Distributions & Channels

China Australia Austria Benelux Brazil Bulgaria Czech Republic Canada Denmark

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MORNSUN®

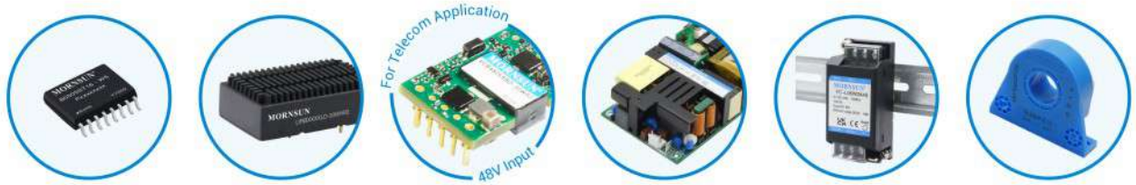
Product Catalogue 2023

MORNSUN®

One-stop solutions of power supplies

Board Mount AC/DC Converter, Board Mount DC/DC Converter, Transceiver Module

Signal Conditioning Module, IGBT Driver, LED Driver, EMC Auxiliary Device, Smart Control Module



2023 Power Module Selection Guide

MORNSUN®

MORE THAN RELIABILITY

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Product Category List

Board Mount AC/DC Converter

Board Mount DC/DC Converter

Signal & EMC Auxiliary Device

Smart Control Module

Board Mount AC/DC Converter

Board Mount DC/DC Converter

Signal & EMC Auxiliary Device

Smart Control Module

About MORNSUN

MORNSUN is a one-stop power supplies solutions manufacturer. With 25 years of experience in the area of power supply design and manufacture, MORNSUN has introduced more than 6000 high-quality products including AC/DC converter, DC/DC converter, enclosed switching power supply, power ICs, and transformers, etc. for different applications and industries, such as industrial automation, medical, energy management, electricity, railway transportation, smart city , and more. Guided by the service principle of "trustworthy", MORNSUN offers the best products, fast and local service, and efficient pre-sales and after-sales support for the clients worldwide.

R&D Center in Guangzhou


Manufacturing Center in Huaihua

- Established: 1998
- Employees: 4300+
- Including R&D engineers: 700+
- IPRs & Patents: 1200+
- Including Invention Patent: 400+
- Company formations: 3 Subsidiaries: Germany/Huaihua China/Guangzhou China
  6 R&D Center: Guangzhou/Shenzhen/Xian/Wuhan/Changsha/Chengdu

Headquarters in Guangzhou

Complete Service

High quality
7 reliability verification platforms

High performance
25+ years R&D experience

Well-designed
1200+ patents

Fast delivery
80000+m² factory
70+% automatic production

Timely after-sales service
Quick respond from FAE Team

MORNSUN provides a complete service from product R&D throughout the lifetime of a project, making it an optimal solution of the quality, performance, design, delivery and after-sales service.

One–stop solutions of power supplies

- 1200+ IPRs & patents: power circuit topology, transformer structures, assembling technology, etc.
- Drafted 4 standards: NB/T 42093-2014, NB/T 10285-2019, <Photovoltaic Switching Power Supply> and <All-rounder DIY AC-DC Switching Power Supply>;
- With 80000+ square meters manufacturing center, 48 SMT production lines, the production capacity is up to 150kk per year;
- International standard pin-out and SMD package with convenient design and automatic manufacturing process.
- The extensive product line, most of which are CE/UL/CSA approval, aims to provide more suitable products for different demands:
  On-board power supplies: AC/DC converter, DC/DC converter, transceiver module, isolation module
  Shell housing power supplies: AC/DC Enclosed switching power supplies, DIN rail power supplies, high power density power supplies
  Other products: IC, transformers, EMC Auxiliary device, IGBT driver, current transducer, contactor control module
- 10000+ power supply design and industry application cases.
- Professional selection guide : 'Choose the product that works';
- Precise trading: Nearly 100% OTD and door-to-door delivery which reduce customers' cost and risks;
- 360° professional support: Fast response within 48hrs, routine visit, technical communication and discussion.

Notes:
NB/T 42093-2014: Wide voltage input and regulated output isolated DC-DC model power supply
NB/T 10285-2019: Fixed voltage input and unregulated output isolated DC-DC model power supply

Applications


Industrial Automation


Railway Transportation


New energy Power (Wind/PV/ESS)


IoT


Smart Grid


Medical


EV and Charger


Telecom

Milestones

2022----Awarded National-level Specialized and Sophisticated "Little Giant" Firms

2022----Awarded "TOP 500 Manufacturing enterprise in Guangdong Province" for 7 years in a row (2016-2022)

2022----Ranked a list of "TOP 100 Guangdong Innovative Announcements 2022" for 3 years in a row (2019-2022)

2021----Acquired "Guangdong SRDI Enterprise" approval (S-Specialized, R-Refinement, D-Differentiation, I-Innovation)

2021----Awarded "Top 500 Manufacturing enterprise in Guangdong Province" for 6 years in a row (2016-2021)

2021----Awarded "Top 10 Power Supply Product" for 10 years in a row (2012-2021)

2020----Awarded "Automation Product Innovation"

2020----Awarded "China IC Achievement Award for Power Management IC"

2019----Awarded Guangdong Province Power Supply Association "Innovative Technology Contribution Achievement"

2019----Awarded "China Innovative Top 500 IPR"

2018----Awarded "Best Employer of China" for 5 years in a row (2013-2018)

2017----Awarded "TOP 500 Manufacturing enterprise in Guangdong Province" for 2 years in a row (2016-2017)

2017----Awarded Sci-Tech Awards by CHINA POWER SUPPLY SOCIETY for 3 times in a row (2013-2017, biennial event)

2017----Awarded "TOP 10 Power Supply Product" for 6 years in a row (2012-2017)

2017----Awarded "Guangdong Outstanding Export Enterprise 2017"

2017----Awarded "Intellectual Property Mayor award in Guangzhou"

2017----Established MORNSUN Power GmbH in Germany

2017----Awarded "IPR Demonstration Enterprises in Guangdong 2017"

2017----Acquired "Guangdong Provincial Enterprise Technology Center"approval

Milestones

2017----Member of the Product Safety Standards Working Group (under Ministry of Industry and Information Technology) and of drafting compulsory GB4943.1 standard and amending IEC62368-1 draft

2017----High frequency switching DC power source awarded "Well-Known Product" in Guangdong (2014, 2017)

2016----Completed the certification of GB/T29490-2013 Enterprise IPR Management

2016----Awarded "Top 100 Innovative Enterprise in Guangdong"

2016----Awarded "To 20 Enterprise of Patent Creating in Development Zone" for 5 years in arow (2012-2016)

2016----Awarded "Guangdong Golden Award of Patent"

2015----Awarded "Guangdong Engineering Technology Research Center of Industrial Power Supply Module"

2015----Awarded "Well-Known Trademark" in Guangdong

2014----Purchased MORNSUN Guangzhou R&D center building

2013----Drafted Fixed voltage input and Unregulated output isolated DC-DC model power supply, standard number (pending): Energy 20130817

2012----Drafted Wide voltage input and regulated output isolated DC-DC model power supply, standard number NB/T 42039-2014, which goes into effect from Nov. 1 2014

2012----Ranked the top 18th of 100 most potential private companies by Forbes China

2012----Awarded "Most Satisfactory Employer of China 2012" under the Hi-Tech category

2011----Established MORNSUN Huaihua manufacturing center

2010----Moved to MORNSUN new headquarters building in Guangzhou Science City

2008----Established Subsidiary in the USA

2003----Awarded "High-tech Enterprise"

2001----Implemented informational management system

1998.07----Established MORNSUN in Guangzhou, China

Automatic SMT dust-free workshop

Automatic production workshop

Markings

Systems

IATF16949 ISO9001 ISO14001 OHSAS18001

Key to the Reliability

Power supply is the heart of industrial equipment. What customers concern most is not the price, the function or the efficiency, but the reliability of the power supply. In other words, it must not break down especially in various extreme situations.

It is easy to guarantee the function of the power supply, but not the reliability, particularly the reliability of the power supply under harsh conditions. The reliability can only be achieved by a perfect management system which consists of advanced research technology, high-quality raw material platform, advanced equipment, excellent manufacturing process management, specialized screening sequence on reliability and rich experience.

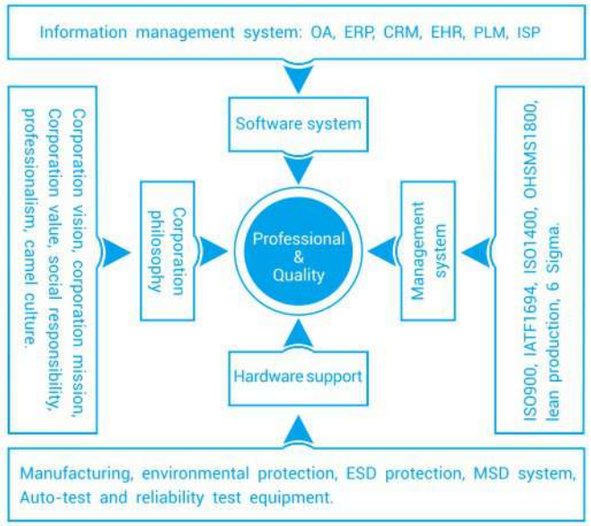
Meanwhile, the reliability of products depends on not only design and manufacturing but also customers' proper operation. Therefore, MORNSUN FAE team is ready to offer professional technical support to customers to enhance the reliability.

Therefore, improving the reliability of the products is not a simple task but a rather complex system.

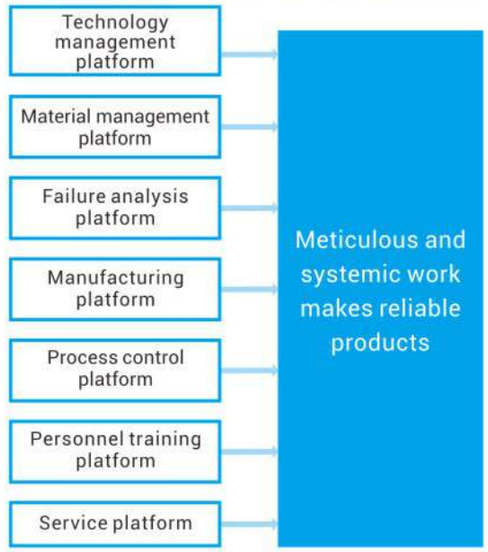
To meet customers demand and expectation, MORNSUN spends much time and money to improve the power supply reliability. In 2007, MORNSUN established the power supply reliability system and brought in 7 platforms to improve the reliability of MORNSUN products, including Technology management platform,Material management platform,Failure analysis platform,Manufacturing platform,Process control platform,Personnel training platform,Service platform. Thanks to these platforms, MORNSUN makes significant breakthroughs in all existing products and develops R3 DC-DC Converter with higher reliability and upgraded performance.

"No pain, no gain." The reliability can only be achieved by earnest, meticulous work, step by step, which is consistent with MORNSUN's Camel Culture. In conclusion, MORNSUN's meticulous and systemic work makes products reliable.

TQA System Architecture



Reliability Assurance



Board Mount AC/DC Converter

Flexible DIY Type — LS Series (1-15W)

Series		Power	Input Voltage Range	Output Voltage(VDC)	Markings	Page
LS01-K3B05SS	Non-isolated	1W	85-305VAC/70-430VDC	5	RoHS CE UKCA	26
LS03-K3B12SS	Non-isolated	3W	85-305VAC/70-430VDC	12	RoHS CE UKCA	26
LS03-13BxxR3		3W	85-305VAC/70-430VDC	3.3,5,9,12,15,24	RoHS cULus CE CB UKCA	27
LS05-K3BxxSS	Non-isolated	5W	85-305VAC/70-430VDC	12,15,18	RoHS CE UKCA	26
LS05-13BxxR3(-F)		5W	85-305VAC/70-430VDC	3.3,5,9,12,15,24	RoHS cULus CE CB UKCA	27
LS05-13BxxR3S		5W	85-305VAC/100-430VDC	3.3,5,9,12,15,24	RoHS CE UKCA	27
LS05-13Dxx	Dual outputs	5W	85-305VAC/70-430VDC	5/12,5/24	RoHS CE UKCA	28
LS05-23BxxDR3	SIP	5W	85-305VAC/70-430VDC	3.3,5,9,12,15,24	RoHS CE UKCA	26
LS10-13BxxR3P(-F)		10W	85-305VAC/90-430VDC	3.3,5,9,12,15,24	RoHS cULus CE CB UKCA	27
LS10-13Dxx	Dual outputs	10W	85-305VAC/70-430VDC	5/5, 5.7/5, 5.7/12, 5.7/24, 12/12	RoHS CE UKCA	28
LS15-13BxxSS(-F)		15W	85-305VAC/100-430VDC	3.3,5,9,12,15,24	RoHS cULus CE CB UKCA	27
LS15-23BxxDR3	SIP	15W	85-305VAC/100-430VDC	3.3,5,9,12,15,24	RoHS CE UKCA	26

Cost-effective & Open-Frame — LO Series (10-65W)

Series	No. of Outputs	Power	Input Voltage Range	Output Voltage(VDC)	Markings	Page
LO10-13Bxx 3O5RAC	1	10W	85-305VAC/100-430VDC	3.3,5,9,12,15,24	RoHS CE UKCA	29
LO15-10Bxx	1	15W	85-264VAC/100-370VDC	3.3,5,9,12,15,24	RoHS cULus CE CB UKCA	29
LO15-10Axx	2	15W	85-264VAC/100-370VDC	±12,±15	RoHS cULus CE CB UKCA	30
LO15-10Dxxxx-xx	2	15W	85-264VAC/100-370VDC	5/5,5/12,5/24	RoHS CE UKCA	30
LO20-10Cxxxx-xx	3	17.8W	85-264VAC/100-370VDC	5/±12	RoHS	30
LO30-10Bxx	1	30W	85-264VAC/100-370VDC	3.3,5,9,12,15,24,48	RoHS cULus CE CB UKCA	29
LO30-10Axx	2	30W	85-264VAC/100-370VDC	±12,±15	RoHS cULus CE CB UKCA	30
LO30-10Cxxxx-xx	3	31.2W	85-264VAC/100-373VDC	5/±12	RoHS	30
LO30-10Dxxxx-xx	2	30W	85-264VAC/100-370VDC	5/5,5/12,5/24	RoHS CE UKCA	30
LO45-10Bxx	1	45W	85-264VAC/100-370VDC	3.3,5,9,12,15,24,48	RoHS cULus CE CB UKCA	29
LO45-10Cxxxx-xx	3	45W	85-264VAC/100-370VDC	±5/12,5/±12,5/±15	RoHS CE UKCA	30
LO65-10Bxx	1	65W	85-264VAC/100-370VDC	5,9,12,15,24,30.3,48	RoHS cULus CE CB UKCA	29

Half/Full Brick Packages — LBH / LBF Series (150-750W)

Series		Power	Input Voltage Range	Output Voltage(VDC)	Markings	Page
LBH150-13Bxx	Telecom	150W	85-305VAC/120-430VDC	12,24,28,48,54	RoHS	31
LBH300-13Bxx	Telecom	300W	85-305VAC/120-430VDC	12,24,28	RoHS	31
LBF750-13Bxx	Telecom	750W	85-305VAC/120-430VDC	12,24,28,48,54	RoHS	31

• This catalog is a collection of the latest products. For more information, please contact our sales team.

Board Mount AC/DC Converter

DIP Compact-size — LD Series (3-90W)

Series		Power	Input Voltage Range	Output Voltage(VDC)	Markings	Page
LD03-23BxxR2		3W	85-305VAC/100-430VDC	3.3,5,9,12,15,24	RoHS cULus CE CB UKCA	31
LD05-23BxxR2		5W	85-305VAC/100-430VDC	3.3,5,9,12,15,24	RoHS cULus CE CB UKCA	31
LD10-23Bxx-DW	Ultra-low temperature	10W	85-305VAC/100-430VDC	5,9,12,15,24	RoHS CE UKCA (pending)	32
LD10-2WBxx	Ultra-wide input voltage	10W	21.6-305VAC/18-430VDC	5,9,12,15,24	RoHS CE UKCA (pending)	32
LD10-23BxxR2		10W	85-305VAC/100-430VDC	3.3,5,9,12,15,24	RoHS cULus CE CB UKCA	32
LD15-23BxxR2		15W	85-305VAC/100-430VDC	3.3,5,9,12,15,24	RoHS cULus CE CB UKCA	32
LD20-23BxxR2		20W	85-305VAC/100-430VDC	3.3,5,9,12,15,24	RoHS cULus CE CB UKCA	32
LD30-23BxxR2		30W	85-305VAC/100-430VDC	3.3,5,9,12,15,24,48	RoHS cULus CE CB UKCA	32
LD40-23BxxR2		40W	85-305VAC/100-430VDC	5,12,15,24,48	RoHS cULus CE UKCA (pending)	32
LD60-23BxxR2		60W	85-305VAC/100-430VDC	5,12,15,24,48	RoHS cULus CE UKCA (pending)	32
LD90-23BxxR2		90W	85-305VAC/110-430VDC	12,15,24,48	RoHS cULus CE UKCA (pending)	32

DIP Multiple Outputs — LH Series (5-20W)

Series	Power	Input Voltage Range	Output Voltage(VDC)	Markings	Page
LHE05-20Axxxx	5W	85-264VAC/100-370VDC	±5,±12,±15	RoHS	33
LHE05-20Cxxxx-xx	5W	85-264VAC/100-370VDC	5/±5,5/±12,5/±15	RoHS	33
LHE05-20Dxxxx-xx	5W	85-264VAC/100-370VDC	5/5,5/12,5/15,5/24	RoHS	33
LHE10-20Axxxx	10W	85-264VAC/100-370VDC	±5,±12,±15	RoHS	33
LHE10-20Cxxxx-xx	10W	85-264VAC/100-370VDC	5/±12,5/±15	RoHS	33
LHE10-20Dxxxx-xx	10W	85-264VAC/100-370VDC	5/5,5/12,5/15,5/24	RoHS	33
LHE15-20Axxxx	15W	85-264VAC/100-370VDC	±5,±12,±15	RoHS	33
LHE15-20Cxxxx-xx	15W	85-264VAC/100-370VDC	5/±5,5/±12,5/±15	RoHS	33
LHE15-20Dxxxx-xx	15W	85-264VAC/100-370VDC	5/5,5/12,5/24	RoHS	33
LHE20-20Axxxx	20W	85-264VAC/100-370VDC	±12,±15	RoHS	33
LHE20-20Cxxxx-xx	20W	85-264VAC/100-370VDC	5/±12,5/±15	RoHS	33
LHE20-20Dxxxx-xx	20W	85-264VAC/100-370VDC	5/12,5/15,5/24	RoHS	33

DIP Single Output — LH Series (5-85W)

Series		Power	Input Voltage Range	Output Voltage(VDC)	Markings	Page
LH05-23BxxR2	3O5RAC	5W	85-305VAC/100-430VDC	3.3,5,9,12,15,24	RoHS CE UKCA	34
LH10-23BxxR2	3O5RAC	10W	85-305VAC/100-430VDC	3.3,5,9,12,15,24	RoHS cULus CE CB UKCA	34
LH15-23BxxR2	3O5RAC	15W	85-305VAC/100-430VDC	3.3,5,9,12,15,24,48	RoHS cULus CE CB UKCA	34
LH20-23BxxR2	3O5RAC	20W	85-305VAC/100-430VDC	3.3,5,9,12,15,24,48	RoHS CE UKCA	34
LH25-23BxxR2	3O5RAC	25W	85-305VAC/100-430VDC	3.3,5,9,12,15,24,48	RoHS cULus CE CB UKCA	34
LH85-20B12		85W	85-264VAC/100-370VDC	12	RoHS cULus CE CB UKCA	34

• This catalog is for reference only, not being the judgment basis for the use. For detailed datasheets please visit our website: www.mornsun-power.com.

Board Mount AC/DC Converter

for Smart Connected Device

LS/CLS Series (1-5W)

Series		Power	Input Voltage Range	Output Voltage(VDC)	Markings	Page
LSF01-K5BxxSS	Single live wire	1W	8(15)-380VDC	5.5, 12.5, 24.5	RoHS CE UKCA	35
LS05-13Hxx	Meter	5W	85-305VAC/70-430VDC	5/5.5/12	RoHS	35
CLS05-15B12R3	Automobile	5W	85-418VAC/100-591VDC	12	RoHS	35

for Electricity Industry

LS/LD/LO Series (5-75W)

Series		Power	Input Voltage Range	No. of Outputs	Output Voltage(VDC)	Markings	Page
LS05-15BxxR3		5W	85-418VAC/100-591VDC	1	3.3,5,9,12,15,24	RoHS	35
LS05-26BxxR3		5W	90-528VAC/100-745VDC	1	3.3,5,9,12,15,24	RoHS CE UKCA	35
LS10-26BxxR3		10W	85-528VAC/100-745VDC	1	3.3,5,9,12,15,24	RoHS	35
LD10-26Bxx		10W	90-528VAC/100-745VDC	1	3.3,5,9,12,15,24	RoHS CE UKCA	36
LD15-25BxxR2		15W	176-418VAC/248-591VDC	1	5,9,12,15,24	RoHS CE UKCA	36
LD20-26Bxx		20W	90-528VAC/100-745VDC	1	3.3,5,9,12,15,24	RoHS cULus CE CB UKCA	36
LD30-26BxxR2		30W	176-528VAC/248-746VDC	1	3.3,5,9,12,15,24,48	RoHS CE UKCA (pending)	36
LO10-24BxxK	Electricity meter	10W	30-280VAC/30-400VDC	1	5,12,13	RoHS	38
LO10-26Dxxxx-xx	Three-phase Four-wire/ Electricity meter	10W	57-528VAC/80-745VDC	2	5.1/12	RoHS	38
LO15-26Dxxxx-xx	Electricity meter	15W	57-528VAC/80-745VDC	2	12/12,13.5/5	RoHS	38
LO20-26Dxxxx-xx	TTU	20W	165-480VAC/230-680VDC	2	12.15/12	RoHS	38
LO15-23BxxE	Relay protection	15W	85-305VAC/88-430VDC	1	3.3,5,12,15,24	RoHS CE UKCA	37
LO30-23BxxE	Relay protection	30W	85-305VAC/88-430VDC	1	3.3,5,12,15,24	RoHS CE UKCA	37
LO50-23BxxE	Relay protection	50W	85-305VAC/88-430VDC	1	3.3,5,9,12,15,24,27,48	RoHS CE UKCA	37
LO75-20BxxE	Relay protection	75W	85-264VAC/88-370VDC	1	3.3,5,9,12,15,24,27,48	RoHS cULus CE CB UKCA	37
LO75-26Bxx	Three-phase Four-wire	75W	176-576VAC	1	12,24,48	RoHS	38

for Mining Industry

PVA Series (40-200W)

Series		Power	Input Voltage Range	Output Voltage(VDC)	Markings	Page
PVA40-26Bxx	Mining power	40W	460-1500VAC	12,28,35	RoHS	42
PVA40-27Bxx	Mining power	40W	85-900VAC	18,24,30	RoHS	42
PVA70-27Bxx	Mining power	70W	85-900VAC	24,28,35	RoHS	42
PVA120-27BxxR2	Mining power	120W	85-900VAC/120-1300VDC	24,28,35	RoHS	42
PVA150-27Bxx	Mining power	150W	85-850VAC	24,28,35	RoHS	42
PVA200-27BxxR2	Mining power	200W	85-900VAC/120-1300VDC	24,28,35	RoHS	42

• This catalog is a collection of the latest products. For more information, please contact our sales team.

Board Mount AC/DC Converter

for Medical Industry

LOF/LH/LO Series (15-750W)

Series		Power	Input Voltage Range	Output Voltage(VDC)	Markings	Page
LH15-20BxxMU		15W	85-264VAC/100-370VDC	5,12,15,18,24	RoHS CE CB UKCA	41
LH25-20BxxMU		25W	85-264VAC/100-370VDC	5,12,15,18,24	RoHS CE CB UKCA	41
LO30-20BxxMU		30W	85-264VAC/100-370VDC	3.3,5,12,15,19,24,36,48	RoHS CE UKCA	41
LO45-20BxxMU(-C)		45W	85-264VAC/100-370VDC	3.3,5,12,15,24,30,36,48	RoHS CE UKCA	41
LO45-20BxxSMU(-C)	5 years warranty	45W	80-264VAC/100-370VDC	3.3,5,12,15,24,36,48	RoHS CE UKCA	41
LO65-20BxxMU(-C)		65W	85-264VAC/100-370VDC	3.3,5,12,15,24,36,48	RoHS CE UKCA	41
LO65-20BxxSMU(-C)	5 years warranty	65W	80-264VAC/100-370VDC	3.3,5,12,15,24,36,48	RoHS cULus CE UKCA	41
LO75-20BxxMU		75W	85-264VAC	5,12,15,19,24,36,48,55	RoHS CE UKCA (pending)	42
LO120-20BxxMU		120W	85-264VAC/120-370VDC	12,15,19,24,27,36,48,54	RoHS cULus CE UKCA	42
LOF120-20Bxx(-C)		120W	85-264VAC/120-370VDC	12,15,19,24,27,36,48,54	RoHS cULus CE CB UKCA	39
LOF225-20Bxx(-C)		Air cooling: 140W 13CFM: 225W	85-264VAC/120-370VDC	12,15,18,19,24,27, 36,48,54	RoHS cULus CE CB UKCA	39
LOF225-23BxxR2		Air cooling: 200W 13CFM: 225W	85-277VAC/120-390VDC	12,15,18,19,24,27, 36,48,54	RoHS CE (pending)	39
LOF350-20Bxx(-C)		Air cooling: 180-200W 20.5CFM: 300-351W	90-264VAC/127-370VDC	12,15,18,19,24,27, 36,48,54	RoHS cULus CE CB UKCA	39
LOF450-20Bxx(-C/-CF)		Air cooling: 250W 25CFM: 450W	90-264VAC/127-370VDC	12,15,18,19,24,27, 36,48,54	RoHS cULus CE CB UKCA (pending)	40
LOF550-20Bxx(-C/-CF)		Air cooling: 320W 25CFM: 550W	90-264VAC/127-370VDC	12,15,18,19,24,27, 36,48,54	RoHS cULus CE CB UKCA (pending)	40
LOF750-20Bxx		Air cooling: 400/450W 25CFM: 700/750W	90-264VAC/127-370VDC	12,15,24,27,36,48,54	RoHS CE UKCA (pending)	40

• The products strictly according to medical standards, meeting 2xMOPP compliance, and is suitable for all kinds of BF type (be accessible to patients) medical system devices.

• This catalog is for reference only, not being the judgment basis for the use. For detailed datasheets please visit our website: www.mornsun-power.com.

Fixed Input Isolated & Unregulated

A/B/D/E/F/G/H Series (1-2W)

Series	Package	Power	Input Voltage(VDC)	Output Voltage(VDC)	Isolation Voltage (VDC)	Markings	Page
B_MT-1WR4	DFN	1W	5	5	3000	RoHS	44
D_T-1WR4	DFN	1W	5	5/5	3000	RoHS	44
E_T-1WR4	DFN	1W	5	±5	3000	RoHS	44
FB_T-1WR4	DFN	1W	5	5	4200	RoHS	44
A_XT-1WR3	SMD	1W	3.3,5,12,15,24	±3.3,±5,±9,±12,±15,±24	1500	RoHS	45
B_XT-1WR3	SMD(pin-reduced)	1W	3.3,5,12,15,24	3.3,5,9,12,15,24	1500	RoHS	45
B_T-1WR3	SMD	1W	3.3,5,12	3.3,5,9,12,15	1500	RoHS	45
E_XT-1WR3	SMD	1W	3.3,5,12,15,24	±3.3,±5,±9,±12,±15,±24	3000	RoHS	46
F_XT-1WR3	SMD	1W	3.3,5,12,15,24	3.3,5,9,12,15,24	3000	RoHS	46
FB0505XT-1WR3	SMD	1W	5	5	4200	RoHS	45
A_S-1WR3	7-SIP	1W	3.3,5,12,15,24	±3.3,±5,±9,±12,±15,±24	1500	RoHS	47
B_S-1WR3	4-SIP	1W	3.3,5,12,15,24	3.3,5,9,12,15,24	1500	RoHS	47
B_LS-1WR3	7-SIP	1W	3.3,5,12,15,24	3.3,5,9,12,15,24	1500	RoHS	47
E_S-1WR3	7-SIP	1W	3.3,5,12,15,24	±3.3,±5,±9,±12,±15,±24	3000	RoHS	48
F_S-1WR3	7-SIP	1W	3.3,5,9,12,15,24	3.3,5,7.2,9,12,15,24	3000	RoHS	48
G_S-1WR3	SIP	1W	12,15,24	±5,±9,±12,±15	6000	RoHS	51
G_WS-1WR3	SIP	1W	12,15,24	±5,±9,±12,±15	6000	RoHS	51
H_S-1WR3	SIP	1W	12,24	3.3,5,9,12,15,24	6000	RoHS	51
H_WS-1WR3	SIP	1W	12,24	3.3,5,9,12,15,24	6000	RoHS	51
H_CS-1WR3	SIP	1W	5	5	7000	RoHS	51
A_D-1WR3	14-DIP	1W	12,15,24	±5,±9,±12,±15,±24	1500	RoHS	53
B_D-1WR3	8-DIP	1W	3.3,5,12,15,24	3.3,5,7.2,9,12,15,24	1500	RoHS	53
E_D-1WR3	14-DIP	1W	5,12,15,24	±3.3,±5,±9,±12,±15	3000	RoHS	53
F_D-1WR3	14-DIP	1W	5,12,15,24	3.3,5,12,15	3000	RoHS	53
F_N-1WR3	8-DIP	1W	5,12,15,24	3.3,5,7.2,9,12,15,24	3000	RoHS	53
B_XT-2WR3	SMD	2W	5,12,15,24	3.3,5,7,9,12,15,24	1500	RoHS	46
F_XT-2WR3	SMD	2W	5,12,15,24	3.3,5,7,9,12,15,24	3000	RoHS	46
A_S-2WR3	7-SIP	2W	5,12,15,24	±3.3,±5,±7.2,±9,±12,±15,±24	1500	RoHS	49
B_S-2WR3	7-SIP	2W	5,12,15,24	3.3,5,7.2,9,12,15,24	1500	RoHS	49
B_M-2WR3	4-SIP	2W	12,24	3.3,5,12,15,24	1500	RoHS	49
E_S-2WR3	7-SIP	2W	5,12,15,24	±3.3,±5,±7.2,±9,±12,±15,±24	3000	RoHS	50
F_S-2WR3	7-SIP	2W	5,12,15,24	3.3,5,6.4,7.2,9,12,15,18,24	3000	RoHS	50
G_S-2WR3	SIP	2W	12,15,24	±5,±9,±12,±15	6000	RoHS	52
G_WS-2WR3	SIP	2W	12,15,24	±5,±9,±12,±15	6000	RoHS	52
H_S-2WR3	SIP	2W	12,15,24	5,9,12,15,24	6000	RoHS	52
H_WS-2WR3	SIP	2W	12,15,24	5,9,12,15,24	6000	RoHS	52
H_CS-2WR3-K3	SIP	2W	12	5,12	7000	RoHS	52
A_D-2WR3	14-DIP	2W	5,12,15,24	±3.3,±5,±7,±9,±12,±15,±24	1500	RoHS	54
B_D-2WR3	14-DIP	2W	3.3,5,12,15,24	3.3,5,9,12,15,24	1500	RoHS	54
E_D-2WR3	14-DIP	2W	5,12,15,24	±3.3,±5,±9,±12,±15,±24	3000	RoHS	54
F_D-2WR3	14-DIP	2W	5,9,12,15,24	3.3,5,9,12,15,24	3000	RoHS	54

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Board Mount DC/DC Converter

Fixed Input Isolated & Regulated

B/IB/IE/IF Series (0.5-1W)

Series	Package	Power	Input Voltage (VDC)	Output Voltage (VDC)	Isolation Voltage (VDC)	Markings	Page
B0505ST16-W5	SOIC16	0.5W	5	5	5000VAC	RoHS	55
IB_XT-W75R3	SMD	0.75W	5,12	3.3,5,9,12,15	1500	RoHS	55
IB_S-W75R3	SIP	0.75W	5,12,24	3.3,5,9,12,15	1500	RoHS	55
IB_XT-1WR3	SMD	1W	5,12,15,24	3.3,5,9,12,15	1500	RoHS	56
IB_LS-1WR3	SIP	1W	5,12,15,24	3.3,5,9,12,15,24	1500	RoHS	56
IF_XT-1WR3	SMD	1W	5,12,15,24	3.3,5,9,12,15	3000	RoHS	56
IF_S-1WR3	SIP	1W	5,12,15,24	3.3,5,9,12,15,24	3000	RoHS	56
IE_KS-1WR3	SIP	1W	5,24	±5,±9,±12,±15	3000	RoHS	56

2:1 Wide Input with Brick Package

VCB/VCF Series (3-1300W) for Telecom Industry

Series	Power	Input Voltage Range (VDC)	Output Voltage (VDC)	Isolation Voltage (VDC)	Markings	Page
VCB_SO-3WR3	3W	36-75	5,12,15,24	1500	RoHS	57
VCB_SO-6WR3	6W	36-75	5,12,15,24	1500	RoHS	57
VCB_SBO-10WR3	10W	36-75	5,12,15,24	1500	RoHS	57
VCB_SBO-20WR3	20W	36-75	3.3,5,12,15,24,28	1500	RoHS	57
VCB_SBO-30WR3	30W	36-75	5,12,15,24,28	1500	RoHS	57
VCB_SBO-50WR3(-N)	50W	36-75	5,12	1500	RoHS	57
VCF_EBO-50W(F)R3-N	50W	36-75	5,12,24	2250	RoHS (pending)	57
VCB_SBO-75W(F)R3(-N)	75W	36-75	5,12,28	1500	RoHS	57
VCF_EBO-75W(F)R3-N	75W	36-75	3.3,5,12,24	2250	RoHS (pending)	57
VCB_SBO-100W(F)R3(-N)	100W	36-75	5,12,28	1500	RoHS	57
VCB_EBO-100W(F)R3	100W	36-75	5,12,15,24,28	1500	RoHS	58
VCF_EBO-100W(F)R3-N	100W	36-75	3.3,5,12,24	2250	RoHS (pending)	58
VCF_EBO-120W(F)R3-N	120W	36-75	5,12,24	2250	RoHS (pending)	58
VCF_EBO-150W(F)R3-N	150W	36-75	5,12,24	2250	RoHS (pending)	58
VCB_QBO-200WR3(-N)	200W	36-75	5,12,15,24	1500	RoHS	58
VCB_EBO-240W(F/H)R3-N	240W	36-75	10,8,12	1500	RoHS (pending)	58
VCB_EBO-300W(F/H)R3-N	300W	36-75	10,8,12	1500	RoHS (pending)	58
VCB_EBO-400W(F/H)R3-N	400W	36-75	10,8,12	1500	RoHS	58
VCF_QBO-400W(F/H)R3(-N)	400W	36-75	12,15,24,28	2250	RoHS	58
VCB_QBO-800WR3A(D)-N	800W	40-60	12,12.1,10.8,10.9	1500	RoHS	58
VCB_QBO-1300WR3A-N	1300W	45-60	10,8,12	1500	RoHS	58

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Board Mount DC/DC Converter

2:1 Wide Input with Encapsulating Package

WR/VR Series (1-400W)

Series	Package	Power	Input Voltage Range (VDC)	Output Voltage (VDC)	Isolation Voltage (VDC)	Markings	Page
WRA_S-1WR2	SIP	1W	4.5-9,9-18,18-36,36-75	±5,±9,±12,±15	1500	RoHS CE UKCA	59
WRB_S-1WR2	SIP	1W	4.5-9,9-18,18-36,36-75	3.3,5,9,12,15,24	1500	RoHS cULus CE CB UKCA	59
WRE_S-1WR2	SIP	1W	4.5-9,9-18,18-36,36-75	±5,±12,±15	3000	RoHS CE UKCA	59
WRF_S-1WR2	SIP	1W	4.5-9,9-18,18-36,36-75	3.3,5,9,12,15,24	3000	RoHS CE UKCA	59
WRA_S-3WR2	SIP	3W	4.5-9,9-18,18-36,36-75	±5,±9,±12,±15,±24	1500	RoHS CE UKCA	60
WRB_S-3WR2	SIP	3W	4.5-9,9-18,18-36,36-75	3.3,5,6,9,12,15,24	1500	RoHS CE UKCA	60
WRE_S-3WR2	SIP	3W	4.5-9,9-18,18-36,36-75	±5,±9,±12,±15	3000	RoHS CE UKCA	60
WRF_S-3WR2	SIP	3W	4.5-9,9-18,18-36,36-75	3.3,5,9,12,15,24	3000	RoHS CE UKCA	60
WRA_ZP-3WR2	DIP	3W	4.5-9,9-18,18-36,36-75	±5,±9,±12,±15,±24	1500	RoHS CE UKCA	61
WRB_ZP-3WR2	DIP	3W	4.5-9,9-18,18-36,36-75	3.3,5,9,12,15,24	1500	RoHS CE UKCA	61
WRE_P-3WR2	DIP	3W	4.5-9,9-18,18-36,36-75	±3.3,±5,±9,±12,±15	3000	RoHS CE UKCA	61
WRF_P-3WR2	DIP	3W	4.5-9,9-18,18-36,36-75	3.3,5,12,15,24	3000	RoHS CE UKCA	61
VRB_S-6WR3	SIP	6W	9-18,18-36	3.3,5,9,12,15,24	1600	RoHS CE UKCA	62
VRA_ZP-6WR3	DIP	6W	4.5-9,9-18,18-36,36-75	±5,±12,±15,±24	1500	RoHS CE UKCA	63
VRB_ZP-6WR3	DIP	6W	4.5-9,9-18,18-36,36-75	3.3,5,12,15,24	1500	RoHS CE UKCA	63
VRA_YMD-6WR3	DIP	6W	9-18,18-36	±5,±12,±15	1500	RoHS cULus CE CB UKCA	64
VRB_YMD-6WR3	DIP	6W	9-18,18-36,36-75	3.3,5,9,12,15,24	1500	RoHS CE UKCA	64
VRB_S-10WR3	SIP	10W	9-18,18-36	3.3,5,9,12,15,24	1500	RoHS CE UKCA	62
VRA_ZP-10WR3	DIP	10W	9-18,18-36,36-75	±5,±12,±15	1500	RoHS CE UKCA	63
VRB_ZP-10WR3	DIP	10W	9-18,18-36,36-75	3.3,5,12,15,24	1500	RoHS CE UKCA	63
VRA_YMD-10WR3	DIP	10W	4.5-9	±5,±12,±15,±24	1500	RoHS CE UKCA	64
VRB_YMD-10WR3	DIP	10W	9-18,18-36,36-75	3.3,5,12,15,24	1500	RoHS CE UKCA	64
VRB_LD-15WR3	DIP	15W	18-36,36-75	3.3,5,12,15,24	1500	RoHS cULus CE CB UKCA	65
VRB_YMD-15WR3	DIP	15W	9-18,18-36,36-75	3.3,5,12,15,24	1500	RoHS CE UKCA	64
VRA_LD-20WR3	DIP	20W	9-18,18-36,36-75	±5,±9,±12,±15,±24	1500	RoHS CE UKCA	65
VRB_LD-20WR3	DIP	20W	9-18,18-36,36-75	3.3,5,9,12,15,24,110	1500	RoHS CE UKCA	65
VRB_YMD-20WR3	DIP	20W	9-18,18-36,36-75	3.3,5,12,15,24	1500	RoHS CE UKCA	64
VRB_LD-30WR3	DIP	30W	18-36,36-75	3.3,5,9,12,15,24	1500	RoHS CE UKCA	65
VRB_LD-40W(H)R3	DIP	40W	18-36,36-75	5,12,15,24	1500	RoHS CE UKCA	65
VRB_LD-50W(H)R3	DIP	50W	18-36,36-75	3.3,5,12,15,24	1500	RoHS CE UKCA	65
VRB_HB-350WR3	DIP	350W	20-36	12,24,28,32	1500	RoHS	66
VRF_HB-400W(H)R3-N	DIP	400W	36-75	12,15,24,28	2250	RoHS	66

7mm Ultra-thin Wide Input

WR/UR/VR Series (1-15W)

Series	Power	Input Voltage Range (VDC)	Output Voltage (VDC)	Isolation Voltage (VDC)	Markings	Page
WRA_ST/SD-1WR2	1W	9-18,18-36	±5,±9,±12,±15	1500	RoHS CE UKCA	73
WRB_ST/SD-1WR2	1W	9-18,18-36	3.3,5,12,15,24	1500	RoHS CE UKCA	73
WRA_ST/SD-3WR2	3W	9-18,18-36	±5,±9,±12,±15	1500	RoHS CE UKCA	73
WRB_ST/SD-3WR2	3W	9-18,18-36	3.3,5,12,15,24	1500	RoHS CE UKCA	73
U/VRB_J(M)T/D-3W	3W	4.5-9,9-36	3.3,5,12,15,24	1500	RoHS CE UKCA	74
URB_MT-3WR3	3W	9-36,18-75	3.3,5,9,12,15,24	1500	RoHS cULus CE CB UKCA	75
VRB_J(M)D/T-6W	6W	9-18,18-36	3.3,5,12,15	1500	RoHS cULus CE CB UKCA	74
URB_J(M)D/T-10W	10W	9-36	5,12,15,24	1500	RoHS cULus CE CB UKCA	74
URB_J(M)D/T-15W	15W	9-36,18-75	3.3,5,12,15	1500	RoHS CE UKCA	74

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Board Mount DC/DC Converter

4:1 Wide Input with Encapsulating Package

UR Series (3-200W)

Series	Package	Power	Input Voltage Range (VDC)	Output Voltage (VDC)	Isolation Voltage (VDC)	Markings	Page
URD_S-3WR3	SIP	3W	18-75	5/5,5/12,5/24	3000	RoHS CE UKCA	66
URA_S-6WR3	SIP	6W	9-36	±5,±9,±12,±15,±24	1500	RoHS CE UKCA	66
URB_S-6WR3	SIP	6W	9-36	3.3,5,9,12,15,24	1600	RoHS CE UKCA	66
URA_ZP-6WR3	DIP	6W	9-36,18-75	±5,±9,±12,±15,±24	1500	RoHS cULus CE CB UKCA	67
URB_ZP-6WR3	DIP	6W	9-36,18-75	3.3,5,9,12,15,24	1500	RoHS cULus CE CB UKCA	67
URA_YMD-6WR3	DIP	6W	9-36,18-75	±5,±12,±15,±24	1500	RoHS cULus CE CB UKCA	69
URB_YMD-6WR3	DIP	6W	9-36,18-75	3.3,5,9,12,15,24	1500	RoHS cULus CE CB UKCA	69
URE_P-6WR3	DIP	6W	9-36	±5,±12,±15	3000	RoHS cULus CE CB UKCA	68
URF_P-6WR3	DIP	6W	9-36,18-75	3.3,5,9,12,15,24,25	3000	RoHS cULus CE CB UKCA	68
URH_P-6WR3	DIP	6W	9-36,18-75	5,6,9,12,15,18,24	6000	RoHS cULus CE CB UKCA	68
URB_S-10WR3	SIP	10W	9-36	3.3,5,9,12,15,24	1500	RoHS CE UKCA	66
URA_ZP-10WR3	DIP	10W	9-36,18-75	±5,±12,±15	1500	RoHS CE UKCA	67
URB_ZP-10WR3	DIP	10W	9-36,18-75	3.3,5,12,15,24	1500	RoHS CE UKCA	67
URA_YMD-10WR3	DIP	10W	9-36,18-75	±5,±9,±12,±15,±24	1500	RoHS cULus CE CB UKCA	69
URB_YMD-10WR3	DIP	10W	9-36,18-75	3.3,5,9,12,15,24	1500	RoHS cULus CE CB UKCA	69
URD_YMD-10WR3	DIP	10W	18-75	5/5,5/12,5/24	1500	RoHS CE UKCA	69
URE_LP-10WR3	DIP	10W	9-36,18-75	±5,±12,±15	3000	RoHS cULus CE CB UKCA	67
URF_LP-10WR3	DIP	10W	9-36,18-75	3.3,5,9,12,15,24	3000	RoHS cULus CE UKCA	67
URA_YMD-15WR3	DIP	15W	9-36,18-75	±5,±12,±15,±24	1500	RoHS CE UKCA	69
URB_YMD-15WR3	DIP	15W	9-36,18-75	3.3,5,12,15,24	1500	RoHS cULus CE CB UKCA	70
URA_YMD-20WR3	DIP	20W	9-36,18-75	±5,±12,±15,±24	1500	RoHS CE UKCA	70
URB_YMD-20WR3	DIP	20W	9-36,18-75	3.3,5,6,12,15,24	1500	RoHS cULus CE CB UKCA	70
URA_LD-20WR3	DIP	20W	9-36,18-75	±5,±9,±12,±15	1500	RoHS cULus CE CB UKCA	71
URB_LD-20WR3	DIP	20W	9-36,18-75	3.3,5,9,12,15,24	1500	RoHS cULus CE CB UKCA	71
URD_LD-20WR3	DIP	20W	18-75	5/5,5/12,5/24	3000	RoHS CE UKCA	71
URF_LP-20WR3	DIP	20W	9-36,18-75	3.3,5,9,12,15,18,24	3000	RoHS cULus CE CB UKCA	68
URH_LP-20WR3	DIP	20W	9-36,18-75	3.3,5,12,15,24	5000VAC	RoHS CE UKCA	68
URA_YMD-30WR3	DIP	30W	18-75	±12,±15,±24	1500	RoHS	70
URB_YMD-30WR3	DIP	30W	18-75	5,12,15,24	1500	RoHS CE UKCA	70
URA_LD-30WR3	DIP	30W	9-36,18-75	±5,±12,±15,±24	1500	RoHS CE UKCA	71
URB_LD-30WR3	DIP	30W	9-36,18-75	3.3,5,9,12,15,24	1500	RoHS cULus CE CB UKCA	71
URD_D-30WR3	DIP	30W	18-75	5/24,9/24	3000VAC	RoHS CE UKCA	71
URB_YMD-40WR3	DIP	40W	9-36,18-75	3.3,5,12,15,24,28	1500	RoHS CE UKCA	70
URB_LD-40WR3	DIP	40W	9-36,18-75	5,12,15,24	1500	RoHS CE UKCA	71
URA_LD-60WR3	DIP	60W	9-36	±12,±15,±24	1500	RoHS CE UKCA	72
URB_LD-60WR3	DIP	60W	9-36	5,12,15,24	1500	RoHS CE UKCA	72
URF_QB-75WR3	DIP	75W	18-75	5,12,15,24,48	2250	RoHS CE UKCA	72
URF_QB-100WR3	DIP	100W	9-36,18-75	5,12,15,24,28,48	2250	RoHS CE UKCA	72
URF_QB-150WR3	DIP	150W	18-75	5,12,15,24,48	2250	RoHS CE UKCA	72
URF_QB-200WR3	DIP	200W	18-75	5,12,15,24,36,42.5,48	2250	RoHS CE UKCA	72

ZP Package

32.00 × 20.00 × 10.80mm

YMD Package

25.40 × 25.40 × 11.70mm

LD Package

20.40 × 50.80 × 11.70mm

LP Package

26.50 × 51.50 × 12.00mm

• This catalog is for reference only, not being the judgment basis for the use. For detailed datasheets please visit our website: www.mornsun-power.com.

8:1 Wide Input with SIP Package

UW Series (1-3W)

Series	Package	Power	Input Voltage Range (VDC)	Output Voltage (VDC)	Isolation Voltage (VDC)	Markings	Page
UWE_S-1WR3	SIP	1W	4.5-36	±5,±12,±15	3000	RoHS CE UKCA	75
UWF_S-1WR3	SIP	1W	4.5-36	5,9,12,15	3000	RoHS CE UKCA	75
UWE_S-3WR3	SIP	3W	4.5-36	±5,±12,±15	3000	RoHS CE UKCA	75
UWF_S-3WR3	SIP	3W	4.5-36	5,12,15	3000	RoHS CE UKCA	75

12:1 Wide Input with DIP Package

UWTH1D Series (6-100W)

Series	Package	Power	Input Voltage Range(VDC)	Output Voltage (VDC)	Isolation Voltage	Markings	Page
UWTH1D_P-6WR3	DIP	6W	14-160	3.3,5,12,15,24	3000VAC	RoHS CE CB UKCA	76
UWTH1D_LD-10W(F/H)R3	DIP	10W	14-160	3.3,5,12,15,24,28,48,54	3000VAC	RoHS CE CB UKCA	76
UWTH1D_LD-20W(F/H)R3	DIP	20W	14-160	3.3,5,12,15,24,28,48,54	3000VAC	RoHS CE CB UKCA	76
UWTH1D_LD-30W(F/H)R3	DIP	30W	14-160	5,12,15,24,28,48,54	3000VAC	RoHS CE CB UKCA	76
UWTH1D_QB-50W(F/H)R3S	DIP	50W	14-160	12,15,24,28,48,54	3000VAC	RoHS CE CB UKCA	76
UWTH1D_QB-100W(F/H)R3	DIP	100W	14-160	12,15,24,28,48,54	3000VAC	RoHS CE CB UKCA	76

for Railway Industry

URB1D/URF1D Series (6-400W)

Series	Power	Input Voltage Range (VDC)	Output Voltage (VDC)	Isolation Voltage	Markings	Page
URA1D_YMD-6WR3	6W	40-160	±5,±12,±15	2250VDC	RoHS CE UKCA	77
URB1D_YMD-6WR3	6W	40-160	5,12,15,24	2250VDC	RoHS CE UKCA	77
URA1D_(X)LMD-10WR3	10W	40-160	±5,±12,±15	2250VDC	RoHS CE UKCA	77
URB1D_LMD-10WR3	10W	40-160	3.3,5,12,15,24	2250VDC	RoHS CE UKCA	77
URB1D_LMD-15WR3	15W	40-160	3.3,5,12,15,24	2250VDC	RoHS CE UKCA	77
URB1D_LMD-20WR3	20W	40-160	3.3,5,12,15,24	2250VDC	RoHS CE UKCA	77
URB1D_LD-20WR3	20W	40-160	3.3,5,12,15,24	2250VDC	RoHS CE UKCA	77
URE1D_LD-20WR3	20W	40-160	±12,±15,±24	3000VDC	RoHS CE UKCA (pending)	77
URF1D_LD-40WR3	40W	40-160	3.3,5,12,15,24,48	3000VDC	RoHS CE UKCA	77
URF1D_QB-50WR3	50W	43-160	3.3,5,12,15,24,48	3000VAC	RoHS CE UKCA	78
URF1D_QB-75WR3	75W	43-160	3.3,5,12,15,24,48	3000VAC	RoHS CE UKCA	78
URF1D_QB-100WR3	100W	43-160	3.3,5,12,15,24,48	3000VAC	RoHS CE UKCA	78
URF1D_HB-150WR3	150W	43-160	5,12,15,24,48	3000VAC	RoHS CE UKCA	78
URF1D_HB-250WR3	250W	40-160	5,12,15,24,48,54	3000VAC	RoHS CE UKCA	78
URF1D_FB-400W(H)R3	400W	66-160	5,9,12,15,24,28,36,48,54	3000VAC	RoHS CE UKCA (pending)	78

for Automotive Industry

C Series (1-8W)

Series		Power	Input Voltage Range (VDC)	Output Voltage (VDC)	Isolation Voltage	Markings	Page
CF0505XT-1WR3	Fixed input	1W	5	5	3500VDC	RoHS CE UKCA	79
CFB0505XT-1WR3	Fixed input	1W	5	5	4200VDC	RoHS CE UKCA	79
CWRF_S-3W	Wide input	3W	7-18	15	4300VDC	RoHS CE UKCA (pending)	79
CUWF_J(Y)T-3WR3	Wide input	3W	6-42	5,12,15,24	3000VAC	RoHS CE UKCA	79
CUWF_J(Y)T-6WR3	Wide input	6W	6-42	5,12,15,24	3000VAC	RoHS CE UKCA	79
CUWB_YMD-6WR3	Wide input	6W	4.5-36	3.3,5,12,15,24	1500VDC	RoHS CE UKCA	80

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Board Mount DC/DC Converter

for New Energy Industry

PV Series (15-1000W)

Series		Power	Input Voltage Range (VDC)	Output Voltage (VDC)	Isolation Voltage (VAC)	Markings	Page
PV15-27BxxR3	BESS	15W	100-1000	12,15,24	4000	RoHS CE UKCA	83
PV15-29BxxR3	Solar	15W	200-1500	5,12,15,24	4000	RoHS cULus CE UKCA	83
PV40-27BxxR2	BESS	40W	200-1200	12,15,24,28	4000	RoHS CE	83
PV40-29BxxR3	Solar	40W	250-1500	12,24,28	4000	RoHS CE UKCA (pending)	83
PV50-29Dxxxx-xx	Solar	50W	150-1500	5/15	4000	RoHS	83
PV75-2YBxxR3	BESS	75W	80-1000	12,15,24	4000	RoHS cULus CE UKCA	83
PV75-36Dxxxx-xx	SVG/UHV	Transient 75W	250-3300	15/400	4000	RoHS	83
PV120-27Bxx	BESS	120W	200-1100	12,15,24,26,28,48	4000	RoHS	83
PV150-29Bxx	Solar	150W	250-1500	12,15,24,28,32,48	4000	RoHS CE CB SEMKO	84
PV200-27Bxx	BESS	200W	200-1000	12,15,24,26,48	4000	RoHS CE UKCA	84
PV200-29BxxR3	Solar	200W	250-1500	12,24,28,48	4000	RoHS cULus CE UKCA (pending)	84
PVA200-29B24-PCS	BESS	200W	300-1500	24	4000	RoHS	84
PV350-29Bxx	Solar	350W	200(300)-1500	12,24,28,32,48	4000	RoHS cULus CE CB UKCA	84
PV1000-27Bxx	BESS	1000W	300-1000	24,48	4000	RoHS	84

High Output Voltage

HO1 Series (0.4-400W)

Series	Power	Input Voltage (VDC)	Maximum Output Voltage(VDC)	Output Voltage Range(VDC)	Output Current (mA)	Markings	Page
HO1-P421H-1C	0.42W	12	+420	+420	1	RoHS	81
HO1-P(N)1251V-0.5C(F)	0.625W	12,24	+1250/-1250	0 to +1250 / 0 to -1250	0.5	RoHS	81
HO1-P(N)1251S-0.5C	0.625W	12	+1250/-1250	0 to +1250 / 0 to -1250	0.5	RoHS	81
HO1-P(N)1201-0.6B	0.72W	5	+1200/-1200	0 to +1200 / 0 to -1200	0.6	RoHS CE	81
HO1-P(N)1251H-1B	0.75W	5	+1250/-1250	0 to +1250 / 0 to -1250	1	RoHS CE UKCA	81
HO1-P(N)1251H-0.5C(D/F)	0.75W	12,15,24	+1250/-1250	0 to +1250 / 0 to -1250	0.5	RoHS CE UKCA	81
HO1-P(N)1501H-0.5C(D)	0.75W	12,15	+1500/-1500	0 to +1500 / 0 to -1500	0.5	RoHS CE UKCA	81
HO1-N201-5B	1W	5	-200	0 to -200	5	RoHS	81
HO1-P201-5C	1W	12	+200	0 to +200	5	RoHS	81
HO1-P(N)202V-0.5B	1W	5	+2000/-2000	0 to +2000 / 0 to -2000	0.5	RoHS	81
HO1-P(N)302-0.5C(F)	1.5W	12,24	+3000/-3000	0 to +3000 / 0 to -3000	0.5	RoHS	81
HO1-P(N)602-0.25C	1.5W	12	+6000/-6000	0 to +6000 / 0 to -6000	0.25	RoHS	82
HO1-P(N)601V-3C	1.8W	12	+600/-600	0 to +600 / 0 to -600	3	RoHS	82
HO1-N1501V-1.2F	1.8W	24	-1500	0 to -1500	1.2	RoHS	82
HO1-PN202-0.5C	2W	12	±2000	0 to ±2000	0.5	RoHS	82
HO1-P(N)202V-1C	2W	12	+2000/-2000	0 to +2000 / 0 to -2000	1	RoHS	82
HO1-P401V-5C	2W	12	+400	0 to +400	5	RoHS	82
HO1-P231V-10F	2.3W	24	+230	0 to +230	10	RoHS	82
HO1-N102V-3F	3W	24	-1000	0 to -1000	3	RoHS	82
HO1-P401V-10C	4W	12	+400	0 to +400	10	RoHS	82
HO1-P501LD-50C	25W	12	+500	0 to +500	50	RoHS	82
HO1-P102-30F	30W	24	+1000	0 to +1000	30	RoHS	82
HO1-P202-20D	40W	16	+2000	0 to +2000	20	RoHS	82
HO1-P431-XA	/	3.3	+430	/	10uA	RoHS	82

High Output Negative ion Generator

HO5 Series

Series	Input Voltage Range(VDC)	Input Current (mA)	Output Voltage (VDC)	Negative-ion Concentration(pcs/cc)	Ozone Concentration (ppm)	Markings	Page
HO5-N202TS-A	3.6 (3.2-3.8)	3	-1000V to -3000V	10 M	0.05	RoHS	80

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Board Mount DC/DC Converter

Two-way Switching Power Supply

MBP Series (2-5A)

Series	Forward Input Voltage(VDC)	Forward Output (VDC)	Forward Output Current(A)	Reverse Input Voltage(VDC)	Reverse Output Voltage(VDC)	Reverse Output Current(A)	Markings	Page
MBP2403RP-2A	24 (15-30)	3.3 (1.8-4.5)	2	3.3 (1.8-4.5)	24 (15-30)	-0.21	RoHS	92
MBP2403RP-3A	24 (15-30)	3.3 (1.8-4.5)	3	3.3 (1.8-4.5)	24 (15-30)	-0.34	RoHS	92
MBP2403JD-3A	24 (10-36)	3.3 (1.8-5)	3	3.3 (1.8-5)	24 (10-36)	-0.34	RoHS	92
MBP2403RP-5A	24 (15-30)	3.3 (1.8-4.5)	5	3.3 (1.8-4.5)	24 (15-30)	-0.5	RoHS	92

Non-isolated Switching Regulator

K78 Series (0.3-3A)

Series	Input Voltage Range(VDC)	Output Voltage(VDC)	Output Current(mA)	Markings	Page
K78U-500R3(L)	9-90	3.3,5,6.5,9,12,15,24	500	RoHS CE UKCA	85
K78_MT-500R4	4.5-36	3.3,5,6.5,9,12,15,-3.3,-5,-6.5,-9,-12,-15	500	RoHS CE UKCA	85
K78-500R3	4.75-36	3.3,5,9,12,15,-5,-12,-15	500/-300/-150	RoHS cULus CE CB UKCA	85
K78_500R3-LB	4.75-36	3.3,5,6.5,9,12,15,-3.3,-5,-6.5,-9,-12,-15	500/-300	RoHS CE UKCA	85
K78_JT-500R3-LB	4.75-36	3.3,5,6.5,9,12,15	500	RoHS CE UKCA	85
K78_T-500R3	4.75-36	1.5,1.8,2.5,3.3,5,6.5,9,12,15	500	RoHS CE UKCA	85
K78U-1000R3(L)	9-75	3.3,5,6.5,9,12,15,24	1000	RoHS CE UKCA (pending)	86
K78_MT-1000R4	4.75-36	3.3,5,6.5,9,12,15,-3.3,-5,-6.5,-9,-12,-15	1000	RoHS CE UKCA	86
K78_T-1000R3	4.75-36	1.5,1.8,2.5,3.3,5,6.5,9,12	1000/800	RoHS CE UKCA	86
K78-1000R3(L)	6-36	3.3,5,9,12,15,-5,-12,-15	1000/-500/-300	RoHS cULus CE CB UKCA	86
K78_M-1000R3	6-36	3.3,5,6.5,9,12,15,-5,-12,-15	1000/-500/-300	RoHS CE UKCA	86
K78-2000R3	4.5-36	1.8,2.5,3.3,5,6.5,9,12,15	2000	RoHS CE UKCA	86
K78(L)xx-3AR3	8-36	3.3,5,6.5,9,12,15	3000	RoHS CE UKCA	86

Non-isolated PoL Power Supply

K12 Series (6-60A)

Series	Input Voltage Range(VDC)	Output Voltage(VDC)	Output Current(mA)	Markings	Page
K12T-6A-P(N)	8.3-14	0.75-5.5	6000	RoHS CE UKCA	87
K12MT-6A-P(N)	4.5-14.4	0.6-5.5	6000	RoHS	87
K12T-10A-P(N)	8.3-14	0.75-5.5	10000	RoHS CE UKCA	87
K12MT-12A-P(N)	4.5-14.4	0.6-5.5	12000	RoHS	87
K12MT-16A-P(N)	4.5-14.4	0.6-3.63	16000	RoHS	87
K12T-16A-P(N)	8.3-14	0.75-5.5	16000	RoHS CE UKCA	87
K12T-20A-P(N)	8-14	0.6-5.0	20000	RoHS CE UKCA	87
KD12T-40A	4.5-14.4	0.6-4.5	40000	RoHS	87
KD12T-60A	7.5-14.4	0.6-4.5	60000	RoHS	87

Buck/Buck-Boost Power Supply

KJB/KUB Series (7-20A)

Series	Input Voltage Range(VDC)	Output Voltage(VDC)	Output Current(mA)	Markings	Page
KUB48_EB(F)-10A(-RS)	9-60	0-60	0-10000	RoHS CE UKCA	88
KUB48_QB-10A	30-75	12,24	10000	RoHS CE UKCA	88
KUB_48EB(F)-10A	14.5-75,14.5-90	20-55	10000	RoHS CE UKCA	88
KJB48_SBO-10A	18-85	5,12,15,24	10000	RoHS CE UKCA	88
KJB48_EB(F)-10A	18-85	5,12,15,24,36	10000	RoHS CE UKCA	88
KJB48_EB(F)-15A	43-85	36	15000	RoHS CE UKCA	88
KJB48_EB(F)-20A	14.5-85	5,12,15,24	20000	RoHS CE UKCA	88

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Board Mount DC/DC Converter

LED Driver

KC Series

Series	Input Voltage Range(VDC)	Output Voltage(VDC)	Output Current(mA)	Markings	Page
KC24H-1000	5.5-48	3.3-36	1000	RoHS	89
KC24H-1200	5.5-48	3.3-36	1200	RoHS	89
KC24H-R	5.5-46	3.3-36	0-300,0-350,0-500,0-600,0-700	RoHS	89
KC24W	5.5-48	3.3-36	0-300,0-350,0-500,0-600,0-700	RoHS	89
KC24JT-R3	6-36	3.3-33	300,700	RoHS CE UKCA	89

DC/DC Converter for IGBT Driver

QA Series

Series	Standard Input Voltage(VDC)	Input Voltage Range(VDC)	Output Voltage Vo1(VDC)	Output Voltage Vo2(VDC)	Output Current (mA)	Efficiency (Typ.%)	Isolation Voltage	Markings	Page
QAxx3HD2-1509R3	12/15/24	10.8-13.2,13.5-16.5, 21.6-26.4	+15	-9	+100/-100	85	5000VAC	RoHS	90
QAxx3-1509R3	5/12/15/24	4.5-5.5,10.8-13.2, 13.5-16.5,21.6-26.4	+15	-8.7/-9	+80/-40, +100/-100	87	5000VAC	RoHS cULus CE	90
QAxx3H-1509R3	12/15/24	10.8-13.2,13.5-16.5, 21.6-26.4	+15	-9	+100/-100	87	5000VAC	RoHS cULus CE	90
QAxx3D-2GR3	12/15/24	11.4-12.6,14.5-15.5, 22.8-25.3	+24	+24	+100/+100	88	5000VAC	RoHS CE	90
QA0x	12/15/24	9-15,11.6-12.4,14.5-15.5, 23.3-24.7	+9/+15/ +17	-8/-8.7/-9	+55/-55,+80/-40, +100/-40,+111/--	80	3000VAC	RoHS cULus CE CB	90
QAxx1	12/15/24	11.4-12.6,14.25-15.75, 22.8-25.2	+15	-8	+120/-120	81	3000VAC	RoHS CE	90
QAWxx	12/24	9-15,18-36	+15	-9	±200/±10	85	3000VDC	RoHS	90

DC/DC Converter for SiC MOSFET Driver

QA Series

Series	Standard Input Voltage(VDC)	Input Voltage Range(VDC)	Output Voltage Vo1(VDC)	Output Voltage Vo2(VDC)	Output Current (mA)	Efficiency (%)	Isolation Voltage	Markings	Page
QAxx3C-1504R3	5/12/15/24	4.5-5.5,10.8-13.2, 13.5-16.5,21.6-26.4	+15	-4/-5	+80/-40, +120/-120	82	5000VAC	RoHS cULus CE	91
QAxx3HC-1504R3	12/15/24	10.8-13.2, 13.5-16.5,21.6-26.4	+15	-4	+120/-120	82	5000VAC	RoHS cULus CE	91
QAxx3HCD2-1504R3	12/15/24	10.8-13.2, 13.5-16.5,21.6-26.4	+15	-4	+120/-120	85	5000VAC	RoHS	91
QAxx3C-1803R3	5/12	4.5-5.5,10.8-13.2	+18	-3/-3.5	+80/-80, +100/-100	82	5000VAC	RoHS cULus CE	91
QAxx3HCD2-1803R3	12/15/24	10.8-13.2, 13.5-16.5,21.6-26.4	+18	-3	+110/-110	85	5000VAC	RoHS	91
QAxx3C-2005R3	5/12/15/24	4.5-5.5,10.8-13.2, 13.5-16.5,21.6-26.4	+20	-4/-5	+80/-40, +90/-90	82	5000VAC	RoHS cULus CE	91
QAxx3HC-2005R3	12/15/24	10.8-13.2, 13.5-16.5,21.6-26.4	+20	-5	+90/-90	82	5000VAC	RoHS cULus CE	91
QAxx3HCD2-2005R3	12/15/24	10.8-13.2, 13.5-16.5,21.6-26.4	+20	-5	+90/-90	85	5000VAC	RoHS	91
QAxx1C	5/12/15	4.5-5.5, 10.8-13.2,13.5-16.5	+15/+18/ +20	-3/-3.5/ -4/-5	+80/-40, +100/-100,+111/-111	82	3500VAC	RoHS cULus CE CB	91
QAxx1C-20	12/24	10.8-13.2,21.6-26.4	+20	-4/-5	+100/-100	80	3500VAC	RoHS	91

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Isolated CAN Bus Transceiver Module

CAN Series

Series	Package	Integrated Power	Type	Protocol	Input Voltage	Baud Rate	Nodes	Markings	Page
TDA51SCANHC	SOIC	YES	High-rate	CAN	5VDC	1Mbps	110	RoHS	94
TD541SCANH-S	DFN	YES	High-rate	CAN	5VDC	40k-1Mbps	110	RoHS	94
TD3/541SCANH	DFN	YES	High-rate	CAN	3.3/5VDC	40k-1Mbps	110	RoHS	94
TD541SCANFD	DFN	YES	High-rate	CANFD	5VDC	5Mbps	110	RoHS	94
TD041SCANH-S	DFN	NO	High-rate	CAN	3.3/5VDC	40k-1Mbps	110	RoHS	94
TD041SCANH	DFN	NO	High-rate	CAN	3.3/5VDC	40k-1Mbps	110	RoHS	94
TD041SCANFD	DFN	NO	High-rate	CANFD	3.3/5VDC	40k-5Mbps	110	RoHS	94
TD3/531SCANH	SMD	YES	High-rate	CAN	3.3/5VDC	40k-1Mbps	110	RoHS	94
TD3/531SCANFD	SMD	YES	High-rate	CANFD	3.3/5VDC	40k-5Mbps	110	RoHS	94
CTD3/531SCANH	SMD	YES	Automotive & High-rate	CAN	3.3/5VDC	40k-1Mbps	110	RoHS	94
TD3/521SCAN(H)	SMD	YES	Universal	CAN	3.3/5VDC	5k-1Mbps/ 40k-1Mbps	110	RoHS	94
TD3/52xDCAN	DIP	YES	Universal	CAN	3.3/5VDC	40k-1Mbps	110	RoHS	94
TDH3/501DCAN	DIP	YES	High-isolated & High-rate	CAN	3.3/5VDC	5k-1Mbps	110	RoHS	94
TD3/501DCANH-W	DIP	YES	Wake-up & High-rate	CAN	3.3/5VDC	40k-1Mbps	110	RoHS	94
TD3/501MCAN	DIP	YES	Ultra-compact size	CAN	3.3/5VDC	40k-1Mbps	110	RoHS	94

Isolated RS-485 Transceiver Module

RS-485 Series

Series	Package	Integrated Power	Type	Protocol	Input Voltage	Baud Rate	Nodes	Markings	Page
TDA51S485HC	SOIC	YES	High-rate & Half-duplex	485	5VDC	500kbps	256	RoHS	95
TD541S485H-S	DFN	YES	High-rate & Half-duplex	485	5VDC	1Mbps	256	RoHS	95
TD3/541S485H	DFN	YES	(Ultra) High-rate & Half-duplex	485	3.3/5VDC	1Mbps	256	RoHS	95
TD3/541S485H-A	DFN	YES	Automatic send/receive	485	3.3/5VDC	500kbps	256	RoHS	95
TD041S485H	DFN	NO	(Ultra) High-rate & Half-duplex	485	3.3/5VDC	1Mbps	256	RoHS	95
TD041S485H-A	DFN	NO	Automatic send/receive	485	3.3/5VDC	500kbps	256	RoHS	95
TD041S485S-F(1)	DFN	NO	High-rate & Full-duplex	485/422	3.3/5VDC	20Mbps	256	RoHS	95
TD3/541S485S-F(T/1)	DFN	YES	High-rate & Full-duplex	485/422	3.3/5VDC	20Mbps	256	RoHS	95
TD3/531S485(H/H-A/H-E)	SMD	YES	High-rate & Half-duplex	485	3.3/5VDC	19.2k-500kbps	128	RoHS	96
TD3/521S485(H/H-A/H-E)	SMD	YES	High-rate & Half-duplex	485	3.3/5VDC	19.2k-500kbps	128	RoHS	96
TD3/521D485(H/H-A/H-E)	DIP	YES	High-rate & Half-duplex	485	3.3/5VDC	19.2k-500kbps	128	RoHS	96
TD3/501D485(H/H-A/H-E)	DIP	YES	High-rate & Half-duplex	485	3.3/5VDC	9.6k-500kbps	128	RoHS	96
TDH3/501D485H(H2/H-E)	DIP	YES	High-isolated & Half-duplex	485	3.3/5VDC	115.2k-1Mbps	256	RoHS	96
TD3/501M485	DIP	YES	Ultra-compact size	485	3.3/5VDC	500kbps	64	RoHS	96

Isolated RS-232 Transceiver Module

RS-232 Series

Series	Package	Integrated Power	Type	Protocol	Input Voltage	Baud Rate	Nodes	Markings	Page
TD(H)3/541S232H	DFN	YES	High-rate	232	3.3/5VDC	120kbps	1	RoHS	97
TD041S232H	DFN	NO	High-rate	232	3.3/5VDC	120kbps	1	RoHS	97
TD3/531S232H	SMD	YES	High-rate	232	3.3/5VDC	115.2kbps	1	RoHS	97
TD3/501D232H	DIP	YES	High-rate	232	3.3/5VDC	115.2kbps	1	RoHS	97

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Signal & EMC Auxiliary Device

UART/SPI-CAN Protocol Conversion Module

TDxUSPCAN Series

Series	Package	Integrated Power	Type	Input Voltage	Baud Rate	Nodes	Markings	Page
TD3USPCAN	DIP	YES	Protocol conversion	3.15-3.45VDC	5k-1Mbps	110	RoHS	97
TD5USPCAN	DIP	YES	Protocol conversion	4.75-5.25VDC	5k-1Mbps	110	RoHS	97

Ethernet Protocol Conversion Module

TD-NET Series

Series	Package	Integrated Power	Type	Protocol	Input Voltage	Baud Rate	Nodes	Markings	Page
TD1UDNET-RJ45	DIP	YES	Protocol conversion	Ethernet	3.15-3.45/4.5-30VDC	10/100M	1	RoHS	98
TD1UDNET	DIP	YES	Protocol conversion	Ethernet	3.15-3.45/4.5-30VDC	10/100M	1	RoHS	98
TD3UT-NET	SMD	YES	Protocol conversion	Ethernet	3.0-3.6VDC	10/100M	1	RoHS	98

Digital Signal Isolation Module

TD Series

Series	Package	Type	Input Voltage	Isolation Voltage	Baud Rate	Operating Voltage	Markings	Page
TDA51S-41HC	SOIC	Quad channels digital isolator	3-5VDC	5000VAC	150Mbps	High 3.3V/5V	RoHS	99
TD3/541S-4xH3(5)	DFN	Quad channels digital isolator	3.3/5VDC	5000VDC	150Mbps	High 3.3V/5V	RoHS	99
TD541S-4xL3(5)	DFN	Quad channels digital isolator	3.3/5VDC	5000VDC	150Mbps	Low	RoHS	99

Analog Signal Conditioning Module

T Series

Series	Package	Type	VCC Voltage (VDC)	Input Signal	Output Signal	Isolation Voltage	Markings	Page
TE_N	DIP	Active high-precision input signal conditioning	5/12/15/24	0-1V/0-5V/0-10V/0-20mA/4-20mA	0-1V/0-2.5V/0-3.3V/0-5V/0-10V/1-5V	2000VAC	RoHS	100
TEM_N	DIP	Active high-precision millivolt-input signal conditioning	12/15/24	±50mV/±75mV/±100mV/±200mV	0-5V/±5V/±10V	2000VAC	RoHS	100
TF_N	DIP	Active high-precision output signal conditioning	5/12/24	0-3.3V/0-5V/0-10V	0-5V/0-10V/0-20mA/4-20mA	2000VAC	RoHS	100
TFW_N	DIP	Active high-precision PWM-output signal conditioning	5	PWM (0-100%)	0-5V/0-10V/0-20mA	2000VAC	RoHS	100
T_P	DIP	Active high-precision well-rounded signal conditioning	12/15/24	0-10V/1-5V/0-20mA/4-20mA	0-2.5/0-5V/0-10V/1-5V/0-20mA/4-20mA	2500VDC	RoHS	101
TM_P	DIP	Active high-precision millivolt & Well-rounded signal conditioning	5/12/24	0-10mV/0-20mV/0-30mV/ 0-50mV/0-75mV/0-100mV	0-2.5V/0-3.3V/0-5V/0-10V/ 0-20mA/4-20mA	2500VDC	RoHS	101
T1100N	DIP	Passive high-precision signal conditioning	/	4-20mA	4-20mA	3000VDC	RoHS	102
T1100L	SIP	Passive high-precision signal conditioning	/	4-20mA	4-20mA	3000VDC	RoHS	102
T1100L-F	SIP	Passive loop power supply signal conditioning	/	4-20mA	4-20mA	3000VDC	RoHS	102
T_HL	SIP	Two-wire loop power supply signal isolation(with HART)	15-24,10-24	0-2.5V	3.7-22mA	2000VAC	RoHS	102
T_L	SIP	Two-wire loop power supply signal isolation	10-24	0-2.5V	3.7-22mA	2000VAC	RoHS	102
TRP_P	DIP	Input signal conditioning(thermistor)	12/24	Pt100	0-2.5V/4-20mA	2000VAC	RoHS	103

IGBT Driver Module

QP/QC Series

Series	Integrated Power	VCC Voltage (VDC)	VEE Voltage (VDC)	Output Voltage Range Vo1(VDC)	Output Voltage Range Vo2(VDC)	Max. Driving Current(A)	Max. Frequency (kHz)	Isolation Voltage	Markings	Page
QP12W08S-37	YES	15	/	15	-9	±8	20	3750VAC	RoHS	104
QP12W08S-37A	YES	12	/	15	-9	±8	20	3750VAC	RoHS	104
QC962-8A	NO	15	-10	14	-9	±8	40	3750VAC	RoHS	104

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Signal & EMC Auxiliary Device

EMC Auxiliary Device — FC Series

Series	Function	Input Voltage Range	Max. Output Power/ Current	Mounting	Markings	Page
FC-AX3D	DC/DC EMC filter	10-36VDC	30W	PCB/Din-rail/Wiring	RoHS	105
FC-B02D	DC/DC EMC filter	18-75VDC	30W	PCB/Din-rail/Wiring	RoHS	105
FC-D03D	DC/DC EMC filter	18-36VDC	50W	PCB/Din-rail/Wiring	RoHS	105
FC-E03D	DC/DC EMC filter	36-75VDC	75W	PCB/Din-rail/Wiring	RoHS	105
FC-A01D	DC/DC EMC filter	9-36VDC	1A	PCB/Din-rail/Wiring	RoHS	105
FC-B01D	DC/DC EMC filter	18-75VDC	1A	PCB/Din-rail/Wiring	RoHS	105
FC-CxxD	DC/DC EMC filter	40-160VDC	10W/30W/50W/100W	PCB/Din-rail/Wiring	RoHS CE	105
FT-AX1D	DC/DC pulse group suppressor	0-40VDC	1.5A	PCB/Din-rail/Wiring	RoHS	106
FT-BX1D	DC/DC pulse group suppressor	0-80VDC	1.5A	PCB/Din-rail/Wiring	RoHS	106
FS-TD01D	485-AB bus surge protection module	0-5VDC	0.1A	PCB	RoHS	106
FL2D-xx-xxx	Common mode filter	/	0.5A/1A/3A/5A/8A/12A/40A	PCB	RoHS	107
FC-LxxD	AC/DC EMC filter	0-305VAC/85-305VAC	1.5A/3A	PCB	RoHS	108
FC-L03I(x)	AC/DC EMC filter	0-305VAC	3.0A	Din-rail	RoHS CE	108
FC-LxxW	AC/DC EMC filter	0-305VAC	3A/6A	PCB/Din-rail/Wiring	RoHS CE	109
FC-L04QB	AC/DC EMC filter	0-305VAC	4A	PCB	RoHS CE	109
FC-L10HB	AC/DC EMC filter	0-305VAC	10A	PCB	RoHS CE	109

CAN/RS-485 Industrial Bus IC — SCM34xxA Series

Series	Package	Type	Input Voltage	Protocol	Baud Rate	Interface Withstand Voltage (V)	Nodes	Markings	Page
SCM3406A	SOP-8	High-rate 485 TR	3-5.5VDC	485	10Mbps	-15 To +15	256	RoHS	110
SCM3421B	SOP-8	High-rate CAN TR	4.5-5.5VDC	CAN	5Mbps	-58 To +58	110	RoHS	110
SCM3422B	SOP-8	High-rate CAN TR	4.5-5.5VDC	CAN	5Mbps	-58 To +58	110	RoHS	110
SCM3425A	SOP-8	High-rate CAN TR	4.5-5.5VDC	CAN	5Mbps	-42 To +42	110	RoHS	110

Digital Signal Isolation IC — SCM37xxA Series

Series	Package	Type	Input Voltage	Isolation Voltage (kV rms)	Baud Rate	Operating Voltage	Markings	Page
SCM3721A	SOP-8	Dual channels digital isolator	3-5.5VDC	3	150kbps	High 3.3(5)V	RoHS	110
SCM3723A	SOP-8	Dual channels digital isolator	3-5.5VDC	3	150kbps	High 3.3(5)V	RoHS	110
SCM3725A	SOP-8	Dual channels digital isolator	3-5.5VDC	3	10Mbps	High 3.3(5)V	RoHS	110
SCM3728A	SOP-8	Dual channels digital isolator	3-5.5VDC	3	10Mbps	Low	RoHS	110

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Smart Control Module

Current Transducer — TL Series

Series	Function	Mounting	Input Voltage	Current Measurement Range	Turn Ratio	Markings	Page
TLAx00-S	High accuracy hall current transducer	Disc Type (bolt fixed)	±12/±15VDC	±100A to ±300A	1:2000/1:2500/1:3500	RoHS	112
TLxx-A3TPV	PCB-type hall current transducer	PCB	5VDC	±20A to ±150A	1:1600	RoHS	112
TLxxx-A2(T)PV	PCB-type hall current transducer	PCB	5VDC	±300A to ±500A	1:1800	RoHS	112
TLx00(P)-D1C	Disc-type hall current transducer	Disc Type (bolt fixed)	±12/±15VDC	±150A to ±500A	1:2000	RoHS	112
TLx00-D2C	Disc-type hall current transducer	Disc Type (bolt fixed)	±12/±15VDC	±150A to ±450A	1:1000/1:3000	RoHS	112
TL500(P)-D1C	Disc-type hall current transducer	Disc Type (bolt fixed)	±15/±24VDC	±800A	1:5000	RoHS	112

Residual Current Detection Module — TLB Series

Series	Function	Mounting	Rated Residual Current(A)	Operating Temperature	Dimension(mm)	Markings	Page
TLB6-A1PV/D	EV Charging-Type-B Residual Current Protection Module	PCB	DC:6mA, AC:30mA	-40℃ to 85℃	TLB6-A1PV: 13.2 x 40 x 45 TLB6-A1PD: 12.4 x 44 x 50	RoHS	113
TLB6-A1SVE	EV Charging-Type-B Residual Current Protection Module	PCB	DC:6mA, AC:30mA	-40℃ to 85℃	26.6 x 28.3 x 23.6	RoHS	113
TLB6-A1TDM	EV Charging-Type-B Residual Current Protection Module (3-Phase)	PCB	DC:6mA, AC:30mA	-40℃ to 85℃	34 x 49 x 23	RoHS	113
TLxxx-D3	Low-voltage Electrical-Type-B Residual Current Protection Module	Wiring	30mA,100mA,300mA	-40℃ to 85℃	36.66 x 28.46 x 22.30	RoHS	113

Contactor Control Module — KM Series

Series	Function	Apparent Power	Control Voltage	Rated Operational Current	No-load Switching Frequency	Markings	Page
KM95-C0-0	Contactor control module	6.5VA	90-275 VAC/VDC	95A	3600 times/h	RoHS	113
KM115-C0-0	Contactor control module	6.5VA	75-305 VAC/VDC	115A	3600 times/h	RoHS	113

DC Contactor — KMJ Series

Series	Function	Mounting	Max. Operating Voltage(V)	Continuous Current(A)	Coil Voltage (V)	Markings	Page
KMJ200-xx	Low voltage DC Contactor	Wiring	24V/48V	200A	12V/24V/48V/9-36V	RoHS CQC (pending)	114
KMJ250-900-24MP	High voltage DC Contactor	Wiring	900V	250A	9-36V	RoHS	114

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Board Mount AC/DC Converter

Flexible DIY Type (Non-isolated) LS Series (1-5W)

Features

- Input voltage range: 85-305VAC/70-430VDC
- Open frame & Compact size
- Flexible design for multi-application with specific EMC peripheral circuit
- Output short-circuit, over-current protections

LS01-K3B05SS

Selection Guide

Part No.	Power	Input voltage	Output voltage/current (Vo/Io)	Efficiency (%)(typ.)
LS01-K3B05SS	1W	85-305VAC/ 70-430VDC	5V/200mA	57

Dimension LxWxH: 16.13 x 15.10 x 9.50(mm)

LS03-K3B12SS

Selection Guide

Part No.	Power	Input voltage	Output voltage/current (Vo/Io)	Efficiency (%)(typ.)
LS03-K3B12SS	3W	85-305VAC/ 70-430VDC	12V/250mA	73

Dimension LxWxH: 16.13 x 15.10 x 9.50(mm)

LS05-K3BxxSS

Selection Guide

Part No.	Power	Input voltage	Output voltage/current (Vo/Io)	Efficiency (%)(typ.)
LS05-K3B12SS	4W	85-305VAC/ 70-430VDC	12V/330mA	75
LS05-K3B15SS	5W		15V/330mA	76
LS05-K3B18SS	5W		18V/280mA	77

Dimension LxWxH: 16.13 x 15.10 x 9.50(mm)

Note

There is no insulation protection between output and input dangerous voltage on non-isolated power supplies. Beware of electric shock.

Flexible DIY Type (SIP Package) LS Series (5-15W)

Features

- Ultra-wide input voltage range: 85-305VAC/70-430VDC, 85-305VAC/100-430VDC
- Accepts AC or DC input (dual-use of the same terminal)
- Operating temperature: -40℃ to +85℃
- Flexible design for various applications, miniature size
- Low standby power consumption 0.1W
- Output short-circuit, over-current protections
- Plastic case meets UL94V-0
- Pollution Degree 3(designed to meet IEC62368-1)

LS05-23BxxDR3

Selection Guide

Part No.	Power	Input voltage	Output voltage/current (Vo/Io)	Efficiency (%)(typ.)
LS05-23B03DR3	3.3W	85-305VAC/ 70-430VDC	3.3V/1000mA	68
LS05-23B05DR3	5W		5V/1000mA	71
LS05-23B09DR3	5W		9V/560mA	74
LS05-23B12DR3	5W		12V/420mA	75
LS05-23B15DR3	5W		15V/340mA	77
LS05-23B24DR3	5W		24V/210mA	77

Dimension LxWxH: 27.60 x 18.50 x 7.80(mm)

LS15-23BxxDR3

Selection Guide

Part No.	Power	Input voltage	Output voltage/current (Vo/Io)	Efficiency (%)(typ.)
LS15-23B03DR3	9.9W	85-305VAC/ 100-430VDC	3.3V/3000mA	78
LS15-23B05DR3	15W		5V/3000mA	81
LS15-23B09DR3	15W		9V/1670mA	84
LS15-23B12DR3	15W		12V/1250mA	84
LS15-23B15DR3	15W		15V/1000mA	84
LS15-23B24DR3	15W		24V/625mA	84

Dimension LxWxH: 33.34 x 21.50 x 9.72(mm)

Flexible DIY Type (Standard)

LS Series (3-15W)

Features

- Miniature layout & Flexible design for multi-application , low power consumption
- Ultra-wide input voltage range, accepts AC or DC input (dual-use of the same terminal)
- Operating temperature: -40℃ to +85℃
- Output short-circuit, over-current and over-voltage protections
- Stable output, low ripple & noise
- Meets IEC/EN61558, IEC/EN60335 standards
- IEC/UL/EN62368 approval

LS03-13BxxR3

Selection Guide

Part No.	Power	Input voltage	Output voltage/current (Vo/Io)	Efficiency (%)(typ.)
LS03-13B03R3	1.98W	85-305VAC/ 70-430VDC	3.3V/600mA	67
LS03-13B05R3	3W		5V/600mA	72
LS03-13B09R3	3W		9V/333mA	76
LS03-13B12R3	3W		12V/250mA	77
LS03-13B15R3	3W		15V/200mA	78
LS03-13B24R3	3W		24V/125mA	80

Dimension LxWxH: 26.40 x 12.58 x 11.00(mm)

LS10-13BxxR3P(-F)

Selection Guide

Part No.	Power	Input voltage	Output voltage/current (Vo/Io)	Efficiency (%)(typ.)
LS10-13B03R3P(-F)	6.6W	85-305VAC/ 90-430VDC	3.3V/2000mA	70
LS10-13B05R3P(-F)	10W		5V/2000mA	77
LS10-13B09R3P(-F)	10W		9V/1100mA	80
LS10-13B12R3P(-F)	10W		12V/830mA	83
LS10-13B15R3P(-F)	10W		15V/670mA	83
LS10-13B24R3P(-F)	10W		24V/420mA	84

LS10-13BxxR3P Dimension LxWxH: 28.84 x 17.20 x 14.05(mm)
LS10-13BxxR3P-F Dimension LxWxH: 31.00 x 20.00 x 14.75(mm)

LS05-13BxxR3(-F)

Selection Guide

Part No.	Power	Input voltage	Output voltage/current (Vo/Io)	Efficiency (%)(typ.)
LS05-13B03R3(-F)	3.3W	85-305VAC/ 70-430VDC	3.3V/1000mA	69
LS05-13B05R3(-F)	5W		5V/1000mA	76
LS05-13B09R3(-F)	5W		9V/560mA	77
LS05-13B12R3(-F)	5W		12V/420mA	79
LS05-13B15R3(-F)	5W		15V/340mA	79
LS05-13B24R3(-F)	5W		24V/210mA	81

LS05-13BxxR3 Dimension LxWxH: 26.40 x 14.73 x 11.00(mm)
LS05-13BxxR3-F Dimension LxWxH: 27.84 x 11.60 x 17.60(mm)

LS15-13BxxSS(-F)

Selection Guide

Part No.	Power	Input voltage	Output voltage/current (Vo/Io)	Efficiency (%)(typ.)
LS15-13B03SS(-F)	9.9W	85-305VAC/ 100-430VDC	3.3V/3000mA	75
LS15-13B05SS(-F)	14W		5V/2800mA	77
LS15-13B09SS(-F)	15W		9V/1670mA	82
LS15-13B12SS(-F)	15W		12V/1250mA	82
LS15-13B15SS(-F)	15W		15V/1000mA	84
LS15-13B24SS(-F)	15W		24V/625mA	85

LS15-13BxxSS Dimension LxWxH: 44.50 x 24.00 x 15.00(mm)
LS15-13BxxSS-F Dimension LxWxH: 44.50 x 15.00 x 24.00(mm)

LS05-13BxxR3S

Selection Guide

Part No.	Power	Input voltage	Output voltage/current (Vo/Io)	Efficiency (%)(typ.)
LS05-13B03R3S	3.3W	85-305VAC/ 100-430VDC	3.3V/1000mA	69
LS05-13B05R3S	5W		5V/1000mA	76
LS05-13B09R3S	5W		9V/560mA	77
LS05-13B12R3S	5W		12V/420mA	79
LS05-13B15R3S	5W		15V/340mA	79
LS05-13B24R3S	5W		24V/210mA	81

Dimension LxWxH: 26.40 x 14.73 x 11.00(mm)

Notes

1. The nominal output voltage refers to the voltage applied to the load terminal after adding external circuits.
2. If the product is used in a severe vibration application, it needs to be glued and fixed.
3. The layout of 3.3V/5V/9V and 12V/15V/24V outputs are varied due to different modes of rectification.
4. An "-F" suffix designates horizontal package vs. standard vertical mounting. For example, the corresponding model with 90-degree bending pins of LS15-13BxxSS is LS15-13BxxSS-F.
5. This series has high precision output primary-side feedback type products. Please contact our sales for more details.

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Flexible DIY Type (Dual outputs)

LS Series (5-10W)

Features

- Ultra-wide input voltage range: 85-305VAC/70-430VDC
- Accepts AC or DC input (dual-use of the same terminal)
- Operating temperature: -40℃ to +85℃
- Flexible design for various applications
- Miniature size, high power density, green power
- Output short-circuit, over-current and over-voltage protections

LS05-13Dxx

Selection Guide

Part No.	Power	Input voltage	Output voltage/current (Vo1/Io1)	Output voltage/current (Vo2/Io2)	Efficiency (%)(typ.)
LS05-13D0512-03	5W	85-305VAC/ 70-430VDC	5V/200mA	12V/330mA	78
LS05-13D0524-01	5W		5V/200mA	24V/167mA	78

Dimension LxWxH: 29.54 x 15.70 x 12.00(mm)

LS10-13Dxx

Selection Guide

Part No.	Power	Input voltage	Output voltage/current (Vo1/Io1)	Output voltage/current (Vo2/Io2)	Efficiency (%)(typ.)
LS10-13D0505-06	10W	85-305VAC/ 70-430VDC	5V/1400mA	5V/600mA	77
LS10-13DY505-06	10W		5.7V/1230mA	5V/600mA	77
LS10-13DY512-04	10W		5.7V/910mA	12V/400mA	80
LS10-13DY524-02	10W		5.7V/910mA	24V/200mA	80
LS10-13D1212-02	10W		12V/630mA	12V/200mA	82

Dimension LxWxH: 34.50 x 18.00 x 14.75(mm)

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Cost-effective & Open-Frame (Single output) LO Series (10-65W)

Features

- Input voltage range: 85-305VAC/100-430VDC
  85-264VAC/100-370VDC
- Operating temperature: -25℃ to +70℃
- High efficiency, high reliability, low ripple & noise
- Output short-circuit, over-current and over-voltage protections
- EMI performance meets CISPR32/EN55032 CLASS B
- 15-30W series meets IEC/EN/UL62368, EN60335 standards
- 45-65W series meets IEC/EN/UL62368 standards


LO10-13Bxx

Selection Guide

Part No.	Power	Input voltage	Output voltage/current (Vo/Io)	Efficiency (%)(typ.)
LO10-13B03	6.6W	85-305VAC/ 100-430VDC	3.3V/2000mA	73
LO10-13B05	10W		5V/2000mA	78
LO10-13B09	10W		9V/1100mA	79
LO10-13B12	10W		12V/900mA	81
LO10-13B15	10W		15V/700mA	81
LO10-13B24	10W		24V/450mA	81

Dimension LxWxH: 60.00 x 42.00 x 16.30(mm)

LO15-10Bxx

Selection Guide

Part No.	Power	Input voltage	Output voltage/current (Vo/Io)	Efficiency (%)(typ.)
LO15-10B03	9W	85-264VAC/ 100-370VDC	3.3V/3000mA	72
LO15-10B05	14W		5V/2800mA	76
LO15-10B09	15W		9V/1600mA	78
LO15-10B12	15W		12V/1250mA	81
LO15-10B15	15W		15V/1000mA	81
LO15-10B24	15W		24V/625mA	82

Dimension LxWxH: 63.50 x 45.70 x 19.00(mm)

LO30-10Bxx

Selection Guide

Part No.	Power	Input voltage	Output voltage/current (Vo/Io)	Efficiency (%)(typ.)
LO30-10B03	13.5W	85-264VAC/ 100-370VDC	3.3V/4100mA	73
LO30-10B05	20.5W		5V/4100mA	78
LO30-10B09	30W		9V/3333mA	82
LO30-10B12	30W		12V/2500mA	84
LO30-10B15	30W		15V/2000mA	86
LO30-10B24	30W		24V/1250mA	87
LO30-10B48	30W		48V/625mA	88

Dimension LxWxH: 76.20 x 50.80 x 27.00(mm)

LO45-10Bxx

Selection Guide

Part No.	Power	Input voltage	Output voltage/current (Vo/Io)	Efficiency (%)(typ.)
LO45-10B03	26.4W	85-264VAC/ 100-370VDC	3.3V/8000mA	76
LO45-10B05	40W		5V/8000mA	82
LO45-10B09	40W		9V/4444mA	84
LO45-10B12	45W		12V/3750mA	84
LO45-10B15	45W		15V/3000mA	86
LO45-10B24	45W		24V/1875mA	86
LO45-10B48	45W		48V/940mA	87

Dimension LxWxH: 76.20 x 50.80 x 30.00(mm)

LO65-10Bxx

Selection Guide

Part No.	Power	Input voltage	Output voltage/current (Vo/Io)	Efficiency (%)(typ.)
LO65-10B05	50W	85-264VAC/ 100-370VDC	5V/10000mA	80
LO65-10B09	60W		9V/6600mA	83
LO65-10B12	65W		12V/5420mA	85
LO65-10B15	65W		15V/4340mA	85
LO65-10B24	65W		24V/2710mA	87
LO65-10B48	65W		48V/1360mA	87

Dimension LxWxH: 76.20 x 50.80 x 30.00(mm)

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Cost-effective & Open-Frame (Multiple outputs) LO Series (15-45W)

Features

- Input voltage range: 85-264VAC/100-370VDC
- Operating temperature: -25℃ to +70℃
- High efficiency, high reliability, low ripple & noise
- Output short-circuit, over-current and over-voltage protections
- EMI performance meets CISPR32/EN55032 CLASS B
- LO30 series meets IEC/EN/UL62368, EN60335 standards
- LO45 series meets IEC/EN/UL62368 standards


LO15-10Axx

Selection Guide

Part No.	Power	Input voltage	Output voltage/current (Vo1/Io1)	Output voltage/current (Vo2/Io2)	Efficiency (%)(typ.)
LO15-10A12	15W	85-264VAC/ 100-370VDC	+12V/625mA	-12V/625mA	79
LO15-10A15	15W		+15V/500mA	-15V/500mA	81

Dimension LxWxH: 63.50 x 45.70 x 21.00(mm)

LO30-10Axx

Selection Guide

Part No.	Power	Input voltage	Output voltage/current (Vo1/Io1)	Output voltage/current (Vo2/Io2)	Efficiency (%)(typ.)
LO30-10A12	30W	85-264VAC/ 100-370VDC	+12V/1250mA	-12V/1250mA	82
LO30-10A15	30W		+15V/1000mA	-15V/1000mA	82

Dimension LxWxH: 76.20 x 50.80 x 28.00(mm)

LO15-10Dxxxx-xx

Selection Guide

Part No.	Power	Input voltage	Output voltage/current (Vo1/Io1)	Output voltage/current (Vo2/Io2)	Efficiency (%)(typ.)
LO15-10D0505-15	15W	85-264VAC/ 100-370VDC	5V/1500mA	5V/1500mA	76
LO15-10D0512-07	15W		5V/1260mA	12V/720mA	80
LO15-10D0524-05	15W		5V/720mA	24V/480mA	80

Dimension LxWxH: 63.50 x 45.70 x 21.00(mm)

LO30-10Dxxxx-xx

Selection Guide

Part No.	Power	Input voltage	Output voltage/current (Vo1/Io1)	Output voltage/current (Vo2/Io2)	Efficiency (%)(typ.)
LO30-10D0505-30	30W	85-264VAC/ 100-370VDC	5V/3000mA	5V/3000mA	79
LO30-10D0512-15	30W		5V/2520mA	12V/1440mA	81
LO30-10D0524-10	30W		5V/1440mA	24V/960mA	84

Dimension LxWxH: 76.20 x 50.80 x 28.00(mm)

LO20-10Cxxxx-xx

LO20-10C0512-01 LO20-10C0512-05

Selection Guide

Part No.	Power	Input voltage	Output voltage/current (Vo1/Io1)	Output voltage/current (Vo2/Io2)	Output voltage/current (Vo3/Io3)	Efficiency (%)(typ.)
LO20-10C0512-01	18.7W	165-264VAC/ 230-370VDC	5V/500mA	12V/1200mA	-12V/150mA	78
LO20-10C0512-05	17.8W	85-264VAC/ 100-370VDC	5V/2000mA	12V/500mA	-12V/150mA	79

Dimension LxWxH: 70.00 x 48.00 x 23.00(mm)

LO30-10Cxxxx-xx

LO30-10C0512-12 LO30-10C0512-20

Selection Guide

Part No.	Power	Input voltage	Output voltage/current (Vo1/Io1)	Output voltage/current (Vo2/Io2)	Output voltage/current (Vo3/Io3)	Efficiency (%)(typ.)
LO30-10C0512-12	31.2W	85-264VAC/ 100-373VDC	5V/3000mA	12V/1200mA	-12V/150mA	78
LO30-10C0512-20	35.2W	85-264VAC/ 100-370VDC	12V/2000mA	5V/2000mA	-12V/100mA	78

Dimension LxWxH: 97.00 x 50.00 x 28.00(mm)

LO45-10Cxxxx-xx

Selection Guide

Part No.	Power	Input voltage	Output voltage/current (Vo1/Io1)	Output voltage/current (Vo2/Io2)	Output voltage/current (Vo3/Io3)	Efficiency (%)(typ.)
LO45-10C050512-20	40.5W	85-264VAC/ 100-370VDC	5V/3000mA	12V/2000mA	-5V/300mA	78
LO45-10C051212-20	42.6W		5V/3000mA	12V/2000mA	-12V/300mA	78
LO45-10C051515-16	43.5W		5V/3000mA	15V/1600mA	-15V/300mA	78

Dimension LxWxH: 102.00 x 51.00 x 30.00(mm)

• This catalog is for reference only, not being the judgment basis for the use. For detailed datasheets please visit our website: www.mornsun-power.com.

Half/Full Brick Packages

LB Series（150-750W）

305RAC

Features

- Input voltage range: 85-305VAC/120-430VDC
- High efficiency up to 92%, PF value up to 0.99
- Compact size, High power density
- Input under-voltage, and over-temperature protections
- Output short-circuit, over-current and over-voltage protections
- Comply with IEC/EN/UL62368 standards

LBH150-13Bxx

Selection Guide RoHS

Part No.	Power	Input voltage	Output voltage/current (Vo/Io)	Efficiency (%)(typ.)
LBH150-13B12	150W	85-305VAC/ 120-430VDC	12V/12.5A	92
LBH150-13B24	150W		24V/6.25A	92
LBH150-13B28	150W		28V/5.36A	92
LBH150-13B48	150W		48V/3.13A	92
LBH150-13B54	150W		54V/2.78A	92

Dimension LxWxH: 63.14 x 60.60 x 12.70(mm)

LBF750-13Bxx

Selection Guide RoHS

Part No.	Power	Input voltage	Output voltage/current (Vo/Io)	Efficiency (%)(typ.)
LBF750-13B12	696W	85-305VAC/ 120-430VDC	12V/58A	89
LBF750-13B24	750W		24V/31.2A	91
LBF750-13B28	750W		28V/26.8A	91.5
LBF750-13B48	750W		48V/15.6A	92
LBF750-13B54	750W		54V/13.9A	92

Dimension LxWxH: 116.80 x 61.00 x 12.70(mm)

LBH300-13Bxx

Selection Guide RoHS

Part No.	Power	Input voltage	Output voltage/current (Vo/Io)	Efficiency (%)(typ.)
LBH300-13B12	300W	85-305VAC/ 120-430VDC	12V/25A	92
LBH300-13B24	300W		24V/12.5A	92
LBH300-13B28	300W		28V/10.8A	92

Dimension LxWxH: 63.14 x 60.60 x 12.70(mm)

DIP Compact-size

LD Series（3-90W）

305RAC

Features

- Ultra-wide input voltage range: 85-305VAC/100-430VDC
  21.6-305VAC/18-430VDC(LD10-2WBxx)
- Compact size, Low standby power consumption < 0.1W
- Operating temperature: -40℃ to +85℃
- Operating altitude up to 5000m
- Isolation voltage 4000VAC
- Plastic case meets UL94V-0
- EMI performance meets CISPR32/EN55032 CLASS B, EN55014
- IEC/EN/UL62368/EN60335/EN61558 approval
- Meets IEC/EN60601-1/ANSI/AAMI ES60601-1 standards (2xMOPP)

LD03-23BxxR2

Selection Guide cULus CE CB UKCA RoHS

Part No.	Power	Input voltage	Output voltage/current (Vo/Io)	Efficiency (%)(typ.)
LD03-23B03R2	3W	85-305VAC/ 100-430VDC	3.3V/900mA	71
LD03-23B05R2	3W		5V/600mA	75
LD03-23B09R2	3W		9V/333mA	77
LD03-23B12R2	3W		12V/250mA	77
LD03-23B15R2	3W		15V/200mA	78
LD03-23B24R2	3W		24V/125mA	78

Dimension LxWxH: 25.40 x 25.40 x 17.60(mm)

LD05-23BxxR2

Selection Guide cULus CE CB UKCA RoHS

Part No.	Power	Input voltage	Output voltage/current (Vo/Io)	Efficiency (%)(typ.)
LD05-23B03R2	5W	85-305VAC/ 100-430VDC	3.3V/1515mA	71.5
LD05-23B05R2	5W		5V/1000mA	77.5
LD05-23B09R2	5W		9V/555mA	80.5
LD05-23B12R2	5W		12V/416mA	80.5
LD05-23B15R2	5W		15V/333mA	81.5
LD05-23B24R2	5W		24V/208mA	81.5

Dimension LxWxH: 25.40 x 25.40 x 17.60(mm)

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LD10-23BxxR2

Selection Guide cULus CE CB UKCA RoHS

Part No.	Power	Input voltage	Output voltage/current (Vo/Io)	Efficiency (%)(typ.)
LD10-23B03R2	8.6W	85-305VAC/ 100-430VDC	3.3V/2600mA	74
LD10-23B05R2	10W		5V/2000mA	79
LD10-23B09R2	10W		9V/1100mA	81
LD10-23B12R2	10W		12V/830mA	84
LD10-23B15R2	10W		15V/660mA	84
LD10-23B24R2	10W		24V/410mA	85

Dimension LxWxH: 40.00 x 25.40 x 21.00(mm)

LD10-23Bxx-DW

Selection Guide (Pending) CE UKCA RoHS

Part No.	Power	Input voltage	Output voltage/current (Vo/Io)	Efficiency (%)(typ.)
LD10-23B05-DW	10W	85-305VAC/ 100-430VDC	5V/2000mA	76
LD10-23B09-DW	10W		9V/1100mA	80
LD10-23B12-DW	10W		12V/830mA	81
LD10-23B15-DW	10W		15V/670mA	82
LD10-23B24-DW	10W		24V/420mA	82

Dimension LxWxH: 55.00 x 45.00 x 21.00(mm)

LD10-2WBxx

Selection Guide (Pending) CE UKCA RoHS

Part No.	Power	Input voltage	Output voltage/current (Vo/Io)	Efficiency (%)(typ.)
LD10-2WB05	10W	21.6-305VAC/ 18-430VDC	5V/2000mA	76
LD10-2WB09	9.9W		9V/1100mA	78
LD10-2WB12	9.96W		12V/830mA	80
LD10-2WB15	10.05W		15V/670mA	80
LD10-2WB24	10.08W		24V/420mA	81

Dimension LxWxH: 55.00 x 45.00 x 21.00(mm)

LD15-23BxxR2

Selection Guide cULus CE CB UKCA RoHS

Part No.	Power	Input voltage	Output voltage/current (Vo/Io)	Efficiency (%)(typ.)
LD15-23B03R2	13.2W	85-305VAC/ 100-430VDC	3.3V/4000mA	82
LD15-23B05R2	15W		5V/3000mA	85
LD15-23B09R2	15W		9V/1670mA	84
LD15-23B12R2	15W		12V/1250mA	85
LD15-23B15R2	15W		15V/1000mA	85
LD15-23B24R2	15W		24V/625mA	86

Dimension LxWxH: 47.60 x 26.80 x 23.50(mm)

LD20-23BxxR2

Selection Guide cULus CE CB UKCA RoHS

Part No.	Power	Input voltage	Output voltage/current (Vo/Io)	Efficiency (%)(typ.)
LD20-23B03R2	14.85W	85-305VAC/ 100-430VDC	3.3V/4500mA	81
LD20-23B05R2	20W		5V/4000mA	85
LD20-23B09R2	20W		9V/2200mA	84
LD20-23B12R2	20W		12V/1670mA	86
LD20-23B15R2	20W		15V/1330mA	87
LD20-23B24R2	20W		24V/830mA	87

Dimension LxWxH: 52.40 x 27.20 x 24.00(mm)

LD30-23BxxR2

Selection Guide cULus CE CB UKCA RoHS

Part No.	Power	Input voltage	Output voltage/current (Vo/Io)	Efficiency (%)(typ.)
LD30-23B03R2	19.8W	85-305VAC/ 100-430VDC	3.3V/6000mA	85
LD30-23B05R2	30W		5V/6000mA	86
LD30-23B09R2	30.6W		9V/3400mA	88
LD30-23B12R2	30W		12V/2500mA	90
LD30-23B15R2	30W		15V/2000mA	90
LD30-23B24R2	31.2W		24V/1300mA	88
LD30-23B48R2	30.2W		48V/630mA	90

Dimension LxWxH: 69.50 x 39.00 x 24.00(mm)

LD40-23BxxR2

Selection Guide (Pending) cULus CE UKCA RoHS

Part No.	Power	Input voltage	Output voltage/current (Vo/Io)	Efficiency (%)(typ.)
LD40-23B05R2	35W	85-305VAC/ 100-430VDC	5V/7000mA	86
LD40-23B12R2	40W		12V/3330mA	89
LD40-23B15R2	40W		15V/2666mA	90
LD40-23B24R2	40W		24V/1670mA	89
LD40-23B48R2	40W		48V/833mA	90

Dimension LxWxH: 69.50 x 39.00 x 24.00(mm)

LD60-23BxxR2

Selection Guide (Pending) cULus CE UKCA RoHS

Part No.	Power	Input voltage	Output voltage/current (Vo/Io)	Efficiency (%)(typ.)
LD60-23B05R2	50W	85-305VAC/ 100-430VDC	5V/10000mA	89
LD60-23B12R2	60W		12V/5000mA	91
LD60-23B15R2	60W		15V/4000mA	90
LD60-23B24R2	60W		24V/2500mA	90
LD60-23B48R2	60W		48V/1250mA	91

Dimension LxWxH: 70.00 x 48.00 x 27.00(mm)

LD90-23BxxR2

Selection Guide (Pending) cULus CE UKCA RoHS

Part No.	Power	Input voltage	Output voltage/current (Vo/Io)	Efficiency (%)(typ.)
LD90-23B12R2	80.4W	85-305VAC/ 110-430VDC	12V/6700mA	92
LD90-23B15R2	85.05W		15V/5670mA	92.5
LD90-23B24R2	90W		24V/3750mA	93
LD90-23B48R2	90W		48V/1875mA	93

Dimension LxWxH: 87.00 x 52.00 x 29.50(mm)

Note

Models with suffix "A2S" is chassis mounting and suffix with "A4S" is DIN rail mounting.

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DIP Multiple Outputs

LH Series（5-20W）

Features

- Standard package, suitable for industrial control application requiring high EMC performance
- Input voltage range: 85-264VAC/100-370VDC
- Isolation voltage: 4200VAC
- Low ripple & noise
- Output short-circuit, over-current and over-voltage protections
- EMI performance meets CISPR32/EN55032 CLASS B




A2 Chassis Mounting


A5 Chassis Mounting


A6 DIN-Rail Mounting


A4 DIN-Rail Mounting

LHE05-20Axxxx

Selection Guide RoHS

Part No.	Power	Input voltage	Output voltage/current (Vo1/Io1)	(Vo2/Io2)	Efficiency (%)(typ.)
LHE05-20A05**	5W	85-264VAC/ 100-370VDC	+5V/500mA	-5V/500mA	73
LHE05-20A12**	5W		+12V/210mA	-12V/210mA	77
LHE05-20A15**	5W		+15V/160mA	-15V/160mA	77

Dimension LxWxH: 48.50 x 36.00 x 20.50(mm)

LHE15-20Axxxx

Selection Guide RoHS

Part No.	Power	Input voltage	Output voltage/current (Vo1/Io1)	(Vo2/Io2)	Efficiency (%)(typ.)
LHE15-20A05**	15W	85-264VAC/ 100-370VDC	+5V/1500mA	-5V/1500mA	76
LHE15-20A12**	15W		+12V/650mA	-12V/650mA	80
LHE15-20A15**	15W		+15V/500mA	-15V/500mA	81

Dimension LxWxH: 62.00 x 45.00 x 22.50(mm)

LHE05-20Cxxxx-xx

Selection Guide RoHS

Part No.	Power	Input voltage	Output voltage/current (Vo1/Io1)	(Vo2/Io2)	Efficiency (%)(typ.)
LHE05-20C0505-01	5W	85-264VAC/ 100-370VDC	5V/800mA	±5V/100mA	70
LHE05-20C0512-01	5.4W		5V/600mA	±12V/100mA	73
LHE05-20C0515-01	5.4W		5V/600mA	±15V/80mA	74

Dimension LxWxH: 48.50 x 36.00 x 20.50(mm)

LHE15-20Cxxxx-xx

Selection Guide RoHS

Part No.	Power	Input voltage	Output voltage/current (Vo1/Io1)	(Vo2/Io2)	Efficiency (%)(typ.)
LHE15-20C0505-05	15W	85-264VAC/ 100-370VDC	5V/2000mA	±5V/500mA	75
LHE15-20C0512-02	15W		5V/2000mA	±12V/200mA	77
LHE15-20C0515-02	15W		5V/1800mA	±15V/200mA	78

Dimension LxWxH: 62.00 x 45.00 x 22.50(mm)

LHE05-20Dxxxx-xx

Selection Guide RoHS

Part No.	Power	Input voltage	Output voltage/current (Vo1/Io1)	(Vo2/Io2)	Efficiency (%)(typ.)
LHE05-20D0505-01	5W	85-264VAC/ 100-370VDC	5V/900mA	5V/100mA	70
LHE05-20D0512-01	5W		5V/750mA	12V/100mA	72
LHE05-20D0515-01	5W		5V/700mA	15V/100mA	72
LHE05-20D0524-01	5.4W		5V/600mA	24V/100mA	74

Dimension LxWxH: 48.50 x 36.00 x 20.50(mm)

LHE15-20Dxxxx-xx

Selection Guide RoHS

Part No.	Power	Input voltage	Output voltage/current (Vo1/Io1)	(Vo2/Io2)	Efficiency (%)(typ.)
LHE15-20D0505-08	15W	85-264VAC/ 100-370VDC	5V/2000mA	5V/800mA	76
LHE15-20D0512-04	15W		5V/2000mA	12V/400mA	78
LHE15-20D0524-02	15W		5V/2000mA	24V/200mA	78
LHE15-20D0524-04	15W		5V/1000mA	24V/400mA	80

Dimension LxWxH: 62.00 x 45.00 x 22.50(mm)

LHE10-20Axxxx

Selection Guide RoHS

Part No.	Power	Input voltage	Output voltage/current (Vo1/Io1)	(Vo2/Io2)	Efficiency (%)(typ.)
LHE10-20A05**	10W	85-264VAC/ 100-370VDC	+5V/1000mA	-5V/1000mA	76
LHE10-20A12**	10W		+12V/450mA	-12V/450mA	80
LHE10-20A15**	10W		+15V/350mA	-15V/350mA	81

Dimension LxWxH: 55.00 x 45.00 x 21.00(mm)

LHE20-20Axxxx

Selection Guide RoHS

Part No.	Power	Input voltage	Output voltage/current (Vo1/Io1)	(Vo2/Io2)	Efficiency (%)(typ.)
LHE20-20A12**	20W	85-264VAC/ 100-370VDC	+12V/830mA	-12V/830mA	82
LHE20-20A15**	20W		+15/650mA	-15/650mA	83

Dimension LxWxH: 70.00 x 48.00 x 23.50(mm)

LHE10-20Cxxxx-xx

Selection Guide RoHS

Part No.	Power	Input voltage	Output voltage/current (Vo1/Io1)	(Vo2/Io2)	Efficiency (%)(typ.)
LHE10-20C0512-02	10W	85-264VAC/ 100-370VDC	5V/1000mA	±12V/200mA	75
LHE10-20C0515-02	10W		5V/900mA	±15V/200mA	75

Dimension LxWxH: 55.00 x 45.00 x 21.00(mm)

LHE20-20Cxxxx-xx

Selection Guide RoHS

Part No.	Power	Input voltage	Output voltage/current (Vo1/Io1)	(Vo2/Io2)	Efficiency (%)(typ.)
LHE20-20C0512-04	20W	85-264VAC/ 100-370VDC	5V/2000mA	±12V/400mA	78
LHE20-20C0515-03	20W		5V/2000mA	±15V/300mA	79

Dimension LxWxH: 70.00 x 48.00 x 23.50(mm)

LHE10-20Dxxxx-xx

Selection Guide RoHS

Part No.	Power	Input voltage	Output voltage/current (Vo1/Io1)	(Vo2/Io2)	Efficiency (%)(typ.)
LHE10-20D0505-02	10W	85-264VAC/ 100-370VDC	5V/1800mA	5V/200mA	75
LHE10-20D0512-02	10W		5V/1500mA	12V/200mA	78
LHE10-20D0515-02	10W		5V/1400mA	15V/200mA	79
LHE10-20D0524-02	10W		5V/1000mA	24V/200mA	80

Dimension LxWxH: 55.00 x 45.00 x 21.00(mm)

LHE20-20Dxxxx-xx

Selection Guide RoHS

Part No.	Power	Input voltage	Output voltage/current (Vo1/Io1)	(Vo2/Io2)	Efficiency (%)(typ.)
LHE20-20D0512-06	20W	85-264VAC/ 100-370VDC	5V/2500mA	12V/600mA	78
LHE20-20D0515-05	20W		5V/2500mA	15V/500mA	78
LHE20-20D0524-03	20W		5V/2500mA	24V/300mA	78

Dimension LxWxH: 70.00 x 48.00 x 23.50(mm)

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Notes

1. Standard LHE series meet the requirements of surge level of ±1KV/2KV (level three). If the application requires higher performance for surge, our LH-ER2 series for ±2KV/4KV (level four) and recommended peripheral circuits for ±2KV/4KV (level four) are available.
2. If the application requires higher performance for surge, our matching EMC auxiliary devices are available. For example, the standard LHE(05-25) series matching with FC-LX1D are able to reach ±2KV/4KV (level four).
3. Product packages are available with A2/A5 chassis mounting and A4/A6 DIN rail mounting, detailed application please refer to the datasheet.
4. Products marked with "**" feature that Vo2 is the main circuit. Other products feature that Vo1 is the main circuit.

DIP Single Output

LH Series（5-85W）

Features

- Standard package, suitable for industrial control application requiring high EMC performance
- Isolation voltage: 4200VAC
- Effiency up to 87%
- Low ripple & noise
- Output short-circuit, over-current and over-voltage protections
- EMI performance meets CISPR32/EN55032 CLASS B
- IEC/EN/UL62368, IEC/UL/EN60950 approval


LH05-23BxxR2

Selection Guide RoHS

Part No.	Power	Input voltage	Output voltage/current (Vo/Io)	Efficiency (%)(typ.)
LH05-23B03R2	4.12W	85-305VAC/ 100-430VDC	3.3V/1250mA	72
LH05-23B05R2	5W		5V/1000mA	77
LH05-23B09R2	4.95W		9V/550mA	78
LH05-23B12R2	5.04W		12V/420mA	79
LH05-23B15R2	4.95W		15V/330mA	79
LH05-23B24R2	5.52W		24V/230mA	82

Dimension LxWxH: 48.50 x 36.00 x 20.50(mm)

LH20-23BxxR2

Selection Guide RoHS

Part No.	Power	Input voltage	Output voltage/current (Vo/Io)	Efficiency (%)(typ.)
LH20-23B03R2	11.55W	85-305VAC/ 100-430VDC	3.3V/3500mA	80
LH20-23B05R2	15.5W		5V/3100mA	82
LH20-23B09R2	18.9W		9V/2100mA	85
LH20-23B12R2	19.2W		12V/1600mA	86
LH20-23B15R2	19.5W		15V/1300mA	87
LH20-23B24R2	20.4W		24V/850mA	85
LH20-23B48R2	19.68W		48V/410mA	87

Dimension LxWxH: 62.00 x 45.00 x 22.50(mm)

LH10-23BxxR2

Selection Guide RoHS

Part No.	Power	Input voltage	Output voltage/current (Vo/Io)	Efficiency (%)(typ.)
LH10-23B03R2	6.6W	85-305VAC/ 100-430VDC	3.3V/2000mA	70
LH10-23B05R2	10W		5V/2000mA	76
LH10-23B09R2	10W		9V/1100mA	78
LH10-23B12R2	10W		12V/900mA	80
LH10-23B15R2	10W		15V/700mA	81
LH10-23B24R2	10W		24V/450mA	82

Dimension LxWxH: 55.00 x 45.00 x 21.00(mm)

LH25-23BxxR2

Selection Guide RoHS

Part No.	Power	Input voltage	Output voltage/current (Vo/Io)	Efficiency (%)(typ.)
LH25-23B03R2	13.53W	85-305VAC/ 100-430VDC	3.3V/4100mA	78
LH25-23B05R2	20.5W		5V/4100mA	82
LH25-23B09R2	22.5W		9V/2500mA	82
LH25-23B12R2	25.2W		12V/2100mA	84
LH25-23B15R2	24W		15V/1600mA	85
LH25-23B24R2	26.4W		24V/1100mA	85
LH25-23B48R2	24W		48V/500mA	87

Dimension LxWxH: 70.00 x 48.00 x 23.50(mm)

LH15-23BxxR2

Selection Guide RoHS

Part No.	Power	Input voltage	Output voltage/current (Vo/Io)	Efficiency (%)(typ.)
LH15-23B03R2	9.9W	85-305VAC/ 100-430VDC	3.3V/3000mA	77
LH15-23B05R2	14W		5V/2800mA	79
LH15-23B09R2	15W		9V/1670mA	78
LH15-23B12R2	15W		12V/1250mA	82
LH15-23B15R2	15W		15V/1000mA	82
LH15-23B24R2	15W		24V/625mA	83
LH15-23B48R2	15W		48V/320mA	85

Dimension LxWxH: 62.00 x 45.00 x 22.50(mm)

LH85-20B12

Selection Guide RoHS

Part No.	Power	Input voltage	Output voltage/current (Vo/Io)	Efficiency (%)(typ.)
LH85-20B12	84W	85-264VAC/ 100-370VDC	12V/7000mA	87

Dimension LxWxH: 109.00 x 58.50 x 30.00(mm)

Note

Models with suffix "A2" is chassis mounting and suffix with "A4" is DIN rail mounting.

• This catalog is for reference only, not being the judgment basis for the use. For detailed datasheets please visit our website: www.mornsun-power.com.

For Smart Connected Device　LS/CLS Series（1-5W）

Features

- Specific power supply designing for Intelligent interconnect Application
- Simple to use, high compatibility
- High efficiency, high reliability
- Wide operating temperature range
- Low static power consumption

LSF01-K5BxxSS（Single Live Wire）

Selection Guide　CE UKCA RoHS

Part No.	Power	Input voltage	Output voltage/current (Vo/Io)	Efficiency (%)(typ.)
LSF01-K5B05SS	0.625W	85-264VAC, 8/15/35-380VDC	5.5V/114mA	50
LSF01-K5B12SS	1W		12.5V/83mA	58
LSF01-K5B24SS	1W		24.5V/42mA	60

Dimension LxWxH: 15.70 x 9.00 x 14.50(mm)

CLS05-15B12R3（Automobile）

Selection Guide　RoHS

Part No.	Power	Input voltage	Output voltage/current (Vo/Io)	Efficiency (%)(typ.)
CLS05-15B12R3	5W	85-418VAC/ 100-591VDC	12V/420mA	79

Dimension LxWxH: 30.28 x 17.96 x 11.00(mm)

LS05-13Hxx（Meter）

Selection Guide　RoHS

Part No.	Power	Input voltage	Output voltage/current (Vo1/Io1)	Output voltage/current (Vo2/Io2)	Efficiency (%)(typ.)
LS05-13H0505-02	5W	85-305VAC/ 70-430VDC	5V/800mA	5V/200mA	76
LS05-13H0512-01	5W		5V/760mA	12V/100mA	77

Dimension LxWxH: 32.84 x 16.79 x 12.00(mm)

For Electricity Industry　LS Series（5-10W）

Features

- Specific power supply designing for Electricity Industry
- Accepts AC or DC input (dual-use of the same terminal)
- Flexible design for various applications
- Operating temperature: -40℃ to +85℃
- Ultra-wide input voltage range

LS05-15BxxR3

Selection Guide　RoHS

Part No.	Power	Input voltage	Output voltage/current (Vo/Io)	Efficiency (%)(typ.)
LS05-15B03R3	3.3W	85-418VAC/ 100-591VDC	3.3V/1000mA	69
LS05-15B05R3	5W		5V/1000mA	76
LS05-15B09R3	5W		9V/560mA	77
LS05-15B12R3	5W		12V/420mA	79
LS05-15B15R3	5W		15V/340mA	79
LS05-15B24R3	5W		24V/210mA	81

Dimension LxWxH: 27.20 x 14.73 x 11.00(mm)

LS10-26BxxR3

Selection Guide　RoHS

Part No.	Power	Input voltage	Output voltage/current (Vo/Io)	Efficiency (%)(typ.)
LS10-26B03R3	6.6W	85-528VAC/ 100-745VDC	3.3V/2000mA	70
LS10-26B05R3	10W		5V/2000mA	77
LS10-26B09R3	10W		9V/1100mA	80
LS10-26B12R3	10W		12V/830mA	82
LS10-26B15R3	10W		15V/670mA	82
LS10-26B24R3	10W		24V/420mA	83

Dimension LxWxH: 38.00 x 20.00 x 15.25(mm)

LS05-26BxxR3

Selection Guide　CE UKCA RoHS

Part No.	Power	Input voltage	Output voltage/current (Vo/Io)	Efficiency (%)(typ.)
LS05-26B03R3	3.3W	90-528VAC/ 100-745VDC	3.3V/1000mA	70
LS05-26B05R3	5W		5V/1000mA	72
LS05-26B09R3	5W		9V/560mA	72
LS05-26B12R3	5W		12V/420mA	78
LS05-26B15R3	5W		15V/340mA	78
LS05-26B24R3	5W		24V/210mA	78

Dimension LxWxH: 33.50 x 17.20 x 13.00(mm)

• This catalog is a collection of the latest products. For more information, please contact our sales team.

For Electricity Industry　LD Series（10-30W）

Features

- Suitable for electric power, industrial control and intelligent building applications
- Input voltage range: 90-528VAC/100-745VDC (LD10, LD20)
  176-418VAC/248-591VDC (LD15)
  176-528VAC/248-746VDC (LD30)
- Operating temperature: -40℃ to +70℃
- Isolation voltage 4000VAC
- Output short-circuit, over-current and over-voltage protections
- IEC/EN/UL62368 approval

LD10-26Bxx

Selection Guide　CE UKCA RoHS

Part No.	Power	Input voltage	Output voltage/current (Vo/Io)	Efficiency (%)(typ.)
LD10-26B03	6.6W	90-528VAC/ 100-745VDC	3.3V/2000mA	72
LD10-26B05	10W		5V/2000mA	76
LD10-26B09	10W		9V/1100mA	78
LD10-26B12	10W		12V/900mA	80
LD10-26B15	10W		15V/700mA	80
LD10-26B24	10W		24V/450mA	82

Dimension LxWxH: 62.00 x 45.00 x 30.00(mm)

LD20-26Bxx

Selection Guide　cULus CE CB UKCA RoHS

Part No.	Power	Input voltage	Output voltage/current (Vo/Io)	Efficiency (%)(typ.)
LD20-26B03	11.88W	90-528VAC/ 100-745VDC	3.3V/3600mA	74
LD20-26B05	18W		5V/3600mA	78
LD20-26B09	20W		9V/2230mA	79
LD20-26B12	20W		12V/1660mA	82
LD20-26B15	20W		15V/1330mA	83
LD20-26B24	20W		24V/833mA	83

Dimension LxWxH: 70.00 x 48.00 x 30.00(mm)

LD15-25BxxR2

Selection Guide　CE UKCA RoHS

Part No.	Power	Input voltage	Output voltage/current (Vo/Io)	Efficiency (%)(typ.)
LD15-25B05R2	15W	176-418VAC/ 248-591VDC	5V/3000mA	81
LD15-25B09R2	15W		9V/1670mA	83
LD15-25B12R2	15W		12V/1250mA	84
LD15-25B15R2	15W		15V/1000mA	84
LD15-25B24R2	15W		24V/625mA	85

Dimension LxWxH: 52.40 x 27.20 x 24.00(mm)

LD30-26BxxR2

Selection Guide　(Pending) CE UKCA RoHS

Part No.	Power	Input voltage	Output voltage/current (Vo/Io)	Efficiency (%)(typ.)
LD30-26B03R2	19.8W	176-528VAC/ 248-746VDC	3.3V/6000mA	82
LD30-26B05R2	30W		5V/6000mA	84
LD30-26B09R2	30.06W		9V/3340mA	85
LD30-26B12R2	30W		12V/2500mA	85
LD30-26B15R2	30W		15V/2000mA	85
LD30-26B24R2	30W		24V/1250mA	86
LD30-26B48R2	30W		48V/625mA	88

Dimension LxWxH: 70.00 x 48.00 x 30.00(mm)

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For Electricity Industry (Relay protection) LO Series (15-75W)

Features

- Specific power supply designing for smart grid
- Ultra-thin design, the height of the product does not exceed 22mm
- Ultra-wide input voltage range: 85-305VAC/88-430VDC
- Ultra-wide operating temperature: -40℃ to +85℃
- High reliability, low ripple & noise
- EMI performance meets CISPR32/EN55032 CLASS B
- Immunity meets electricity standard Level 4
- Meets impulse voltage requirements of 1.2/50us 5KV
- Meet UL/EN/IEC62368 standards
- EN62368 approval

LO15-23BxxE 305RAC

Selection Guide CE UKCA RoHS

Part No.	Power	Input voltage	Output voltage/current (Vo/Io)	Efficiency (%)(typ.)
LO15-23B03E	9.9W	85-305VAC/ 88-430VDC	3.3V/3A	71
LO15-23B05E	15W		5V/3A	78
LO15-23B12E	15.6W		12V/1.3A	83
LO15-23B15E	15W		15V/1A	84
LO15-23B24E	16.8W		24V/0.7A	85

Dimension LxWxH: 87.50 x 50.00 x 22.00(mm)

LO30-23BxxE 305RAC

Selection Guide CE UKCA RoHS

Part No.	Power	Input voltage	Output voltage/current (Vo/Io)	Efficiency (%)(typ.)
LO30-23B03E	19.8W	85-305VAC/ 88-430VDC	3.3V/6A	77
LO30-23B05E	30W		5V/6A	82
LO30-23B12E	30W		12V/2.5A	86
LO30-23B15E	30W		15V/2A	87
LO30-23B24E	31.2W		24V/1.3A	88

Dimension LxWxH: 105.00 x 50.00 x 30.00(mm)

LO50-23BxxE 305RAC

Selection Guide CE UKCA RoHS

Part No.	Power	Input voltage	Output voltage/current (Vo/Io)	Efficiency (%)(typ.)
LO50-23B03E	33W	85-305VAC/ 88-430VDC	3.3V/10A	84
LO50-23B05E	50W		5V/10A	86
LO50-23B09E	50.4W		9V/5.6A	86
LO50-23B12E	50.4W		12V/4.2A	86
LO50-23B15E	51W		15V/3.4A	86
LO50-23B24E	50.4W		24V/2.1A	87
LO50-23B27E	51.3W		27V/1.9A	88
LO50-23B48E	52.8W		48V/1.1A	89

Dimension LxWxH: 132.00 x 50.00 x 27.10(mm)

LO75-20BxxE

Selection Guide cULus CE CB UKCA RoHS

Part No.	Power	Input voltage	Output voltage/current (Vo/Io)	Efficiency (%)(typ.)
LO75-20B03E	39.6W	85-264VAC/ 88-370VDC	3.3V/12A	82
LO75-20B05E	60W		5V/12A	84
LO75-20B09E	75.6W		9V/8.4A	86
LO75-20B12E	76.8W		12V/6.4A	88
LO75-20B15E	75W		15V/5A	88
LO75-20B24E	76.8W		24V/3.2A	89
LO75-20B27E	75.6W		27V/2.8A	89
LO75-20B48E	76.8W		48V/1.6A	90

Dimension LxWxH: 101.60 x 50.80 x 27.00(mm)

Notes

1. Support customized service of output voltage of 05/24, 05/15, etc.
2. If the application requires higher performance for EMC, please refer to the recommended peripheral circuit in the datasheet.

For Electricity Industry LO Series (10-75W)

Features

- Input voltage range: 30-280VAC/30-400VDC (LO10-24B)
  57-528VAC/80-745VDC (LO10-26D, LO15-26D)
  165-264VAC/230-370VDC (LO20-26D)
  176-576VAC (LO75-26B)
- Isolation voltage 3000VAC
- Triple outputs, high output voltage accuracy
- Efficiency up to 78%
- Output short circuit, over-current, over-voltage protections
- Safety Class: CLASS II
- Meets IEC60950 standard

LO10-24BxxK

Selection Guide RoHS

Part No.	Power	Input voltage	Output voltage/current (Vo/Io)	Efficiency (%)(typ.)
LO10-24B05K	6W	30-280VAC/ 30-400VDC	5V/1.20A	71
LO10-24B12K	6.6W		12V/0.55A	77
LO10-24B13K	6.5W		13V/0.50A	77

Dimension LxWxH: 80.00 x 40.00 x 30.00(mm)

LO10-26Dxxxx-xx

Selection Guide RoHS

Part No.	Power	Input voltage	Output voltage/current (Vo1/Io1)	Output voltage/current (Vo2/Io2)	Efficiency (%)(typ.)
LO10-26D0512-04L	10.92W	57-528VAC/ 80-745VDC	5.1VDC/1.2A	12VDC/0.4A	78

Dimension LxWxH: 80.00 x 40.00 x 35.00(mm)

LO15-26Dxxxx-xx

Selection Guide RoHS

Part No.	Power	Input voltage	Output voltage/current (Vo1/Io1)	Output voltage/current (Vo2/Io2)	Efficiency (%)(typ.)
LO15-26D1305-03	15W	57-528VAC/ 80-745VDC	13.5VDC/1.0A	5VDC/0.3A	78

Dimension LxWxH: 80.00 x 40.00 x 35.00(mm)

LO20-26Dxxxx-xx

Selection Guide RoHS

Part No.	Power	Input voltage	Output voltage/current (Vo1/Io1)	Output voltage/current (Vo2/Io2)	Efficiency (%)(typ.)
LO20-26D1212-05	24.2W	165-480VAC/ 230-680VDC	12.15VDC/1.5A	12VDC/0.5A	80

Dimension LxWxH: 76.20 x 50.80 x 30.00(mm)

LO75-26Bxx

Selection Guide RoHS

Part No.	Power	Input voltage	Output voltage/current (Vo/Io)	Efficiency (%)(typ.)
LO75-26B12	75W	176-576VAC	12V/6.250A	85
LO75-26B24	75W		24V/3.125A	87
LO75-26B48	75W		48V/1.562A	88

Dimension LxWxH: 127.00 x 76.19 x 38.60(mm)

For Medical Industry — LOF Series (120-350W)

Features

- Input voltage range: 85-264VAC/120-370VDC (LOF120/LOF225)
  85-277VAC/120-390VDC (LOF225-R2)
  90-264VAC/127-370VDC (LOF350)
- Active PFC function
- Output short-circuit, over-current, over-voltage, over-temperature protections
- The base plate with conformal coating
- Operating altitude up to 5000m
- Low leakage current < 0.1mA
- Meets IEC/EN/UL62368-1, IEC/EN60335-1, IEC/EN61558-1, GB4943-1, IEC/EN/ES60601-1 standards

LOF120-20Bxx(-C)

Selection Guide

Part No.	Input voltage	Cooling mode	Rated power	Output voltage/ current(Vo/Io)	Efficiency (%)(typ.)
LOF120-20B12	85-264VAC/ 120-370VDC	Air cooling	114W	12V/9.5A	94
LOF120-20B15		Air cooling	114W	15V/7.6A	94
LOF120-20B19		Air cooling	119.7W	19V/6.3A	93
LOF120-20B24		Air cooling	120W	24V/5A	95
LOF120-20B27		Air cooling	119.9W	27V/4.44A	95
LOF120-20B36		Air cooling	120W	36V/3.33A	94
LOF120-20B48		Air cooling	120W	48V/2.5A	94.5
LOF120-20B54		Air cooling	120W	54V/2.22A	94

LOF120-20Bxx Dimension LxWxH: 76.20 x 50.80 x 31.00(mm)
LOF120-20Bxx-C Dimension LxWxH: 80.00 x 62.00 x 40.00(mm)

LOF225-20Bxx(-C)

Selection Guide

Part No.	Input voltage	Cooling mode	Rated power	Output voltage/ current(Vo/Io)	Efficiency (%)(typ.)
LOF225-20B12	85-264VAC/ 120-370VDC	Air cooling	140W	12V/11.67A	93
		13CFM	225W	12V/18.75A	
LOF225-20B15		Air cooling	140W	15V/9.33A	93
		13CFM	225W	15V/15A	
LOF225-20B18		Air cooling	140W	18V/7.78A	93
		13CFM	225W	18V/12.5A	
LOF225-20B19		Air cooling	140W	19V/7.37A	93
		13CFM	225W	19V/11.84A	
LOF225-20B24		Air cooling	140W	24V/5.83A	94
		13CFM	225W	24V/9.4A	
LOF225-20B27		Air cooling	130W	27V/4.81A	94
		13CFM	225W	27V/8.35A	
LOF225-20B36		Air cooling	140W	36V/3.88A	94
		13CFM	225W	36V/6.25A	
LOF225-20B48		Air cooling	140W	48V/2.91A	94
		13CFM	225W	48V/4.7A	
LOF225-20B54		Air cooling	140W	54V/2.59A	94
		13CFM	225W	54V/4.17A	

LOF225-20Bxx Dimension LxWxH: 101.60 x 50.80 x 25.40(mm)
LOF225-20Bxx-C Dimension LxWxH: 103.40 x 62.00 x 37.00(mm)

Note

The Series with Suffix"-C" are Metal case Enclosed series (eg. LOFxx-20Bxx-C)
- Support auxiliary power supply to connect a fan for heat dissipation.

LOF225-23BxxR2

Selection Guide (Pending)

Part No.	Input voltage	Cooling mode	Rated power	Output voltage/ current(Vo/Io)	Efficiency (%)(typ.)
LOF225-23B12R2	85-277VAC/ 120-390VDC	Air cooling	200	12V/16.67A	94
		13CFM	225	12V/18.75A	
LOF225-23B15R2		Air cooling	200	15V/13.33A	94
		13CFM	225	15V/15A	
LOF225-23B18R2		Air cooling	200	18V/11.11A	94
		13CFM	225	18V/12.5A	
LOF225-23B19R2		Air cooling	200	19V/10.53A	94
		13CFM	225	19V/11.84A	
LOF225-23B24R2		Air cooling	200	24V/8.33A	95
		13CFM	225	24V/9.4A	
LOF225-23B27R2		Air cooling	200	27V/7.41A	95
		13CFM	225	27V/8.35A	
LOF225-23B36R2		Air cooling	200	36V/5.55A	95
		13CFM	225	36V/6.25A	
LOF225-23B48R2		Air cooling	200	48V/4.16A	96
		13CFM	225	48V/4.7A	
LOF225-23B54R2		Air cooling	200	54V/3.7A	96
		13CFM	225	54V/4.17A	

LOF225-23BxxR2 Dimension LxWxH: 101.60 x 50.80 x 28.50(mm)

LOF350-20Bxx(-C)

Selection Guide

Part No.	Input voltage	Cooling mode	Rated power	Output voltage/ current(Vo/Io)	Efficiency (%)(typ.)
LOF350-20B12	90-264VAC/ 127-370VDC	Air cooling	180W	12V/15A	92
		20.5CFM	300W	12V/25A	
LOF350-20B15		Air cooling	180W	15V/12A	92
		20.5CFM	325W	15V/21.67A	
LOF350-20B18		Air cooling	180W	18V/10A	92.5
		20.5CFM	324W	18V/18A	
LOF350-20B19		Air cooling	180.5W	19V/9.5A	92.5
		20.5CFM	324.9W	19V/17.1A	
LOF350-20B24		Air cooling	199.9W	24V/8.33A	93
		20.5CFM	350.4W	24V/14.6A	
LOF350-20B27		Air cooling	199.8W	27V/7.4A	93
		20.5CFM	351W	27V/13A	
LOF350-20B36		Air cooling	200.16W	36V/5.56A	93
		20.5CFM	350.28W	36V/9.73A	
LOF350-20B48		Air cooling	200.1W	48V/4.17A	94
		20.5CFM	350.4W	48V/7.3A	
LOF350-20B54		Air cooling	199.8W	54V/3.7A	94
		20.5CFM	351W	54V/6.5A	

LOF350-20Bxx Dimension LxWxH: 127.00 x 76.20 x 25.40(mm)
LOF350-20Bxx-C Dimension LxWxH: 130.00 x 86.00 x 35.00(mm)

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For Medical Industry — LOF Series (450-750W)

Features

- Input voltage range: 90-264VAC/127-370VDC
- Active PFC function
- Output short-circuit, over-current, over-voltage, over-temperature protections
- The base plate with conformal coating
- Operating altitude up to 5000m
- Low leakage current < 0.1mA
- Meets IEC/EN/UL62368-1, IEC/EN60335-1, IEC/EN61558-1, GB4943-1, IEC/EN/ES60601-1 standards

LOF450-20Bxx(-C/-CF)

Selection Guide (Pending)

Part No.	Input voltage	Cooling mode	Rated power	Output voltage/ current(Vo/Io)	Efficiency (%)(typ.)
LOF450-20B12	90-264VAC/ 127-370VDC	Air cooling	250W	12V/20.8A	91
		25CFM	400W	12V/33.3A	
LOF450-20B15		Air cooling	250W	15V/16.7A	92
		25CFM	400W	15V/26.7A	
LOF450-20B18		Air cooling	250.2W	18V/13.9A	92.5
		25CFM	399.6W	18V/22.2A	
LOF450-20B19		Air cooling	250.8W	19V/13.2A	92.5
		25CFM	400.9W	19V/21.1A	
LOF450-20B24		Air cooling	250W	24V/10.5A	93
		25CFM	450W	24V/18.75A	
LOF450-20B27		Air cooling	250W	27V/9.3A	93.5
		25CFM	450W	27V/16.7A	
LOF450-20B36		Air cooling	250W	36V/6.95A	93
		25CFM	450W	36V/12.5A	
LOF450-20B48		Air cooling	250W	48V/5.3A	94
		25CFM	450W	48V/9.4A	
LOF450-20B54		Air cooling	250W	54V/4.63A	94
		25CFM	449.8W	54V/8.33A	

LOF450-20Bxx Dimension LxWxH: 127.00 x 76.20 x 38.50(mm)
LOF450-20Bxx-C Dimension LxWxH: 130.00 x 86.00 x 43.00(mm)
LOF450-20Bxx-CF Dimension LxWxH: 160.00 x 86.00 x 43.00(mm)

LOF550-20Bxx(-C/-CF)

Selection Guide (Pending)

Part No.	Input voltage	Cooling mode	Rated power	Output voltage/ current(Vo/Io)	Efficiency (%)(typ.)
LOF550-20B12	90-264VAC/ 127-370VDC	Air cooling	320.4W	12V/26.7A	91
		25CFM	499.2W	12V/41.6A	
LOF550-20B15		Air cooling	319.5W	15V/21.3A	92
		25CFM	499.5W	15V/33.3A	
LOF550-20B18		Air cooling	320.4W	18V/17.8A	92.5
		25CFM	500.4W	18V/27.8A	
LOF550-20B19		Air cooling	319.2W	19V/16.8A	92.5
		25CFM	499.7W	19V/26.3A	
LOF550-20B24		Air cooling	321.6W	24V/13.4A	93
		25CFM	549.6W	24V/22.9A	
LOF550-20B27		Air cooling	321.3W	27V/11.9A	93.5
		25CFM	550.8W	27V/20.4A	
LOF550-20B36		Air cooling	320.4W	36V/8.9A	94
		25CFM	550.8W	36V/15.3A	
LOF550-20B48		Air cooling	321.6W	48V/6.7A	94
		25CFM	550W	48V/11.46A	
LOF550-20B54		Air cooling	310.5W	54V/5.75A	94
		25CFM	550.8W	54V/10.2A	

LOF550-20Bxx Dimension LxWxH: 127.00 x 76.20 x 40.50(mm)
LOF550-20Bxx-C Dimension LxWxH: 130.00 x 86.00 x 43.00(mm)
LOF550-20Bxx-CF Dimension LxWxH: 160.00 x 86.00 x 43.00(mm)

LOF750-20Bxx

Selection Guide (Pending)

Part No.	Input voltage	Cooling mode	Rated power	Output voltage/ current(Vo/Io)	Efficiency (%)(typ.)
LOF750-20B12	90-264VAC/ 127-370VDC (Full voltage range)	Air cooling	399.6W	12V/33.3A	92
		25CFM	699.6W	12V/58.3A	
LOF750-20B15		Air cooling	400.5W	15V/26.7A	92
		25CFM	700.5W	15V/46.7A	
LOF750-20B24	115VAC	Air cooling	400.8W	24V/16.7A	94
	230VAC		451.2W	24V/18.8A	
	Full voltage range	25CFM	748.8W	24V/31.2A	
LOF750-20B27	115VAC	Air cooling	399.6W	27V/14.8A	94
	230VAC		450.9W	27V/16.7A	
	Full voltage range	25CFM	750.6W	27V/27.8A	
LOF750-20B36	115VAC	Air cooling	399.6W	36V/11.1A	94.5
	230VAC		450.0W	36V/12.5A	
	Full voltage range	25CFM	748.8W	36V/20.8A	
LOF750-20B48	115VAC	Air cooling	398.4W	48V/8.3A	95
	230VAC		451.2W	48V/9.4A	
	Full voltage range	25CFM	748.8W	48V/15.6A	
LOF750-20B54	115VAC	Air cooling	399.6W	54V/7.4A	95
	230VAC		449.8W	54V/8.33A	
	Full voltage range	25CFM	750.0W	54V/13.89A	

LOF750-20Bxx Dimension LxWxH: 127.00 x 76.20 x 43.00(mm)

Notes

1. The Series with Suffix"-C" are Metal case Enclosed series (eg. LOFxx-20Bxx-C)
   - Support auxiliary power supply to connect a fan for heat dissipation.
2. The Series with Suffix"-CF" are Metal case Enclosed series (eg. LOFxx-20Bxx-CF)
   - Support auxiliary power supply, and built-in a fan for heat dissipation.

• This catalog is for reference only, not being the judgment basis for the use. For detailed datasheets please visit our website: www.mornsun-power.com.

For Medical Industry

LH/LO Series (15-120W)

Features

- EN60601-1, ANSI/AAMI ES60601-1 approval (2xMOPP)
- Input voltage range: 85-264VAC/100-370VDC
- Operating temperature: -40℃ to +70℃
- Isolation voltage 4000VAC
- Operating altitude up to 5000m
- Low standby power consumption < 0.1W
- Low leakage current < 100uA
- Ripple & noise: 50mV (Typ.)
- Output short-circuit, over-current, over-voltage protections
- Optional packages: PCB mounting, chassis mounting, DIN-Rail (TS35) mounting

LH15-20BxxMU

Selection Guide — CE CB UKCA RoHS

Part No.	Power	Input voltage	Output voltage/current (Vo/Io)	Efficiency (%)(typ.)
LH15-20B05MU	14W	85-264VAC/ 100-370VDC	5V/2800mA	78
LH15-20B12MU	15W		12V/1250mA	83
LH15-20B15MU	15W		15V/1000mA	83
LH15-20B18MU	15W		18V/833mA	84
LH15-20B24MU	15W		24V/625mA	86

Dimension LxWxH: 62.00 x 45.00 x 22.50(mm)

LH25-20BxxMU

Selection Guide — CE CB UKCA RoHS

Part No.	Power	Input voltage	Output voltage/current (Vo/Io)	Efficiency (%)(typ.)
LH25-20B05MU	20.5W	85-264VAC/ 100-370VDC	5V/4100mA	82
LH25-20B12MU	25W		12V/2100mA	88
LH25-20B15MU	25W		15V/1600mA	88
LH25-20B18MU	25W		18V/1400mA	88
LH25-20B24MU	25W		24V/1100mA	89

Dimension LxWxH: 70.00 x 48.00 x 23.50(mm)

LO30-20BxxMU

Selection Guide — CE UKCA RoHS

Part No.	Power	Input voltage	Output voltage/current (Vo/Io)	Efficiency (%)(typ.)
LO30-20B03MU	19.8W	80-264VAC/ 100-370VDC	3.3V/6000mA	82
LO30-20B05MU	30W		5V/6000mA	85
LO30-20B12MU	30W		12V/2500mA	88
LO30-20B15MU	30W		15V/2000mA	89
LO30-20B19MU	30W		19V/1580mA	88
LO30-20B24MU	30W		24V/1250mA	89
LO30-20B36MU	30W		36V/833mA	90
LO30-20B48MU	30W		48V/625mA	90

Dimension LxWxH: 76.20 x 50.80 x 26.50(mm)

LO45-20BxxMU(-C)

Selection Guide — CE UKCA RoHS

Part No.	Power	Input voltage	Output voltage/current (Vo/Io)	Efficiency (%)(typ.)
LO45-20B03MU(-C)	26.4W	85-264VAC/ 100-370VDC	3.3V/8A	82
LO45-20B05MU(-C)	40W		5V/8A	84
LO45-20B12MU(-C)	45W		12V/3.75A	86
LO45-20B15MU(-C)	45W		15V/3A	86
LO45-20B24MU(-C)	45W		24V/1.875A	90
LO45-20B30MU(-C)	45W		30V/1.5A	89
LO45-20B36MU(-C)	45W		36V/1.25A	90
LO45-20B48MU(-C)	45W		48V/0.94A	90

LO45-20BxxMU Dimension LxWxH: 76.20 x 50.80 x 26.50(mm)
LO45-20BxxMU-C Dimension LxWxH: 91.40 x 60.50 x 33.30(mm)

LO45-20BxxSMU(-C)

Selection Guide — CE UKCA RoHS

Part No.	Power	Input voltage	Output voltage/current (Vo/Io)	Efficiency (%)(typ.)
LO45-20B03SMU(-C)	26.4W	85-264VAC/ 100-370VDC	3.3V/8000mA	83
LO45-20B05SMU(-C)	40W		5V/8000mA	85
LO45-20B12SMU(-C)	45W		12V/3750mA	90
LO45-20B15SMU(-C)	45W		15V/3000mA	90
LO45-20B24SMU(-C)	45W		24V/1875mA	90
LO45-20B36SMU(-C)	45W		36V/1250mA	90
LO45-20B48SMU(-C)	45W		48V/940mA	90

LO45-20BxxSMU Dimension LxWxH: 76.20 x 50.80 x 26.50(mm)
LO45-20BxxSMU-C Dimension LxWxH: 91.40 x 60.50 x 33.30(mm)

LO65-20BxxMU(-C)

Selection Guide — CE UKCA RoHS

Part No.	Power	Input voltage	Output voltage/current (Vo/Io)	Efficiency (%)(typ.)
LO65-20B03MU(-C)	33W	85-264VAC/ 100-370VDC	3.3V/10A	84
LO65-20B05MU(-C)	50W		5V/10A	85
LO65-20B12MU(-C)	65W		12V/5.42A	89
LO65-20B15MU(-C)	65W		15V/4.34A	90
LO65-20B24MU(-C)	65W		24V/2.71A	90
LO65-20B36MU(-C)	65W		36V/1.81A	91
LO65-20B48MU(-C)	65W		48V/1.36A	91

LO65-20BxxMU Dimension LxWxH: 76.20 x 50.80 x 26.50(mm)
LO65-20BxxMU-C Dimension LxWxH: 91.40 x 60.50 x 33.30(mm)

LO65-20BxxSMU(-C)

Selection Guide — CE UKCA RoHS

Part No.	Power	Input voltage	Output voltage/current (Vo/Io)	Efficiency (%)(typ.)
LO65-20B03SMU(-C)	33W	85-264VAC/ 100-370VDC	3.3V/10000mA	84
LO65-20B05SMU(-C)	50W		5V/10000mA	85
LO65-20B12SMU(-C)	65W		12V/5420mA	89
LO65-20B15SMU(-C)	65W		15V/4340mA	90
LO65-20B24SMU(-C)	65W		24V/2710mA	90
LO65-20B36SMU(-C)	65W		36V/1810mA	91
LO65-20B48SMU(-C)	65W		48V/1360mA	91

LO65-20BxxSMU Dimension LxWxH: 76.20 x 50.80 x 26.50(mm)
LO65-20BxxSMU-C Dimension LxWxH: 91.40 x 60.50 x 33.30(mm)

Notes

1. LH-MU series meet the requirements of ±1KV surge level. If the application requires higher performance, please refer to our recommended circuit.
2. If the application requires higher performance for surge, our matching EMC auxiliary devices are available. For example, products matching with FC-LX1D are able to reach 4KV (level four).
3. If the application requires higher performance for surge, our recommended peripheral circuits for 4KV (level four) are available.
4. Terminal with protective cover series: with the suffix "-C".
5. Detailed application please refer to the datasheet.

• This catalog is a collection of the latest products. For more information, please contact our sales team.

LO75-20BxxMU

Selection Guide — (Pending) CE UKCA RoHS

Part No.	Power(W)	Input voltage	Output voltage/current (Vo/Io)	Efficiency (%)(typ.)
LO75-20B05MU	50.0/60.0	85-264VAC	5V/10.0A	84
LO75-20B12MU	75.6/99.6		12V/6.3A	88
LO75-20B15MU	75.0/100.5		15V/5.0A	88
LO75-20B19MU	76.0/100.7		19V/4.0A	88
LO75-20B24MU	76.8/100.8		24V/3.2A	89
LO75-20B36MU	75.6/100.8		36V/2.1A	89
LO75-20B48MU	76.8/100.8		48V/1.6A	90
LO75-20B55MU	75.9/100.1		55V/1.38A	90

Dimension LxWxH: 101.60 x 50.80 x 32.00(mm)

LO120-20BxxMU

Selection Guide — cULus CE UKCA RoHS

Part No.	Input voltage	Cooling mode	Rated power	Output voltage/ current(Vo/Io)	Efficiency (%)(typ.)
LO120-20B12MU	85-264VAC/ 120-370VDC	Air cooling	84W	12V/7A	89
		10CFM	120W	12V/10A	
LO120-20B15MU		Air cooling	84W	15V/5.6A	89
		10CFM	120W	15V/8A	
LO120-20B24MU		Air cooling	84W	24V/3.5A	90
		10CFM	120W	24V/5A	
LO120-20B27MU		Air cooling	84W	27V/3.11A	90
		10CFM	120W	27V/4.44A	
LO120-20B36MU		Air cooling	84W	36V/2.33A	90
		10CFM	120W	36V/3.33A	
LO120-20B48MU		Air cooling	84W	48V/1.75A	91
		10CFM	120W	48V/2.5A	
LO120-20B54MU		Air cooling	84W	54V/1.56A	91
		10CFM	120W	54V/2.22A	

Dimension LxWxH: 101.60 x 50.80 x 32.00(mm)

For Mining Industry

PVA Series (40-200W)

Features

- Specific power supply designing for mining industry
- Wide input voltage range: 85-850VAC/85-900VAC/460-1500VDC
- Operating temperature range of -25℃ to +70℃
- High isolation voltage up to 4000VAC
- High reliability, high efficiency, long life span
- Output short circuit, over-current, over-voltage protections
- Low input inrush current
- EMS: Surge IEC/EN61000-4-5 Line to line ±4KV; EFT IEC/EN61000-4-4 ±4KV (PVA120-27Bxx-C's surge meets IEC/EN61000-4-5 Line to line ±2KV)

PVA40-26Bxx

Selection Guide — RoHS

Part No.	Power	Input voltage	Output voltage/current (Vo/Io)	Efficiency (%)(typ.)
PVA40-26B12	40W	460-1500VAC	12V/3400mA	82
PVA40-26B28	40W		28V/1430mA	85
PVA40-26B35	40W		35V/1150mA	85

Dimension LxWxH: 144.50 x 105.00 x 40.00(mm)

PVA120-27BxxR2

Selection Guide — RoHS

Part No.	Power	Input voltage	Output voltage/current (Vo/Io)	Efficiency (%)(typ.)
PVA120-27B24R2	120W	85-900VAC/ 120-1300VDC	24V/5000mA	85
PVA120-27B28R2	120W		28V/4286mA	85
PVA120-27B35R2	120W		35V/3428mA	85

Dimension LxWxH: 140.00 x 90.00 x 37.50(mm)

PVA40-27Bxx

Selection Guide — RoHS

Part No.	Power	Input voltage	Output voltage/current (Vo/Io)	Efficiency (%)(typ.)
PVA40-27B18	40W	85-900VAC	18V/2222mA	86
PVA40-27B24	40W		24V/1667mA	86
PVA40-27B30	40W		30V/1333mA	86

Dimension LxWxH: 138.00 x 82.00 x 32.00(mm)

PVA150-27Bxx

Selection Guide — RoHS

Part No.	Power	Input voltage	Output voltage/current (Vo/Io)	Efficiency (%)(typ.)
PVA150-27B24	150W	85-850VAC	24V/6.25A	87
PVA150-27B28	150W		28V/5.36A	87
PVA150-27B35	150W		35V/4.3A	87

Dimension LxWxH: 199.00 x 110.00 x 55.00(mm)

PVA70-27Bxx

Selection Guide — RoHS

Part No.	Power	Input voltage	Output voltage/current (Vo/Io)	Efficiency (%)(typ.)
PVA70-27B24	70W	85-900VAC	24V/2917mA	87
PVA70-27B28	70W		28V/2500mA	87
PVA70-27B35	70W		35V/2000mA	87

Dimension LxWxH: 155.00 x 95.00 x 41.00(mm)

PVA200-27BxxR2

Selection Guide — RoHS

Part No.	Power	Input voltage	Output voltage/current (Vo/Io)	Efficiency (%)(typ.)
PVA200-27B24R2	200W	85-900VAC/ 120-1300VDC	24V/8333A	87
PVA200-27B28R2	200W		28V/7140A	87
PVA200-27B35R2	200W		35V/5710A	87

Dimension LxWxH: 199.00 x 110.00 x 55.00(mm)

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Board Mount DC/DC Converter

Fixed Input Isolated & Unregulated (DFN Package) B/D/E/FB Series (1W)

Features

- Ultra-compact, ultra-thin DFN package (9.00 x 7.00 x 3.10mm)
- Operating temperature range: -40℃ to +125℃
- Efficiency up to 85%
- Continuous output short-circuit protection
- IEC/UL/EN62368 approved

B_MT-1WR4

Selection Guide RoHS

Part No.	Power	Input voltage range	Output voltage/current (Vo/Io)	Eff(%) (min./typ.)	Isolation (VDC)
B0505MT-1WR4	1W	4.5-5.5 (5VDC)	5V/200mA	81/85	3000

Dimension LxWxH: 9.00 x 7.00 x 3.10(mm)

E_T-1WR4

Selection Guide RoHS

Part No.	Power	Input voltage range	Output voltage/current (Vo/Io)	Eff(%) (min./typ.)	Isolation (VDC)
E0505T-1WR4	1W	4.5-5.5 (5VDC)	± 5V/ ± 100mA	83/87	3000

Dimension LxWxH: 13.20 x 7.00 x 3.10(mm)

D_T-1WR4

Selection Guide RoHS

Part No.	Power	Input voltage range	Output voltage/ current(Vo/Io)	Eff(%) (min./typ.)	Isolation (VDC)
D0505T-1WR4	1W	4.5-5.5 (5VDC)	5V/100mA	83/87	in→out:3000 out→out:1500

Dimension LxWxH: 13.20 x 7.00 x 3.10(mm)

FB_T-1WR4

Selection Guide RoHS

Part No.	Power	Input voltage range	Output voltage/current (Vo/Io)	Eff(%) (min./typ.)	Isolation (VDC)
FB0505T-1WR4	1W	4.5-5.5 (5VDC)	5V/200mA	83/87	4200

Dimension LxWxH: 13.20 x 7.00 x 3.10(mm)

Fixed Input Isolated & Unregulated (SMD Package)

A/B/E/F/FB Series (1-2W)

Features

- Isolation voltage: 1500/3000/4200VDC
- Operating temperature range: -40℃ to +105℃
- Efficiency up to 86%
- ESD Immunity up to ±8kV
- Continuous short-circuit protection
- Compact SMD package

A_XT-1WR3

Input: 3.3V Input: 5V Input:12/15/24V

Selection Guide

Part No.	Power	Input voltage range	Output voltage/current (Vo/Io)	Eff(%) (min./typ.)	Isolation (VDC)
A0303XT-1WR3	1W	2.97-3.63 (3.3VDC)	± 3.3V/ ± 152mA	73/77	1500
A0305XT-1WR3	1W		± 5V/ ± 100mA	78/82	
A0309XT-1WR3	1W		± 9V/ ± 56mA	78/82	
A0312XT-1WR3	1W		± 12V/ ± 42mA	78/82	
A0315XT-1WR3	1W		± 15V/ ± 34mA	78/82	
A0324XT-1WR3	1W		± 24V/ ± 21mA	80/84	
A0505XT-1WR3	1W	4.5-5.5 (5VDC)	± 5V/ ± 100mA	78/82	1500
A0509XT-1WR3	1W		± 9V/ ± 56mA	79/83	
A0512XT-1WR3	1W		± 12V/ ± 42mA	79/83	
A0515XT-1WR3	1W		± 15V/ ± 34mA	79/83	
A0524XT-1WR3	1W		± 24V/ ± 21mA	81/85	
A1205XT-1WR3	1W	10.8-13.2 (12VDC)	± 5V/ ± 100mA	78/82	1500
A1209XT-1WR3	1W		± 9V/ ± 56mA	79/83	
A1212XT-1WR3	1W		± 12V/ ± 42mA	79/83	
A1215XT-1WR3	1W		± 15V/ ± 34mA	79/83	
A1224XT-1WR3	1W		± 24V/ ± 21mA	81/85	
A1515XT-1WR3	1W	13.5-16.5 (15VDC)	± 15V/ ± 34mA	79/83	1500
A2405XT-1WR3	1W	21.6-26.4 (24VDC)	± 5V/ ± 100mA	76/82	1500
A2409XT-1WR3	1W		± 9V/ ± 56mA	77/83	
A2412XT-1WR3	1W		± 12V/ ± 42mA	77/83	
A2415XT-1WR3	1W		± 15V/ ± 34mA	77/83	
A2424XT-1WR3	1W		± 24V/ ± 21mA	79/85	

Dimension LxWxH: 15.24 x 11.40 x 7.25(mm)

B_XT-1WR3

Input: 3.3V Input: 5V Input:12/15/24V

Selection Guide

Part No.	Power	Input voltage range	Output voltage/current (Vo/Io)	Eff(%) (min./typ.)	Isolation (VDC)
B0303XT-1WR3	1W	2.97-3.63 (3.3VDC)	3.3V/303mA	73/77	1500
B0305XT-1WR3	1W		5V/200mA	78/82	
B0309XT-1WR3	1W		9V/111mA	80/84	
B0312XT-1WR3	1W		12V/83mA	80/84	
B0315XT-1WR3	1W		15V/67mA	80/84	
B0324XT-1WR3	1W		24V/42mA	80/84	
B0503XT-1WR3	1W	4.5-5.5 (5VDC)	3.3V/303mA	70/74	1500
B0505XT-1WR3	1W		5V/200mA	78/82	
B0509XT-1WR3	1W		9V/111mA	79/83	
B0512XT-1WR3	1W		12V/84mA	79/83	
B0515XT-1WR3	1W		15V/67mA	79/83	
B0524XT-1WR3	1W		24V/42mA	81/85	
B1203XT-1WR3	1W	10.8-13.2 (12VDC)	3.3V/303mA	72/76	1500
B1205XT-1WR3	1W		5V/200mA	78/82	
B1209XT-1WR3	1W		9V/111mA	79/83	
B1212XT-1WR3	1W		12V/84mA	79/83	
B1215XT-1WR3	1W		15V/67mA	79/83	
B1224XT-1WR3	1W		24V/42mA	81/85	
B1505XT-1WR3	1W	13.5-16.5 (15VDC)	5V/200mA	78/82	1500
B1509XT-1WR3	1W		9V/111mA	78/82	
B1515XT-1WR3	1W		15V/67mA	79/83	
B2405XT-1WR3	1W	21.6-26.4 (24VDC)	5V/200mA	74/80	1500
B2409XT-1WR3	1W		9V/111mA	74/80	
B2412XT-1WR3	1W		12V/84mA	74/80	
B2415XT-1WR3	1W		15V/67mA	74/80	
B2424XT-1WR3	1W		24V/42mA	74/80	

Dimension LxWxH: 13.20 x 11.40 x 7.25(mm)

B_T-1WR3

Input: 3.3V Input: 5V Input:12V

Selection Guide

Part No.	Power	Input voltage range	Output voltage/current (Vo/Io)	Eff(%) (min./typ.)	Isolation (VDC)
B0303T-1WR3	1W	2.97-3.63 (3.3VDC)	3.3V/303mA	73/77	1500
B0305T-1WR3	1W		5V/200mA	78/82	
B0503T-1WR3	1W	4.5-5.5 (5VDC)	3.3V/303mA	70/74	1500
B0505T-1WR3	1W		5V/200mA	78/82	
B0509T-1WR3	1W		9V/111mA	79/83	
B0512T-1WR3	1W		12V/84mA	79/83	
B0515T-1WR3	1W		15V/67mA	79/83	
B1205T-1WR3	1W	10.8-13.2 (12VDC)	5V/200mA	78/82	1500
B1209T-1WR3	1W		9V/111mA	79/83	
B1212T-1WR3	1W		12V/84mA	79/83	
B1215T-1WR3	1W		15V/67mA	79/83	

Dimension LxWxH: 13.20 x 11.40 x 7.25(mm)

FB0505XT-1WR3

Selection Guide

Part No.	Power	Input voltage range	Output voltage/current (Vo/Io)	Eff(%) (min./typ.)	Isolation (VDC)
FB0505XT-1WR3	1W	4.5-5.5 (5VDC)	5V/200mA	78/82	4200

Dimension LxWxH: 15.24 x 11.40 x 7.25(mm)

E_XT-1WR3

Input: 3.3V Input: 5V Input:12/15/24V

Selection Guide

Part No.	Power	Input voltage range	Output voltage/current (Vo/Io)	Eff(%) (min./typ.)	Isolation (VDC)
E0303XT-1WR3	1W	2.97-3.63 (3.3VDC)	± 3.3V/ ± 152mA	73/77	3000
E0305XT-1WR3	1W		± 5V/ ± 100mA	78/82	
E0309XT-1WR3	1W		± 9V/ ± 56mA	78/82	
E0312XT-1WR3	1W		± 12V/ ± 42mA	78/82	
E0315XT-1WR3	1W		± 15V/ ± 34mA	78/82	
E0324XT-1WR3	1W		± 24V/ ± 21mA	80/84	
E0505XT-1WR3	1W	4.5-5.5 (5VDC)	± 5V/ ± 100mA	78/82	3000
E0509XT-1WR3	1W		± 9V/ ± 56mA	79/83	
E0512XT-1WR3	1W		± 12V/ ± 42mA	79/83	
E0515XT-1WR3	1W		± 15V/ ± 34mA	79/83	
E0524XT-1WR3	1W		± 24V/ ± 21mA	81/85	
E1205XT-1WR3	1W	10.8-13.2 (12VDC)	± 5V/ ± 100mA	78/82	3000
E1209XT-1WR3	1W		± 9V/ ± 56mA	79/83	
E1212XT-1WR3	1W		± 12V/ ± 42mA	79/83	
E1215XT-1WR3	1W		± 15V/ ± 34mA	79/83	
E1224XT-1WR3	1W		± 24V/ ± 21mA	81/85	
E1515XT-1WR3	1W	13.5-16.5 (15VDC)	± 15V/ ± 34mA	79/83	3000
E2405XT-1WR3	1W	21.6-26.4 (24VDC)	± 5V/ ± 100mA	76/82	3000
E2409XT-1WR3	1W		± 9V/ ± 56mA	77/83	
E2412XT-1WR3	1W		± 12V/ ± 42mA	77/83	
E2415XT-1WR3	1W		± 15V/ ± 34mA	77/83	
E2424XT-1WR3	1W		± 24V/ ± 21mA	79/85	

Dimension LxWxH: 15.24 x 11.40 x 7.25(mm)

F_XT-1WR3

Input: 3.3V Input: 5V Input:12/15/24V

Selection Guide

Part No.	Power	Input voltage range	Output voltage/current (Vo/Io)	Eff(%) (min./typ.)	Isolation (VDC)
F0303XT-1WR3	1W	2.97-3.63 (3.3VDC)	3.3V/303mA	73/77	3000
F0305XT-1WR3	1W		5V/200mA	78/82	
F0309XT-1WR3	1W		9V/111mA	80/84	
F0312XT-1WR3	1W		12V/83mA	80/84	
F0315XT-1WR3	1W		15V/67mA	80/84	
F0324XT-1WR3	1W		24V/42mA	80/84	
F0503XT-1WR3	1W	4.5-5.5 (5VDC)	3.3V/303mA	70/74	3000
F0505XT-1WR3	1W		5V/200mA	78/82	
F0509XT-1WR3	1W		9V/111mA	79/83	
F0512XT-1WR3	1W		12V/84mA	79/83	
F0515XT-1WR3	1W		15V/67mA	79/83	
F0524XT-1WR3	1W		24V/42mA	81/85	
F1203XT-1WR3	1W	10.8-13.2 (12VDC)	3.3V/303mA	72/76	3000
F1205XT-1WR3	1W		5V/200mA	78/82	
F1209XT-1WR3	1W		9V/111mA	79/83	
F1212XT-1WR3	1W		12V/84mA	79/83	
F1215XT-1WR3	1W		15V/67mA	79/83	
F1224XT-1WR3	1W		24V/42mA	81/85	
F1505XT-1WR3	1W	13.5-16.5 (15VDC)	5V/200mA	78/82	3000
F1509XT-1WR3	1W		9V/111mA	78/82	
F1515XT-1WR3	1W		15V/67mA	79/83	
F2403XT-1WR3	1W	21.6-26.4 (24VDC)	3.3V/303mA	72/76	3000
F2405XT-1WR3	1W		5V/200mA	74/80	
F2409XT-1WR3	1W		9V/111mA	74/80	
F2412XT-1WR3	1W		12V/84mA	74/80	
F2415XT-1WR3	1W		15V/67mA	74/80	
F2424XT-1WR3	1W		24V/42mA	74/80	

Dimension LxWxH: 13.20 x 11.40 x 7.25(mm)

B_XT-2WR3

Input: 5V Input:12/15/24V

Selection Guide

Part No.	Power	Input voltage range	Output voltage/current (Vo/Io)	Eff(%) (min./typ.)	Isolation (VDC)
B0503XT-2WR3	2W	4.5-5.5 (5VDC)	3.3V/400mA	74/78	1500
B0505XT-2WR3	2W		5V/400mA	80/84	
B05X7XT-2WR3	2W		7V/286mA	80/84	
B0509XT-2WR3	2W		9V/222mA	81/85	
B0512XT-2WR3	2W		12V/167mA	81/85	
B0515XT-2WR3	2W		15V/133mA	82/86	
B0524XT-2WR3	2W		24V/83mA	82/86	
B1205XT-2WR3	2W	10.8-13.2 (12VDC)	5V/400mA	79/83	1500
B1209XT-2WR3	2W		9V/222mA	79/83	
B1212XT-2WR3	2W		12V/167mA	80/84	
B1215XT-2WR3	2W		15V/133mA	80/84	
B1224XT-2WR3	2W		24V/83mA	81/85	
B1505XT-2WR3	2W	13.5-16.5 (15VDC)	5V/400mA	79/83	1500
B1515XT-2WR3	2W		15V/133mA	80/84	
B2405XT-2WR3	2W	21.6-26.4 (24VDC)	5V/400mA	77/83	1500
B2409XT-2WR3	2W		9V/222mA	77/83	
B2412XT-2WR3	2W		12V/167mA	78/84	
B2415XT-2WR3	2W		15V/133mA	78/84	
B2424XT-2WR3	2W		24V/83mA	79/85	

Dimension LxWxH: 13.20 x 11.40 x 7.25(mm)

F_XT-2WR3

Input: 5V Input:12/15/24V

Selection Guide

Part No.	Power	Input voltage range	Output voltage/current (Vo/Io)	Eff(%) (min./typ.)	Isolation (VDC)
F0503XT-2WR3	2W	4.5-5.5 (5VDC)	3.3V/400mA	74/78	3000
F0505XT-2WR3	2W		5V/400mA	80/84	
F05X7XT-2WR3	2W		7V/286mA	80/84	
F0509XT-2WR3	2W		9V/222mA	81/85	
F0512XT-2WR3	2W		12V/167mA	81/85	
F0515XT-2WR3	2W		15V/133mA	82/86	
F0524XT-2WR3	2W		24V/83mA	82/86	
F1205XT-2WR3	2W	10.8-13.2 (12VDC)	5V/400mA	79/83	3000
F1206XT-2WR3	2W		6V/333mA	79/83	
F1209XT-2WR3	2W		9V/222mA	79/83	
F1212XT-2WR3	2W		12V/167mA	80/84	
F1215XT-2WR3	2W		15V/133mA	80/84	
F1224XT-2WR3	2W		24V/83mA	81/85	
F1505XT-2WR3	2W	13.5-16.5 (15VDC)	5V/400mA	79/83	3000
F1515XT-2WR3	2W		15V/133mA	80/84	
F2405XT-2WR3	2W	21.6-26.4 (24VDC)	5V/400mA	77/83	3000
F2409XT-2WR3	2W		9V/222mA	77/83	
F2412XT-2WR3	2W		12V/167mA	78/84	
F2415XT-2WR3	2W		15V/133mA	78/84	
F2424XT-2WR3	2W		24V/83mA	79/85	

Dimension LxWxH: 13.20 x 11.40 x 7.25(mm)

Fixed Input Isolated & Unregulated (SIP Package)

A/B/E/F Series (1W)

Features

- Isolation voltage: 1500VDC/3000VDC
- Operating temperature range: -40℃ to +105℃
- Efficiency up to 83%
- Continuous short-circuit protection
- No-load input current as low as 5mA

A_S-1WR3

Input: 3.3V Input: 5V Input:12/15/24V

Selection Guide

Part No.	Power	Input voltage range	Output voltage/current (Vo/Io)	Eff(%) (min./typ.)	Isolation (VDC)
A0303S-1WR3	1W	2.97-3.63 (3.3VDC)	±3.3V/±152mA	74/78	1500
A0305S-1WR3	1W		±5V/±100mA	78/82	
A0309S-1WR3	1W		±9V/±56mA	81/85	
A0312S-1WR3	1W		±12V/±42mA	78/82	
A0315S-1WR3	1W		±15V/±34mA	78/82	
A0324S-1WR3	1W		±24V/±21mA	80/84	
A0503S-1WR3	1W	4.5-5.5 (5VDC)	±3.3V/±152mA	70/74	1500
A0505S-1WR3	1W		±5V/±100mA	78/82	
A0509S-1WR3	1W		±9V/±56mA	79/83	
A0512S-1WR3	1W		±12V/±42mA	79/83	
A0515S-1WR3	1W		±15V/±34mA	79/83	
A0524S-1WR3	1W		±24V/±21mA	81/85	
A1203S-1WR3	1W	10.8-13.2 (12VDC)	±3.3V/±152mA	71/75	1500
A1205S-1WR3	1W		±5V/±100mA	76/80	
A1209S-1WR3	1W		±9V/±56mA	76/80	
A1212S-1WR3	1W		±12V/±42mA	77/81	
A1215S-1WR3	1W		±15V/±34mA	77/81	
A1224S-1WR3	1W		±24V/±21mA	76/80	
A1505S-1WR3	1W	13.5-16.5 (15VDC)	±5V/±100mA	76/80	1500
A1509S-1WR3	1W		±9V/±56mA	76/80	
A1512S-1WR3	1W		±12V/±42mA	76/80	
A1515S-1WR3	1W		±15V/±34mA	77/81	
A1524S-1WR3	1W		±24V/±21mA	77/81	
A2405S-1WR3	1W	21.6-26.4 (24VDC)	±5V/±100mA	74/80	1500
A2409S-1WR3	1W		±9V/±56mA	74/80	
A2412S-1WR3	1W		±12V/±42mA	75/81	
A2415S-1WR3	1W		±15V/±34mA	73/79	
A2424S-1WR3	1W		±24V/±21mA	74/80	

Dimension LxWxH: 19.65 x 6.00 x 10.16(mm)

B_S-1WR3

Input: 3.3V Input: 5V Input:12/15/24V

Selection Guide

Part No.	Power	Input voltage range	Output voltage/current (Vo/Io)	Eff(%) (min./typ.)	Isolation (VDC)
B0303S-1WR3	1W	2.97-3.63 (3.3VDC)	3.3V/303mA	75/79	1500
B0305S-1WR3	1W		5V/200mA	78/82	
B0309S-1WR3	1W		9V/111mA	81/85	
B0312S-1WR3	1W		12V/83mA	78/82	
B0315S-1WR3	1W		15V/67mA	78/82	
B0324S-1WR3	1W		24V/42mA	80/84	
B0503S-1WR3	1W	4.5-5.5 (5VDC)	3.3V/303mA	70/74	1500
B0505S-1WR3	1W		5V/200mA	78/82	
B0509S-1WR3	1W		9V/111mA	79/83	
B0512S-1WR3	1W		12V/84mA	79/83	
B0515S-1WR3	1W		15V/67mA	79/83	
B0524S-1WR3	1W		24V/42mA	81/85	
B1203S-1WR3	1W	10.8-13.2 (12VDC)	3.3V/303mA	71/75	1500
B1205S-1WR3	1W		5V/200mA	76/80	
B1209S-1WR3	1W		9V/111mA	76/80	
B1212S-1WR3	1W		12V/83mA	76/80	
B1215S-1WR3	1W		15V/67mA	77/81	
B1224S-1WR3	1W		24V/42mA	77/81	
B1505S-1WR3	1W	13.5-16.5 (15VDC)	5V/200mA	76/80	1500
B1509S-1WR3	1W		9V/111mA	76/80	
B1512S-1WR3	1W		12V/83mA	76/80	
B1515S-1WR3	1W		15V/67mA	77/81	
B1524S-1WR3	1W		24V/42mA	77/81	
B2403S-1WR3	1W	21.6-26.4 (24VDC)	3.3V/303mA	69/75	1500
B2405S-1WR3	1W		5V/200mA	73/79	
B2409S-1WR3	1W		9V/111mA	74/80	
B2412S-1WR3	1W		12V/83mA	75/81	
B2415S-1WR3	1W		15V/67mA	75/81	
B2424S-1WR3	1W		24V/42mA	75/81	

Dimension LxWxH: 11.60 x 6.00 x 10.16(mm)

B_LS-1WR3

Input: 3.3V Input: 5V Input:12/15/24V

Selection Guide

Part No.	Power	Input voltage range	Output voltage/current (Vo/Io)	Eff(%) (min./typ.)	Isolation (VDC)
B0303LS-1WR3	1W	2.97-3.63 (3.3VDC)	3.3V/303mA	75/79	1500
B0305LS-1WR3	1W		5V/200mA	78/82	
B0309LS-1WR3	1W		9V/111mA	81/85	
B0312LS-1WR3	1W		12V/83mA	78/82	
B0315LS-1WR3	1W		15V/67mA	78/82	
B0324LS-1WR3	1W		24V/42mA	80/84	
B0503LS-1WR3	1W	4.5-5.5 (5VDC)	3.3V/303mA	70/74	1500
B0505LS-1WR3	1W		5V/200mA	78/82	
B0509LS-1WR3	1W		9V/111mA	79/83	
B0512LS-1WR3	1W		12V/84mA	79/83	
B0515LS-1WR3	1W		15V/67mA	79/83	
B0524LS-1WR3	1W		24V/42mA	81/85	

Dimension LxWxH: 19.65 x 6.00 x 10.16(mm)

Part No.	Power	Input voltage range	Output voltage/current (Vo/Io)	Eff(%) (min./typ.)	Isolation (VDC)
B1203LS-1WR3	1W	10.8-13.2 (12VDC)	3.3V/303mA	71/75	1500
B1205LS-1WR3	1W		5V/200mA	76/80	
B1209LS-1WR3	1W		9V/111mA	76/80	
B1212LS-1WR3	1W		12V/83mA	76/80	
B1215LS-1WR3	1W		15V/67mA	77/81	
B1224LS-1WR3	1W		24V/42mA	77/81	
B1505LS-1WR3	1W	13.5-16.5 (15VDC)	5V/200mA	76/80	1500
B1509LS-1WR3	1W		9V/111mA	76/80	
B1512LS-1WR3	1W		12V/84mA	76/80	
B1515LS-1WR3	1W		15V/67mA	77/81	
B1524LS-1WR3	1W		24V/42mA	77/81	
B2403LS-1WR3	1W	21.6-26.4 (24VDC)	3.3V/303mA	69/75	1500
B2405LS-1WR3	1W		5V/200mA	73/79	
B2407LS-1WR3	1W		7.2V/139mA	74/80	
B2409LS-1WR3	1W		9V/111mA	74/80	
B2412LS-1WR3	1W		12V/83mA	75/81	
B2415LS-1WR3	1W		15V/67mA	75/81	
B2424LS-1WR3	1W		24V/42mA	75/81	

E_S-1WR3

Input: 3.3V Input: 5V Input:12/15/24V

Selection Guide

Part No.	Power	Input voltage range	Output voltage/current (Vo/Io)	Eff(%) (min./typ.)	Isolation (VDC)
E0303S-1WR3	1W	2.97-3.63 (3.3VDC)	±3.3V/±150mA	74/78	3000
E0305S-1WR3	1W		±5V/±100mA	78/82	
E0309S-1WR3	1W		±9V/±56mA	81/85	
E0312S-1WR3	1W		±12V/±42mA	78/82	
E0315S-1WR3	1W		±15V/±34mA	78/82	
E0324S-1WR3	1W		±24V/±21mA	80/84	
E0503S-1WR3	1W	4.5-5.5 (5VDC)	±3.3V/±152mA	70/74	3000
E0505S-1WR3	1W		±5V/±100mA	78/82	
E0509S-1WR3	1W		±9V/±56mA	79/83	
E0512S-1WR3	1W		±12V/±42mA	79/83	
E0515S-1WR3	1W		±15V/±34mA	79/83	
E0524S-1WR3	1W		±24V/±21mA	81/85	
E1203S-1WR3	1W	10.8-13.2 (12VDC)	±3.3V/±152mA	71/75	3000
E1205S-1WR3	1W		±5V/±100mA	76/80	
E1209S-1WR3	1W		±9V/±56mA	76/80	
E1212S-1WR3	1W		±12V/±42mA	77/81	
E1215S-1WR3	1W		±15V/±34mA	77/81	
E1224S-1WR3	1W		±24V/±21mA	76/80	
E1505S-1WR3	1W	13.5-16.5 (15VDC)	±5V/±100mA	76/80	3000
E1509S-1WR3	1W		±9V/±56mA	76/80	
E1512S-1WR3	1W		±12V/±42mA	76/80	
E1515S-1WR3	1W		±15V/±34mA	77/81	
E1524S-1WR3	1W		±24V/±21mA	77/81	
E2403S-1WR3	1W	21.6-26.4 (24VDC)	±3.3V/±150mA	72/76	3000
E2405S-1WR3	1W		±5V/±100mA	74/80	
E2409S-1WR3	1W		±9V/±56mA	74/80	
E2412S-1WR3	1W		±12V/±42mA	75/81	
E2415S-1WR3	1W		±15V/±34mA	73/79	
E2424S-1WR3	1W		±24V/±21mA	74/80	

Dimension LxWxH: 19.65 x 6.00 x 10.16(mm)

F_S-1WR3

Input: 3.3V Input: 5V Input: 9/12/15/24V

Selection Guide

Part No.	Power	Input voltage range	Output voltage/current (Vo/Io)	Eff(%) (min./typ.)	Isolation (VDC)
F0303S-1WR3	1W	2.97-3.63 (3.3VDC)	3.3V/303mA	75/79	3000
F0305S-1WR3	1W		5V/200mA	78/82	
F0309S-1WR3	1W		9V/111mA	81/85	
F0312S-1WR3	1W		12V/83mA	78/82	
F0315S-1WR3	1W		15V/67mA	78/82	
F0324S-1WR3	1W		24V/42mA	80/84	
F0503S-1WR3	1W	4.5-5.5 (5VDC)	3.3V/303mA	70/74	3000
F0505S-1WR3	1W		5V/200mA	78/82	
F0509S-1WR3	1W		9V/111mA	79/83	
F0512S-1WR3	1W		12V/83mA	79/83	
F0515S-1WR3	1W		15V/67mA	79/83	
F0524S-1WR3	1W		24V/42mA	81/85	
F0909S-1WR3	1W	8.1-9.9 (9VDC)	9V/111mA	77/81	3000
F1203S-1WR3	1W	10.8-13.2 (12VDC)	3.3V/303mA	71/75	3000
F1205S-1WR3	1W		5V/200mA	76/80	
F1209S-1WR3	1W		9V/111mA	76/80	
F1212S-1WR3	1W		12V/83mA	76/80	
F1215S-1WR3	1W		15V/67mA	77/81	
F1224S-1WR3	1W		24V/42mA	77/81	
F1505S-1WR3	1W	13.5-16.5 (15VDC)	5V/200mA	76/80	3000
F1509S-1WR3	1W		9V/111mA	76/80	
F1512S-1WR3	1W		12V/83mA	76/80	
F1515S-1WR3	1W		15V/67mA	77/81	
F1524S-1WR3	1W		24V/42mA	77/81	
F2403S-1WR3	1W	21.6-26.4 (24VDC)	3.3V/303mA	69/75	3000
F2405S-1WR3	1W		5V/200mA	73/79	
F2407S-1WR3	1W		7.2V/139mA	74/80	
F2409S-1WR3	1W		9V/111mA	74/80	
F2412S-1WR3	1W		12V/83mA	75/81	
F2415S-1WR3	1W		15V/67mA	75/81	
F2424S-1WR3	1W		24V/42mA	75/81	

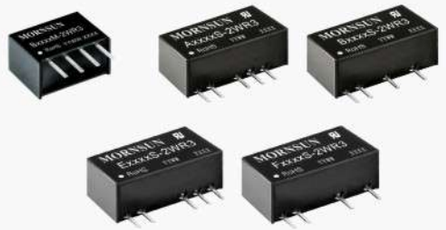
Dimension LxWxH: 19.65 x 6.00 x 10.16(mm)

Fixed Input Isolated & Unregulated (SIP Package)

A/B/E/F Series (2W)

Features

- Isolation voltage: 1500VDC
- Operating temperature range: -40℃ to +105℃
- Continuous short-circuit protection
- International standard pin-out
- IEC/UL/EN62368 approved



A_S-2WR3

Input: 5V Input:12/15/24V

Selection Guide

Part No.	Power	Input voltage range	Output voltage/current (Vo/Io)	Eff(%) (min./typ.)	Isolation (VDC)
A0503S-2WR3	2W	4.5-5.5 (5VDC)	± 3.3V/ ± 303mA	71/75	1500
A0505S-2WR3	2W		± 5V/ ± 200mA	80/84	
A0509S-2WR3	2W		± 9V/ ± 111mA	81/85	
A0512S-2WR3	2W		± 12V/ ± 83mA	81/85	
A0515S-2WR3	2W		± 15V/ ± 67mA	82/86	
A0524S-2WR3	2W		± 24V/ ± 42mA	82/86	
A1203S-2WR3	2W	10.8-13.2 (12VDC)	± 3.3V/ ± 303mA	71/75	1500
A1205S-2WR3	2W		± 5V/ ± 200mA	76/80	
A1207S-2WR3	2W		± 7.2V/ ± 139mA	76/80	
A1209S-2WR3	2W		± 9V/ ± 111mA	78/82	
A1212S-2WR3	2W		± 12V/ ± 83mA	79/83	
A1215S-2WR3	2W		± 15V/ ± 67mA	79/83	
A1224S-2WR3	2W		± 24V/ ± 42mA	79/83	
A1505S-2WR3	2W	13.5-16.5 (15VDC)	± 5V/ ± 200mA	76/80	1500
A1515S-2WR3	2W		± 15V/ ± 67mA	78/82	
A2403S-2WR3	2W	21.6-26.4 (24VDC)	± 3.3V/ ± 303mA	70/76	1500
A2405S-2WR3	2W		± 5V/ ± 200mA	74/80	
A2407S-2WR3	2W		± 7.2V/ ± 139mA	74/80	
A2409S-2WR3	2W		± 9V/ ± 111mA	75/81	
A2412S-2WR3	2W		± 12V/ ± 83mA	77/83	
A2415S-2WR3	2W		± 15V/ ± 67mA	77/83	
A2424S-2WR3	2W		± 24V/ ± 42mA	77/83	

Dimension LxWxH: 19.50 x 7.05 x 10.16(mm)

B_S-2WR3

Input: 5V Input:12/15/24V

Selection Guide

Part No.	Power	Input voltage range	Output voltage/current (Vo/Io)	Eff(%) (min./typ.)	Isolation (VDC)
B0503S-2WR3	2W	4.5-5.5 (5VDC)	3.3V/400mA	74/78	1500
B0505S-2WR3	2W		5V/400mA	80/84	
B0507S-2WR3	2W		7.2V/278mA	80/84	
B0509S-2WR3	2W		9V/222mA	81/85	
B0512S-2WR3	2W		12V/167mA	81/85	
B0515S-2WR3	2W		15V/133mA	82/86	
B0524S-2WR3	2W		24V/83mA	82/86	
B1203S-2WR3	2W	10.8-13.2 (12VDC)	3.3V/400mA	75/79	1500
B1205S-2WR3	2W		5V/400mA	78/82	
B1209S-2WR3	2W		9V/222mA	78/82	
B1212S-2WR3	2W		12V/167mA	80/84	
B1215S-2WR3	2W		15V/133mA	81/85	
B1224S-2WR3	2W		24V/83mA	82/86	
B1505S-2WR3	2W	13.5-16.5 (15VDC)	5V/400mA	76/80	1500
B1515S-2WR3	2W		15V/133mA	77/81	
B1524S-2WR3	2W		24V/83mA	77/81	
B2403S-2WR3	2W	21.6-26.4 (24VDC)	3.3V/400mA	70/76	1500
B2405S-2WR3	2W		5V/400mA	74/80	
B2409S-2WR3	2W		9V/222mA	75/81	
B2412S-2WR3	2W		12V/167mA	78/84	
B2415S-2WR3	2W		15V/133mA	80/86	
B2424S-2WR3	2W		24V/83mA	80/86	

Dimension LxWxH: 19.50 x 7.05 x 10.16(mm)

B_M-2WR3

Selection Guide

Part No.	Power	Input voltage range	Output voltage/current (Vo/Io)	Eff(%) (min./typ.)	Isolation (VDC)
B1203M-2WR3	2W	10.8-13.2 (12VDC)	3.3V/400mA	75/79	1500
B1205M-2WR3	2W		5V/400mA	78/82	
B1212M-2WR3	2W		12V/167mA	80/84	
B2405M-2WR3	2W	21.6-26.4 (24VDC)	5V/400mA	74/80	1500
B2415M-2WR3	2W		15V/133mA	78/84	
B2424M-2WR3	2W		24V/83mA	80/86	

Dimension LxWxH: 11.60 x 7.55 x 10.16(mm)

E_S-2WR3

Input: 5V Input:12/15/24V

Selection Guide

Part No.	Power	Input voltage range	Output voltage/current (Vo/Io)	Eff(%) (min./typ.)	Isolation (VDC)
E0503S-2WR3	2W	4.5-5.5 (5VDC)	± 3.3V/ ± 303mA	71/75	3000
E0505S-2WR3	2W		± 5V/ ± 200mA	80/84	
E0509S-2WR3	2W		± 9V/ ± 111mA	81/85	
E0512S-2WR3	2W		± 12V/ ± 83mA	81/85	
E0515S-2WR3	2W		± 15V/ ± 67mA	82/86	
E0524S-2WR3	2W		± 24V/ ± 42mA	82/86	
E1203S-2WR3	2W	10.8-13.2 (12VDC)	± 3.3V/ ± 303mA	71/75	3000
E1205S-2WR3	2W		± 5V/ ± 200mA	76/80	
E1207S-2WR3	2W		± 7.2V/ ± 139mA	76/80	
E1209S-2WR3	2W		± 9V/ ± 111mA	78/82	
E1212S-2WR3	2W		± 12V/ ± 83mA	79/83	
E1215S-2WR3	2W		± 15V/ ± 67mA	79/83	
E1224S-2WR3	2W		± 24V/ ± 42mA	79/83	
E1505S-2WR3	2W	13.5-16.5 (15VDC)	± 5V/ ± 200mA	76/80	3000
E1515S-2WR3	2W		± 15V/ ± 67mA	78/82	
E2403S-2WR3	2W	21.6-26.4 (24VDC)	± 3.3V/ ± 303mA	70/76	3000
E2405S-2WR3	2W		± 5V/ ± 200mA	74/80	
E2407S-2WR3	2W		± 7.2V/ ± 139mA	74/80	
E2409S-2WR3	2W		± 9V/ ± 111mA	75/81	
E2412S-2WR3	2W		± 12V/ ± 83mA	77/83	
E2415S-2WR3	2W		± 15V/ ± 67mA	77/83	
E2424S-2WR3	2W		± 24V/ ± 42mA	77/83	

Dimension LxWxH: 19.65 x 7.05 x 10.16(mm)

F_S-2WR3

Input: 5V Input:12/15/24V

Selection Guide

Part No.	Power	Input voltage range	Output voltage/current (Vo/Io)	Eff(%) (min./typ.)	Isolation (VDC)
F0503S-2WR3	2W	4.5-5.5 (5VDC)	3.3V/400mA	74/78	3000
F0505S-2WR3	2W		5V/400mA	80/84	
F0507S-2WR3	2W		7.2V/278mA	80/84	
F0509S-2WR3	2W		9V/222mA	81/85	
F0512S-2WR3	2W		12V/167mA	81/85	
F0515S-2WR3	2W		15V/133mA	82/86	
F0524S-2WR3	2W		24V/83mA	82/86	
F1205S-2WR3	2W	10.8-13.2 (12VDC)	5V/400mA	78/82	3000
F12X6S-2WR3	2W		6.4V/312mA	78/82	
F1209S-2WR3	2W		9V/222mA	78/82	
F1212S-2WR3	2W		12V/167mA	80/84	
F1215S-2WR3	2W		15V/133mA	81/85	
F1224S-2WR3	2W		24V/83mA	82/86	
F1505S-2WR3	2W	13.5-16.5 (15VDC)	5V/400mA	76/80	3000
F1509S-2WR3	2W		9V/222mA	76/80	
F1512S-2WR3	2W		12V/167mA	77/81	
F1515S-2WR3	2W		15V/133mA	77/81	
F1524S-2WR3	2W		24V/83mA	77/81	
F2403S-2WR3	2W	21.6-26.4 (24VDC)	3.3V/400mA	70/76	3000
F2405S-2WR3	2W		5V/400mA	74/80	
F2407S-2WR3	2W		7.2V/278mA	74/80	
F2409S-2WR3	2W		9V/222mA	75/81	
F2412S-2WR3	2W		12V/167mA	78/84	
F2415S-2WR3	2W		15V/133mA	80/86	
F2418S-2WR3	2W		18V/111mA	80/86	
F2424S-2WR3	2W		24V/83mA	80/86	

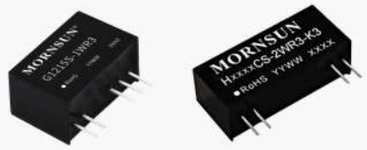
Dimension LxWxH: 19.65 x 7.05 x 10.16(mm)

Fixed Input Isolated & Unregulated (SIP Package)

G/H Series (1-2W)

Features

- Isolation voltage: 5000VAC or 6000VDC (Reinforced insulation)
- Operating temperature range: -40℃ to +105℃
- Efficiency up to 84%
- IEC60950, EN60601-1, ANSI/AAMI ES60601-1 approval (3rd edition, 1xMOPP/2xMOOP)



G_S-1WR3

Selection Guide RoHS

Part No.	Power	Input voltage range	Output voltage/current (Vo/Io)	Eff(%) (min./typ.)	Isolation (VDC)
G1205S-1WR3	1W	10.8-13.2 (12VDC)	±5V/±100mA	75/79	6000
G1209S-1WR3	1W		±9V/±56mA	75/79	
G1212S-1WR3	1W		±12V/±42mA	77/81	
G1215S-1WR3	1W		±15V/±34mA	77/81	
G1505S-1WR3	1W	13.5-16.5 (15VDC)	±5V/±100mA	73/77	6000
G1512S-1WR3	1W		±12V/±42mA	75/79	
G1515S-1WR3	1W		±15V/±33mA	75/79	
G2405S-1WR3	1W	21.6-26.4 (24VDC)	±5V/±100mA	71/75	6000
G2409S-1WR3	1W		±9V/±56mA	71/75	
G2412S-1WR3	1W		±12V/±42mA	72/76	
G2415S-1WR3	1W		±15V/±34mA	72/76	

Dimension LxWxH: 19.50 x 9.80 x 12.50(mm)

H_S-1WR3

Selection Guide RoHS

Part No.	Power	Input voltage range	Output voltage/current (Vo/Io)	Eff(%) (min./typ.)	Isolation (VDC)
H1203S-1WR3	1W	10.8-13.2 (12VDC)	3.3V/303mA	72/76	6000
H1205S-1WR3	1W		5V/200mA	75/79	
H1209S-1WR3	1W		9V/111mA	77/81	
H1212S-1WR3	1W		12V/84mA	79/83	
H1215S-1WR3	1W		15V/67mA	79/83	
H1224S-1WR3	1W		24V/42mA	78/82	
H2405S-1WR3	1W	21.6-26.4 (24VDC)	5V/200mA	72/76	6000
H2409S-1WR3	1W		9V/111mA	72/76	
H2412S-1WR3	1W		12V/84mA	72/76	
H2415S-1WR3	1W		15V/67mA	72/76	
H2424S-1WR3	1W		24V/42mA	72/76	

Dimension LxWxH: 19.50 x 9.80 x 12.50(mm)

G_WS-1WR3

Selection Guide RoHS

Part No.	Power	Input voltage range	Output voltage/current (Vo/Io)	Eff(%) (min./typ.)	Isolation (VDC)
G1205WS-1WR3	1W	10.8-13.2 (12VDC)	±5V/±100mA	75/79	6000
G1209WS-1WR3	1W		±9V/±56mA	75/79	
G1212WS-1WR3	1W		±12V/±42mA	77/81	
G1215WS-1WR3	1W		±15V/±34mA	77/81	
G1505WS-1WR3	1W	13.5-16.5 (15VDC)	±5V/±100mA	73/77	6000
G1512WS-1WR3	1W		±12V/±42mA	75/79	
G1515WS-1WR3	1W		±15V/±33mA	75/79	
G2405WS-1WR3	1W	21.6-26.4 (24VDC)	±5V/±100mA	71/75	6000
G2409WS-1WR3	1W		±9V/±56mA	71/75	
G2412WS-1WR3	1W		±12V/±42mA	72/76	
G2415WS-1WR3	1W		±15V/±34mA	72/76	

Dimension LxWxH: 19.50 x 9.80 x 12.50(mm)

H_WS-1WR3

Selection Guide RoHS

Part No.	Power	Input voltage range	Output voltage/current (Vo/Io)	Eff(%) (min./typ.)	Isolation (VDC)
H1203WS-1WR3	1W	10.8-13.2 (12VDC)	3.3V/303mA	72/76	6000
H1205WS-1WR3	1W		5V/200mA	75/79	
H1209WS-1WR3	1W		9V/111mA	77/81	
H1212WS-1WR3	1W		12V/84mA	79/83	
H1215WS-1WR3	1W		15V/67mA	79/83	
H1224WS-1WR3	1W		24V/42mA	78/82	
H2405WS-1WR3	1W	21.6-26.4 (24VDC)	5V/200mA	72/76	6000
H2409WS-1WR3	1W		9V/111mA	72/76	
H2412WS-1WR3	1W		12V/84mA	72/76	
H2415WS-1WR3	1W		15V/67mA	72/76	
H2424WS-1WR3	1W		24V/42mA	72/76	

Dimension LxWxH: 19.50 x 9.80 x 12.50(mm)

H_CS-1WR3

Selection Guide cULus CE RoHS

Part No.	Power	Input voltage range	Output voltage/current (Vo/Io)	Eff(%) (min./typ.)	Isolation (VDC)
H0505CS-1WR3	1W	4.5-5.5 (5VDC)	5V/200mA	64/68	7000

Dimension LxWxH: 27.40 x 9.50 x 12.00(mm)

• This catalog is a collection of the latest products. For more information, please contact our sales team.

G_S-2WR3

Selection Guide RoHS

Part No.	Power	Input voltage range	Output voltage/current (Vo/Io)	Eff(%) (min./typ.)	Isolation (VDC)
G1205S-2WR3	2W	10.8-13.2 (12VDC)	±5V/±200mA	76/80	6000
G1209S-2WR3	2W		±9V/±111mA	78/82	
G1212S-2WR3	2W		±12V/±83mA	79/83	
G1215S-2WR3	2W		±15V/±67mA	80/84	
G1505S-2WR3	2W	13.5-16.5 (15VDC)	±5V/±200mA	74/78	6000
G1509S-2WR3	2W		±9V/±111mA	76/80	
G1515S-2WR3	2W		±15V/±67mA	76/80	
G2405S-2WR3	2W	21.6-26.4 (24VDC)	±5V/±200mA	75/79	6000
G2409S-2WR3	2W		±9V/±111mA	77/81	
G2412S-2WR3	2W		±12V/±83mA	78/82	
G2415S-2WR3	2W		±15V/±67mA	77/81	

Dimension LxWxH: 19.50 x 9.80 x 12.50(mm)

H_S-2WR3

Selection Guide RoHS

Part No.	Power	Input voltage range	Output voltage/current (Vo/Io)	Eff(%) (min./typ.)	Isolation (VDC)
H1205S-2WR3	2W	10.8-13.2 (12VDC)	5V/400mA	76/80	6000
H1209S-2WR3	2W		9V/222mA	78/82	
H1212S-2WR3	2W		12V/167mA	80/84	
H1215S-2WR3	2W		15V/133mA	80/84	
H1505S-2WR3	2W	13.5-16.5 (15VDC)	5V/400mA	76/80	6000
H1515S-2WR3	2W		15V/133mA	79/83	
H2405S-2WR3	2W	21.6-26.4 (24VDC)	5V/400mA	75/79	6000
H2409S-2WR3	2W		9V/222mA	77/81	
H2412S-2WR3	2W		12V/167mA	78/82	
H2415S-2WR3	2W		15V/133mA	80/84	
H2424S-2WR3	2W		24V/83mA	80/84	

Dimension LxWxH: 19.50 x 9.80 x 12.50(mm)

G_WS-2WR3

Selection Guide RoHS

Part No.	Power	Input voltage range	Output voltage/current (Vo/Io)	Eff(%) (min./typ.)	Isolation (VDC)
G1205WS-2WR3	2W	10.8-13.2 (12VDC)	±5V/±200mA	76/80	6000
G1209WS-2WR3	2W		±9V/±111mA	78/82	
G1212WS-2WR3	2W		±12V/±83mA	79/83	
G1215WS-2WR3	2W		±15V/±67mA	80/84	
G1505WS-2WR3	2W	13.5-16.5 (15VDC)	±5V/±200mA	74/78	6000
G1509WS-2WR3	2W		±9V/±111mA	76/80	
G1515WS-2WR3	2W		±15V/±67mA	76/80	
G2405WS-2WR3	2W	21.6-26.4 (24VDC)	±5V/±200mA	75/79	6000
G2409WS-2WR3	2W		±9V/±111mA	77/81	
G2412WS-2WR3	2W		±12V/±83mA	78/82	
G2415WS-2WR3	2W		±15V/±67mA	77/81	

Dimension LxWxH: 19.50 x 9.80 x 12.50(mm)

H_WS-2WR3

Selection Guide RoHS

Part No.	Power	Input voltage range	Output voltage/current (Vo/Io)	Eff(%) (min./typ.)	Isolation (VDC)
H1205WS-2WR3	2W	10.8-13.2 (12VDC)	5V/400mA	76/80	6000
H1209WS-2WR3	2W		9V/222mA	78/82	
H1212WS-2WR3	2W		12V/167mA	80/84	
H1215WS-2WR3	2W		15V/133mA	80/84	
H1505WS-2WR3	2W	13.5-16.5 (15VDC)	5V/400mA	76/80	6000
H1515WS-2WR3	2W		15V/133mA	79/83	
H2405WS-2WR3	2W	21.6-26.4 (24VDC)	5V/400mA	75/79	6000
H2409WS-2WR3	2W		9V/222mA	77/81	
H2412WS-2WR3	2W		12V/167mA	78/82	
H2415WS-2WR3	2W		15V/133mA	80/84	
H2424WS-2WR3	2W		24V/83mA	80/84	

Dimension LxWxH: 19.50 x 9.80 x 12.50(mm)

H_CS-2WR3-K3

Selection Guide cULus CE CB UKCA RoHS

Part No.	Power	Input voltage range	Output voltage/current (Vo/Io)	Eff(%) (min./typ.)	Isolation (VDC)
H1205CS-2WR3-K3	2W	10.8-13.2 (12VDC)	5V/400mA	80/83	7000
H1212CS-2WR3-K3	2W		12V/167mA	81/84	

Dimension LxWxH: 27.40 x 9.50 x 12.00(mm)

• This catalog is for reference only, not being the judgment basis for the use. For detailed datasheets please visit our website: www.mornsun-power.com.

Fixed Input Isolated & Unregulated (DIP Package)

A/B/E/F Series (1-2W)

Features

- Isolation voltage: 1500VDC/3000VDC
- Operating temperature range: -40℃ to +105℃
- Efficiency up to 86%
- Continuous short-circuit protection
- No-load input current as low as 5mA
- Meets IEC/UL/EN62368 standards

A_D-1WR3

Selection Guide — RoHS

Part No.	Power	Input voltage range	Output voltage/current (Vo/Io)	Eff(%) (min./typ.)	Isolation (VDC)
A1205D-1WR3	1W	10.8-13.2 (12VDC)	± 5V/ ± 100mA	76/80	1500
A1212D-1WR3	1W		± 12V/ ± 42mA	77/81	
A1224D-1WR3	1W		± 24V/ ± 21mA	76/80	
A1524D-1WR3	1W	13.5-16.5 (15VDC)	± 24V/ ± 21mA	77/81	1500
A2409D-1WR3	1W	21.6-26.4 (24VDC)	± 9V/ ± 56mA	74/80	1500
A2412D-1WR3	1W		± 12V/ ± 42mA	75/81	
A2415D-1WR3	1W		± 15V/ ± 33mA	73/79	

Dimension LxWxH: 20.00 x 10.00 x 7.00(mm)

B_D-1WR3

Input: 3.3V | Input: 5V | Input:12/15/24V

Selection Guide — RoHS

Part No.	Power	Input voltage range	Output voltage/current (Vo/Io)	Eff(%) (min./typ.)	Isolation (VDC)
B0303D-1WR3	1W	2.97-3.63 (3.3VDC)	3.3V/303mA	75/79	1500
B0305D-1WR3	1W		5V/200mA	78/82	
B0503D-1WR3	1W	4.5-5.5 (5VDC)	3.3V/303mA	70/74	1500
B0505D-1WR3	1W		5V/200mA	78/82	
B0507D-1WR3	1W		7.2V/139mA	76/80	
B0509D-1WR3	1W		9V/111mA	79/83	
B0512D-1WR3	1W		12V/84mA	79/83	
B0515D-1WR3	1W		15V/67mA	79/83	
B0524D-1WR3	1W		24V/42mA	81/85	
B1203D-1WR3	1W	10.8-13.2 (12VDC)	3.3V/303mA	71/75	1500
B1205D-1WR3	1W		5V/200mA	76/80	
B1209D-1WR3	1W		9V/111mA	74/78	
B1212D-1WR3	1W		12V/83mA	76/80	
B1215D-1WR3	1W		15V/67mA	77/81	
B1224D-1WR3	1W		24V/42mA	77/81	
B1505D-1WR3	1W	13.5-16.5 (15VDC)	5V/200mA	76/80	1500
B1509D-1WR3	1W		9V/111mA	76/80	
B1515D-1WR3	1W		15V/67mA	77/81	
B2403D-1WR3	1W	21.6-26.4 (24VDC)	3.3V/303mA	69/75	1500
B2405D-1WR3	1W		5V/200mA	73/79	
B2409D-1WR3	1W		9V/111mA	74/80	
B2412D-1WR3	1W		12V/83mA	75/81	
B2415D-1WR3	1W		15V/67mA	75/81	
B2424D-1WR3	1W		24V/42mA	75/81	

Dimension LxWxH: 12.70 x 10.16 x 8.20(mm)

E_D-1WR3

Input: 5V | Input:12/15/24V

Selection Guide — CE UK CA RoHS

Part No.	Power	Input voltage range	Output voltage/current (Vo/Io)	Eff(%) (min./typ.)	Isolation (VDC)
E0503D-1WR3	1W	4.5-5.5 (5VDC)	±3.3V/±152mA	70/74	3000
E0505D-1WR3	1W		±5V/±100mA	78/82	
E0509D-1WR3	1W		±9V/±56mA	80/84	
E0512D-1WR3	1W		±12V/±42mA	80/84	
E0515D-1WR3	1W		±15V/±34mA	80/84	
E1205D-1WR3	1W	10.8-13.2 (12VDC)	±5V/±100mA	76/80	3000
E1209D-1WR3	1W		±9V/±55mA	76/80	
E1212D-1WR3	1W	10.8-13.2 (12VDC)	±12V/±42mA	77/81	3000
E1215D-1WR3	1W		±15V/±34mA	77/81	
E1515D-1WR3	1W	13.5-16.5 (15VDC)	±15V/±33mA	77/81	3000
E2405D-1WR3	1W	21.6-26.4 (24VDC)	±5V/±100mA	74/80	3000
E2409D-1WR3	1W		±9V/±55mA	74/80	
E2412D-1WR3	1W		±12V/±42mA	75/81	
E2415D-1WR3	1W		±15V/±34mA	73/79	

Dimension LxWxH: 20.00 x 10.00 x 7.00(mm)

F_D-1WR3

Input: 5V | Input:12/15/24V

Selection Guide — RoHS

Part No.	Power	Input voltage range	Output voltage/current (Vo/Io)	Eff(%) (min./typ.)	Isolation (VDC)
F0503D-1WR3	1W	4.5-5.5 (5VDC)	3.3V/303mA	70/74	3000
F0505D-1WR3	1W		5V/200mA	78/82	
F0512D-1WR3	1W		12V/84mA	79/83	
F0515D-1WR3	1W		15V/67mA	79/83	
F1205D-1WR3	1W	10.8-13.2 (12VDC)	5V/200mA	76/80	3000
F1212D-1WR3	1W		12V/83mA	77/81	
F1215D-1WR3	1W		15V/67mA	77/81	
F1515D-1WR3	1W	13.5-16.5 (15VDC)	15V/67mA	77/81	3000
F2405D-1WR3	1W	21.6-26.4 (24VDC)	5V/200mA	73/79	3000

Dimension LxWxH: 20.00 x 10.00 x 7.00(mm)

F_N-1WR3

Input: 5V | Input:12/15/24V

Selection Guide — CE CB UK CA RoHS

Part No.	Power	Input voltage range	Output voltage/current (Vo/Io)	Eff(%) (min./typ.)	Isolation (VDC)
F0503N-1WR3	1W	4.5-5.5 (5VDC)	3.3V/303mA	70/74	3000
F0505N-1WR3	1W		5V/200mA	78/82	
F0507N-1WR3	1W		7.2V/139mA	76/80	
F0509N-1WR3	1W		9V/111mA	79/83	
F0512N-1WR3	1W		12V/84mA	79/83	
F0515N-1WR3	1W		15V/67mA	79/83	
F0524N-1WR3	1W		24V/42mA	81/65	
F1203N-1WR3	1W	10.8-13.2 (12VDC)	3.3V/303mA	71/75	3000
F1205N-1WR3	1W		5V/200mA	76/80	
F1209N-1WR3	1W		9V/111mA	74/78	
F1212N-1WR3	1W		12V/83mA	76/80	
F1215N-1WR3	1W		15V/67mA	77/81	
F1224N-1WR3	1W		24V/42mA	77/81	
F1505N-1WR3	1W	13.5-16.5 (15VDC)	5V/200mA	76/80	3000
F1509N-1WR3	1W		9V/111mA	76/80	
F1515N-1WR3	1W		15V/67mA	71/81	
F2403N-1WR3	1W	21.6-26.4 (24VDC)	3.3V/303mA	69/75	3000
F2405N-1WR3	1W		5V/200mA	73/79	
F2409N-1WR3	1W		9V/111mA	74/80	
F2412N-1WR3	1W		12V/83mA	75/81	
F2415N-1WR3	1W		15V/67mA	75/81	
F2424N-1WR3	1W		24V/42mA	75/81	

Dimension LxWxH: 12.70 x 10.16 x 8.20(mm)

• This catalog is a collection of the latest products. For more information, please contact our sales team.

A_D-2WR3

Input: 5V | Input:12/15/24V

Selection Guide — RoHS

Part No.	Power	Input voltage range	Output voltage/current (Vo/Io)	Eff(%) (min./typ.)	Isolation (VDC)
A0503D-2WR3	2W	4.5-5.5 (5VDC)	± 3.3V/ ± 303mA	74/78	1500
A0505D-2WR3	2W		± 5V/ ± 200mA	80/84	
A05X7D-2WR3	2W		± 7V/ ± 143mA	80/84	
A0509D-2WR3	2W		± 9V/ ± 111mA	81/85	
A0512D-2WR3	2W		± 12V/ ± 83mA	81/85	
A0515D-2WR3	2W		± 15V/ ± 67mA	82/86	
A0524D-2WR3	2W		± 24V/ ± 42mA	82/86	
A1205D-2WR3	2W	10.8-13.2 (12VDC)	± 5V/ ± 200mA	76/80	1500
A1209D-2WR3	2W		± 9V/ ± 111mA	78/82	
A1212D-2WR3	2W		± 12V/ ± 83mA	79/83	
A1215D-2WR3	2W		± 15V/ ± 67mA	79/83	
A1224D-2WR3	2W		± 24V/ ± 42mA	81/85	
A1515D-2WR3	2W	13.5-16.5 (15VDC)	± 15V/ ± 67mA	77/81	1500
A2405D-2WR3	2W	21.6-26.4 (24VDC)	± 5V/ ± 200mA	74/80	1500
A2409D-2WR3	2W		± 9V/ ± 111mA	75/81	
A2412D-2WR3	2W		± 12V/ ± 83mA	77/83	
A2415D-2WR3	2W		± 15V/ ± 67mA	77/83	
A2424D-2WR3	2W		± 24V/ ± 42mA	77/83	

Dimension LxWxH: 20.32 x 10.16 x 8.20(mm)

B_D-2WR3

Input: 3.3V | Input: 5V | Input:12/15/24V

Selection Guide — RoHS

Part No.	Power	Input voltage range	Output voltage/current (Vo/Io)	Eff(%) (min./typ.)	Isolation (VDC)
B0303D-2WR3	2W	2.97-3.63 (3.3VDC)	3.3V/400mA	74/78	1500
B0305D-2WR3	2W		5V/400mA	74/78	
B0503D-2WR3	2W	4.5-5.5 (5VDC)	3.3V/400mA	74/78	1500
B0505D-2WR3	2W		5V/400mA	80/84	
B0509D-2WR3	2W		9V/222mA	81/85	
B0512D-2WR3	2W		12V/167mA	81/85	
B0515D-2WR3	2W		15V/133mA	82/86	
B0524D-2WR3	2W		24V/83mA	82/86	
B1205D-2WR3	2W	10.8-13.2 (12VDC)	5V/400mA	78/82	1500
B1209D-2WR3	2W		9V/222mA	78/82	
B1212D-2WR3	2W		12V/167mA	80/84	
B1215D-2WR3	2W		15V/133mA	81/85	
B1224D-2WR3	2W		24V/83mA	82/86	
B1505D-2WR3	2W	13.5-16.5 (15VDC)	5V/400mA	75/79	1500
B1509D-2WR3	2W		9V/222mA	78/82	
B1515D-2WR3	2W		15V/133mA	75/79	
B2405D-2WR3	2W	21.6-26.4 (24VDC)	5V/400mA	76/82	1500
B2409D-2WR3	2W		9V/222mA	76/82	
B2412D-2WR3	2W		12V/167mA	80/86	
B2415D-2WR3	2W		15V/133mA	82/88	
B2424D-2WR3	2W		24V/83mA	82/88	

Dimension LxWxH: 20.32 x 10.16 x 8.20(mm)

E_D-2WR3

Input: 5V | Input:12/15/24V

Selection Guide — CE UK CA RoHS

Part No.	Power	Input voltage range	Output voltage/current (Vo/Io)	Eff(%) (min./typ.)	Isolation (VDC)
E0503D-2WR3	2W	4.5-5.5 (5VDC)	± 3.3V/ ± 303mA	74/78	3000
E0505D-2WR3	2W		± 5V/ ± 200mA	80/84	
E0509D-2WR3	2W		± 9V/ ± 111mA	81/85	
E0512D-2WR3	2W		± 12V/ ± 83mA	81/85	
E0515D-2WR3	2W		± 15V/ ± 67mA	82/86	
E0524D-2WR3	2W		± 24V/ ± 42mA	82/86	
E1203D-2WR3	2W	10.8-13.2 (12VDC)	± 3.3V/ ± 303mA	71/75	3000
E1205D-2WR3	2W		± 5V/ ± 200mA	76/80	
E1212D-2WR3	2W		± 12V/ ± 83mA	79/83	
E1215D-2WR3	2W		± 15V/ ± 67mA	79/83	
E1224D-2WR3	2W		± 24V/ ± 42mA	81/85	
E1509D-2WR3	2W	13.5-16.5 (15VDC)	± 9V/ ± 111mA	77/81	3000
E1512D-2WR3	2W		± 12V/ ± 83mA	77/81	
E1515D-2WR3	2W		± 15V/ ± 67mA	77/81	
E2405D-2WR3	2W	21.6-26.4 (24VDC)	± 5V/ ± 200mA	74/80	3000
E2412D-2WR3	2W		± 12V/ ± 83mA	79/83	
E2415D-2WR3	2W		± 15V/ ± 67mA	77/83	
E2424D-2WR3	2W		± 24V/ ± 42mA	80/84	

Dimension LxWxH: 20.32 x 10.16 x 8.20(mm)

F_D-2WR3

Input: 5V | Input:12/15/24V

Selection Guide — RoHS

Part No.	Power	Input voltage range	Output voltage/current (Vo/Io)	Eff(%) (min./typ.)	Isolation (VDC)
F0503D-2WR3	2W	4.5-5.5 (5VDC)	3.3V/400mA	74/78	3000
F0505D-2WR3	2W		5V/400mA	80/84	
F0509D-2WR3	2W		9V/222mA	81/85	
F0512D-2WR3	2W		12V/167mA	81/85	
F0515D-2WR3	2W		15V/133mA	82/86	
F0524D-2WR3	2W		24V/83mA	82/86	
F1205D-2WR3	2W	10.8-13.2 (12VDC)	5V/400mA	78/82	3000
F1209D-2WR3	2W		9V/222mA	78/82	
F1212D-2WR3	2W		12V/167mA	80/84	
F1215D-2WR3	2W		15V/133mA	81/85	
F1224D-2WR3	2W		24V/83mA	82/86	
F1505D-2WR3	2W	13.5-16.5 (15VDC)	5V/400mA	75/79	3000
F1509D-2WR3	2W		9V/222mA	78/82	
F1515D-2WR3	2W		15V/133mA	75/79	
F2405D-2WR3	2W	21.6-26.4 (24VDC)	5V/400mA	76/80	3000
F2409D-2WR3	2W		9V/222mA	76/80	
F2412D-2WR3	2W		12V/167mA	80/84	
F2415D-2WR3	2W		15V/133mA	82/86	
F2424D-2WR3	2W		24V/83mA	82/86	

Dimension LxWxH: 20.32 x 10.16 x 8.20(mm)

• This catalog is for reference only, not being the judgment basis for the use. For detailed datasheets please visit our website: www.mornsun-power.com.

Fixed Input Isolated & Regulated(SOIC 16 Package)

B Series (0.5W)

Features

- Isolation voltage up to 5000VDC, reinforced insulation
- Wide operating temperature: -55℃ to +125℃
- Output voltage adjustable: 3.3V, 3.7V, 5.0V, 5.4V
- ±150kV/us CMTI
- Meets IEC62368/UL62368/EN62368 standards (pending)
- Meets EN60601-1, ANSI/AAMI ES60601-1 (2xMOPP)
- Built-in soft start, over-temperature, Output overload, and short-circuit protections

B0505ST16-W5

Selection Guide — RoHS

Part No.	Power	Input voltage range	Output voltage/current (Vo/Io)	Eff(%) (min./typ.)	Isolation (VDC)
B0505ST16-W5	0.5W	4.5-5.5 (5VDC)	3.3V/150mA	40/48	5000
			3.7V/135mA	40/48	
			5.0V/100mA	45/53	
			5.4V/92mA	45/53	

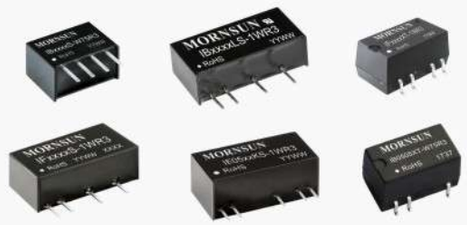
Dimension LxWxH: 10.30 x 10.30 x 2.50(mm)

Fixed Input Isolated & Regulated

IB/IE/IF Series (0.75-1W)

Features

- Isolation voltage: 1500VDC/3000VDC
- Operating temperature range: -40℃ to + 85℃
- Continuous short-circuit protection
- No-load input current as low as 5mA
- Meets IEC/UL/EN62368 standards



IB_XT-W75R3 SMD

Input: 5V Input: 12V

Selection Guide — CE UKCA RoHS

Part No.	Power	Input voltage range	Output voltage/current (Vo/Io)	Eff(%) (min./typ.)	Isolation (VDC)
IB0503XT-W75R3	0.75W	4.75-5.25 (5VDC)	3.3V/200mA	64/68	1500
IB0505XT-W75R3	0.75W		5V/150mA	68/72	
IB0509XT-W75R3	0.75W		9V/83mA	68/72	
IB0512XT-W75R3	0.75W		12V/62mA	69/73	
IB0515XT-W75R3	0.75W		15V/50mA	70/74	
IB1205XT-W75R3	0.75W	11.4-12.6 (12VDC)	5V/150mA	68/72	1500
IB1212XT-W75R3	0.75W		12V/62mA	69/73	
IB1215XT-W75R3	0.75W		15V/50mA	70/74	

Dimension LxWxH: 13.20 x 11.40 x 7.25(mm)

IB_S-W75R3 SIP

Input: 5V Input:12/24V

Selection Guide — CE UKCA RoHS

Part No.	Power	Input voltage range	Output voltage/current (Vo/Io)	Eff(%) (min./typ.)	Isolation (VDC)
IB0503S-W75R3	0.75W	4.75-5.25 (5VDC)	3.3V/200mA	64/68	1500
IB0505S-W75R3	0.75W		5V/150mA	68/72	
IB0509S-W75R3	0.75W		9V/83mA	68/72	
IB0512S-W75R3	0.75W		12V/62mA	69/73	
IB0515S-W75R3	0.75W		15V/50mA	70/74	
IB1203S-W75R3	0.75W	11.4-12.6 (12VDC)	3.3V/200mA	64/68	1500
IB1205S-W75R3	0.75W		5V/150mA	68/72	
IB1212S-W75R3	0.75W		12V/62mA	69/73	
IB1215S-W75R3	0.75W		15V/50mA	70/74	
IB2403S-W75R3	0.75W	22.8-25.2 (24VDC)	3.3V/200mA	62/68	1500
IB2405S-W75R3	0.75W		5V/150mA	66/72	
IB2412S-W75R3	0.75W		12V/62mA	67/73	
IB2415S-W75R3	0.75W		15V/50mA	68/74	

Dimension LxWxH: 11.60 x 6.00 x 10.16(mm)

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IB_XT-1WR3 SMD

Input: 5V Input:12/15/24V

Selection Guide — RoHS

Part No.	Power	Input voltage range	Output voltage/current (Vo/Io)	Eff(%) (min./typ.)	Isolation (VDC)
IB0503XT-1WR3	1W	4.75-5.25 (5VDC)	3.3V/250mA	62/66	1500
IB0505XT-1WR3	1W		5V/200mA	65/69	
IB0509XT-1WR3	1W		9V/111mA	66/70	
IB0512XT-1WR3	1W		12V/84mA	67/71	
IB0515XT-1WR3	1W		15V/67mA	67/71	
IB1205XT-1WR3	1W	11.4-12.6 (12VDC)	5V/200mA	65/69	1500
IB1212XT-1WR3	1W		12V/84mA	67/71	
IB1215XT-1WR3	1W		15V/67mA	67/71	
IB1505XT-1WR3	1W	14.25-15.75 (15VDC)	5V/200mA	64/68	1500
IB2405XT-1WR3	1W	22.8-25.2 (24VDC)	5V/200mA	63/69	1500
IB2412XT-1WR3	1W		12V/84mA	65/71	
IB2415XT-1WR3	1W		15V/67mA	65/71	

Dimension LxWxH: 15.24 x 11.40 x 7.25(mm)

IF_XT-1WR3 SMD

Input: 5V Input:12/15/24V

Selection Guide — CE UKCA RoHS

Part No.	Power	Input voltage range	Output voltage/current (Vo/Io)	Eff(%) (min./typ.)	Isolation (VDC)
IF0503XT-1WR3	1W	4.75-5.25 (5VDC)	3.3V/250mA	62/66	3000
IF0505XT-1WR3	1W		5V/200mA	65/69	
IF0509XT-1WR3	1W		9V/111mA	66/70	
IF0512XT-1WR3	1W		12V/84mA	66/71	
IF0515XT-1WR3	1W		15V/67mA	66/71	
IF1205XT-1WR3	1W	11.4-12.6 (12VDC)	5V/200mA	65/69	3000
IF1212XT-1WR3	1W		12V/84mA	67/71	
IF1215XT-1WR3	1W		15V/67mA	67/71	
IF1505XT-1WR3	1W	14.25-15.75 (15VDC)	5V/200mA	63/69	3000
IF2405XT-1WR3	1W	22.8-25.2 (24VDC)	5V/200mA	63/69	3000
IF2412XT-1WR3	1W		12V/84mA	65/71	
IF2415XT-1WR3	1W		15V/67mA	65/71	

Dimension LxWxH: 15.24 x 11.40 x 7.25(mm)

IE_KS-1WR3 SIP

Input: 5V Input: 24V

Selection Guide — CE UKCA RoHS

Part No.	Power	Input voltage range	Output voltage/current (Vo/Io)	Eff(%) (min./typ.)	Isolation (VDC)
IE0505KS-1WR3	1W	4.75-5.25 (5VDC)	± 5V / ± 100mA	64/68	3000
IE0509KS-1WR3	1W		± 9V/ ± 56mA	65/69	
IE0512KS-1WR3	1W		± 12V/ ± 42mA	66/70	
IE0515KS-1WR3	1W		± 15V/ ± 33mA	66/70	
IE2405KS-1WR3	1W	22.8-25.2 (24VDC)	± 5V / ± 100mA	64/70	3000
IE2409KS-1WR3	1W		± 9V/ ± 56mA	64/70	
IE2412KS-1WR3	1W		± 12V/ ± 42mA	64/70	
IE2415KS-1WR3	1W		± 15V/ ± 33mA	64/70	

Dimension LxWxH: 27.50 x 9.50 x 12.00(mm)

IB_LS-1WR3 SIP

Input: 5V Input:12/15/24V

Selection Guide — cULus CE CB UKCA RoHS

Part No.	Power	Input voltage range	Output voltage/current (Vo/Io)	Eff(%) (min./typ.)	Isolation (VDC)
IB0503LS-1WR3	1W	4.75-5.25 (5VDC)	3.3V/250mA	63/67	1500
IB0505LS-1WR3	1W		5V/200mA	66/70	
IB0509LS-1WR3	1W		9V/111mA	67/71	
IB0512LS-1WR3	1W		12V/84mA	68/72	
IB0515LS-1WR3	1W		15V/67mA	69/73	
IB0524LS-1WR3	1W		24V/41mA	69/73	
IB1205LS-1WR3	1W	11.4-12.6 (12VDC)	5V/200mA	69/73	1500
IB1209LS-1WR3	1W		9V/111mA	69/73	
IB1212LS-1WR3	1W		12V/83mA	69/73	
IB1215LS-1WR3	1W		15V/67mA	71/75	
IB1505LS-1WR3	1W	14.25-15.75 (15VDC)	5V/200mA	69/73	1500
IB1515LS-1WR3	1W		15V/67mA	71/75	
IB2403LS-1WR3	1W	22.8-25.2 (24VDC)	3.3V/250mA	65/71	1500
IB2405LS-1WR3	1W		5V/200mA	67/73	
IB2409LS-1WR3	1W		9V/111mA	67/73	
IB2412LS-1WR3	1W		12V/83mA	67/73	
IB2415LS-1WR3	1W		15V/67mA	67/73	

Dimension LxWxH: 19.65 x 6.00 x 10.16(mm)

IF_S-1WR3 SIP

Input: 5V Input:12/15/24V

Selection Guide — cULus CE CB UKCA RoHS

Part No.	Power	Input voltage range	Output voltage/current (Vo/Io)	Eff(%) (min./typ.)	Isolation (VDC)
IF0503S-1WR3	1W	4.75-5.25 (5VDC)	3.3V/250mA	63/67	3000
IF0505S-1WR3	1W		5V/200mA	66/70	
IF0509S-1WR3	1W		9V/111mA	67/71	
IF0512S-1WR3	1W		12V/84mA	68/72	
IF0515S-1WR3	1W		15V/67mA	69/73	
IF0524S-1WR3	1W		24V/41mA	69/73	
IF1205S-1WR3	1W	11.4-12.6 (12VDC)	5V/200mA	69/73	3000
IF1209S-1WR3	1W		9V/111mA	69/73	
IF1212S-1WR3	1W		12V/83mA	69/73	
IF1215S-1WR3	1W		15V/67mA	71/75	
IF1505S-1WR3	1W	14.25-15.75 (15VDC)	5V/200mA	69/73	3000
IF1515S-1WR3	1W		15V/67mA	71/75	
IF2403S-1WR3	1W	22.8-25.2 (24VDC)	3.3V/250mA	65/71	3000
IF2405S-1WR3	1W		5V/200mA	67/73	
IF2409S-1WR3	1W		9V/111mA	67/73	
IF2412S-1WR3	1W		12V/83mA	67/73	
IF2415S-1WR3	1W		15V/67mA	67/73	

Dimension LxWxH: 19.65 x 6.00 x 10.16(mm)

• This catalog is for reference only, not being the judgment basis for the use. For detailed datasheets please visit our website: www.mornsun-power.com.

2:1 Wide Input with Brick Package (Telecom Application) VCB/VCF Series (3-1300W)

Features

- Isolation voltage: 1500VDC
- Operating temperature range: -40℃ to +85℃ / -40℃ to +100℃
- Efficiency up to 92%
- Widely used in communication, medical, industrial control, electric power, instrumentation applications
- Input under-voltage protection, output short-circuit, over-current protections
- EN62368 approved

VCB_SO-3WR3

Selection Guide

Part No.	Power	Input voltage range	Output voltage/current (Vo/Io)	Eff(%) (min./typ.)	Isolation (VDC)
VCB4805SO-3WR3	3W	36-75 (48VDC)	5V/600mA	78/80	1500
VCB4812SO-3WR3	3W		12V/250mA	79/81	
VCB4815SO-3WR3	3W		15V/200mA	80/82	
VCB4824SO-3WR3	3W		24V/125mA	80/82	

Dimension LxWxH: 22.00 x 12.80 x 8.20(mm)

VCB_SO-6WR3

Selection Guide

Part No.	Power	Input voltage range	Output voltage/current (Vo/Io)	Eff(%) (min./typ.)	Isolation (VDC)
VCB4805SO-6WR3	6W	36-75 (48VDC)	5V/1200mA	79/81	1500
VCB4812SO-6WR3	6W		12V/500mA	81/83	
VCB4815SO-6WR3	6W		15V/400mA	82/84	
VCB4824SO-6WR3	6W		24V/250mA	83/85	

Dimension LxWxH: 22.00 x 12.80 x 8.20(mm)

VCB_SBO-10WR3

Selection Guide

Part No.	Power	Input voltage range	Output voltage/current (Vo/Io)	Eff(%) (min./typ.)	Isolation (VDC)
VCB4805SBO-10WR3	10W	36-75 (48VDC)	5V/2000mA	81/83	1500
VCB4812SBO-10WR3	10W		12V/833mA	85/87	
VCB4815SBO-10WR3	10W		15V/667mA	86/88	
VCB4824SBO-10WR3	10W		24V/417mA	86/88	

Dimension LxWxH: 33.02 x 22.86 x 11.40(mm)

VCB_SBO-20WR3

Selection Guide

Part No.	Power	Input voltage range	Output voltage/current (Vo/Io)	Eff(%) (min./typ.)	Isolation (VDC)
VCB4803SBO-20WR3	20W	36-75 (48VDC)	3.3V/5000mA	84/86	1500
VCB4805SBO-20WR3	20W		5V/4000mA	86/88	
VCB4812SBO-20WR3	20W		12V/1667mA	87/89	
VCB4815SBO-20WR3	20W		15V/1333mA	87/89	
VCB4824SBO-20WR3	20W		24V/833mA	88/90	
VCB4828SBO-20WR3	20W		28V/714mA	88/90	

Dimension LxWxH: 33.02 x 22.86 x 12.60(mm)

VCB_SBO-30WR3

Selection Guide

Part No.	Power	Input voltage range	Output voltage/current (Vo/Io)	Eff(%) (min./typ.)	Isolation (VDC)
VCB4805SBO-30WR3	30W	36-75 (48VDC)	5V/6000mA	88/90	1500
VCB4812SBO-30WR3	30W		12V/2500mA	88/90	
VCB4815SBO-30WR3	30W		15V/2000mA	88/90	
VCB4824SBO-30WR3	30W		24V/1250mA	88/90	
VCB4828SBO-30WR3	30W		28V/1072mA	88/90	

Dimension LxWxH: 33.02 x 22.86 x 9.18(mm)

VCB_SBO-50WR3(-N)

Selection Guide

Part No.	Power	Input voltage range	Output voltage/current (Vo/Io)	Eff(%) (min./typ.)	Isolation (VDC)
VCB4805SBO-50WR3	50W	36-75 (48VDC)	5V/10000mA	88	1500
VCB4805SBO-50WR3-N	50W		5V/10000mA	88	
VCB4812SBO-50WR3	50W		12V/4170mA	90	
VCB4812SBO-50WR3-N	50W		12V/4170mA	90	

Dimension LxWxH: 33.02 x 22.86 x 9.70(mm)

VCF_EBO-50W(F)R3-N

Selection Guide (Pending)

Part No.	Power	Input voltage range	Output voltage/current (Vo/Io)	Eff(%) (min./typ.)	Isolation (VDC)
VCF4805EBO-50W(F)R3-N	50W	36-75 (48VDC)	5V/10000mA	90/92	2250
VCF4812EBO-50W(F)R3-N	50W		12V/4170mA	91/93	
VCF4824EBO-50W(F)R3-N	50W		24V/2083mA	90/92	

VCF_EBO-50WR3-N Dimension LxWxH: 58.42 x 22.86 x 9.69(mm)
VCF_EBO-50WFR3-N Dimension LxWxH: 58.42 x 22.86 x 12.7(mm)

VCB_SBO-75W(F)R3(-N)

Selection Guide

Part No.	Power	Input voltage range	Output voltage/current (Vo/Io)	Eff(%) (min./typ.)	Isolation (VDC)
VCB4805SBO-75W(F)R3(-N)	75W	36-75 (48VDC)	5V/15000mA	90/92	1500
VCB4812SBO-75W(F)R3(-N)	75W		12V/6250mA	90/92	
VCB4828SBO-75W(F)R3(-N)	75W		28V/2678mA	88/90	

VCB4805/12SBO-75WR3(-N) Dimension LxWxH: 33.02 x 22.86 x 9.75(mm)
VCB4805/12SBO-75WFR3(-N) Dimension LxWxH: 33.02 x 22.86 x 12.70(mm)
VCB4828SBO-75WR3(-N) Dimension LxWxH: 33.02 x 22.86 x 10.05(mm)
VCB4828SBO-75WFR3(-N) Dimension LxWxH: 33.02 x 22.86 x 13.00(mm)

VCF_EBO-75W(F)R3-N

Selection Guide (Pending)

Part No.	Power	Input voltage range	Output voltage/current (Vo/Io)	Eff(%) (min./typ.)	Isolation (VDC)
VCF4803EBO-75W(F)R3-N	75W	36-75 (48VDC)	3.3V/22730mA	88/90	2250
VCF4805EBO-75W(F)R3-N	75W		5V/15000mA	90.5/92.5	
VCF4812EBO-75W(F)R3-N	75W		12V/6250mA	91.5/93.5	
VCF4824EBO-75W(F)R3-N	75W		24V/3125mA	90/92	

VCF_EBO-75WR3-N Dimension LxWxH: 58.42 x 22.86 x 9.69(mm)
VCF_EBO-75WFR3-N Dimension LxWxH: 58.42 x 22.86 x 12.70(mm)

VCB_SBO-100W(F)R3(-N)

Selection Guide

Part No.	Power	Input voltage range	Output voltage/current (Vo/Io)	Eff(%) (min./typ.)	Isolation (VDC)
VCB4805SBO-100W(F)R3(-N)	100W	36-75 (48VDC)	5V/20000mA	90/92	1500
VCB4812SBO-100W(F)R3(-N)	100W		12V/8333mA	90/92	
VCB4828SBO-100W(F)R3(-N)	100W		28V/3571mA	88/90	

VCB4805/12SBO-100WR3(-N) Dimension LxWxH: 33.02 x 22.86 x 9.75(mm)
VCB4805/12SBO-100WFR3(-N) Dimension LxWxH: 33.02 x 22.86 x 12.70(mm)
VCB4828SBO-100WR3(-N) Dimension LxWxH: 33.02 x 22.86 x 10.05(mm)
VCB4828SBO-100WFR3(-N) Dimension LxWxH: 33.02 x 22.86 x 13.00(mm)

VCB_EBO-100W(F)R3

Selection Guide

Part No.	Power	Input voltage range	Output voltage/current (Vo/Io)	Eff(%) (min./typ.)	Isolation (VDC)
VCB4805EBO-100W(F)R3	100W	36-75 (48VDC)	5V/20000mA	90/92	1500
VCB4812EBO-100W(F)R3	100W		12V/8300mA	91/93	
VCB4815EBO-100W(F)R3	100W		15V/6670mA	91/93	
VCB4824EBO-100W(F)R3	100W		24V/4170mA	90/92	
VCB4828EBO-100W(F)R3	100W		28V/3570mA	90/92	

VCB_EBO-100WR3 Dimension LxWxH: 58.42 x 22.86 x 9.69(mm)
VCB_EBO-100WFR3 Dimension LxWxH: 58.42 x 22.86 x 12.70(mm)

VCF_EBO-100W(F)R3-N

Selection Guide (Pending)

Part No.	Power	Input voltage range	Output voltage/current (Vo/Io)	Eff(%) (min./typ.)	Isolation (VDC)
VCF4803EBO-100W(F)R3-N	100W	36-75 (48VDC)	3.3V/25000mA	88/90	2250
VCF4805EBO-100W(F)R3-N	100W		5V/20000mA	90.5/92.5	
VCF4812EBO-100W(F)R3-N	100W		12V/8300mA	91.5/93.5	
VCF4824EBO-100W(F)R3-N	100W		24V/4170mA	90.5/92.5	

VCF_EBO-100WR3-N Dimension LxWxH: 58.42 x 22.86 x 9.69(mm)
VCF_EBO-100WFR3-N Dimension LxWxH: 58.42 x 22.86 x 12.70(mm)

VCF_EBO-120W(F)R3-N

Selection Guide (Pending)

Part No.	Power	Input voltage range	Output voltage/current (Vo/Io)	Eff(%) (min./typ.)	Isolation (VDC)
VCF4805EBO-120W(F)R3-N	120W	36-75 (48VDC)	5V/24000mA	90.5/92.5	2250
VCF4812EBO-120W(F)R3-N	120W		12V/10000mA	91.5/93.5	
VCF4824EBO-120W(F)R3-N	120W		24V/5000mA	90.5/92.5	

VCF_EBO-120WR3-N Dimension LxWxH: 58.42 x 22.86 x 9.69(mm)
VCF_EBO-120WFR3-N Dimension LxWxH: 58.42 x 22.86 x 12.70(mm)

VCF_EBO-150W(F)R3-N

Selection Guide (Pending)

Part No.	Power	Input voltage range	Output voltage/current (Vo/Io)	Eff(%) (min./typ.)	Isolation (VDC)
VCF4805EBO-150W(F)R3-N	150W	36-75 (48VDC)	5V/30000mA	90.5/92.5	2250
VCF4812EBO-150W(F)R3-N	150W		12V/12500mA	91.5/93.5	
VCF4824EBO-150W(F)R3-N	150W		24V/6250mA	90.5/92.5	

VCF_EBO-150WR3-N Dimension LxWxH: 58.42 x 22.86 x 9.69(mm)
VCF_EBO-150WFR3-N Dimension LxWxH: 58.42 x 22.86 x 12.70(mm)

VCB_QBO-200WR3(-N)

Selection Guide

Part No.	Power	Input voltage range	Output voltage/current (Vo/Io)	Eff(%) (min./typ.)	Isolation (VDC)
VCB4805QBO-200WR3(-N)	200W	36-75 (48VDC)	5V/36000mA	89/91	1500
VCB4812QBO-200WR3(-N)	200W		12V/16670mA	91/93	
VCB4815QBO-200WR3(-N)	200W		15V/13330mA	91/93	
VCB4824QBO-200WR3(-N)	200W		24V/8330mA	90/92	

Dimension LxWxH: 57.9 x 36.80 x 10.05(mm)

VCB_EBO-240W(F/H)R3-N

Selection Guide (Pending)

Part No.	Power	Input voltage range	Output voltage/current (Vo/Io)	Eff(%) (min./typ.)	Isolation (VDC)
VCB4810EBO-240W(F/H)R3-N	240W	36-75 (48VDC)	10.8V/22200mA	92/94	1500
VCB4812EBO-240W(F/H)R3-N	240W		12V/20000mA	92/94	

VCB_EBO-240WR3-N Dimension LxWxH: 58.42 x 22.86 x10.70(mm)
VCB_EBO-240WFR3-N Dimension LxWxH: 58.42 x 22.86 x 13.20(mm)
VCB_EBO-240WHR3-N Dimension LxWxH: 58.42 x 22.86 x 25.90(mm)

VCB_EBO-300W(F/H)R3-N

Selection Guide (Pending)

Part No.	Power	Input voltage range	Output voltage/current (Vo/Io)	Eff(%) (min./typ.)	Isolation (VDC)
VCB4810EBO-300W(F/H)R3-N	300W	36-75 (48VDC)	10.8V/22200mA	93/95	1500
VCB4812EBO-300W(F/H)R3-N	300W		12V/20000mA	93/95	

VCB_EBO-300WR3-N Dimension LxWxH: 58.42 x 22.86 x10.70(mm)
VCB_EBO-300WFR3-N Dimension LxWxH: 58.42 x 22.86 x 13.20(mm)
VCB_EBO-300WHR3-N Dimension LxWxH: 58.42 x 22.86 x 25.90(mm)

VCB_EBO-400W(F/H)R3-N

Selection Guide

Part No.	Power	Input voltage range	Output voltage/current (Vo/Io)	Eff(%) (min./typ.)	Isolation (VDC)
VCB4810EBO-400W(F/H)R3-N	400W	36-75 (48VDC)	10.8V/33000mA	92.5/94.5	1500
VCB4812EBO-400W(F/H)R3-N	400W		12V/33000mA	92.5/94.5	

VCB_EBO-400WR3-N Dimension LxWxH: 58.42 x 22.86 x 13.79(mm)
VCB_EBO-400WFR3-N Dimension LxWxH: 58.42 x 22.86 x 16.30(mm)
VCB_EBO-400WHR3-N Dimension LxWxH: 58.42 x 22.86 x 29.00(mm)

VCF_QBO-400W(F/H)R3(-N)

Selection Guide

Part No.	Power	Input voltage range	Output voltage/current (Vo/Io)	Eff(%) (min./typ.)	Isolation (VDC)
VCF4812QBO-400W(F/H)R3(-N)	400W	36-75 (48VDC)	12V/33000mA	93/95	2250
VCF4815QBO-400W(F/H)R3(-N)	400W		15V/26500mA	93/95	
VCF4824QBO-400W(F/H)R3(-N)	400W		24V/16500mA	93/95	
VCF4828QBO-400W(F/H)R3(-N)	400W		28V/14200mA	93/95	

VCF_QBO-400WR3(-N) Dimension LxWxH: 57.90 x 36.80 x 12.90(mm)
VCF_QBO-400WHR3(-N) Dimension LxWxH: 57.90 x 36.80 x 25.60(mm)
VCF_QBO-400WFR3(-N) Dimension LxWxH: 62.00 x 56.00 x 14.70(mm)

VCB_QBO-800WR3A(D)-N

Selection Guide

Part No.	Flow	Input voltage range	Output Voltage (VDC)	Output Current(mA) 50%Io/100%Io	Eff(%) 50%Io/100%Io	Capacitive load(μF)
VCB4812QBO-800WR3A-N	ACS	40-60(48VDC)	12	33300/66600	96.5/96.6	Min:3500 Max:15000
		40-60(53VDC)			96.1/96.4	
VCB4812QBO-800WR3D-N	DLS	40-60(48VDC)	12.1		96.5/96.6	
		40-60(53VDC)			96.1/96.4	
VCB4810QBO-800WR3A-N	ACS	40-60(48VDC)	10.8		96.2/96.3	
		40-60(53VDC)			96.0/96.1	
VCB4810QBO-800WR3D-N	DLS	40-60(48VDC)	10.9		96.2/96.3	
		40-60(53VDC)			96.0/96.1	

Dimension LxWxH: 58.4 x 36.8 x 14.2mm(mm)

VCB_QBO-1300WR3A-N

Selection Guide

Part No.	Flow	Input voltage range	Output Voltage (VDC)	Output Current(mA) 50%Io/100%Io	Eff(%) 50%Io/100%Io	Capacitive load(μF)
VCB4810QBO-1300WR3A-N	ACS	45-60 (53VDC)	10.8	54100/108300	97.0/96.2	Min:3500 Max:15000
VCB4812QBO-1300WR3A-N	ACS		12		97.3/96.5	

Dimension LxWxH: 58.4 x 36.8 x 14.2mm(mm)

Notes

1. The series with suffix "F" are with heat sink package, suffix "H" for heat sink mounting, suffix "A" for product with ACS bus current sharing function, and suffix "D" for DLS droop current sharing function. We recommend to choose modules with a heat sink for enhanced heat dissipation and applications with extreme temperature requirements.
2. "N" means negative logic.

This catalog is a collection of the latest products. For more information, please contact our sales team.

This catalog is for reference only, not being the judgment basis for the use. For detailed datasheets please visit our website: www.mornsun-power.com.

2:1 Wide Input with Encapsulating Package (SIP)

WR Series (1-3W)

Features

- Suitable for communication, instrumentation, industrial electronics applications
- Operating temperature range: -40℃ to +85℃
- Continuous output short-circuit protection (self-recovery)
- Remote ON/OFF
- Low ripple & noise
- EN62368 approved

WRA_S-1WR2

Selection Guide

Part No.	Power	Input voltage range	Output voltage/current (Vo/Io)	Eff(%) (min./typ.)	Isolation (VDC)
WRA0505S-1WR2	1W	4.5-9 (5VDC)	± 5V/ ± 100mA	71/73	1500
WRA0512S-1WR2	1W		± 12V/ ± 42mA	74/76	
WRA0515S-1WR2	1W		± 15V/ ± 33mA	73/75	
WRA1205S-1WR2	1W	9-18 (12VDC)	± 5V/ ± 100mA	76/78	1500
WRA1212S-1WR2	1W		± 12V/ ± 42mA	79/81	
WRA1215S-1WR2	1W		± 15V/ ± 33mA	76/78	
WRA2405S-1WR2	1W	18-36 (24VDC)	± 5V/ ± 100mA	77/79	1500
WRA2409S-1WR2	1W		± 9V/ ± 56mA	77/79	
WRA2412S-1WR2	1W		± 12V/ ± 42mA	77/79	
WRA2415S-1WR2	1W		± 15V/ ± 33mA	77/79	
WRA4805S-1WR2	1W	36-75 (48VDC)	± 5V/ ± 100mA	74/76	1500
WRA4812S-1WR2	1W		± 12V/ ± 42mA	76/78	
WRA4815S-1WR2	1W		± 15V/ ± 33mA	78/80	

Dimension LxWxH: 22.00 x 9.50 x 12.00(mm)

WRE_S-1WR2

Selection Guide

Part No.	Power	Input voltage range	Output voltage/current (Vo/Io)	Eff(%) (min./typ.)	Isolation (VDC)
WRE0505S-1WR2	1W	4.5-9 (5VDC)	± 5V/ ± 100mA	71/73	3000
WRE0512S-1WR2	1W		± 12V/ ± 42mA	74/76	
WRE0515S-1WR2	1W		± 15V/ ± 33mA	73/75	
WRE1205S-1WR2	1W	9-18 (12VDC)	± 5V/ ± 100mA	76/78	3000
WRE1212S-1WR2	1W		± 12V/ ± 42mA	79/81	
WRE1215S-1WR2	1W		± 15V/ ± 33mA	76/78	
WRE2405S-1WR2	1W	18-36 (24VDC)	± 5V/ ± 100mA	77/79	3000
WRE2412S-1WR2	1W		± 12V/ ± 42mA	77/79	
WRE2415S-1WR2	1W		± 15V/ ± 33mA	77/79	
WRE4805S-1WR2	1W	36-75 (48VDC)	± 5V/ ± 100mA	74/76	3000
WRE4812S-1WR2	1W		± 12V/ ± 42mA	76/78	
WRE4815S-1WR2	1W		± 15V/ ± 33mA	78/80	

Dimension LxWxH: 22.00 x 9.50 x 12.00(mm)

WRB_S-1WR2

Selection Guide

Part No.	Power	Input voltage range	Output voltage/current (Vo/Io)	Eff(%) (min./typ.)	Isolation (VDC)
WRB0503S-1WR2	1W	4.5-9 (5VDC)	3.3V/303mA	69/71	1500
WRB0505S-1WR2	1W		5V/200mA	70/72	
WRB0512S-1WR2	1W		12V/83mA	74/76	
WRB0515S-1WR2	1W		15V/67mA	73/75	
WRB0524S-1WR2	1W		24V/42mA	71/73	
WRB1203S-1WR2	1W	9-18 (12VDC)	3.3V/303mA	73/75	1500
WRB1205S-1WR2	1W		5V/200mA	75/77	
WRB1209S-1WR2	1W		9V/111mA	77/79	
WRB1212S-1WR2	1W		12V/83mA	77/79	
WRB1215S-1WR2	1W		15V/67mA	78/80	
WRB1224S-1WR2	1W		24V/42mA	74/76	
WRB2403S-1WR2	1W	18-36 (24VDC)	3.3V/303mA	73/75	1500
WRB2405S-1WR2	1W		5V/200mA	75/77	
WRB2412S-1WR2	1W		12V/83mA	76/78	
WRB2415S-1WR2	1W		15V/67mA	76/78	
WRB2424S-1WR2	1W		24V/42mA	75/77	
WRB4803S-1WR2	1W	36-75 (48VDC)	3.3V/303mA	73/75	1500
WRB4805S-1WR2	1W		5V/200mA	74/76	
WRB4812S-1WR2	1W		12V/83mA	78/80	
WRB4815S-1WR2	1W		15V/67mA	77/79	

Dimension LxWxH: 22.00 x 9.50 x 12.00(mm)

WRF_S-1WR2

Selection Guide

Part No.	Power	Input voltage range	Output voltage/current (Vo/Io)	Eff(%) (min./typ.)	Isolation (VDC)
WRF0503S-1WR2	1W	4.5-9 (5VDC)	3.3V/303mA	69/71	3000
WRF0505S-1WR2	1W		5V/200mA	70/72	
WRF0512S-1WR2	1W		12V/83mA	74/76	
WRF0515S-1WR2	1W		15V/67mA	73/75	
WRF1203S-1WR2	1W	9-18 (12VDC)	3.3V/303mA	73/75	3000
WRF1205S-1WR2	1W		5V/200mA	75/77	
WRF1209S-1WR2	1W		9V/111mA	77/79	
WRF1212S-1WR2	1W		12V/83mA	77/79	
WRF1215S-1WR2	1W		15V/67mA	78/80	
WRF2403S-1WR2	1W	18-36 (24VDC)	3.3V/303mA	73/75	3000
WRF2405S-1WR2	1W		5V/200mA	75/77	
WRF2412S-1WR2	1W		12V/83mA	76/78	
WRF2415S-1WR2	1W		15V/67mA	76/78	
WRF2424S-1WR2	1W		24V/42mA	75/77	
WRF4803S-1WR2	1W	36-75 (48VDC)	3.3V/303mA	73/75	3000
WRF4805S-1WR2	1W		5V/200mA	74/76	
WRF4812S-1WR2	1W		12V/83mA	78/80	
WRF4815S-1WR2	1W		15V/67mA	77/79	

Dimension LxWxH: 22.00 x 9.50 x 12.00(mm)

• This catalog is a collection of the latest products. For more information, please contact our sales team.

WRA_S-3WR2

Selection Guide

Part No.	Power	Input voltage range	Output voltage/current (Vo/Io)	Eff(%) (min./typ.)	Isolation (VDC)
WRA0505S-3WR2	3W	4.5-9 (5VDC)	± 5V/ ± 250mA	72/74	1500
WRA0512S-3WR2	3W		± 12V/ ± 104mA	75/77	
WRA0515S-3WR2	3W		± 15V/ ± 83mA	75/77	
WRA0524S-3WR2	3W		± 24V/ ± 52mA	74/76	
WRA1205S-3WR2	3W	9-18 (12VDC)	± 5V/ ± 300mA	76/78	1500
WRA1209S-3WR2	3W		± 9V/ ± 167mA	76/78	
WRA1212S-3WR2	3W		± 12V/ ± 125mA	77/79	
WRA1215S-3WR2	3W		± 15V/ ± 100mA	78/80	
WRA2405S-3WR2	3W	18-36 (24VDC)	± 5V/ ± 300mA	77/79	1500
WRA2409S-3WR2	3W		± 9V/ ± 167mA	79/81	
WRA2412S-3WR2	3W		± 12V/ ± 125mA	81/83	
WRA2415S-3WR2	3W		± 15V/ ± 100mA	81/83	
WRA4805S-3WR2	3W	36-75 (48VDC)	± 5V/ ± 300mA	77/79	1500
WRA4812S-3WR2	3W		± 12V/ ± 125mA	80/82	
WRA4815S-3WR2	3W		± 15V/ ± 100mA	80/82	

Dimension LxWxH: 22.00 x 9.50 x 12.00(mm)

WRE_S-3WR2

Selection Guide

Part No.	Power	Input voltage range	Output voltage/current (Vo/Io)	Eff(%) (min./typ.)	Isolation (VDC)
WRE0505S-3WR2	3W	4.5-9 (5VDC)	± 5V/ ± 250mA	72/74	3000
WRE0512S-3WR2	3W		± 12V/ ± 104mA	75/77	
WRE0515S-3WR2	3W		± 15V/ ± 83mA	75/77	
WRE1205S-3WR2	3W	9-18 (12VDC)	± 5V/ ± 300mA	76/78	3000
WRE1212S-3WR2	3W		± 12V/ ± 125mA	77/79	
WRE1215S-3WR2	3W		± 15V/ ± 100mA	78/80	
WRE2405S-3WR2	3W	18-36 (24VDC)	± 5V/ ± 300mA	77/79	3000
WRE2409S-3WR2	3W		± 9V/ ± 167mA	79/81	
WRE2412S-3WR2	3W		± 12V/ ± 125mA	81/83	
WRE2415S-3WR2	3W		± 15V/ ± 100mA	81/83	
WRE4805S-3WR2	3W	36-75 (48VDC)	± 5V/ ± 300mA	77/79	3000
WRE4812S-3WR2	3W		± 12V/ ± 125mA	80/82	
WRE4815S-3WR2	3W		± 15V/ ± 100mA	80/82	

Dimension LxWxH: 22.00 x 9.50 x 12.00(mm)

WRB_S-3WR2

Selection Guide

Part No.	Power	Input voltage range	Output voltage/current (Vo/Io)	Eff(%) (min./typ.)	Isolation (VDC)
WRB0503S-3WR2	3W	4.5-9 (5VDC)	3.3V/758mA	66/68	1500
WRB0505S-3WR2	3W		5V/500mA	71/73	
WRB0509S-3WR2	3W		9V/278mA	72/74	
WRB0512S-3WR2	3W		12V/208mA	75/77	
WRB0515S-3WR2	3W		15V/167mA	72/74	
WRB0524S-3WR2	3W		24V/104mA	74/76	
WRB1203S-3WR2	3W	9-18 (12VDC)	3.3V/758mA	73/75	1500
WRB1205S-3WR2	3W		5V/600mA	74/76	
WRB1206S-3WR2	3W		6V/500mA	77/79	
WRB1209S-3WR2	3W		9V/333mA	77/79	
WRB1212S-3WR2	3W		12V/250mA	80/82	
WRB1215S-3WR2	3W		15V/200mA	81/83	
WRB1224S-3WR2	3W		24V/125mA	79/81	
WRB2403S-3WR2	3W	18-36 (24VDC)	3.3V/758mA	72/74	1500
WRB2405S-3WR2	3W		5V/600mA	79/81	
WRB2409S-3WR2	3W		9V/333mA	81/83	
WRB2412S-3WR2	3W		12V/250mA	81/83	
WRB2415S-3WR2	3W		15V/200mA	81/83	
WRB2424S-3WR2	3W		24V/125mA	81/83	
WRB4803S-3WR2	3W	36-75 (48VDC)	3.3V/758mA	73/75	1500
WRB4805S-3WR2	3W		5V/600mA	74/76	
WRB4812S-3WR2	3W		12V/250mA	78/80	
WRB4815S-3WR2	3W		15V/200mA	82/84	
WRB4824S-3WR2	3W		24V/125mA	80/82	

Dimension LxWxH: 22.00 x 9.50 x 12.00(mm)

WRF_S-3WR2

Selection Guide

Part No.	Power	Input voltage range	Output voltage/current (Vo/Io)	Eff(%) (min./typ.)	Isolation (VDC)
WRF0505S-3WR2	3W	4.5-9 (5VDC)	5V/500mA	71/73	3000
WRF0509S-3WR2	3W		9V/278mA	72/74	
WRF0512S-3WR2	3W		12V/208mA	75/77	
WRF0515S-3WR2	3W		15V/167mA	72/74	
WRF1203S-3WR2	3W	9-18 (12VDC)	3.3V/758mA	73/75	3000
WRF1205S-3WR2	3W		5V/600mA	74/76	
WRF1209S-3WR2	3W		9V/333mA	77/79	
WRF1212S-3WR2	3W		12V/250mA	80/82	
WRF1215S-3WR2	3W		15V/200mA	81/83	
WRF1224S-3WR2	3W		24V/125mA	79/81	
WRF2403S-3WR2	3W	18-36 (24VDC)	3.3V/758mA	72/74	3000
WRF2405S-3WR2	3W		5V/600mA	79/81	
WRF2409S-3WR2	3W		9V/333mA	81/83	
WRF2412S-3WR2	3W		12V/250mA	81/83	
WRF2415S-3WR2	3W		15V/200mA	81/83	
WRF2424S-3WR2	3W		24V/125mA	81/83	
WRF4803S-3WR2	3W	36-75 (48VDC)	3.3V/758mA	73/75	3000
WRF4805S-3WR2	3W		5V/600mA	74/76	
WRF4812S-3WR2	3W		12V/250mA	78/80	
WRF4815S-3WR2	3W		15V/200mA	82/84	

Dimension LxWxH: 22.00 x 9.50 x 12.00(mm)

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2:1 Wide Input with Encapsulating Package (DIP) WR Series (3W)

Features

- Suitable for industrial control, electric power, instrumentation, communication applications
- Operating temperature range: -40℃ to +85℃
- No-load power consumption as low as 0.11W
- Input under-voltage, output over-voltage, over-current, short-circuit protections
- Meet CISPR32/EN55032 CLASS A
- IEC/UL/EN62368 approved

WRA_ZP-3WR2

Selection Guide

Part No.	Power	Input voltage range	Output voltage/current (Vo/Io)	Eff(%) (min./typ.)	Isolation (VDC)
WRA0505ZP-3WR2	3W	4.5-9 (5VDC)	±5V/±300mA	74/76	1500
WRA0509ZP-3WR2	3W		±9V/±166mA	74/76	
WRA0512ZP-3WR2	3W		±12V/±125mA	76/78	
WRA0515ZP-3WR2	3W		±15V/±100mA	76/78	
WRA1205ZP-3WR2	3W	9-18 (12VDC)	±5V/±300mA	79/81	1500
WRA1209ZP-3WR2	3W		±9V/±166mA	82/84	
WRA1212ZP-3WR2	3W		±12V/±125mA	82/84	
WRA1215ZP-3WR2	3W		±15V/±100mA	83/85	
WRA2405ZP-3WR2	3W	18-36 (24VDC)	±5V/±300mA	80/82	1500
WRA2412ZP-3WR2	3W		±12V/±125mA	82/84	
WRA2415ZP-3WR2	3W		±15V/±100mA	82/84	
WRA4805ZP-3WR2	3W	36-75 (48VDC)	±5V/±300mA	80/82	1500
WRA4812ZP-3WR2	3W		±12V/±125mA	82/84	
WRA4815ZP-3WR2	3W		±15V/±100mA	83/85	
WRA4824ZP-3WR2	3W		±24V/±63mA	82/84	

Dimension LxWxH: 32.00 x 20.00 x 10.80(mm)

WRE_P-3WR2

Selection Guide

Part No.	Power	Input voltage range	Output voltage/current (Vo/Io)	Eff(%) (min./typ.)	Isolation (VDC)
WRE0505P-3WR2	3W	4.5-9 (5VDC)	±5V/±300mA	74/76	3000
WRE0512P-3WR2	3W		±12V/±125mA	76/78	
WRE0515P-3WR2	3W		±15V/±100mA	76/78	
WRE1205P-3WR2	3W	9-18 (12VDC)	±5V/±300mA	79/81	3000
WRE1209P-3WR2	3W		±9V/±166mA	82/84	
WRE1212P-3WR2	3W		±12V/±125mA	82/84	
WRE1215P-3WR2	3W		±15V/±100mA	83/85	
WRE2405P-3WR2	3W	18-36 (24VDC)	±5V/±300mA	80/82	3000
WRE2412P-3WR2	3W		±12V/±125mA	82/84	
WRE2415P-3WR2	3W		±15V/±100mA	82/84	
WRE4803P-3WR2	3W	36-75 (48VDC)	±3.3V/±909mA	74/76	3000
WRE4805P-3WR2	3W		±5V/±300mA	80/82	
WRE4812P-3WR2	3W		±12V/±125mA	82/84	
WRE4815P-3WR2	3W		±15V/±100mA	83/85	

Dimension LxWxH: 31.60 x 20.30 x 10.20(mm)

WRB_ZP-3WR2

Selection Guide

Part No.	Power	Input voltage range	Output voltage/current (Vo/Io)	Eff(%) (min./typ.)	Isolation (VDC)
WRB0505ZP-3WR2	3W	4.5-9 (5VDC)	5V/600mA	72/74	1500
WRB0512ZP-3WR2	3W		12V/250mA	75/77	
WRB0515ZP-3WR2	3W		15V/200mA	75/77	
WRB1203ZP-3WR2	3W	9-18 (12VDC)	3.3V/909mA	72/74	1500
WRB1205ZP-3WR2	3W		5V/600mA	79/81	
WRB1212ZP-3WR2	3W		12V/250mA	81/83	
WRB1215ZP-3WR2	3W		15V/200mA	80/82	
WRB1224ZP-3WR2	3W		24V/125mA	81/83	
WRB2403ZP-3WR2	3W	18-36 (24VDC)	3.3V/909mA	76/78	1500
WRB2405ZP-3WR2	3W		5V/600mA	79/81	
WRB2409ZP-3WR2	3W		9V/333mA	79/81	
WRB2412ZP-3WR2	3W		12V/250mA	84/86	
WRB2415ZP-3WR2	3W		15V/200mA	84/86	
WRB2424ZP-3WR2	3W		24V/125mA	83/85	
WRB4803ZP-3WR2	3W	36-75 (48VDC)	3.3V/909mA	74/76	1500
WRB4805ZP-3WR2	3W		5V/600mA	80/82	
WRB4812ZP-3WR2	3W		12V/250mA	84/86	
WRB4815ZP-3WR2	3W		15V/200mA	84/86	
WRB4824ZP-3WR2	3W		24V/125mA	82/84	

Dimension LxWxH: 32.00 x 20.00 x 10.80(mm)

WRF_P-3WR2

Selection Guide

Part No.	Power	Input voltage range	Output voltage/current (Vo/Io)	Eff(%) (min./typ.)	Isolation (VDC)
WRF0505P-3WR2	3W	4.5-9 (5VDC)	5V/600mA	72/74	3000
WRF0512P-3WR2	3W		12V/250mA	75/77	
WRF0515P-3WR2	3W		15V/200mA	75/77	
WRF1203P-3WR2	3W	9-18 (12VDC)	3.3V/909mA	72/74	3000
WRF1205P-3WR2	3W		5V/600mA	79/81	
WRF1212P-3WR2	3W		12V/250mA	81/83	
WRF1215P-3WR2	3W		15V/200mA	80/82	
WRF1224P-3WR2	3W		24V/125mA	81/83	
WRF2403P-3WR2	3W	18-36 (24VDC)	3.3V/909mA	76/78	3000
WRF2405P-3WR2	3W		5V/600mA	79/81	
WRF2412P-3WR2	3W		12V/250mA	84/86	
WRF2415P-3WR2	3W		15V/200mA	84/86	
WRF2424P-3WR2	3W		24V/125mA	83/85	
WRF4803P-3WR2	3W	36-75 (48VDC)	3.3V/909mA	74/76	3000
WRF4805P-3WR2	3W		5V/600mA	80/82	
WRF4812P-3WR2	3W		12V/250mA	84/86	
WRF4815P-3WR2	3W		15V/200mA	84/86	

Dimension LxWxH: 31.60 x 20.30 x 10.20(mm)

Notes

1. Series with suffix "ZP" are standard DIP24 packaged with aluminum alloy casing.
2. If the application requires higher performance for EMC, our matching EMC auxiliary devices such as FC-AX3D, FC-B02D, FI-B03D and FT-BX1D are available. For more information, please contact our sales.

• This catalog is a collection of the latest products. For more information, please contact our sales team.

2:1 Wide Input with Encapsulating Package (SIP) VR Series (6-10W)

Features

- Isolation voltage: 5000VAC (Reinforced insulation)
- Operating temperature range: -40℃ to +105℃ (6W)
  -40℃ to +85℃ (10W)
- Adjustable output voltage of 3.3V, 3.7V, 5.0V, 5.4V
- ±150kV/μs CMTI
- Meet IEC62368/UL62368/EN62368 (pending)
- Meet EN60601-1, ANSI/AAMI ES60601-1 (2xMOPP)
- Input under-voltage, output over-current, short-circuit protections

VRB_S-6WR3

Selection Guide

Part No.	Power	Input voltage range	Output voltage/current (Vo/Io)	Eff(%) (min./typ.)	Isolation (VDC)
VRB1203S-6WR3	6W	9-18 (12VDC)	3.3V/1350mA	74/76	1600
VRB1205S-6WR3	6W		5V/±1200mA	78/80	
VRB1209S-6WR3	6W		9V/±667mA	80/82	
VRB1212S-6WR3	6W		12V/±500mA	82/84	
VRB1215S-6WR3	6W		15V/±400mA	82/84	
VRB1224S-6WR3	6W		24V/±250mA	82/84	
VRB2403S-6WR3	6W	18-36 (24VDC)	3.3V/1350mA	76/78	1600
VRB2405S-6WR3	6W		5V/±1200mA	80/82	
VRB2409S-6WR3	6W		9V/±667mA	82/84	
VRB2412S-6WR3	6W		12V/±500mA	84/86	
VRB2415S-6WR3	6W		15V/±400mA	85/87	
VRB2424S-6WR3	6W		24V/±250mA	83/85	

Dimension LxWxH: 22.00 x 9.50 x 12.00(mm)

VRB_S-10WR3

Selection Guide

Part No.	Power	Input voltage range	Output voltage/current (Vo/Io)	Eff(%) (min./typ.)	Isolation (VDC)
VRB1203S-10WR3	10W	9-18 (12VDC)	3.3V/2400mA	81/83	1500
VRB1205S-10WR3	10W		5V/2000mA	84/86	
VRB1209S-10WR3	10W		9V/1111mA	84/86	
VRB1212S-10WR3	10W		12V/833mA	84/86	
VRB1215S-10WR3	10W		15V/667mA	84/86	
VRB1224S-10WR3	10W		24V/417mA	84/86	
VRB2403S-10WR3	10W	18-36 (24VDC)	3.3V/2400mA	83/85	1500
VRB2405S-10WR3	10W		5V/2000mA	86/88	
VRB2409S-10WR3	10W		9V/1111mA	86/88	
VRB2412S-10WR3	10W		12V/833mA	86/88	
VRB2415S-10WR3	10W		15V/667mA	86/88	
VRB2424S-10WR3	10W		24V/417mA	86/88	

Dimension LxWxH: 22.00 x 9.50 x 12.00(mm)

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2:1 Wide Input with Encapsulating Package (DIP) VR Series (6-10W)

Features

- Suitable for industrial control, electric power, instrumentation, communication applications
- Operating temperature range: -40℃ to +85℃
- No-load power consumption as low as 0.09W
- Input under-voltage, output over-voltage, over-current, short-circuit protections
- Meet CISPR32/EN55032 CLASS A
- IEC/UL/EN62368 approved

VRA_ZP-6WR3

Selection Guide

Part No.	Power	Input voltage range	Output voltage/current (Vo/Io)	Eff(%) (min./typ.)	Isolation (VDC)
VRA0505ZP-6WR3	6W	4.5-9 (5VDC)	±5V/±600mA	76/78	1500
VRA0512ZP-6WR3	6W		±12V/±250mA	82/84	
VRA0515ZP-6WR3	6W		±15V/±200mA	82/84	
VRA0524ZP-6WR3	6W		±24V/±125mA	82/84	
VRA1205ZP-6WR3	6W	9-18 (12VDC)	±5V/±600mA	78/80	1500
VRA1212ZP-6WR3	6W		±12V/±250mA	82/84	
VRA1215ZP-6WR3	6W		±15V/±200mA	83/85	
VRA1224ZP-6WR3	6W		±24V/±125mA	82/84	
VRA2405ZP-6WR3	6W	18-36 (24VDC)	±5V/±600mA	81/83	1500
VRA2412ZP-6WR3	6W		±12V/±250mA	84/86	
VRA2415ZP-6WR3	6W		±15V/±200mA	85/87	
VRA2424ZP-6WR3	6W	36-75 (48VDC)	±24V/±125mA	83/85	1500
VRA4805ZP-6WR3	6W		±5V/±600mA	81/83	
VRA4812ZP-6WR3	6W		±12V/±250mA	85/87	
VRA4815ZP-6WR3	6W		±15V/±200mA	83/85	
VRA4824ZP-6WR3	6W		±24V/±125mA	83/85	

Dimension LxWxH: 32.00 x 20.00 x 10.80(mm)

VRA_ZP-10WR3

Selection Guide

Part No.	Power	Input voltage range	Output voltage/current (Vo/Io)	Eff(%) (min./typ.)	Isolation (VDC)
VRA1205ZP-10WR3	10W	9-18 (12VDC)	±5V/±1000mA	81/83	1500
VRA1212ZP-10WR3	10W		±12V/±416mA	85/87	
VRA1215ZP-10WR3	10W		±15V/±333mA	85/87	
VRA2405ZP-10WR3	10W	18-36 (24VDC)	±5V/±1000mA	81/83	1500
VRA2412ZP-10WR3	10W		±12V/±416mA	85/87	
VRA2415ZP-10WR3	10W		±15V/±333mA	85/87	
VRA4805ZP-10WR3	10W	36-75 (48VDC)	±5V/±1000mA	81/83	1500
VRA4812ZP-10WR3	10W		±12V/±416mA	85/87	
VRA4815ZP-10WR3	10W		±15V/±333mA	85/87	

Dimension LxWxH: 32.00 x 20.00 x 10.80(mm)

VRB_ZP-6WR3

Selection Guide

Part No.	Power	Input voltage range	Output voltage/current (Vo/Io)	Eff(%) (min./typ.)	Isolation (VDC)
VRB0505ZP-6WR3	6W	4.5-9 (5VDC)	5V/1200mA	76/78	1500
VRB0512ZP-6WR3	6W		12V/500mA	82/84	
VRB0515ZP-6WR3	6W		15V/400mA	82/84	
VRB0524ZP-6WR3	6W	9-18 (12VDC)	24V/250mA	82/84	1500
VRB1203ZP-6WR3	6W		3.3V/1500mA	73/75	
VRB1205ZP-6WR3	6W		5V/1200mA	78/80	
VRB1212ZP-6WR3	6W		12V/500mA	82/84	
VRB1215ZP-6WR3	6W		15V/400mA	83/85	
VRB1224ZP-6WR3	6W		24V/250mA	83/85	
VRB2403ZP-6WR3	6W	18-36 (24VDC)	3.3V/1500mA	76/78	1500
VRB2405ZP-6WR3	6W		5V/1200mA	80/82	
VRB2412ZP-6WR3	6W		12V/500mA	83/85	
VRB2415ZP-6WR3	6W		15V/400mA	84/86	
VRB2424ZP-6WR3	6W		24V/250mA	84/86	
VRB4803ZP-6WR3	6W	36-75 (48VDC)	3.3V/1500mA	77/79	1500
VRB4805ZP-6WR3	6W		5V/1200mA	81/83	
VRB4812ZP-6WR3	6W		12V/500mA	85/87	
VRB4815ZP-6WR3	6W		15V/400mA	86/88	
VRB4824ZP-6WR3	6W		24V/250mA	85/87	

Dimension LxWxH: 32.00 x 20.00 x 10.80(mm)

VRB_ZP-10WR3

Selection Guide

Part No.	Power	Input voltage range	Output voltage/current (Vo/Io)	Eff(%) (min./typ.)	Isolation (VDC)
VRB1203ZP-10WR3	10W	9-18 (12VDC)	3.3V/2400mA	85/87	1500
VRB1205ZP-10WR3	10W		5V/2000mA	85/87	
VRB1212ZP-10WR3	10W		12V/833mA	85/87	
VRB1215ZP-10WR3	10W		15V/667mA	85/87	
VRB1224ZP-10WR3	10W		24V/416mA	86/88	
VRB2403ZP-10WR3	10W	18-36 (24VDC)	3.3V/2400mA	84/86	1500
VRB2405ZP-10WR3	10W		5V/2000mA	86/88	
VRB2412ZP-10WR3	10W		12V/833mA	85/87	
VRB2415ZP-10WR3	10W		15V/667mA	85/87	
VRB2424ZP-10WR3	10W		24V/416mA	85/87	
VRB4803ZP-10WR3	10W	36-75 (48VDC)	3.3V/2400mA	85/87	1500
VRB4805ZP-10WR3	10W		5V/2000mA	86/88	
VRB4812ZP-10WR3	10W		12V/833mA	85/87	
VRB4815ZP-10WR3	10W		15V/667mA	85/87	
VRB4824ZP-10WR3	10W		24V/416mA	86/88	

Dimension LxWxH: 32.00 x 20.00 x 10.80(mm)

Notes

1. Series with suffix "ZP" are standard DIP24 packaged with aluminum alloy casing.
2. If the application requires higher performance for EMC, our matching EMC auxiliary devices such as FC-AX3D, FC-B02D, FI-B03D and FT-BX1D are available. For more information, please contact our sales.

• This catalog is a collection of the latest products. For more information, please contact our sales team.

2:1 Wide Input with Encapsulating Package (DIP) VR Series (6-20W)

Features

- Suitable for industrial control, electric power, instrumentation, communication applications
- Operating temperature range: -40℃ to +85℃ / -40℃ to +105℃
- No-load power consumption as low as 0.11W
- Input under-voltage, output over-voltage, over-current, short-circuit protections
- Meet CISPR32/EN55032 CLASS A
- IEC/UL/EN62368 approved

VRA_YMD-6WR3

Selection Guide

Part No.	Power	Input voltage range	Output voltage/current (Vo/Io)	Eff(%) (min./typ.)	Isolation (VDC)
VRA1205YMD-6WR3*	6W	9-18 (12VDC)	±5V/±600mA	79/81	1500
VRA1212YMD-6WR3*	6W		±12V/±250mA	83/85	
VRA1215YMD-6WR3*	6W		±15V/±200mA	81/83	
VRA2405YMD-6WR3*	6W	18-36 (24VDC)	±5V/±600mA	81/83	1500
VRA2412YMD-6WR3*	6W		±12V/±250mA	85/87	
VRA2415YMD-6WR3*	6W		±15V/±200mA	85/87	

Dimension LxWxH: 25.40 x 25.40 x 11.70(mm)

VRB_YMD-6WR3

Selection Guide

Part No.	Power	Input voltage range	Output voltage/current (Vo/Io)	Eff(%) (min./typ.)	Isolation (VDC)
VRB1205YMD-6WR3*	6W	9-18 (12VDC)	5V/1200mA	79/81	1500
VRB1212YMD-6WR3*	6W		12V/500mA	83/85	
VRB2403YMD-6WR3*	6W	18-36 (24VDC)	3.3V/1500mA	75/77	1500
VRB2405YMD-6WR3*	6W		5V/1200mA	80/82	
VRB2409YMD-6WR3*	6W		9V/667mA	83/85	
VRB2412YMD-6WR3*	6W		12V/500mA	83/85	
VRB2415YMD-6WR3*	6W		15V/400mA	84/86	
VRB2424YMD-6WR3*	6W		24V/250mA	83/85	
VRB4803YMD-6WR3*	6W	36-75 (48VDC)	3.3V/1500mA	77/79	1500
VRB4805YMD-6WR3*	6W		5V/1200mA	81/83	
VRB4812YMD-6WR3*	6W		12V/500mA	85/87	
VRB4815YMD-6WR3*	6W		15V/400mA	86/88	
VRB4824YMD-6WR3*	6W		24V/250mA	86/88	

Dimension LxWxH: 25.40 x 25.40 x 11.70(mm)

VRB_YMD-10WR3

Selection Guide

Part No.	Power	Input voltage range	Output voltage/current (Vo/Io)	Eff(%) (min./typ.)	Isolation (VDC)
VRB0503YMD-10WR3	10W	4.5-9 (5VDC)	3.3V/2500mA	82/84	1500
VRB0505YMD-10WR3	10W		5V/2000mA	83/85	
VRB0512YMD-10WR3	10W		12V/834mA	81/83	
VRB0515YMD-10WR3	10W		15V/667mA	82/84	
VRB0524YMD-10WR3	10W		24V/417mA	81/83	
VRB1205YMD-10WR3	10W	9-18 (12VDC)	5V/2000mA	81/83	1500
VRB2405YMD-10WR3	10W	18-36 (24VDC)	5V/2000mA	81/83	1500
VRB2412YMD-10WR3	10W		12V/833mA	85/87	
VRB2415YMD-10WR3	10W		15V/667mA	86/88	
VRB2424YMD-10WR3	10W		24V/416mA	86/88	
VRB4803YMD-10WR3	10W	36-75 (48VDC)	3.3V/2400mA	77/79	1500
VRB4805YMD-10WR3	10W		5V/2000mA	81/83	
VRB4812YMD-10WR3	10W		12V/833mA	85/87	
VRB4812XYMD-10WR3*	10W		12V/833mA	85/87	
VRB4815YMD-10WR3	10W		15V/667mA	85/87	
VRB4815XYMD-10WR3*	10W		15V/667mA	85/87	
VRB4824YMD-10WR3	10W		24V/416mA	86/88	

Dimension LxWxH: 25.40 x 25.40 x 11.70(mm)

VRA_YMD-10WR3

Selection Guide

Part No.	Power	Input voltage range	Output voltage/current (Vo/Io)	Eff(%) (min./typ.)	Isolation (VDC)
VRA0505YMD-10WR3	10W	4.5-9 (5VDC)	±5V/±1000mA	76/78	1500
VRA0512YMD-10WR3	10W		±12V/±417mA	81/83	
VRA0515YMD-10WR3	10W		±15V/±334mA	82/84	
VRA0524YMD-10WR3	10W		±24V/±209mA	81/83	

Dimension LxWxH: 25.40 x 25.40 x 11.70(mm)

VRB_YMD-15WR3

Selection Guide

Part No.	Power	Input voltage range	Output voltage/current (Vo/Io)	Eff(%) (min./typ.)	Isolation (VDC)
VRB1203YMD-15WR3	15W	9-18 (12VDC)	3.3V/4000mA	86/88	1500
VRB1205YMD-15WR3	15W		5V/3000mA	88/90	
VRB1212YMD-15WR3	15W		12V/1250mA	88/90	
VRB1215YMD-15WR3	15W		15V/1000mA	89/91	
VRB1224YMD-15WR3	15W		24V/625mA	89/91	
VRB2403YMD-15WR3	15W	18-36 (24VDC)	3.3V/4000mA	86/88	1500
VRB2405YMD-15WR3	15W		5V/3000mA	88/90	
VRB2412YMD-15WR3	15W		12V/1250mA	88/90	
VRB2415YMD-15WR3	15W		15V/1000mA	89/91	
VRB2424YMD-15WR3	15W		24V/625mA	89/91	
VRB4803YMD-15WR3	15W	36-75 (48VDC)	3.3V/4000mA	86/88	1500
VRB4805YMD-15WR3	15W		5V/3000mA	88/90	
VRB4812YMD-15WR3	15W		12V/1250mA	89/91	
VRB4815YMD-15WR3	15W		15V/1000mA	89/91	
VRB4824YMD-15WR3	15W		24V/625mA	89/91	

Dimension LxWxH: 25.40 x 25.40 x 11.70(mm)

VRB_YMD-20WR3

Selection Guide

Part No.	Power	Input voltage range	Output voltage/current (Vo/Io)	Eff(%) (min./typ.)	Isolation (VDC)
VRB1203YMD-20WR3	20W	9-18 (12VDC)	3.3V/5000mA	84/86	1500
VRB1205YMD-20WR3	20W		5V/4000mA	87/89	
VRB1212YMD-20WR3	20W		12V/1667mA	87/89	
VRB1215YMD-20WR3	20W		15V/1333mA	88/90	
VRB1224YMD-20WR3	20W		24V/833mA	88/90	
VRB2403YMD-20WR3	20W	18-36 (24VDC)	3.3V/5000mA	86/88	1500
VRB2405YMD-20WR3	20W		5V/4000mA	88/90	
VRB2412YMD-20WR3	20W		12V/1667mA	88/90	
VRB2415YMD-20WR3	20W		15V/1333mA	88/90	
VRB2424YMD-20WR3	20W		24V/833mA	89/91	
VRB4803YMD-20WR3	20W	36-75 (48VDC)	3.3V/5000mA	86/88	1500
VRB4805YMD-20WR3	20W		5V/4000mA	88/90	
VRB4812YMD-20WR3	20W		12V/1667mA	89/91	
VRB4815YMD-20WR3	20W		15V/1333mA	89/91	
VRB4824YMD-20WR3	20W		24V/833mA	89/91	

Dimension LxWxH: 25.40 x 25.40 x 11.70(mm)

Note

"*" means product without Ctrl pin.

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2:1 Wide Input with Encapsulating Package (DIP) VR Series (15-400W)

Features

- Suitable for DCS, battery-powered device, communication, distributed power system, D/A hybrid system, RTU and industrial robot system applications
- Operating temperature range: -40℃ to +85℃ / -40℃ to +105℃
- No-load power consumption as low as 0.12W
- Input under-voltage, output over-voltage, over-current, short-circuit protections
- IEC/UL/EN60950, EN62368 approved

VRB_LD-15WR3

Selection Guide

Part No.	Power	Input voltage range	Output voltage/current (Vo/Io)	Eff(%) (min./typ.)	Isolation (VDC)
VRB2405LD-15WR3	15W	18-36 (24VDC)	5V/3000mA	87/89	1500
VRB2412LD-15WR3	15W		12V/1250mA	87/89	
VRB2415LD-15WR3	15W		15V/1000mA	87/89	
VRB2424LD-15WR3	15W		24V/625mA	88/90	
VRB4803LD-15WR3	15W	36-75 (48VDC)	3.3V/4000mA	81/83	1500
VRB4805LD-15WR3	15W		5V/3000mA	86/88	
VRB4812LD-15WR3	15W		12V/1250mA	86/88	
VRB4815LD-15WR3	15W		15V/1000mA	87/89	
VRB4824LD-15WR3	15W		24V/625mA	87/89	

Dimension LxWxH: 50.80 x 25.40 x 11.80(mm)

VRA_LD-20WR3

Selection Guide

Part No.	Power	Input voltage range	Output voltage/current (Vo/Io)	Eff(%) (min./typ.)	Isolation (VDC)
VRA1215LD-20WR3	20W	9-18 (12VDC)	±15V/±667mA	85/87	1500
VRA1224LD-20WR3	20W		±24V/±417mA	86/88	
VRA2405LD-20WR3	20W	18-36 (24VDC)	±5V/±2000mA	82/84	1500
VRA2409LD-20WR3	20W		±9V/±1111mA	84/86	
VRA2412LD-20WR3	20W		±12V/±834mA	84/86	
VRA2415LD-20WR3	20W		±15V/±667mA	84/86	
VRA2424LD-20WR3	20W		±24V/±417mA	84/86	
VRA4805LD-20WR3	20W	36-75 (48VDC)	±5V/±2000mA	84/86	1500
VRA4812LD-20WR3	20W		±12V/±834mA	86/88	
VRA4815LD-20WR3	20W		±15V/±667mA	87/89	

Dimension LxWxH: 50.80 x 25.40 x 11.80(mm)

VRB_LD-20WR3

Selection Guide

Part No.	Power	Input voltage range	Output voltage/current (Vo/Io)	Eff(%) (min./typ.)	Isolation (VDC)
VRB121DLD-20WR3	20W	9-18 (12VDC)	110V/182mA	86/88	1500
VRB2403LD-20WR3	20W	18-36 (24VDC)	3.3V/5000mA	84/86	1500
VRB2405LD-20WR3	20W		5V/4000mA	88/90	
VRB2409LD-20WR3	20W		9V/2222mA	85/87	
VRB2412LD-20WR3	20W		12V/1667mA	85/87	
VRB2415LD-20WR3	20W		15V/1333mA	86/88	
VRB2424LD-20WR3	20W		24V/834mA	86/88	
VRB4803LD-20WR3	20W	36-75 (48VDC)	3.3V/5000mA	84/86	1500
VRB4805LD-20WR3	20W		5V/4000mA	88/90	
VRB4809LD-20WR3	20W		9V/2222mA	87/89	
VRB4812LD-20WR3	20W		12V/1667mA	87/89	
VRB4815LD-20WR3	20W		15V/1333mA	88/90	
VRB4824LD-20WR3	20W		24V/834mA	88/90	

Dimension LxWxH: 50.80 x 25.40 x 11.80(mm)

VRB_LD-30WR3

Selection Guide

Part No.	Power	Input voltage range	Output voltage/current (Vo/Io)	Eff(%) (min./typ.)	Isolation (VDC)
VRB2403LD-30WR3	30W	18-36 (24VDC)	3.3V/6000mA	83/85	1500
VRB2405LD-30WR3	30W		5V/6000mA	86/88	
VRB2409LD-30WR3	30W		9V/3333mA	84/86	
VRB2412LD-30WR3	30W		12V/2500mA	86/88	
VRB2415LD-30WR3	30W		15V/2000mA	88/90	
VRB2424LD-30WR3	30W		24V/1250mA	88/90	
VRB4803LD-30WR3	30W	36-75 (48VDC)	3.3V/6000mA	84/86	1500
VRB4805LD-30WR3	30W		5V/6000mA	86/88	
VRB4812LD-30WR3	30W		12V/2500mA	86/88	
VRB4815LD-30WR3	30W		15V/2000mA	87/89	
VRB4824LD-30WR3	30W		24V/1250mA	87/89	

Dimension LxWxH: 50.80 x 25.40 x 11.80(mm)

VRB_LD-40W(H)R3

Selection Guide

Part No.	Power	Input voltage range	Output voltage/current (Vo/Io)	Eff(%) (min./typ.)	Isolation (VDC)
VRB2405LD-40W(H)R3	40W	18-36 (24VDC)	5V/8000mA	86/88	1500
VRB2412LD-40W(H)R3	40W		12V/3333mA	88/90	
VRB2415LD-40W(H)R3	40W		15V/2667mA	90/91	
VRB2424LD-40W(H)R3	40W		24V/1667mA	90/91	
VRB4812LD-40W(H)R3	40W	36-75 (48VDC)	12V/3333mA	88/90	1500
VRB4815LD-40W(H)R3	40W		15V/2667mA	90/91	
VRB4824LD-40W(H)R3	40W		24V/1667mA	90/91	

VRB_LD-40WR3 Dimension LxWxH: 50.80 x 25.40 x 11.80(mm)
VRB_LD-40WHR3 Dimension LxWxH: 51.40 x 26.20 x 16.50(mm)

VRB_LD-50W(H)R3

Selection Guide

Part No.	Power	Input voltage range	Output voltage/current (Vo/Io)	Eff(%) (min./typ.)	Isolation (VDC)
VRB2403LD-50W(H)R3	50W	18-36 (24VDC)	3.3V/10000mA	87/90	1500
VRB2405LD-50W(H)R3	50W		5V/10000mA	88/90	
VRB2412LD-50W(H)R3	50W		12V/4167mA	89/91	
VRB2415LD-50W(H)R3	50W		15V/3333mA	89/91	
VRB2424LD-50W(H)R3	50W		24V/2083mA	89/91	
VRB4803LD-50W(H)R3	50W	36-75 (48VDC)	3.3V/10000mA	89/91	1500
VRB4805LD-50W(H)R3	50W		5V/10000mA	89/91	
VRB4812LD-50W(H)R3	50W		12V/4167mA	90/92	
VRB4815LD-50W(H)R3	50W		15V/3333mA	90/92	
VRB4824LD-50W(H)R3	50W		24V/2083mA	90/92	

VRB_LD-50WR3 Dimension LxWxH: 50.80 x 25.40 x 11.80(mm)
VRB_LD-50WHR3 Dimension LxWxH: 51.40 x 26.20 x 16.50(mm)

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VRB_HB-350WR3

Selection Guide

Part No.	Power	Input voltage range	Output voltage/current (Vo/Io)	Eff(%) (min./typ.)	Isolation (VDC)
VRB2412HB-350WR3	350W	20-36 (24VDC)	12V/24A	83/86	1500
VRB2424HB-350WR3	350W		24V/14.5A	85/87	
VRB2428HB-350WR3	350W		28V/12.5A	87/89	
VRB2432HB-350WR3	350W		32V/11A	87/89	

Dimension LxWxH: 61.00 x 57.90 x 12.70(mm)

VRF_HB-400W(H)R3-N

Selection Guide

Part No.	Power	Input voltage range	Output voltage/current(Vo/Io)	Eff(%) (min./typ.)	Isolation (VDC)
VRF4812HB-400W(H)R3-N	400W	36-75 (48VDC)	12V/33000mA	92/94	2250
VRF4815HB-400W(H)R3-N	400W		15V/26500mA	93/95	
VRF4824HB-400W(H)R3-N	400W		24V/16500mA	93/95	
VRF4828HB-400W(H)R3-N	400W		28V/14200mA	92/94	

VRF_HB-400WR3-N Dimension LxWxH: 61.00 x 57.90 x 12.70(mm)
VRF_HB-400WHR3-N Dimension LxWxH: 62.00 x 58.00 x 30.70(mm)

Notes

1. The series (VRB_LD-40W(H)R3, VRB_LD-50W(H)R3, VRF_HB-400W(H)R3-N) with suffix "H" for heat sink mounting. We recommend to choose modules with a heat sink for enhanced heat dissipation and applications with extreme temperature requirements; "A2S" suffix for chassis mounting and "A4S" suffix for Din-Rail mounting.
2. "N" means negative logic.

4:1 Wide Input with Encapsulating Package (SIP) UR Series (3-10W)

Features

- Widely used in communication, instrumentation, industrial electronic applications
- Operating temperature range: -40℃ to +85℃ / -40℃ to +105℃
- Input under-voltage, output short-circuit, over-current protections
- Remote ON/OFF
- Low ripple & noise
- EN62368 approved

URD_S-3WR3

Selection Guide

Part No.	Power	Input voltage range	Output voltage/current(Vo1/Io1)	Output voltage/current(Vo2/Io2)	Eff(%) (min./typ.)	Isolation (VDC)
URD480505S-3WR3	3W	18-75 (48VDC)	5V/300mA	5V/300mA	81/83	3000
URD480512S-3WR3	3W		5V/300mA	12V/125mA	85/87	
URD480524S-3WR3	3W		5V/300mA	24V/63mA	85/87	

Dimension LxWxH: 27.40 x 9.50 x 12.00(mm)

URA_S-6WR3

Selection Guide

Part No.	Power	Input voltage range	Output voltage/current (Vo/Io)	Eff(%) (min./typ.)	Isolation (VDC)
URA2405S-6WR3	6W	9-36 (24VDC)	±5V/±600mA	78/80	1500
URA2409S-6WR3	6W		±9V/±333mA	81/83	
URA2412S-6WR3	6W		±12V/±250mA	81/83	
URA2415S-6WR3	6W		±15V/±200mA	81/83	
URA2424S-6WR3	6W		±24V/±125mA	80/82	

Dimension LxWxH: 22.00 x 9.50 x 12.00(mm)

URB_S-6WR3

Selection Guide

Part No.	Power	Input voltage range	Output voltage/current (Vo/Io)	Eff(%) (min./typ.)	Isolation (VDC)
URB2403S-6WR3	6W	9-36 (24VDC)	3.3V/1350mA	76/78	1600
URB2405S-6WR3	6W		5V/1200mA	80/82	
URB2409S-6WR3	6W		9V/667mA	82/84	
URB2412S-6WR3	6W		12V/500mA	84/86	
URB2415S-6WR3	6W		15V/400mA	85/87	
URB2424S-6WR3	6W		24V/250mA	83/85	

Dimension LxWxH: 22.00 x 9.50 x 12.00(mm)

URB_S-10WR3

Selection Guide

Part No.	Power	Input voltage range	Output voltage/current (Vo/Io)	Eff(%) (min./typ.)	Isolation (VDC)
URB2403S-10WR3	10W	9-36 (24VDC)	3.3V/2400mA	83/85	1500
URB2405S-10WR3	10W		5V/2000mA	86/88	
URB2409S-10WR3	10W		9V/1111mA	86/88	
URB2412S-10WR3	10W		12V/833mA	86/88	
URB2415S-10WR3	10W		15V/667mA	86/88	
URB2424S-10WR3	10W		24V/417mA	86/88	

Dimension LxWxH: 22.00 x 9.50 x 12.00(mm)

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4:1 Wide Input with Encapsulating Package (DIP) UR Series (6-20W)

Features

- Suitable for DCS, battery-powered device, communication, distributed power system, D/A hybrid system, RTU and industrial robot system applications
- Operating temperature range: -40℃ to +85℃ / -40℃ to +105℃
- No-load power consumption as low as 0.12W
- Input under-voltage, output over-voltage, over-current, short-circuit protections
- IEC/UL/EN60950, EN62368 approved

URA_ZP-6WR3

Selection Guide

Part No.	Power	Input voltage range	Output voltage/current (Vo/Io)	Eff(%) (min./typ.)	Isolation (VDC)
URA2405ZP-6WR3	6W	9-36 (24VDC)	±5V/±600mA	80/82	1500
URA2409ZP-6WR3	6W		±9V/±333mA	82/84	
URA2412ZP-6WR3	6W		±12V/±250mA	83/85	
URA2415ZP-6WR3	6W		±15V/±200mA	86/88	
URA2424ZP-6WR3	6W		±24V/±125mA	84/86	
URA4805ZP-6WR3	6W	18-75 (48VDC)	±5V/±600mA	81/83	1500
URA4812ZP-6WR3	6W		±12V/±250mA	85/87	
URA4815ZP-6WR3	6W		±15V/±200mA	86/88	

Dimension LxWxH: 32.00 x 20.00 x 10.80(mm)

URB_ZP-10WR3

Selection Guide

Part No.	Power	Input voltage range	Output voltage/current (Vo/Io)	Eff(%) (min./typ.)	Isolation (VDC)
URB2403ZP-10WR3	10W	9-36 (24VDC)	3.3V/2400mA	85/87	1500
URB2405ZP-10WR3	10W		5V/2000mA	86/88	
URB2412ZP-10WR3	10W		12V/833mA	85/87	
URB2415ZP-10WR3	10W		15V/667mA	85/87	
URB2424ZP-10WR3	10W		24V/416mA	86/88	
URB4803ZP-10WR3	10W	18-75 (48VDC)	3.3V/2400mA	84/86	1500
URB4805ZP-10WR3	10W		5V/2000mA	85/87	
URB4812ZP-10WR3	10W		12V/833mA	85/87	
URB4815ZP-10WR3	10W		15V/667mA	85/87	
URB4824ZP-10WR3	10W		24V/416mA	86/88	

Dimension LxWxH: 32.00 x 20.00 x 10.80(mm)

URB_ZP-6WR3

Selection Guide

Part No.	Power	Input voltage range	Output voltage/current (Vo/Io)	Eff(%) (min./typ.)	Isolation (VDC)
URB2403ZP-6WR3	6W	9-36 (24VDC)	3.3V/1500mA	75/77	1500
URB2405ZP-6WR3	6W		5V/1200mA	80/82	
URB2409ZP-6WR3	6W		9V/667mA	81/83	
URB2412ZP-6WR3	6W		12V/500mA	83/85	
URB2415ZP-6WR3	6W		15V/400mA	84/86	
URB2424ZP-6WR3	6W		24V/250mA	84/86	
URB4803ZP-6WR3	6W	18-75 (48VDC)	3.3V/1500mA	78/80	1500
URB4805ZP-6WR3	6W		5V/1200mA	82/84	
URB4809ZP-6WR3	6W		9V/667mA	83/85	
URB4812ZP-6WR3	6W		12V/500mA	85/87	
URB4815ZP-6WR3	6W		15V/400mA	86/88	
URB4824ZP-6WR3	6W		24V/250mA	85/87	

Dimension LxWxH: 32.00 x 20.00 x 10.80(mm)

URE_LP-10WR3

Selection Guide

Part No.	Power	Input voltage range	Output voltage/current (Vo/Io)	Eff(%) (min./typ.)	Isolation (VDC)
URE2405LP-10WR3	10W	9-36 (24VDC)	±5V/±1000mA	79/81	3000
URE2412LP-10WR3	10W		±12V/±416mA	83/85	
URE2415LP-10WR3	10W		±15V/±333mA	85/87	
URE4805LP-10WR3	10W	18-75 (48VDC)	±5V/±1000mA	80/82	3000
URE4812LP-10WR3	10W		±12V/±416mA	84/86	
URE4815LP-10WR3	10W		±15V/±333mA	85/87	

Dimension LxWxH: 51.50 x 26.50 x 12.00(mm)

URF_LP-10WR3

Selection Guide

Part No.	Power	Input voltage range	Output voltage/current (Vo/Io)	Eff(%) (min./typ.)	Isolation (VDC)
URF2403LP-10WR3	10W	9-36 (24VDC)	3.3V/2400mA	76/78	3000
URF2405LP-10WR3	10W		5V/2000mA	80/82	
URF2409LP-10WR3	10W		9V/1111mA	82/84	
URF2412LP-10WR3	10W		12V/833mA	82/84	
URF2415LP-10WR3	10W		15V/667mA	85/87	
URF2424LP-10WR3	10W	18-75 (48VDC)	24V/416mA	84/86	3000
URF4803LP-10WR3	10W		3.3V/2400mA	77/79	
URF4805LP-10WR3	10W		5V/2000mA	80/82	
URF4812LP-10WR3	10W		12V/833mA	84/86	
URF4815LP-10WR3	10W		15V/667mA	85/87	
URF4824LP-10WR3	10W		24V/416mA	85/87	

Dimension LxWxH: 51.50 x 26.50 x 12.00(mm)

URA_ZP-10WR3

Selection Guide

Part No.	Power	Input voltage range	Output voltage/current (Vo/Io)	Eff(%) (min./typ.)	Isolation (VDC)
URA2405ZP-10WR3	10W	9-36 (24VDC)	±5V/±1000mA	81/83	1500
URA2412ZP-10WR3	10W		±12V/±416mA	85/87	
URA2415ZP-10WR3	10W		±15V/±333mA	85/87	
URA4805ZP-10WR3	10W	18-75 (48VDC)	±5V/±1000mA	81/83	1500
URA4812ZP-10WR3	10W		±12V/±416mA	85/87	
URA4815ZP-10WR3	10W		±15V/±333mA	85/87	

Dimension LxWxH: 32.00 x 20.00 x 10.80(mm)

Notes

1. Series with suffix "LP" are 2"1 packaged with plastic casing. And for detailed dimension please refer to the illustration.
2. Use "A2S" suffix for chassis mounting and "A4S" suffix for DIN rail mounting.
3. The A2S and A4S Model's start-up and minimum input voltages are increased by 1VDC due to the input reverse polarity protection circuit.
4. If the application requires higher performance for EMC, our matching EMC auxiliary devices such as FC-AX3D, FC-B02D, FI-B03D and FT-BX1D are available. For more information, please contact our sales.

URF_LP-20WR3

Selection Guide

Part No.	Power	Input voltage range	Output voltage/current (Vo/Io)	Eff(%) (min./typ.)	Isolation (VDC)
URF2403LP-20WR3	20W	9-36 (24VDC)	3.3V/5000mA	84/86	3000
URF2405LP-20WR3	20W		5V/4000mA	87/89	
URF2409LP-20WR3	20W		9V/2222mA	86/88	
URF2412LP-20WR3	20W		12V/1667mA	86/88	
URF2415LP-20WR3	20W		15V/1334mA	87/89	
URF2418LP-20WR3	20W		18V/1111mA	87/89	
URF2424LP-20WR3	20W		24V/833mA	87/89	
URF4803LP-20WR3	20W	18-75 (48VDC)	3.3V/5000mA	84/86	3000
URF4805LP-20WR3	20W		5V/4000mA	86/88	
URF4812LP-20WR3	20W		12V/1667mA	86/88	
URF4815LP-20WR3	20W		15V/1334mA	87/89	
URF4824LP-20WR3	20W		24V/833mA	87/89	

Dimension LxWxH: 51.50 x 26.50 x 12.00(mm)

URH_LP-20WR3

Selection Guide

Part No.	Power	Input voltage range	Output voltage/current (Vo/Io)	Eff(%) (min./typ.)	Isolation (VAC)
URH2403LP-20WR3	20W	9-36 (24VDC)	3.3V/5000mA	83/85	5000
URH2405LP-20WR3	20W		5V/4000mA	84/86	
URH2412LP-20WR3	20W		12V/1666mA	84/86	
URH2415LP-20WR3	20W		15V/1333mA	85/87	
URH2424LP-20WR3	20W		24V/833mA	87/89	
URH4803LP-20WR3	20W	18-75 (48VDC)	3.3V/5000mA	84/86	5000
URH4805LP-20WR3	20W		5V/4000mA	85/87	
URH4812LP-20WR3	20W		12V/1666mA	85/87	
URH4815LP-20WR3	20W		15V/1333mA	86/88	
URH4824LP-20WR3	20W		24V/833mA	87/89	

Dimension LxWxH: 51.50 x 26.50 x 12.00(mm)

4:1 Wide Input with Encapsulating Package (DIP) UR Series (6W)

Features

- Suitable for industrial control, electric power, instrumentation, communication applications
- Operating temperature range: -40℃ to +85℃
- No-load power consumption as low as 0.12W
- Input under-voltage, output over-voltage, over-current, short-circuit protections
- Meet CISPR32/EN55032 CLASS A
- IEC/UL/EN60950, EN62368 approved
- Meets EN50155 standard

URE_P-6WR3

Selection Guide

Part No.	Power	Input voltage range	Output voltage/current (Vo/Io)	Eff(%) (min./typ.)	Isolation (VDC)
URE2405P-6WR3	6W	9-36 (24VDC)	±5V/±600mA	78/80	3000
URE2412P-6WR3	6W		±12V/±250mA	81/83	
URE2415P-6WR3	6W		±15V/±200mA	82/84	

Dimension LxWxH: 31.60 x 20.30 x 10.20(mm)

URF_P-6WR3

Selection Guide

Part No.	Power	Input voltage range	Output voltage/current (Vo/Io)	Eff(%) (min./typ.)	Isolation (VDC)
URF2403P-6WR3	6W	9-36 (24VDC)	3.3V/1500mA	76/78	3000
URF2405P-6WR3	6W		5V/1200mA	79/81	
URF2409P-6WR3	6W		9V/667mA	82/84	
URF2412P-6WR3	6W		12V/500mA	82/84	
URF2415P-6WR3	6W		15V/400mA	84/86	
URF2424P-6WR3	6W		24V/250mA	84/86	
URF2425P-6WR3	6W		25V/240mA	83/85	
URF4803P-6WR3	6W	18-75 (48VDC)	3.3V/1500mA	77/79	3000
URF4805P-6WR3	6W		5V/1200mA	81/83	
URF4812P-6WR3	6W		12V/500mA	85/87	
URF4815P-6WR3	6W		15V/400mA	86/88	
URF4824P-6WR3	6W		24V/250mA	85/87	

Dimension LxWxH: 31.60 x 20.30 x 10.20(mm)

URH_P-6WR3

Selection Guide

Part No.	Power	Input voltage range	Output voltage/current (Vo/Io)	Eff(%) (min./typ.)	Isolation (VDC)
URH2405P-6WR3	6W	9-36 (24VDC)	5V/1200mA	78/80	6000
URH2406P-6WR3	6W		6V/1000mA	79/81	
URH2409P-6WR3	6W		9V/667mA	81/83	
URH2412P-6WR3	6W		12V/500mA	82/84	
URH2415P-6WR3	6W		15V/400mA	83/85	
URH2418P-6WR3	6W		18V/333mA	83/85	
URH2424P-6WR3	6W		24V/250mA	82/84	
URH4805P-6WR3	6W	18-75 (48VDC)	5V/1200mA	79/81	6000
URH4809P-6WR3	6W		9V/667mA	81/83	
URH4812P-6WR3	6W		12V/500mA	82/84	
URH4815P-6WR3	6W		15V/400mA	83/85	
URH4824P-6WR3	6W		24V/250mA	82/84	

Dimension LxWxH: 31.60 x 20.30 x 10.20(mm)

Notes

1. The series marked "P" are with industrial standard DIP24 packaged with plastic case.
2. If the application requires higher performance for EMC, our matching EMC auxiliary devices such as FC-AX3D, FC-B02D, FI-B03D and FT-BX1D are available. For more information, please contact our sales.

4:1 Wide Input with Encapsulating Package (DIP)

UR Series (6-40W)

Features

- Suitable for industrial control, electric power, instrumentation, communication applications
- Operating temperature range: -40℃ to +85℃ / -40℃ to +105℃
- No-load power consumption as low as 0.12W
- Input under-voltage, output over-voltage, over-current, short-circuit protections
- Meet CISPR32/EN55032 CLASS A
- IEC/UL/EN60950, EN62368 approved

URA_YMD-6WR3*

Selection Guide

Part No.	Power	Input voltage range	Output voltage/current (Vo/Io)	Eff(%) (min./typ.)	Isolation (VDC)
URA2405YMD-6WR3	6W	9-36 (24VDC)	±5V/±600mA	81/83	1500
URA2412YMD-6WR3	6W		±12V/±250mA	84/87	
URA2415YMD-6WR3	6W		±15V/±200mA	83/85	
URA2424YMD-6WR3	6W		±24V/±125mA	85/87	
URA4805YMD-6WR3	6W	18-75 (48VDC)	±5V/±600mA	81/83	1500
URA4812YMD-6WR3	6W		±12V/±250mA	85/87	
URA4815YMD-6WR3	6W		±15V/±200mA	86/88	

Dimension LxWxH: 25.40 x 25.40 x 11.70(mm)

URB_YMD-6WR3*

Selection Guide

Part No.	Power	Input voltage range	Output voltage/current (Vo/Io)	Eff(%) (min./typ.)	Isolation (VDC)
URB2403YMD-6WR3	6W	9-36 (24VDC)	3.3V/1500mA	75/77	1500
URB2405YMD-6WR3	6W		5V/1200mA	80/83	
URB2409YMD-6WR3	6W		9V/667mA	82/84	
URB2412YMD-6WR3	6W		12V/500mA	83/85	
URB2415YMD-6WR3	6W		15V/400mA	84/86	
URB2424YMD-6WR3	6W		24V/250mA	84/86	
URB4803YMD-6WR3	6W	18-75 (48VDC)	3.3V/1500mA	77/79	1500
URB4805YMD-6WR3	6W		5V/1200mA	81/83	
URB4812YMD-6WR3	6W		12V/500mA	85/87	
URB4815YMD-6WR3	6W		15V/400mA	86/88	
URB4824YMD-6WR3	6W		24V/250mA	86/88	

Dimension LxWxH: 25.40 x 25.40 x 11.70(mm)

Note

Products marked with "*" feature no Ctrl function.

URA_YMD-10WR3

Selection Guide

Part No.	Power	Input voltage range	Output voltage/current (Vo/Io)	Eff(%) (min./typ.)	Isolation (VDC)
URA2405YMD-10WR3	10W	9-36 (24VDC)	±5V/±1000mA	81/83	1500
URA2409YMD-10WR3	10W		±9V/±555mA	84/86	
URA2412YMD-10WR3	10W		±12V/±416mA	85/87	
URA2415YMD-10WR3	10W		±15V/±333mA	85/87	
URA2424YMD-10WR3	10W		±24V/±208mA	85/87	
URA4805YMD-10WR3	10W	18-75 (48VDC)	±5V/±1000mA	81/83	1500
URA4812YMD-10WR3	10W		±12V/±416mA	85/87	
URA4815YMD-10WR3	10W		±15V/±333mA	85/87	
URA4824YMD-10WR3	10W		±24V/±208mA	85/87	

Dimension LxWxH: 25.40 x 25.40 x 11.70(mm)

URB_YMD-10WR3

Selection Guide

Part No.	Power	Input voltage range	Output voltage/current (Vo/Io)	Eff(%) (min./typ.)	Isolation (VDC)
URB2403YMD-10WR3	10W	9-36 (24VDC)	3.3V/2400mA	76/78	1500
URB2405YMD-10WR3	10W		5V/2000mA	81/83	
URB2409YMD-10WR3	10W		9V/1111mA	83/85	
URB2412YMD-10WR3	10W		12V/833mA	84/86	
URB2415YMD-10WR3	10W		15V/667mA	84/86	
URB2424YMD-10WR3	10W		24V/416mA	86/88	
URB4803YMD-10WR3	10W	18-75 (48VDC)	3.3V/2400mA	77/79	1500
URB4805YMD-10WR3	10W		5V/2000mA	81/83	
URB4812YMD-10WR3	10W		12V/833mA	85/87	
URB4815YMD-10WR3	10W		15V/667mA	85/87	
URB4824YMD-10WR3	10W		24V/416mA	86/88	

Dimension LxWxH: 25.40 x 25.40 x 11.70(mm)

URD_YMD-10WR3

Selection Guide

Part No.	Power	Input voltage range	Output voltage/current(Vo1/Io1)	Output voltage/current(Vo2/Io2)	Eff(%) (min./typ.)	Isolation (VDC)
URD480505YMD-10WR3	10W	18-75 (48VDC)	5V/1000mA	5V/1000mA	81/84	1500
URD480512YMD-10WR3	10W		5V/1000mA	12V/417mA	82/84	
URD480524YMD-10WR3	10W		5V/1000mA	24V/209mA	82/84	

Dimension LxWxH: 25.40 x 25.40 x 11.70(mm)

URA_YMD-15WR3

Selection Guide

Part No.	Power	Input voltage range	Output voltage/current (Vo/Io)	Eff(%) (min./typ.)	Isolation (VDC)
URA2405YMD-15WR3	15W	9-36 (24VDC)	±5V/±1500mA	85/87	1500
URA2412YMD-15WR3	15W		±12V/±625mA	88/90	
URA2415YMD-15WR3	15W		±15V/±500mA	88/90	
URA2424YMD-15WR3	15W		±24V/±312mA	87/89	
URA4805YMD-15WR3	15W	18-75 (48VDC)	±5V/±1500mA	84/86	1500
URA4812YMD-15WR3	15W		±12V/±625mA	87/89	
URA4815YMD-15WR3	15W		±15V/±500mA	87/89	
URA4824YMD-15WR3	15W		±24V/±312mA	88/90	

Dimension LxWxH: 25.40 x 25.40 x 11.70(mm)

URB_YMD-15WR3

Selection Guide

Part No.	Power	Input voltage range	Output voltage/current (Vo/Io)	Eff(%) (min./typ.)	Isolation (VDC)
URB2403YMD-15WR3	15W	9-36 (24VDC)	3.3V/4000mA	86/88	1500
URB2405YMD-15WR3	15W		5V/3000mA	88/90	
URB2412YMD-15WR3	15W		12V/1250mA	88/90	
URB2415YMD-15WR3	15W		15V/1000mA	89/91	
URB2424YMD-15WR3	15W		24V/625mA	89/91	
URB4803YMD-15WR3	15W	18-75 (48VDC)	3.3V/4000mA	86/88	1500
URB4805YMD-15WR3	15W		5V/3000mA	88/90	
URB4812YMD-15WR3	15W		12V/1250mA	89/91	
URB4815YMD-15WR3	15W		15V/1000mA	89/91	
URB4824YMD-15WR3	15W		24V/625mA	89/91	

Dimension LxWxH: 25.40 x 25.40 x 11.70(mm)

URA_YMD-20WR3

Selection Guide

Part No.	Power	Input voltage range	Output voltage/current (Vo/Io)	Eff(%) (min./typ.)	Isolation (VDC)
URA2405YMD-20WR3	20W	9-36 (24VDC)	±5V/±2000mA	84/86	1500
URA2412YMD-20WR3	20W		±12V/±833mA	88/90	
URA2415YMD-20WR3	20W		±15V/±667mA	88/90	
URA2424YMD-20WR3	20W		±24V/±417mA	86/88	
URA4805YMD-20WR3	20W	18-75 (48VDC)	±5V/±2000mA	84/86	1500
URA4812YMD-20WR3	20W		±12V/±833mA	87/89	
URA4815YMD-20WR3	20W		±15V/±667mA	87/89	
URA4824YMD-20WR3	20W		±24V/±417mA	88/90	

Dimension LxWxH: 25.40 x 25.40 x 11.70(mm)

URB_YMD-20WR3

Selection Guide

Part No.	Power	Input voltage range	Output voltage/current (Vo/Io)	Eff(%) (min./typ.)	Isolation (VDC)
URB2403YMD-20WR3	20W	9-36 (24VDC)	3.3V/5000mA	86/88	1500
URB2405YMD-20WR3	20W		5V/4000mA	88/90	
URB2406YMD-20WR3	20W		6V/3333mA	87/89	
URB2412YMD-20WR3	20W		12V/1667mA	88/90	
URB2415YMD-20WR3	20W		15V/1333mA	87/89	
URB2424YMD-20WR3	20W		24V/833mA	89/91	
URB4803YMD-20WR3	20W	18-75 (48VDC)	3.3V/5000mA	86/88	1500
URB4805YMD-20WR3	20W		5V/4000mA	88/90	
URB4812YMD-20WR3	20W		12V/1667mA	89/91	
URB4815YMD-20WR3	20W		15V/1333mA	89/91	
URB4824YMD-20WR3	20W		24V/833mA	89/91	

Dimension LxWxH: 25.40 x 25.40 x 11.70(mm)

URA_YMD-30WR3

Selection Guide

Part No.	Power	Input voltage range	Output voltage/current (Vo/Io)	Eff(%) (min./typ.)	Isolation (VDC)
URA4812YMD-30WR3	30W	18-75 (48VDC)	±12V/±1250mA	86/88	1500
URA4815YMD-30WR3	30W		±15V/±1000mA	86/88	
URA4824YMD-30WR3	30W		±24V/±625mA	86/88	

Dimension LxWxH: 25.40 x 25.40 x 11.70(mm)

URB_YMD-30WR3

Selection Guide

Part No.	Power	Input voltage range	Output voltage/current (Vo/Io)	Eff(%) (min./typ.)	Isolation (VDC)
URB4805YMD-30WR3	30W	18-75 (48VDC)	5V/6000mA	86/88	1500
URB4812YMD-30WR3	30W		12V/2500mA	86/88	
URB4815YMD-30WR3	30W		15V/2000mA	86/88	
URB4824YMD-30WR3	30W		24V/1250mA	86/88	

Dimension LxWxH: 25.40 x 25.40 x 11.70(mm)

URB_YMD-40WR3

Selection Guide

Part No.	Power	Input voltage range	Output voltage/current (Vo/Io)	Eff(%) (min./typ.)	Isolation (VDC)
URB2403YMD-40WR3	40W	9-36 (24VDC)	3.3V/10000mA	87/89.5	1500
URB2405YMD-40WR3	40W		5V/8000mA	88/90	
URB2412YMD-40WR3	40W		12V/3333mA	89/91.2	
URB2415YMD-40WR3	40W		15V/2667mA	89/91.5	
URB2424YMD-40WR3	40W		24V/1667mA	88/90.1	
URB2428YMD-40WR3	40W		28V/1429mA	88/90.1	
URB4803YMD-40WR3	40W	18-75 (48VDC)	3.3V/10000mA	87/89	1500
URB4805YMD-40WR3	40W		5V/8000mA	88/90	
URB4812YMD-40WR3	40W		12V/3333mA	89/91	
URB4815YMD-40WR3	40W		15V/2667mA	89/91	

Dimension LxWxH: 25.40 x 25.40 x 11.70(mm)

Notes

1. Series with suffix "YMD" are 1*1 packaged with aluminum alloy casing. And for detailed dimension please refer to the illustration.
2. Use "A2S" suffix for chassis mounting and "A4S" suffix for DIN-Rail mounting.
3. The A2S and A4S Model's start-up and minimum input voltages are increased by 1VDC due to the input reverse polarity protection circuit.
4. If the application requires higher performance for EMC, our matching EMC auxiliary devices such as FC-AX3D, FC-B02D, FI-B03D and FT-BX1D are available. For more information, please contact our sales.

4:1 Wide Input with Encapsulating Package (DIP) UR Series (20-60W)

Features

- Suitable for industrial control, electric power, instrumentation, communication applications
- Operating temperature range: -40℃ to +85℃ / -40℃ to +105℃
- No-load power consumption as low as 0.14W
- Input under-voltage, output over-voltage, over-current, short-circuit protections
- Meet CISPR32/EN55032 CLASS A
- IEC/UL/EN60950, EN62368 approved

URA_LD-20WR3

Selection Guide

Part No.	Power	Input voltage range	Output voltage/current (Vo/Io)	Eff(%) (min./typ.)	Isolation (VDC)
URA2405LD-20WR3	20W	9-36 (24VDC)	±5V/±2000mA	84/86	1500
URA2409LD-20WR3	20W		±9V/±1111mA	86/88	
URA2412LD-20WR3	20W		±12V/±834mA	86/88	
URA2415LD-20WR3	20W		±15V/±667mA	86/88	
URA4805LD-20WR3	20W	18-75 (48VDC)	±5V/±2000mA	84/86	1500
URA4812LD-20WR3	20W		±12V/±834mA	86/88	
URA4815LD-20WR3	20W		±15V/±667mA	87/89	

Dimension LxWxH: 50.80 x 25.40 x 11.80(mm)

URB_LD-20WR3

Selection Guide

Part No.	Power	Input voltage range	Output voltage/current (Vo/Io)	Eff(%) (min./typ.)	Isolation (VDC)
URB2403LD-20WR3	20W	9-36 (24VDC)	3.3V/5000mA	84/86	1500
URB2405LD-20WR3	20W		5V/4000mA	86/88	
URB2409LD-20WR3	20W		9V/2222mA	86/88	
URB2412LD-20WR3	20W		12V/1667mA	87/89	
URB2415LD-20WR3	20W		15V/1333mA	88/90	
URB2424LD-20WR3	20W		24V/834mA	88/90	
URB4803LD-20WR3	20W	18-75 (48VDC)	3.3V/5000mA	84/86	1500
URB4805LD-20WR3	20W		5V/4000mA	84/86	
URB4809LD-20WR3	20W		9V/2222mA	87/89	
URB4812LD-20WR3	20W		12V/1667mA	85/87	
URB4815LD-20WR3	20W		15V/1333mA	88/90	
URB4824LD-20WR3	20W		24V/834mA	86/88	

Dimension LxWxH: 50.80 x 25.40 x 11.80(mm)

URD_LD-20WR3

Selection Guide

Part No.	Power	Input voltage range	Output voltage/ current(Vo1/Io1)	Output voltage/ current(Vo2/Io2)	Eff(%) (min./typ.)	Isolation (VDC)
URD480505LD-20WR3	20W	18-75 (48VDC)	5V/2000mA	5V/2000mA	82/84	3000
URD480512LD-20WR3	20W		5V/2000mA	12V/833mA	82/84	
URD480524LD-20WR3	20W		5V/2000mA	24V/417mA	82/84	

Dimension LxWxH: 50.80 x 25.40 x 11.80(mm)

URA_LD-30WR3

Selection Guide

Part No.	Power	Input voltage range	Output voltage/current (Vo/Io)	Eff(%) (min./typ.)	Isolation (VDC)
URA2405LD-30WR3	30W	9-36 (24VDC)	±5V/±3000mA	84/86	1500
URA2412LD-30WR3	30W		±12V/±1250mA	87/89	
URA2415LD-30WR3	30W		±15V/±1000mA	87/89	
URA2424LD-30WR3	30W		±24V/±625mA	87/89	
URA4805LD-30WR3	30W	18-75 (48VDC)	±5V/±3000mA	84/86	1500
URA4812LD-30WR3	30W		±12V/±1250mA	86/88	
URA4815LD-30WR3	30W		±15V/±1000mA	86/88	

Dimension LxWxH: 50.80 x 25.40 x 11.80(mm)

URB_LD-30WR3

Selection Guide

Part No.	Power	Input voltage range	Output voltage/current (Vo/Io)	Eff(%) (min./typ.)	Isolation (VDC)
URB2403LD-30WR3	30W	9-36 (24VDC)	3.3V/6000mA	83/85	1500
URB2405LD-30WR3	30W		5V/6000mA	84/86	
URB2409LD-30WR3	30W		9V/3333mA	86/88	
URB2412LD-30WR3	30W		12V/2500mA	88/90	
URB2415LD-30WR3	30W		15V/2000mA	88/90	
URB2424LD-30WR3	30W		24V/1250mA	88/90	
URB4803LD-30WR3	30W	18-75 (48VDC)	3.3V/6000mA	84/86	1500
URB4805LD-30WR3	30W		5V/6000mA	85/87	
URB4812LD-30WR3	30W		12V/2500mA	86/88	
URB4815LD-30WR3	30W		15V/2000mA	87/89	
URB4824LD-30WR3	30W		24V/1250mA	85/87	

Dimension LxWxH: 50.80 x 25.40 x 11.80(mm)

URD_D-30WR3

Selection Guide

Part No.	Power	Input voltage range	Output voltage/ current(Vo1/Io1)	Output voltage/ current(Vo2/Io2)	Eff(%) (min./typ.)	Isolation (VAC)
URD480524D-30WR3	30W	18-75 (48VDC)	5V/4000mA	24V/417mA	82/84	3000
URD480924D-30WR3	30W		9V/1667mA	24V/625mA	82/84	

Dimension LxWxH: 70.00 x 48.00 x 26.00(mm)

URB_LD-40WR3

Input: 24V Input: 48V

Selection Guide

Part No.	Power	Input voltage range	Output voltage/current (Vo/Io)	Eff(%) (min./typ.)	Isolation (VDC)
URB2405LD-40WR3	40W	9-36 (24VDC)	5V/8000mA	89/91	1500
URB2412LD-40WR3	40W		12V/3333mA	90/92	
URB2415LD-40WR3	40W		15V/2666mA	91/93	
URB2424LD-40WR3	40W		24V/1666mA	90/92	
URB4805LD-40WR3	40W	18-75 (48VDC)	5V/8000mA	89/91	1600
URB4812LD-40WR3	40W		12V/3333mA	90/92	
URB4815LD-40WR3	40W		15V/2667mA	90/92	
URB4824LD-40WR3	40W		24V/1667mA	90/92	

Dimension LxWxH: 50.80 x 25.40 x 11.80(mm)

Notes

1. The series with suffix "H" are with heat sink mounting, suffix "A2S"are with chassis mounting and suffix "A4S" are with DIN-Rail mounting. We recommend to choose modules with a heat sink for enhanced heat dissipation and applications with extreme temperature requirements.
2. The minimum input voltage and starting voltage of A2S and A4S Model are 1VDC higher than those of DIP package due to input reverse polarity protection function.

• This catalog is a collection of the latest products. For more information, please contact our sales team.

URA_LD-60WR3

Selection Guide

Part No.	Power	Input voltage range	Output voltage/current (Vo/Io)	Eff(%) (min./typ.)	Isolation (VDC)
URA2412LD-60WR3	60W	9-36 (24VDC)	±12V/±2500mA	89/90.5	2250
URA2415LD-60WR3	60W		±15V/±2000mA	89/91.5	
URA2424LD-60WR3	60W		±24V/±1250mA	89/91	

Dimension LxWxH: 50.80 x 25.40 x 11.80(mm)

URB_LD-60WR3

Selection Guide

Part No.	Power	Input voltage range	Output voltage/current (Vo/Io)	Eff(%) (min./typ.)	Isolation (VDC)
URB2405LD-60WR3	60W	9-36 (24VDC)	5V/12000mA	90/92	1500
URB2412LD-60WR3	60W		12V/5000mA	91/93	
URB2415LD-60WR3	60W		15V/4000mA	91/93.3	
URB2424LD-60WR3	60W		24V/2500mA	91/93	

Dimension LxWxH: 50.80 x 25.40 x 11.80(mm)

4:1 Wide Input with Encapsulating Package (DIP) UR Series (75-200W)

Features

- Isolation voltage: 2250VDC
- Operating temperature range: -40℃ to +85℃
- Efficiency up to 93%
- Input under-voltage, output over-voltage, over-current, short-circuit, over-temperature protections
- Five-sided metal shielding package
- International standard 1/4 brick
- EN62368 approved

"F" Package with aluminum base

"H" Horizontal package with heat sink

"A5" Chassis Mounting

URF_QB-75WR3

Selection Guide

Part No.	Power	Input voltage range	Output voltage/current (Vo/Io)	Eff(%) (min./typ.)	Isolation (VDC)
URF4805QB-75WR3	75W	18-75 (48VDC)	5V/15000mA	89/91	2250
URF4812QB-75WR3	75W		12V/6250mA	90/92	
URF4815QB-75WR3	75W		15V/5000mA	91/93	
URF4824QB-75WR3	75W		24V/3130mA	90/92	
URF4848QB-75WR3	75W		48V/1560mA	90/92	

Dimension LxWxH: 61.80 x 40.20 x 12.70(mm)

URF_QB-150WR3

Selection Guide

Part No.	Power	Input voltage range	Output voltage/current (Vo/Io)	Eff(%) (min./typ.)	Isolation (VDC)
URF4805QB-150WR3	150W	18-75 (48VDC)	5V/30000mA	86/88	2250
URF4812QB-150WR3	150W		12V/12500mA	89/91	
URF4815QB-150WR3	150W		15V/10000mA	87/89	
URF4824QB-150WR3	150W		24V/6250mA	89/91	
URF4848QB-150WR3	150W		48V/3130mA	89/91	

Dimension LxWxH: 61.80 x 40.20 x 12.70(mm)

URF_QB-100WR3

Input: 24V Input: 48V

Selection Guide

Part No.	Power	Input voltage range	Output voltage/current (Vo/Io)	Eff(%) (min./typ.)	Isolation (VDC)
URF2405QB-100WR3	100W	9-36 (24VDC)	5V/20000mA	87/89	2250
URF2412QB-100WR3	100W		12V/8300mA	88/90	
URF2415QB-100WR3	100W		15V/6700mA	88/90	
URF2424QB-100WR3	100W		24V/4200mA	88/90	
URF2428QB-100WR3	100W		28V/3600mA	88/90	
URF2448QB-100WR3	100W		48V/2100mA	88/90	
URF4803QB-100WR3	100W	18-75 (48VDC)	3.3V/22700mA	86/88	2250
URF4805QB-100WR3	100W		5V/20000mA	89/91	
URF4812QB-100WR3	100W		12V/8300mA	90/92	
URF4815QB-100WR3	100W		15V/6700mA	91/93	
URF4824QB-100WR3	100W		24V/4200mA	90/92	
URF4848QB-100WR3	100W		48V/2100mA	90/92	

Dimension LxWxH: 61.80 x 40.20 x 12.70(mm)

URF_QB-200WR3

Selection Guide

Part No.	Power	Input voltage range	Output voltage/current (Vo/Io)	Eff(%) (min./typ.)	Isolation (VDC)
URF4805QB-200WR3	200W	18-75 (48VDC)	5V/40000mA	86/88	2250
URF4812QB-200WR3	200W		12V/16700mA	89/91	
URF4815QB-200WR3	200W		15V/13300mA	87/89	
URF4824QB-200WR3	200W		24V/8400mA	89/91	
URF4836QB-200WR3	200W		36V/5560mA	86/88	
URF4842QB-200WR3	200W		42.5V/5000mA	88/90	
URF4848QB-200WR3	200W		48V/4200mA	89/91	

Dimension LxWxH: 61.80 x 40.20 x 12.70(mm)

Notes

1. Use "F" suffix for products with aluminum base, "H" suffix for heat sink mounting. We recommend choosing modules with a heat sink for applications that require high requirements for temperature.
2. "A5": Chassis Mounting.
3. "A6": DIN rail Mounting.

• This catalog is for reference only, not being the judgment basis for the use. For detailed datasheets please visit our website: www.mornsun-power.com.

7mm Ultra-thin Wide Input (DIP/SMD) | WR Series (1-3W)

Features

- Isolation voltage: 1500VDC
- Operating temperature range: -40℃ to +85℃
- Suitable for communication, instrumentation, industrial electronics applications
- Ultra-small DIP/SMD package
- Continuous output short-circuit protection
- EN62368 approved, meets UL62368 standard

WRA_ST/SD-1WR2

Selection Guide

Part No.	Power	Input voltage range	Output voltage/ current(Vo/Io)	Eff(%) (min./typ.)	Isolation (VDC)
WRA1205ST/SD-1WR2	1W	9-18 (12VDC)	± 5V/ ± 100mA	75/77	1500
WRA1209ST/SD-1WR2	1W		± 9V/ ± 56mA	78/80	
WRA1212ST/SD-1WR2	1W		± 12V/ ± 42mA	78/80	
WRA1215ST/SD-1WR2	1W		± 15V/ ± 33mA	75/77	
WRA2405ST/SD-1WR2	1W	18-36 (24VDC)	± 5V/ ± 100mA	75/77	1500
WRA2409ST/SD-1WR2	1W		± 9V/ ± 56mA	75/77	
WRA2412ST/SD-1WR2	1W		± 12V/ ± 42mA	75/77	
WRA2415ST/SD-1WR2	1W		± 15V/ ± 33mA	75/77	

WRA_ST-1WR2 Dimension LxWxH: 15.00 x 14.00 x 9.10(mm)
WRA_SD-1WR2 Dimension LxWxH: 14.00 x 14.00 x 9.00(mm)

WRA_ST/SD-3WR2

Selection Guide

Part No.	Power	Input voltage range	Output voltage/ current(Vo/Io)	Eff(%) (min./typ.)	Isolation (VDC)
WRA1205ST/SD-3WR2	3W	9-18 (12VDC)	± 5V/ ± 300mA	76/78	1500
WRA1209ST/SD-3WR2	3W		± 9V/ ± 167mA	76/78	
WRA1212ST/SD-3WR2	3W		± 12V/ ± 125mA	77/79	
WRA1215ST/SD-3WR2	3W		± 15V/ ± 100mA	77/79	
WRA2405ST/SD-3WR2	3W	18-36 (24VDC)	± 5V/ ± 300mA	76/78	1500
WRA2409ST/SD-3WR2	3W		± 9V/ ± 167mA	78/80	
WRA2412ST/SD-3WR2	3W		± 12V/ ± 125mA	80/82	
WRA2415ST/SD-3WR2	3W		± 15V/ ± 100mA	79/81	

WRA_ST-3WR2 Dimension LxWxH: 15.00 x 14.00 x 9.10(mm)
WRA_SD-3WR2 Dimension LxWxH: 14.00 x 14.00 x 9.00(mm)

WRB_ST/SD-1WR2

Selection Guide

Part No.	Power	Input voltage range	Output voltage/ current(Vo/Io)	Eff(%) (min./typ.)	Isolation (VDC)
WRB1203ST/SD-1WR2	1W	9-18 (12VDC)	3.3V/303mA	73/75	1500
WRB1205ST/SD-1WR2	1W		5V/200mA	75/77	
WRB1212ST/SD-1WR2	1W		12V/83mA	77/79	
WRB1215ST/SD-1WR2	1W		15V/67mA	78/80	
WRB1224ST/SD-1WR2	1W		24V/42mA	74/76	
WRB2403ST/SD-1WR2	1W	18-36 (24VDC)	3.3V/303mA	73/75	1500
WRB2405ST/SD-1WR2	1W		5V/200mA	75/77	
WRB2412ST/SD-1WR2	1W		12V/83mA	76/78	
WRB2415ST/SD-1WR2	1W		15V/67mA	76/78	
WRB2424ST/SD-1WR2	1W		24V/42mA	75/77	

WRB_ST-1WR2 Dimension LxWxH: 15.00 x 14.00 x 9.10(mm)
WRB_SD-1WR2 Dimension LxWxH: 14.00 x 14.00 x 9.00(mm)

WRB_ST/SD-3WR2

Selection Guide

Part No.	Power	Input voltage range	Output voltage/ current(Vo/Io)	Eff(%) (min./typ.)	Isolation (VDC)
WRB1203ST/SD-3WR2	3W	9-18 (12VDC)	3.3V/758mA	73/75	1500
WRB1205ST/SD-3WR2	3W		5V/600mA	77/79	
WRB1212ST/SD-3WR2	3W		12V/250mA	80/82	
WRB1215ST/SD-3WR2	3W		15V/200mA	81/83	
WRB1224ST/SD-3WR2	3W		24V/125mA	79/81	
WRB2403ST/SD-3WR2	3W	18-36 (24VDC)	3.3V/758mA	72/74	1500
WRB2405ST/SD-3WR2	3W		5V/600mA	79/81	
WRB2412ST/SD-3WR2	3W		12V/250mA	81/83	
WRB2415ST/SD-3WR2	3W		15V/200mA	81/83	
WRB2424ST/SD-3WR2	3W		24V/125mA	81/83	

WRB_ST-3WR2 Dimension LxWxH: 15.00 x 14.00 x 9.10(mm)
WRB_SD-3WR2 Dimension LxWxH: 14.00 x 14.00 x 9.00(mm)

Note

There are modules with two types of package, "ST" for SMD package, "SD" for DIP package.

• This catalog is a collection of the latest products. For more information, please contact our sales team.

7mm Ultra-thin Wide Input (DIP/SMD) | UR/VR Series (3-15W)

Features

- Isolation voltage: 500VAC/1500VDC
- Operating temperature range: -40℃ to +85℃
- Efficiency up to 89%
- Suitable for communication, instrumentation, industrial electronics applications
- No-load power consumption as low as 0.1W
- Input under-voltage, output short-circuit, over-current, over-voltage protections
- DIP/SMD package optional
- EN62368 approved, Meets UL62368, IEC62368 standards

U/VRB_J(M)T/D-3W

Selection Guide

Part No.	Power	Input voltage range	Output voltage/ current(Vo/Io)	Eff(%) (min./typ.)	Isolation (VDC)
VRB0505J(M)T/D-3W	3W	4.5-9 (5VDC)	5V/600mA	70/72	1500
VRB0512J(M)T/D-3W	3W		12V/250mA	74/76	
VRB0515J(M)T/D-3W	3W		15V/200mA	75/77	
VRB0524J(M)T/D-3W	3W		24V/125mA	74/76	
URB2403J(M)T/D-3W	3W	9-36 (24VDC)	3.3V/600mA	70/72	1500
URB2405J(M)T/D-3W	3W		5V/600mA	75/77	
URB2412J(M)T/D-3W	3W		12V/250mA	79/81	
URB2415J(M)T/D-3W	3W		15V/200mA	80/82	
URB2424J(M)T/D-3W	3W		24V/125mA	79/81	

U/VRB-JD-3W Dimension LxWxH: 24.00 x 15.10 x 6.19(mm)
U/VRB-JMD-3W Dimension LxWxH: 25.00 x 16.40 x 6.80(mm)
U/VRB-JT-3W Dimension LxWxH: 26.20 x 15.10 x 6.19(mm)
U/VRB-JMT-3W Dimension LxWxH: 26.20 x 16.40 x 6.80(mm)

VRB_J(M)D/T-6W

Selection Guide

Part No.	Power	Input voltage range	Output voltage/ current(Vo/Io)	Eff(%) (min./typ.)	Isolation (VDC)
VRB1205J(M)D/T-6W	6W	9-18 (12VDC)	5V/1200mA	79/81	1500
VRB1212J(M)D/T-6W	6W		12V/500mA	83/85	
VRB1215J(M)D/T-6W	6W		15V/400mA	84/86	
VRB2403J(M)D/T-6W	6W	18-36 (24VDC)	3.3V/1500mA	77/79	1500
VRB2405J(M)D/T-6W	6W		5V/1200mA	81/83	
VRB2412J(M)D/T-6W	6W		12V/500mA	83/85	
VRB2415J(M)D/T-6W	6W		15V/400mA	84/86	

VRB-JD-6W Dimension LxWxH: 31.60 x 18.10 x 6.10(mm)
VRB-JMD-6W Dimension LxWxH: 32.60 x 19.10 x 6.80(mm)
VRB-JT-6W Dimension LxWxH: 33.78 x 18.10 x 6.30(mm)
VRB-JMT-6W Dimension LxWxH: 33.78 x 19.10 x 7.00(mm)

URB_J(M)D/T-10W

Selection Guide

Part No.	Power	Input voltage range	Output voltage/ current(Vo/Io)	Eff(%) (min./typ.)	Isolation (VDC)
URB2405J(M)D/T-10W	10W	9-36 (24VDC)	5V/2000mA	82/84	1500
URB2412J(M)D/T-10W	10W		12V/833mA	85/87	
URB2415J(M)D/T-10W	10W		15V/667mA	86/88	
URB2424JMT-10W	10W		24V/417mA	85/87	

URB-JD-10W Dimension LxWxH: 39.20 x 20.80 x 6.10(mm)
URB-JMD-10W Dimension LxWxH: 40.20 x 22.00 x 6.80(mm)
URB-JT-10W Dimension LxWxH: 41.40 x 20.80 x 6.30(mm)
URB-JMT-10W Dimension LxWxH: 41.40 x 22.00 x 7.00(mm)

URB_J(M)D/T-15W

Selection Guide

Part No.	Power	Input voltage range	Output voltage/ current(Vo/Io)	Eff(%) (min./typ.)	Isolation (VDC)
URB2403J(M)D/T-15W	15W	9-36 (24VDC)	3.3V/4500mA	86/88	1500
URB2405J(M)D/T-15W	15W		5V/3000mA	86/88	
URB2412J(M)D/T-15W	15W		12V/1250mA	87/89	
URB2415J(M)D/T-15W	15W		15V/1000mA	87/89	
URB4803J(M)D/T-15W	15W	18-75 (48VDC)	3.3V/4500mA	86/88	1500
URB4805J(M)D/T-15W	15W		5V/3000mA	86/88	
URB4812J(M)D/T-15W	15W		12V/1250mA	87/89	
URB4815J(M)D/T-15W	15W		15V/1000mA	87/89	

URB-JD-15W Dimension LxWxH: 38.70 x 27.20 x 6.20(mm)
URB-JMD-15W Dimension LxWxH: 39.10 x 29.50 x 6.80(mm)
URB-JT-15W Dimension LxWxH: 39.90 x 27.20 x 6.20(mm)
URB-JMT-15W Dimension LxWxH: 39.90 x 29.50 x 6.80(mm)

Note

There are modules with four types of package, "JD" for DIP package without shell, "JMD" for DIP package with shell, "JT" for SMD package without shell, "JMT" for SMD package with shell.

• This catalog is for reference only, not being the judgment basis for the use. For detailed datasheets please visit our website: www.mornsun-power.com.

7mm Ultra-thin Wide Input (DIP/SMD) — UR Series (3W)

Features

- Suitable for industrial control, electric power, instrumentation, communication applications
- Operating temperature range: -40℃ to +85℃
- Efficiency up to 84%
- No-load power consumption as low as 0.1W
- Input under-voltage, output short-circuit, over-current, over-voltage protections
- IEC/UL/EN60950 approved

URB_MT-3WR3

Selection Guide

Part No.	Power	Input voltage range	Output voltage/ current(Vo/Io)	Eff(%) (min./typ.)	Isolation (VDC)
URB2403MT-3WR3	3W	9-36 (24VDC)	3.3V/728mA	73/75	1500
URB2405MT-3WR3	3W		5V/600mA	78/80	
URB2409MT-3WR3	3W		9V/333mA	78/80	
URB2412MT-3WR3	3W		12V/250mA	80/82	
URB2415MT-3WR3	3W		15V/200mA	81/83	
URB2424MT-3WR3	3W		24V/125mA	80/82	
URB4803MT-3WR3	3W	18-75 (48VDC)	3.3V/728mA	73/75	1500
URB4805MT-3WR3	3W		5V/600mA	77/79	
URB4812MT-3WR3	3W		12V/250mA	80/82	
URB4815MT-3WR3	3W		15V/200mA	82/84	
URB4824MT-3WR3	3W		24V/125mA	80/82	

Dimension LxWxH: 19.20 x 18.10 x 10.16(mm)

8:1 Wide Input with SIP Package — UW Series (1-3W)

Features

- Isolation voltage: 3000VDC
- Operating temperature range: -40℃ to +105℃
- Widely used in medical, industrial control, electric power, instrumentation, communication applications
- Wide input voltage range (8:1)
- No-load power consumption as low as 0.12W
- Input under-voltage, output short-circuit, over-current protections
- EN62368 approved

UWE_S-1WR3

Selection Guide

Part No.	Power	Input voltage range	Output voltage/current (Vo/Io)	Eff(%) (min./typ.)	Isolation (VDC)
UWE1205S-1WR3	1W	4.5-36 (12VDC)	±5V/±100mA	69/71	3000
UWE1212S-1WR3	1W		±12V/±42mA	72/74	
UWE1215S-1WR3	1W		±15V/±33mA	72/74	

Dimension LxWxH: 22.00 x 9.50 x 12.00(mm)

UWE_S-3WR3

Selection Guide

Part No.	Power	Input voltage range	Output voltage/current (Vo/Io)	Eff(%) (min./typ.)	Isolation (VDC)
UWE1205S-3WR3	3W	4.5-36 (12VDC)	±5V/±300mA	75/77	3000
UWE1212S-3WR3	3W		±12V/±125mA	77/79	
UWE1215S-3WR3	3W		±15V/±100mA	77/79	

Dimension LxWxH: 22.00 x 9.50 x 12.00(mm)

UWF_S-1WR3

Selection Guide

Part No.	Power	Input voltage range	Output voltage/current (Vo/Io)	Eff(%) (min./typ.)	Isolation (VDC)
UWF1205S-1WR3	1W	4.5-36 (12VDC)	5V/200mA	69/71	3000
UWF1209S-1WR3	1W		9V/111mA	69/72	
UWF1212S-1WR3	1W		12V/83mA	72/74	
UWF1215S-1WR3	1W		15V/67mA	72/74	

Dimension LxWxH: 22.00 x 9.50 x 12.00(mm)

UWF_S-3WR3

Selection Guide

Part No.	Power	Input voltage range	Output voltage/current (Vo/Io)	Eff(%) (min./typ.)	Isolation (VDC)
UWF1205S-3WR3	3W	4.5-36 (12VDC)	5V/600mA	75/77	3000
UWF1212S-3WR3	3W		12V/250mA	77/79	
UWF1215S-3WR3	3W		15V/200mA	77/79	

Dimension LxWxH: 22.00 x 9.50 x 12.00(mm)

• This catalog is a collection of the latest products. For more information, please contact our sales team.

12:1 Wide Input with DIP Package — UWTH1D Series (6-100W)

Features

- Reinforced insulation, Isolation voltage: 3000VAC
- Operating temperature range: -40℃ to +105℃
- Suitable for railway application
- Wide input voltage range: 14-160VDC
- International standard pin-out
- Input under-voltage, output short-circuit, over-current protections
- Meet railway standard EN50155

UWTH1D_P-6WR3

Selection Guide

Part No.	Power	Input voltage range	Output voltage/ current(Vo/Io)	Eff(%) (min./typ.)	Isolation (VAC)
UWTH1D03P-6WR3	6W	14-160 (110VDC)	3.3V/1454mA	73/75	3000
UWTH1D05P-6WR3	6W		5V/1200mA	78/80	
UWTH1D12P-6WR3	6W		12V/500mA	81/83	
UWTH1D15P-6WR3	6W		15V/400mA	81/83	
UWTH1D24P-6WR3	6W		24V/250mA	81/83	

Dimension LxWxH: 31.60 x 20.30 x 12.50(mm)

UWTH1D_LD-10W(F/H)R3

Selection Guide

Part No.	Power	Input voltage range	Output voltage/ current(Vo/Io)	Eff(%) (min./typ.)	Isolation (VAC)
UWTH1D03LD-10W(F/H)R3	10W	14-160 (110VDC)	3.3V/3030mA	78/80	3000
UWTH1D05LD-10W(F/H)R3	10W		5V/2000mA	78/80	
UWTH1D12LD-10W(F/H)R3	10W		12V/833mA	82/84	
UWTH1D15LD-10W(F/H)R3	10W		15V/667mA	82/84	
UWTH1D24LD-10W(F/H)R3	10W		24V/417mA	82/84	
UWTH1D28LD-10W(F/H)R3	10W		28V/357mA	82/84	
UWTH1D48LD-10W(F/H)R3	10W		48V/208mA	82/84	
UWTH1D54LD-10W(F/H)R3	10W		54V/185mA	82/84	

Dimension LxWxH: 50.80 x 25.40 x 11.80(mm)

UWTH1D_LD-20W(F/H)R3

Selection Guide

Part No.	Power	Input voltage range	Output voltage/ current(Vo/Io)	Eff(%) (min./typ.)	Isolation (VAC)
UWTH1D03LD-20W(F/H)R3	20W	14-160 (110VDC)	3.3V/6060mA	82/84	3000
UWTH1D05LD-20W(F/H)R3	20W		5V/4000mA	82/84	
UWTH1D12LD-20W(F/H)R3	20W		12V/1667mA	84/85	
UWTH1D15LD-20W(F/H)R3	20W		15V/1333mA	84/86	
UWTH1D24LD-20W(F/H)R3	20W		24V/833mA	84/86	
UWTH1D28LD-20W(F/H)R3	20W		28V/714mA	84/86	
UWTH1D48LD-20W(F/H)R3	20W		48V/417mA	84/86	
UWTH1D54LD-20W(F/H)R3	20W		54V/370mA	84/86	

Dimension LxWxH: 50.80 x 25.40 x 11.80(mm)

UWTH1D_LD-30W(F/H)R3

Selection Guide

Part No.	Power	Input voltage range	Output voltage/ current(Vo/Io)	Eff(%) (min./typ.)	Isolation (VAC)
UWTH1D05LD-30W(F/H)R3	30W	14-160 (110VDC)	5V/6000mA	85/88	3000
UWTH1D12LD-30W(F/H)R3	30W		12V/2500mA	85/87	
UWTH1D15LD-30W(F/H)R3	30W		15V/2000mA	85/87	
UWTH1D24LD-30W(F/H)R3	30W		24V/1250mA	86/88	
UWTH1D28LD-30W(F/H)R3	30W		28V/1071mA	86/88	
UWTH1D48LD-30W(F/H)R3	30W		48V/625mA	87/89	
UWTH1D54LD-30W(F/H)R3	30W		54V/556mA	87/89	

Dimension LxWxH: 50.80 x 25.40 x 11.80(mm)

UWTH1D_QB-50W(F/H)R3S

Selection Guide

Part No.	Power	Input voltage range	Output voltage/ current(Vo/Io)	Eff(%) (min./typ.)	Isolation (VAC)
UWTH1D12QB-50W(H/F)R3S	50W	14-160 (110VDC)	12V/4160mA	88/90	3000
UWTH1D15QB-50W(H/F)R3S	50W		15V/3330mA	88/90	
UWTH1D24QB-50W(H/F)R3S	50W		24V/2080mA	86/88	
UWTH1D28QB-50W(H/F)R3S	50W		28V/1790mA	86/88	
UWTH1D48QB-50W(H/F)R3S	50W		48V/1040mA	88/90	
UWTH1D54QB-50W(H/F)R3S	50W		54V/930mA	88/90	

Dimension LxWxH: 57.90 x 36.80 x 12.70(mm)

UWTH1D_QB-100W(F/H)R3

Selection Guide

Part No.	Power	Input voltage range	Output voltage/ current(Vo/Io)	Eff(%) (min./typ.)	Isolation (VAC)
UWTH1D12QB-100W(H/F)R3	100W	14-160 (110VDC)	12V/8330mA	88/90	3000
UWTH1D15QB-100W(H/F)R3	100W		15V/6670mA	88/90	
UWTH1D24QB-100W(H/F)R3	100W		24V/4160mA	87/89	
UWTH1D28QB-100W(H/F)R3	100W		28V/3570mA	87/89	
UWTH1D48QB-100W(H/F)R3	100W		48V/2080mA	88/90	
UWTH1D54QB-100W(H/F)R3	100W		54V/1850mA	88/90	

Dimension LxWxH: 57.90 x 36.80 x 12.70(mm)

Note

"F" suffix for aluminum base, "H" suffix for heat sink mounting. We recommend to choose modules with a heat sink for enhanced heat dissipation and applications with extreme temperature requirements

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for Railway Industry — URB/URA/URE/URF1D Series (6-40W)

Features

- reinforced insulation, Isolation voltage: 2250/3000VDC
- Operating temperature range: -40℃ to +105℃
- Suitable for railway application
- Wide input voltage range: 14-160VDC
- Input under-voltage, output short-circuit, over-current protections
- Meet railway standard EN50155

"H" Horizontal package with heat sink

URA1D_YMD-6WR3

Selection Guide — CE UKCA RoHS

Part No.	Power	Input voltage range	Output voltage/ current(Vo/Io)	Eff(%) (min./typ.)	Isolation (VDC)
URA1D05YMD-6WR3	6W	40-160 (110VDC)	± 5V/ ± 600mA	78/80	2250
URA1D12YMD-6WR3	6W		± 12V/ ± 250mA	82/84	
URA1D15YMD-6WR3	6W		± 15V/ ± 200mA	83/85	

Dimension LxWxH: 25.40 x 25.40 x 11.70(mm)

URB1D_YMD-6WR3

Selection Guide — CE UKCA RoHS

Part No.	Power	Input voltage range	Output voltage/ current(Vo/Io)	Eff(%) (min./typ.)	Isolation (VDC)
URB1D05YMD-6WR3	6W	40-160 (110VDC)	5V/1200mA	78/80	2250
URB1D12YMD-6WR3	6W		12V/500mA	82/84	
URB1D15YMD-6WR3	6W		15V/400mA	83/85	
URB1D24YMD-6WR3	6W		24V/250mA	84/86	

Dimension LxWxH: 25.40 x 25.40 x 11.70(mm)

URA1D_(X)LMD-10WR3

Selection Guide — CE UKCA RoHS

Part No.	Power	Input voltage range	Output voltage/ current(Vo/Io)	Eff(%) (min./typ.)	Isolation (VDC)
URA1D05(X)LMD-10WR3	10W	40-160 (110VDC)	± 5V/ ± 1000mA	78/80	2250
URA1D12(X)LMD-10WR3	10W		± 12V/ ± 417mA	82/84	
URA1D15(X)LMD-10WR3	10W		± 15V/ ± 334mA	82/84	

Dimension LxWxH: 50.80 x 25.40 x 11.80(mm)

URB1D_LMD-10WR3

Selection Guide — CE UKCA RoHS

Part No.	Power	Input voltage range	Output voltage/ current(Vo/Io)	Eff(%) (min./typ.)	Isolation (VDC)
URB1D03LMD-10WR3	8W	40-160 (110VDC)	3.3V/2400mA	74/76	2250
URB1D05LMD-10WR3	10W		5V/2000mA	78/80	
URB1D12LMD-10WR3	10W		12V/833mA	82/84	
URB1D15LMD-10WR3	10W		15V/667mA	82/84	
URB1D24LMD-10WR3	10W		24V/417mA	83/85	

封装尺寸 LxWxH: 50.80 x 25.40 x 11.80(mm)

URB1D_LMD-15WR3

Selection Guide — CE UKCA RoHS

Part No.	Power	Input voltage range	Output voltage/ current(Vo/Io)	Eff(%) (min./typ.)	Isolation (VDC)
URB1D03LMD-15WR3	13.2W	40-160 (110VDC)	3.3V/4000mA	80/82	2250
URB1D05LMD-15WR3	15W		5V/3000mA	82/84	
URB1D12LMD-15WR3	15W		12V/1250mA	82/84	
URB1D15LMD-15WR3	15W		15V/1000mA	83/85	
URB1D24LMD-15WR3	15W		24V/625mA	83/85	

Dimension LxWxH: 50.80 x 25.40 x 11.80(mm)

URB1D_LMD-20WR3

Selection Guide — CE UKCA RoHS

Part No.	Power	Input voltage range	Output voltage/ current(Vo/Io)	Eff(%) (min./typ.)	Isolation (VDC)
URB1D03LMD-20WR3	16.5W	40-160 (110VDC)	3.3V/5000mA	80/82	2250
URB1D05LMD-20WR3	20W		5V/4000mA	82/84	
URB1D12LMD-20WR3	20W		12V/1667mA	83/85	
URB1D15LMD-20WR3	20W		15V/1333mA	84/86	
URB1D24LMD-20WR3	20W		24V/833mA	84/86	

Dimension LxWxH: 50.80 x 25.40 x 11.80(mm)

URB1D_LD-20WR3

Selection Guide — CE UKCA RoHS

Part No.	Power	Input voltage range	Output voltage/ current(Vo/Io)	Eff(%) (min./typ.)	Isolation (VDC)
URB1D03LD-20WR3	16.5W	40-160 (110VDC)	3.3V/5000mA	80/82	2250
URB1D05LD-20WR3	20W		5V/4000mA	83/85	
URB1D12LD-20WR3	20W		12V/1667mA	84/86	
URB1D15LD-20WR3	20W		15V/1333mA	84/86	
URB1D24LD-20WR3	20W		24V/833mA	85/87	

Dimension LxWxH: 50.80 x 25.40 x 11.80(mm)

URE1D_LD-20WR3

Selection Guide — (Pending) CE UKCA RoHS

Part No.	Power	Input voltage range	Output voltage/ current(Vo/Io)	Eff(%) (min./typ.)	Isolation (VDC)
URE1D12LD-20WR3	20W	40-160 (110VDC)	± 12V/ ± 833mA	83/85	3000
URE1D15LD-20WR3	20W		± 15V/ ± 667mA	84/86	
URE1D24LD-20WR3	20W		± 24V/ ± 417mA	84/86	

Dimension LxWxH: 50.80 x 25.40 x 11.80(mm)

URF1D_LD-40WR3

Selection Guide — CE UKCA RoHS

Part No.	Power	Input voltage range	Output voltage/ current(Vo/Io)	Eff(%) (min./typ.)	Isolation (VDC)
URF1D03LD-40WR3	33W	40-160 (110VDC)	3.3V/10000mA	85/87	3000
URF1D05LD-40WR3	40W		5V/8000mA	86/88	
URF1D12LD-40WR3	40W		12V/3333mA	89/91	
URF1D15LD-40WR3	40W		15V/2667mA	89/91	
URF1D24LD-40WR3	40W		24V/1667mA	87/89	
URF1D48LD-40WR3	40W		48V/833mA	87/89	

Dimension LxWxH: 50.80 x 25.40 x 11.80(mm)

Note

"H" suffix for products with heat sink mounting, "A2S" for chassis mounting, "A4S" for DIN rail mounting. We recommend choosing modules with a heat sink for applications that require high requirement for temperature.

• This catalog is a collection of the latest products. For more information, please contact our sales team.

for Railway Industry — URF1D Series (37.5-400W)

Features

- Isolation voltage: 3000VAC
- Operating temperature range: -40℃ to +105℃
- Suitable for railway application
- Wide input voltage range: 43-160VDC/40-160VDC/66-160VDC
- Universal standard pin-out
- Input under-voltage, output short-circuit, over-current protections
- Meet railway standard EN50155

URF1D_QB-50WR3

Selection Guide — CE UKCA RoHS

Part No.	Power	Input voltage range	Output voltage/ current(Vo/Io)	Eff(%) (min./typ.)	Isolation (VAC)
URF1D03QB-50W(H)R3	37.5W	43-160 (110VDC)	3.3V/11364mA	84/86	3000
URF1D05QB-50W(H)R3	50W		5V/10000mA	85/87	
URF1D12QB-50W(H)R3	50W		12V/4167mA	86/88	
URF1D15QB-50W(H)R3	50W		15V/3333mA	86/88	
URF1D24QB-50W(H)R3	50W		24V/2083mA	87/89	
URF1D48QB-50W(H)R3	50W		48V/1041mA	85/87	

URF1D_QB-50WR3 Dimension LxWxH: 60.80 x 39.20 x 12.70(mm)
URF1D_QB-50WHR3 Dimension LxWxH: 61.50 x 39.20 x 27.70(mm)

URF1D_QB-75WR3

Selection Guide — CE UKCA RoHS

Part No.	Power	Input voltage range	Output voltage/ current(Vo/Io)	Eff(%) (min./typ.)	Isolation (VAC)
URF1D03QB-75W(H)R3	75W	43-160 (110VDC)	3.3V/17045mA	84/86	3000
URF1D05QB-75W(H)R3	75W		5V/15000mA	86/88	
URF1D12QB-75W(H)R3	75W		12V/6250mA	87/89	
URF1D15QB-75W(H)R3	75W		15V/5000mA	87/89	
URF1D24QB-75W(H)R3	75W		24V/3125mA	89/91	
URF1D48QB-75W(H)R3	75W		48V/1563mA	86/88	

URF1D_QB-75WR3 Dimension LxWxH: 60.80 x 39.20 x 12.70(mm)
URF1D_QB-75WHR3 Dimension LxWxH: 61.50 x 39.20 x 27.70(mm)

URF1D_QB-100WR3

Selection Guide — CE UKCA RoHS

Part No.	Power	Input voltage range	Output voltage/ current(Vo/Io)	Eff(%) (min./typ.)	Isolation (VAC)
URF1D03QB-100WR3	75W	43-160 (110VDC)	3.3V/22727mA	84/86	3000
URF1D05QB-100WR3	100W		5V/20000mA	86/88	
URF1D12QB-100WR3	100W		12V/8333mA	87/89	
URF1D15QB-100WR3	100W		15V/6667mA	87/89	
URF1D24QB-100WR3	100W		24V/4167mA	88/90	
URF1D48QB-100WR3	100W		48V/2083mA	86/88	

URF1D_QB-100WR3 Dimension LxWxH: 60.80 x 39.20 x 12.70(mm)
URF1D_QB-100WHR3 Dimension LxWxH: 61.50 x 39.20 x 27.70(mm)

URF1D_HB-150WR3

Selection Guide — CE UKCA RoHS

Part No.	Power	Input voltage range	Output voltage/ current(Vo/Io)	Eff(%) (min./typ.)	Isolation (VAC)
URF1D05HB-150WR3	120W	43-160 (110VDC)	5V/24000mA	86/88	3000
URF1D12HB-150WR3	150W		12V/12500mA	87/89	
URF1D15HB-150WR3	150W		15V/10000mA	87/89	
URF1D24HB-150WR3	150W		24V/6250mA	87/89	
URF1D48HB-150WR3	150W		48V/3120mA	86/88	

URF1D_HB-150WR3 Dimension LxWxH: 61.00 x 58.00 x 13.80(mm)
URF1D_HB-150WHR3 Dimension LxWxH: 62.00 x 58.00 x 31.80(mm)

URF1D_HB-250WR3

Selection Guide — CE UKCA RoHS

Part No.	Power	Input voltage range(VDC)	Output voltage/ current(Vo/Io)	Eff(%) (min./typ.)	Isolation (VAC)
URF1D05HB-250WR3	200W	40-66	5V/40000mA	87/88	3000
	200W	66-160	5V/40000mA		
URF1D12HB-250WR3	200W	40-66	12V/16670mA	88/90	
	250W	66-160	12V/20840mA		
URF1D15HB-250WR3	200W	40-66	15V/13330mA	88/90	
	250W	66-160	15V/16670mA		
URF1D24HB-250WR3	200W	40-66	24V/8330mA	88/90	
	250W	66-160	24V/10420mA		
URF1D40HB-250WR3	200W	40-66	40V/5000mA	87/89	
	250W	66-160	40V/6250mA		
URF1D48HB-250WR3	200W	40-66	48V/4160mA	88/90	
	250W	66-160	48V/5200mA		
URF1D54HB-250WR3	200W	40-66	54V/3700mA	88/90	
	250W	66-160	54V/4630mA		

URF1D_HB-250WR3 Dimension LxWxH: 61.00 x 57.90 x 13.80(mm)
URF1D_HB-250WHR3 Dimension LxWxH: 62.00 x 58.00 x 31.80(mm)

URF1D_FB-400W(H)R3

Selection Guide — (Pending) CE UKCA RoHS

Part No.	Power	Input voltage range	Output voltage/ current(Vo/Io)	Eff(%) (min./typ.)	Isolation (VAC)
URF1D05FB-400W(H)R3	320W	66-160 (110VDC)	5V/64000mA	84/86	3000
URF1D09FB-400W(H)R3	400W		9V/44440mA	88/90	
URF1D12FB-400W(H)R3	400W		12V/33330mA	89/91	
URF1D15FB-400W(H)R3	400W		15V/26670mA	89/91	
URF1D24FB-400W(H)R3	400W		24V/16670mA	90/92	
URF1D28FB-400W(H)R3	400W		28V/14290mA	90/92	
URF1D36FB-400W(H)R3	400W		36V/11111mA	90/92	
URF1D48FB-400W(H)R3	400W		48V/8333mA	90/92	
URF1D54FB-400W(H)R3	400W		54V/7410mA	90/92	

URF1D_FB-400WR3 Dimension LxWxH: 116.80 x 61.00 x 13.00(mm)
URF1D_FB-400WHR3 Dimension LxWxH: 116.80 x 61.00 x 31.00(mm)

Note

"H" suffix for products with heat sink mounting, "A5" for chassis mounting, "A6" for DIN rail mounting. We recommend choosing modules with a heat sink for applications that require high requirement for temperature.

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for Automotive Industry — C Series (1W)

Features

- Isolation voltage: 3000VAC/4200VDC/3500VDC
- Operating temperature range: -40℃ to +105℃
- Continuous short-circuit protection
- Compact SMD package
- EN62368 approved

CF0505XT-1WR3

Selection Guide

Part No.	Power	Input voltage range	Output voltage/current (Vo/Io)	Eff(%) (min./typ.)	Isolation
CF0505XT-1WR3	1W	4.5-5.5 (5VDC)	5V/200mA	78/82	3500VDC

Dimension LxWxH: 13.20 x 11.40 x 7.25(mm)

CFB0505XT-1WR3

Selection Guide

Part No.	Power	Input voltage range	Output voltage/current (Vo/Io)	Eff(%) (min./typ.)	Isolation
CFB0505XT-1WR3	1W	4.5-5.5 (5VDC)	5V/200mA	78/82	3000VAC/ 4200VDC

Dimension LxWxH: 15.24 x 11.40 x 7.25(mm)

for Automotive Industry — C Series (3-6W)

Features

- Isolation voltage: 3000VDC/4300VDC/3000VAC
- Operating temperature range: -40℃ to +105℃
- Efficiency up to 82%
- No-load power consumption as low as 0.12W
- Meet AEC-Q100 standards
- EMI meets Automotive standards: EN55025/CISPR25 CLASS 4
- Input under-voltage, output short-circuit, over-current, over-voltage protections
- EN62368 approved

CWRF_S-3W

Selection Guide (Pending)

Part No.	Power	Input voltage range	Output voltage/current (Vo/Io)	Eff(%) (min./typ.)	Isolation (VDC)
CWRF1215S-3W	3W	7-18 (12VDC)	15V/200mA	80/82	4300

Dimension LxWxH: 22.00 x 9.50 x 12.00(mm)

CUWF_J(Y)T-6WR3

Selection Guide

Part No.	Power	Input voltage range	Output voltage (Vo)	Output current(Io) 6≤Vin<9	Output current(Io) 9≤Vin≤42	Eff(%) (min./typ.)	Isolation (VDC)
CUWF2405J(Y)T-6WR3	6W	6-42 (24VDC)	5V	960mA	1200mA	76/78	3000
CUWF2412J(Y)T-6WR3	6W		12V	400mA	500mA	78/80	
CUWF2415J(Y)T-6WR3	6W		15V	320mA	400mA	78/80	
CUWF2424J(Y)T-6WR3	6W		24V	200mA	250mA	80/82	

CUWF24_JT-6WR3 Dimension LxWxH: 43.68 x 23.0 x 10.00(mm)
CUWF24_JYT-6WR3 Dimension LxWxH: 43.68 x 25.00 x 10.64(mm)

CUWF_J(Y)T-3WR3

Selection Guide

Part No.	Power	Input voltage range	Output voltage (Vo)	Output current(Io) 6≤Vin<9	Output current(Io) 9≤Vin≤42	Eff(%) (min./typ.)	Isolation (VDC)
CUWF2405J(Y)T-3WR3	3W	6-42 (24VDC)	5V	480mA	600mA	74/76	3000
CUWF2412J(Y)T-3WR3	3W		12V	200mA	250mA	76/78	
CUWF2415J(Y)T-3WR3	3W		15V	160mA	200mA	76/78	
CUWF2424J(Y)T-3WR3	3W		24V	100mA	125mA	78/80	

CUWF24_JT-3WR3 Dimension LxWxH: 43.68 x 23.0 x 10.00(mm)
CUWF24_JYT-3WR3 Dimension LxWxH: 43.68 x 25.00 x 10.64(mm)

Note

There are modules with two types of package, "JT" for SMD package without shell, "JYT" for SMD package with shell.

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for Automotive Industry — C Series (6-8W)

Features

- Operating temperature range: -40℃ to +105℃
- Meet AEC-Q100 standards, EN62368 approved
- Production process meets IATF16949 system
- EMI meets Automotive standards: EN55025/CISPR25 CLASS 3
- 8:1 wide input voltage (4.5-36VDC)
- No-load power consumption as low as 0.06W
- Input under-voltage, output short-circuit, over-current, over-voltage protections

CUWB_YMD-6WR3

Selection Guide

Part No.	Power	Input voltage range	Output voltage (Vo)	Output current(Io) 4.5≤Vin<6	Output current(Io) 6≤Vin≤36	Eff(%) (min./typ.)	Isolation (VDC)
CUWB1203YMD-6WR3	6W	4.5-36 (12VDC)	3.3V	900mA	1500mA	77/79	1500
CUWB1205YMD-6WR3	6W		5V	720mA	1200mA	81/83	
CUWB1212YMD-6WR3	6W		12V	300mA	500mA	83/85	
CUWB1215YMD-6WR3	6W		15V	240mA	400mA	83/85	
CUWB1224YMD-6WR3	6W		24V	150mA	250mA	83/85	

Dimension LxWxH: 25.40 x 25.40 x 11.70(mm)

High Output Negative ion Generator — HO5 Series

Features

- Input voltage range: 3.2-3.8VDC
- Output voltage up to -3000VDC
- Negative ion concentration up to 30 Mpcs/cc
- Ozone concentration as low as 0.05ppm
- Ultra-wide operating temperature range: -25℃ to +71℃

HO5-N202TS-A

Selection Guide

Part No.	Input voltage(VDC) Rated value	Input current(mA) Typical value	Output voltage(VDC) Typical value	Output voltage(VDC) Rated value	Negative ion concentration(pcs/cc) Typical value	Ozone concentration(ppm) Max. value	Dimension(mm) (LxWxH)	Markings	Datasheet
HO5-N202TS-A	3.6 (3.2-3.8)	3	-2000	-1000 to -3000	10M	0.05	22.00 x 12.00 x 4.50	RoHS	

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High Output Voltage

HO1 Series (0.4-40W)

Features

- Suitable for applications of medical, security and some special equipment such as ultrasonic flaw detector, photomultiplier tubes, piezoelectric devices, capacitor charging, etc.
- Utra-wide output voltage range: 0-2000VDC
- Input under-voltage, output short-circuit, over-voltage protections
- Low ripple, low power consumption
- Constant current output

HO1-P421H-1C

Selection Guide — RoHS

Part No.	Power	Input voltage(VDC)	Output voltage(VDC)		Output current(mA)
		Rated value	Max. value	Rated value	
HO1-P421H-1C	0.42W	12(10.8-13.2)	+420	+420	1/0

Dimension LxWxH: 45.50 x 23.00 x 12.50(mm)

HO1-P(N)1251V-0.5C(F)

Selection Guide — RoHS

Part No.	Power	Input voltage(VDC)	Output voltage(VDC)		Output current(mA)
		Rated value	Max. value	Rated value	
HO1-P1251V-0.5C	0.625W	12(10.8-13.2)	+1250	0 to +1250	0.5/0
HO1-N1251V-0.5C	0.625W	12(10.8-13.2)	-1250	0 to -1250	0.5/0
HO1-P1251V-0.5F	0.625W	24(21.6-26.4)	+1250	0 to +1250	0.5/0
HO1-N1251V-0.5F	0.625W	24(21.6-26.4)	-1250	0 to -1250	0.5/0

Dimension LxWxH: 45.50 x 23.00 x 12.50(mm)

HO1-P(N)1251S-0.5C

Selection Guide — RoHS

Part No.	Power	Input voltage(VDC)	Output voltage(VDC)		Output current(mA)
		Rated value	Max. value	Rated value	
HO1-P1251S-0.5C	0.625W	12(10.8-13.2)	+1250	0 to +1250	0.5/0
HO1-N1251S-0.5C	0.625W	12(10.8-13.2)	-1250	0 to -1250	0.5/0

Dimension LxWxH: 45.50 x 12.00 x 24.50(mm)

HO1-P(N)1201-0.6B

Selection Guide — CE RoHS

Part No.	Power	Input voltage(VDC)	Output voltage(VDC)		Output current(mA)
		Rated value	Max. value	Rated value	
HO1-P1201-0.6B	0.72W	5(4.5-5.5)	+1200	0 to +1200	0.6/0
HO1-N1201-0.6B	0.72W	5(4.5-5.5)	-1200	0 to -1200	0.6/0

Dimension LxWxH: 15.00 x 15.00 x 18.00(mm)

HO1-P(N)1251H-1B

Selection Guide — CE UK CA RoHS

Part No.	Power	Input voltage(VDC)	Output voltage(VDC)		Output current(mA)
		Rated value	Max. value	Rated value	
HO1-P1251H-1B	0.75W	5(4.75-5.25)	+1250	0 to +1250	1/0
HO1-N1251H-1B	0.75W	5(4.75-5.25)	-1250	0 to -1250	1/0

Dimension LxWxH: 45.50 x 23.00 x 12.50(mm)

HO1-N201-5B

Selection Guide — RoHS

Part No.	Power	Input voltage(VDC)	Output voltage(VDC)		Output current(mA)
		Rated value	Max. value	Rated value	
HO1-N201-5B	1W	5(4.5-5.5)	-200	-200	5/0

Dimension LxWxH: 31.60 x 20.30 x 10.20(mm)

HO1-P(N)1251H-0.5C(D/F)

Selection Guide — CE UK CA RoHS

Part No.	Power	Input voltage(VDC)	Output voltage(VDC)		Output current(mA)
		Rated value	Max. value	Rated value	
HO1-P1251H-0.5C	0.75W	12(10.8-13.2)	+1250	0 to +1250	0.5/0
HO1-N1251H-0.5C	0.75W	12(10.8-13.2)	-1250	0 to -1250	0.5/0
HO1-P1251H-0.5D	0.75W	15(13.5-16.5)	+1250	0 to +1250	0.5/0
HO1-N1251H-0.5D	0.75W	15(13.5-16.5)	-1250	0 to -1250	0.5/0
HO1-P1251H-0.5F	0.75W	24(21.6-26.4)	+1250	0 to +1250	0.5/0
HO1-N1251H-0.5F	0.75W	24(21.6-26.4)	-1250	0 to -1250	0.5/0

Dimension LxWxH: 45.50 x 23.00 x 12.50(mm)

HO1-P(N)1501H-0.5C(D)

Selection Guide — CE UK CA RoHS

Part No.	Power	Input voltage(VDC)	Output voltage(VDC)		Output current(mA)
		Rated value	Max. value	Rated value	
HO1-P1501H-0.5C	0.75W	12(10.8-13.2)	+1500	0 to +1500	0.5/0
HO1-N1501H-0.5C	0.75W	12(10.8-13.2)	-1500	0 to -1500	0.5/0
HO1-P1501H-0.5D	0.75W	15(13.5-16.5)	+1500	0 to +1500	0.5/0
HO1-N1501H-0.5D	0.75W	15(13.5-16.5)	-1500	0 to -1500	0.5/0

Dimension LxWxH: 45.50 x 23.00 x 12.50(mm)

HO1-P201-5C

Selection Guide — RoHS

Part No.	Power	Input voltage(VDC)	Output voltage(VDC)		Output current(mA)
		Rated value	Max. value	Rated value	
HO1-P201-5C	1W	12(11-16)	+200	+200	5/0

Dimension LxWxH: 31.60 x 20.30 x 10.20(mm)

HO1-P(N)202V-0.5B

Selection Guide — RoHS

Part No.	Power	Input voltage(VDC)	Output voltage(VDC)		Output current(mA)
		Rated value	Max. value	Rated value	
HO1-P202V-0.5B	1W	5(4.75-5.25)	+2000	0 to +2000	0.5/0
HO1-N202V-0.5B	1W	5(4.75-5.25)	-2000	0 to -2000	0.5/0

Dimension LxWxH: 45.50 x 23.00 x 12.50(mm)

HO1-P(N)302-0.5C(F)

Selection Guide — RoHS

Part No.	Power	Input voltage(VDC)	Output voltage(VDC)		Output current(mA)
		Rated value	Max. value	Rated value	
HO1-P302-0.5C	1.5W	12(10.8-13.2)	+3000	0 to +3000	0.5/0
HO1-N302-0.5C	1.5W	12(10.8-13.2)	-3000	0 to -3000	0.5/0
HO1-P302-0.5F	1.5W	24(21.6-26.4)	+3000	0 to +3000	0.5/0
HO1-N302-0.5F	1.5W	24(21.6-26.4)	-3000	0 to -3000	0.5/0

Dimension LxWxH: 45.00 x 35.00 x 12.50(mm)

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HO1-P(N)602-0.25C

Selection Guide — RoHS

Part No.	Power	Input voltage(VDC)	Output voltage(VDC)		Output current(mA)
		Rated value	Max. value	Rated value	
HO1-P602-0.25C	1.5W	12(0.7-12)	+6000	0 to +6000	0.25/0
HO1-N602-0.25C	1.5W	12(0.7-12)	-6000	0 to -6000	0.25/0

Dimension LxWxH: 38.10 x 38.10 x 16.00(mm)

HO1-P(N)601V-3C

Selection Guide — RoHS

Part No.	Power	Input voltage(VDC)	Output voltage(VDC)		Output current(mA)
		Rated value	Max. value	Rated value	
HO1-P601V-3C	1.8W	12(10.8-13.2)	+600	0 to +600	3/0
HO1-N601V-3C	1.8W	12(10.8-13.2)	-600	0 to -6000	3/0

Dimension LxWxH: 45.5 x 23.00 x 12.50(mm)

HO1-N1501V-1.2F

Selection Guide — RoHS

Part No.	Power	Input voltage(VDC)	Output voltage(VDC)		Output current(mA)
		Rated value	Max. value	Rated value	
HO1-N1501V-1.2F	1.8W	24(21.6-26.4)	-1500	0 to -1500	1.2/0

Dimension LxWxH: 45.5 x 23.00 x 12.50(mm)

HO1-PN202-0.5C

Selection Guide — RoHS

Part No.	Power	Input voltage(VDC)	Output voltage(VDC)		Output current(mA)
		Rated value	Max. value	Rated value	
HO1-PN202-0.5C	2W	12(10.8-13.2)	±2000	0 to ±2000	0.5/0

Dimension LxWxH: 45.00 x 35.00 x 12.50(mm)

HO1-P(N)202V-1C

Selection Guide — RoHS

Part No.	Power	Input voltage(VDC)	Output voltage(VDC)		Output current(mA)
		Rated value	Max. value	Rated value	
HO1-P202V-1C	2W	12(10.8-13.2)	+2000	0 to +2000	1/0
HO1-N202V-1C	2W	12(10.8-13.2)	-2000	0 to -2000	1/0

Dimension LxWxH: 45.50 x 23.00 x 12.50(mm)

HO1-P401V-5C

Selection Guide — RoHS

Part No.	Power	Input voltage(VDC)	Output voltage(VDC)		Output current(mA)
		Rated value	Max. value	Rated value	
HO1-P401V-5C	2W	12(10.8-13.2)	+400	0 to +400	5/0

Dimension LxWxH: 45.5 x 23.00 x 12.50(mm)

HO1-P431-XA (G-M counter)

Selection Guide

Part No.	Input voltage (VDC)	Input current①(mA)				Output voltage (VDC)	Output current② (uA) Max./Min.	Pulse width (us) Typ.	Dimension(mm) (LxWxH)	Markings	Datasheet
		The counting rate of counter is less than 10pcs/s		The counting rate of counter is more than 10pcs/s							
	Rated value	Typ.	Max.	Typ.	Max.	Typical value					
HO1-P431-XA	3.3 (2.3-3.5)	0.06	0.15	6	10	430	10/0	50	22.00 x 14.00 x 5.50	RoHS	

Note

① Average input current at nominal input voltage. ② The counting rate of counter is more than 10pcs/s, and the output current range of each channel is sustainable.

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for New Energy Industry

PV Series (15-1000W)

Features

- Operating temperature range: -40℃ to +70℃
- Efficiency up to 85%
- Ultra-wide input voltage range: 100-1500VDC
- Isolation voltage: 4000VAC
- Widely used in PV & HVC applications
- Input reverse voltage, output over-voltage, short-circuit protections
- Meets EN62109 standard
- High reliability, long lifespan, 3-year warranty

PV15-27BxxR3

Selection Guide — CE UKCA RoHS

Part No.	Power	Input voltage range	Output voltage/current (Vo/Io)	Eff(%) (typ.)
PV15-27B12R3	15W	100-1000VDC	12V/1.25A	81
PV15-27B15R3	15W		15V/1.00A	81
PV15-27B24R3	15W		24V/0.625A	83

Dimension LxWxH: 70.00 x 48.00 x 23.50(mm)

Note

Chassis mounting series: with the suffix "A2C". DIN rail mounting series: with the suffix "A4C".

PV15-29BxxR3

Selection Guide — cULus CE UKCA RoHS

Part No.	Power	Input voltage range	Output voltage/current (Vo/Io)	Eff(%) (typ.)
PV15-29B05R3	10W	200-1500VDC	5V/2000mA	64
PV15-29B12R3	15W		12V/1250mA	71
PV15-29B15R3	15W		15V/1000mA	80
PV15-29B24R3	15W		24V/625mA	83

Dimension LxWxH: 89.00 x 63.50 x 25.00(mm)

Note

Chassis mounting series: with the suffix "A5". DIN rail mounting series: with the suffix "A6".

PV40-27BxxR2

Selection Guide — CE RoHS

Part No.	Power	Input voltage range	Output voltage/current (Vo/Io)	Eff(%) (typ.)
PV40-27B12R2	40W	200-1200VDC	12V/3340mA	83
PV40-27B15R2	40W		15V/2670mA	84
PV40-27B24R2	40W		24V/1670mA	85
PV40-27B28R2	40W		28V/1430mA	85

Dimension LxWxH: 89.00 x 63.50 x 25.00(mm)

Note

Chassis mounting series: with the suffix "A5". DIN rail mounting series: with the suffix "A6".

PV40-29BxxR3

Selection Guide — (Pending) CE UKCA RoHS

Part No.	Power	Input voltage range	Output voltage/current (Vo/Io)	Eff(%) (typ.)
PV40-29B12R3	40W	250-1500VDC	12V/3.34A	86
PV40-29B24R3	40W		24V/1.67A	89
PV40-29B28R3	40W		28V/1.43A	89

Dimension LxWxH: 109.00 x 58.50 x 30.00(mm)

Note

Chassis mounting series: with the suffix "A5". DIN rail mounting series: with the suffix "A6".

PV50-29Dxx

Selection Guide — RoHS

Part No.	Power	Input voltage range	Output voltage/ current(Vo1/Io1)	Output voltage/ current(Vo2/Io2)	Eff(%) (typ.)
PV50-29D1505-20	50W	150-1500 VDC	15V/2.66A	5V/2A	78

Dimension LxWxH: 150.00 x 100.00 x 38.70(mm)

PV75-2YBxxR3

Selection Guide — cULus CE UKCA RoHS

Part No.	Power	Input voltage range	Output voltage/current (Vo/Io)	Eff(%) (typ.)
PV75-2YB12R3	75W	80-1000VDC	12V/6.250A	87
PV75-2YB15R3	75W		15V/5A	87
PV75-2YB24R3	75W		24V/3.125A	89

Dimension LxWxH: 140.00 x 70.00 x 42.00(mm)

Note

All models are a derivative model of PV75-2YBxxWR3, the input and output are wiring, they have the same performance.

PV75-36Dxx

Selection Guide — RoHS

Part No.	Power	Input voltage range	Output voltage/ current(Vo1/Io1)	Output voltage/ current(Vo2/Io2)	Eff(%) (typ.)
PV75-36D15400-01	Constant current: 75W Constant voltage: 32W	250-3300 VDC	15V/2000mA	Constant current: 20-400V/112.5mA Constant voltage: 400V/5mA	70

Dimension LxWxH: 220.00 x 157.00 x 40.00(mm)

Note

1. The working time of constant current mode is ≤2s (Typ.), the interval is 1.5s (Typ.).
2. At room temperature, 560uF capacitor can be charged to 400V in 2 seconds;
   The output current of the Vo2 constant current mode is 112.5mA (Typ.), the output voltage of constant voltage mode is 400V (Typ.).

PV120-27Bxx

Selection Guide — RoHS

Part No.	Power	Input voltage range	Output voltage/current (Vo/Io)	Eff(%) (typ.)
PV120-27B12	90W	200-1100VDC	12V/7.500A	84
PV120-27B15	100W		15V/6.670A	85
PV120-27B24	120W		24V/5.000A	87
PV120-27B26	120W		26V/4.616A	87
PV120-27B28	120W		28V/4.286A	87
PV120-27B48	120W		48V/2.500A	89

Dimension LxWxH: 144.50 x 105.00 x 40.00(mm)

PV150-29Bxx

Selection Guide — CE CB RoHS

Part No.	Power	Input voltage range	Output voltage/current (Vo/Io)	Eff(%) (typ.)
PV150-29B12	120W	250-1500VDC	12V/10000mA	84
PV150-29B15	120W		15V/8000mA	85
PV150-29B24	150W		24V/6250mA	87
PV150-29B28	150W		28V/5360mA	87
PV150-29B32	150W		32V/4690mA	87
PV150-29B48	150W		48V/3125mA	88

Dimension LxWxH: 168.00 x 111.20 x 42.50(mm)

PV200-27Bxx

Selection Guide — CE UKCA RoHS

Part No.	Power	Input voltage range	Output voltage/current (Vo/Io)	Eff(%) (typ.)
PV200-27B12	120W	200-1000VDC	12V/10A	86
PV200-27B15	150W		15V/10A	87
PV200-27B24	200W		24V/8.333A	87
PV200-27B26	200W		26V/7.692A	87
PV200-27B48	200W		48V/4.166A	87

Dimension LxWxH: 168.00 x 121.35 x 42.50(mm)

PV200-29BxxR3

Selection Guide — (Pending) cULus CE UKCA RoHS

Part No.	Power	Input voltage range	Output voltage/current (Vo/Io)	Eff(%) (typ.)
PV200-29B12R3	150W	250-1500VDC	12V/12.5A	88
PV200-29B24R3	200W		24V/8.333A	91
PV200-29B28R3	200W		28V/7.143A	91
PV200-29B48R3	200W		48V/4.167A	93

Dimension LxWxH: 201.00 x 70.00 x 42.00(mm)

Note

PV200-29BxxWR3 suffix "W" for lead type version.

PVA200-29B24-PCS

Accepts AC or DC input (dual-use of same terminal)

Selection Guide — RoHS

Part No.	Power	Input voltage range	Output voltage/current (Vo/Io)	Eff(%) (typ.)
PVA200-29B24-PCS	200W	176-456VAC 300-1500VDC	24V/8.333A	89

Dimension LxWxH: 199.00 x 110.00 x 41.00(mm)

PV350-29Bxx

Selection Guide — cULus CE CB UKCA RoHS

Part No.	Power	Input voltage range	Output voltage/current (Vo/Io)	Eff(%) (typ.)
PV350-29B12	250.8W	200 (300) -1500VDC	12V/20.9A	90
PV350-29B24	350.4W		24V/14.6A	92
PV350-29B28	350.4W		28V/12.5A	92
PV350-29B32	350.0W		32V/10.95A	92
PV350-29B48	350.4W		48V/7.3A	92

Dimension LxWxH: 215.00 x 125.00 x 50.00(mm)

Note

PV350-29BxxW suffix "W" for lead type version.

PV1000-27Bxx

Selection Guide — RoHS

Part No.	Power	Input voltage range	Output voltage/current (Vo/Io)	Eff(%) (typ.)
PV1000-27B24	1008W	300-1000VDC	24V/42A	93
PV1000-27B48	1008W		48V/21A	93

Dimension LxWxH: 292.00 x 225.00 x 58.00(mm)

Non-isolated Switching Regulator

K78 Series (0.3-3A)

Features

- Operating temperature range: -40℃ to +85℃
- Efficiency up to 97%
- No-load input current as low as 0.1mA
- Continuous short-circuit protection
- Negative output available(part of R3 series)
- Pin-out compatible with LM78xx linear regulators (1-2A SIP/SMD package)

K78U-500R3(L)

Selection Guide

Part No.	Input voltage range(VDC)	Output voltage(VDC)	Output current(mA)	Capacitive load Max.(μF)	Eff(%) @Full load
K78U03-500R3(L)	48(9-90)	3.3	500	100	82/69
K78U05-500R3(L)	48(9-90)	5	500	100	87/75
K78UX6-500R3(L)	48(9-90)	6.5	500	100	91/78
K78U09-500R3(L)	48(14-90)	9	500	100	91/80
K78U12-500R3(L)	48(18-90)	12	500	100	91/83
K78U15-500R3(L)	48(20-90)	15	500	100	93/84
K78U24-300R3(L)	48(36-90)	24	300	100	93/85

K78U-500R3 Dimension LxWxH: 11.50 x 9.00 x 17.50(mm)
K78U-500R3(L) Dimension LxWxH: 19.00 x 11.50 x 9.00(mm)

K78_MT-500R4

Selection Guide

Part No.	Input voltage range(VDC)	Output voltage(VDC)	Output current(mA)	Capacitive load Max.(μF)	Eff(%) @Full load
K7803MT-500R4	24(4.5-36)	3.3	500	680	89/71
	12(7-32)	-3.3	-300	470	80/71
K7805MT-500R4	24(6.5-36)	5	500	680	91/78
	12(7-31)	-5	-300	470	78/71
K78X6MT-500R4	24(8-36)	6.5	500	680	91/81
	12(7-28)	-6.5	-250	470	80/73
K7809MT-500R4	24(12-36)	9	500	680	92/86
	12(8-27)	-9	-200	470	82/77
K7812MT-500R4	24(15-36)	12	500	680	92/86
	12(8-24)	-12	-150	470	81/79
K7815MT-500R4	24(18-36)	15	500	680	91/87
	12(8-21)	-15	-150	470	80/84

Dimension LxWxH: 9.00 x 7.00 x 3.10(mm)

K78-500R3

Selection Guide

Part No.	Input voltage range(VDC)	Output voltage(VDC)	Output current(mA)	Capacitive load Max.(μF)	Eff(%) @Full load
K7803-500R3	24(4.75-36)	3.3	500	680	86/80
K7805-500R3	24(6.5-36)	5	500	680	90/84
	12(7-31)	-5	-300	330	80/81
K7809-500R3	24(12-36)	9	500	680	93/90
K7812-500R3	24(15-36)	12	500	680	94/91
	12(8-24)	-12	-150	330	84/85
K7815-500R3	24(19-36)	15	500	680	95/93
	12(8-21)	-15	-150	330	85/87

Dimension LxWxH: 11.60 x 7.55 x 10.16(mm)

K78-500R3-LB

Selection Guide

Part No.	Input voltage range(VDC)	Output voltage(VDC)	Output current(mA)	Capacitive load Max.(μF)	Eff(%) @Full load
K7803-500R3-LB	24(4.75-36)	3.3	500	680	85/76
	12(7-32)	-3.3	-300	330	73/72
K7805-500R3-LB	24(6.5-36)	5	500	680	90/81
	12(7-31)	-5	-300	330	76/78
K78X6-500R3-LB	24(8-36)	6.6	500	680	91/83
	12(7-29)	-6.5	-300	330	76/77
K7809-500R3-LB	24(12-36)	9	500	680	93/87
	12(8-27)	-9	-150	330	83/77
K7812-500R3-LB	24(15-36)	12	500	680	94/88
	12(8-24)	-12	-150	330	85/82
K7815-500R3-LB	24(19-36)	15	500	680	95/90
	12(8-21)	-15	-150	330	80/79

Dimension LxWxH: 10.27 x 6.00 x 8.61(mm)

K78_JT-500R3-LB

Selection Guide

Part No.	Input voltage range(VDC)	Output voltage(VDC)	Output current(mA)	Capacitive load Max.(μF)	Eff(%) @Full load
K7803JT-500R3-LB	24(4.75-36)	3.3	500	680	85/76
K7805JT-500R3-LB	24(6.5-36)	5	500	680	90/81
K78X6JT-500R3-LB	24(8-36)	6.5	500	680	91/83
K7809JT-500R3-LB	24(12-36)	9	500	680	93/87
K7812JT-500R3-LB	24(15-36)	12	500	680	94/88
K7815JT-500R3-LB	24(19-36)	15	500	680	95/90

Dimension LxWxH: 12.00 x 12.00 x 4.50(mm)

K78_T-500R3

Selection Guide

Part No.	Input voltage range(VDC)	Output voltage(VDC)	Output current(mA)	Capacitive load Max.(μF)	Eff(%) @Full load
K7801T-500R3	12(4.75-28)	1.5	500	680	76/67
K78X2T-500R3	12(4.75-28)	1.8	500	680	76/69
K7802T-500R3	12(4.75-32)	2.5	500	680	81/74
K7803T-500R3	24(4.75-36)	3.3	500	680	86/80
K7805T-500R3	24(6.5-36)	5	500	680	90/84
K78X6T-500R3	24(8-36)	6.5	500	680	92/87
K7809T-500R3	24(12-36)	9	500	680	93/90
K7812T-500R3	24(15-36)	12	500	680	94/91
K7815T-500R3	24(19-36)	15	500	680	95/93

Dimension LxWxH: 15.24 x 11.40 x 8.25(mm)

• This catalog is a collection of the latest products. For more information, please contact our sales team.

K78U-1000R3(L)

Selection Guide (Pending)

Part No.	Input voltage range(VDC)	Output voltage(VDC)	Output current(mA)	Capacitive load Max.(μF)	Eff(%) @Full load
K78U03-1000R3(L)	48(9-75)	3.3	1000	2400	72/76
K78U05-1000R3(L)	48(9-75)	5	1000	1580	78.5/82.5
K78UX6-1000R3(L)	48(9-75)	6.5	1000	1200	81/85
K78U09-1000R3(L)	48(14-75)	9	1000	880	83.5/87.5
K78U12-1000R3(L)	48(17-75)	12	1000	660	86.5/90.5
K78U15-1000R3(L)	48(21-75)	15	1000	530	86/90
K78U24-700R3(L)	48(33-75)	24	700	330	88/92

K78U-1000R3 Dimension LxWxH: 11.50 x 9.00 x 17.50(mm)
K78U-1000R3(L) Dimension LxWxH: 19.00 x 11.50 x 9.00(mm)

K78_MT-1000R4

Selection Guide

Part No.	Input voltage range(VDC)	Output voltage(VDC)	Output current(mA)	Capacitive load Max.(μF)	Eff(%) @Full load
K7803MT-1000R4	24(4.75-36)	3.3	1000	680	89/81
	12(8-27)	-3.3	-500	330	85/81
K7805MT-1000R4	24(6.5-36)	5	1000	680	92/84
	12(8-27)	-5	-500	330	85/83
K78X6MT-1000R4	24(8-36)	6.5	1000	680	92/86
	12(8-24)	-6.5	-500	330	83/84
K7809MT-1000R4	24(12-36)	9	1000	680	92/87
	12(8-24)	-9	-500	330	81/84
K7812MT-1000R4	24(15-36)	12	1000	680	94/89
	12(8-20)	-12	-300	330	83/84
K7815MT-1000R4	24(18-36)	15	1000	680	94/90
	12(8-18)	-15	-300	330	82/84

Dimension LxWxH: 9.00 x 7.00 x 3.10(mm)

K78_T-1000R3

Selection Guide

Part No.	Input voltage range(VDC)	Output voltage(VDC)	Output current(mA)	Capacitive load Max.(μF)	Eff(%) @Full load
K7801T-1000R3	12(4.75-32)	1.5	1000	680	76/66
K78X2T-1000R3	12(4.75-32)	1.8	1000	680	79/69
K7802T-1000R3	12(4.75-32)	2.5	1000	680	86/74
K7803T-1000R3	24(6.5-36)	3.3	1000	680	90/80
K7805T-1000R3	24(8-36)	5	1000	680	93/85
K78X6T-1000R3	24(10-36)	6.5	1000	680	93/86
K7809T-1000R3	24(13-36)	9	1000	680	94/89
K7812T-1000R3	24(16-36)	12	800	680	95/92

Dimension LxWxH: 15.24 x 11.40 x 8.25(mm)

K78-1000R3(L)

Selection Guide

Part No.	Input voltage range(VDC)	Output voltage(VDC)	Output current(mA)	Capacitive load Max.(μF)	Eff(%) @Full load
K7803-1000R3(L)	24(6-36)	3.3	1000	680	90/81
K7805-1000R3(L)	24(8-36)	5	1000	680	93/86
	12(8-27)	-5	-500	330	86/82
K7809-1000R3(L)	24(13-36)	9	1000	680	95/90
K7812-1000R3(L)	24(16-36)	12	1000	680	96/93
	12(8-20)	-12	-300	330	89/88
K7815-1000R3(L)	24(20-36)	15	1000	680	96/94
	12(8-18)	-15	-300	330	89/89

K78-1000R3 Dimension LxWxH: 11.50 x 9.00 x 17.50(mm)
K78-1000R3(L) Dimension LxWxH: 19.00 x 11.50 x 9.00(mm)

K78_M-1000R3

Selection Guide

Part No.	Input voltage range(VDC)	Output voltage(VDC)	Output current(mA)	Capacitive load Max.(μF)	Eff(%) @Full load
K7803M-1000R3	24(6-36)	3.3	1000	680	90/80
K7805M-1000R3	24(8-36)	5	1000	680	93/85
	12(8-27)	-5	-500	330	85/81
K78X6M-1000R3	24(10-36)	6.5	1000	680	93/85
K7809M-1000R3	24(13-36)	9	1000	680	94/89
K7812M-1000R3	24(16-36)	12	1000	680	95/92
	12(8-20)	-12	-300	330	88/87
K7815M-1000R3	24(20-36)	15	1000	680	96/93
	12(8-18)	-15	-300	330	87/88

Dimension LxWxH: 11.60 x 8.00 x 10.40(mm)

K78-2000R3

Selection Guide

Part No.	Input voltage range(VDC)	Output voltage(VDC)	Output current(mA)	Capacitive load Max.(μF)	Eff(%) @Full load
K78X2-2000R3	24(4.5-28)	1.8	2000	2000	83/79
K7802-2000R3	24(4.5-36)	2.5	2000	2000	89/83
K7803-2000R3(L)	24(6-36)	3.3	2000	1800	89/85
K7805-2000R3(L)	24(8-36)	5	2000	1000	92/89
K78X6-2000R3(L)	24(10-36)	6.5	2000	1000	92/89
K7809-2000R3	24(13-36)	9	2000	680	95/92
K7812-2000R3(L)	24(16-36)	12	2000	470	96/94
K7815-2000R3	24(18-36)	15	2000	470	96/94

K78-2000R3 Dimension LxWxH: 11.50 x 9.00 x 17.50(mm)
K78-2000R3(L) Dimension LxWxH: 19.00 x 11.50 x 9.00(mm)

K78(L)-3AR3

Selection Guide

Part No.	Input voltage range(VDC)	Output voltage(VDC)	Output current(mA)	Capacitive load Max.(μF)	Eff(%) @Full load
K78(L)03-3AR3	24(8-36)	3.3	3000	1000	90/83
K78(L)05-3AR3	24(8-36)	5	3000	680	93/89
K78(L)X6-3AR3	24(10-36)	6.5	3000	330	94/90
K78(L)09-3AR3	24(13-36)	9	3000	330	95/91
K78(L)12-3AR3	24(16-36)	12	3000	330	97/93
K78(L)15-3AR3	24(19-36)	15	3000	330	97/94

K78-3AR3 Dimension LxWxH: 32.15 x 14.85 x 9.05(mm)
K78(L)-3AR3 Dimension LxWxH: 30.60 x 12.50 x 5.80(mm)

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Board Mount DC/DC Converter

Non-isolated PoL Power Supply

K12 Series (6-60A)

Features

- PoL power converter
- Operating temperature range: -40℃ to +105℃
- Efficiency up to 96%
- Input under-voltage, output short-circuit, over-current protections
- Compact SMD package
- EN62368 approved

Selection Guide

Part No.	Input voltage(VDC) Rated value	Input voltage(VDC) Max. value*	Output voltage (VDC) (Rated value)	Output current (mA)(Max./Min.)	Eff(%) (Min./ typ.)	Capacitive load Max.(μF) 1mΩ≤ESR <10mΩ	Capacitive load Max.(μF) ESR≥10mΩ	Dimension(mm) (LxWxH)	Markings	Datasheet
K12T-6A-P(N)	12 (8.3-14)	15	0.75-5.5	6000	90/94	1000	3000	20.30 x 11.40 x 6.60	RoHS	
K12T-10A-P(N)	12 (8.3-14)	15	0.75-5.5	10000	93/96	5000	6000	33.00 x 13.50 x 8.30	RoHS	
K12T-16A-P(N)	12 (8.3-14)	15	0.75-5.5	16000	92/95	5000	6000	33.00 x 13.50 x 8.30	RoHS	
K12T-20A-P(N)	12 (8-14)	15	0.6-5.0	20000	92/94	5000	6000	33.00 x 13.50 x 9.90	RoHS	

Selection Guide

Part No.	Input voltage(VDC) Rated value	Input voltage(VDC) Max. value*	Output voltage (VDC) (Rated value)	Output current (mA)(Max./Min.)	Eff(%) (Min./ typ.)	Capacitive load Max.(μF)	Dimension(mm) (LxWxH)	Markings	Datasheet
K12MT-6A-P(N)	12 (4.5-14.4)	15	0.6-5.5	6000	91/94	1000	12.20 x 12.20 x 8.70	RoHS	
K12MT-12A-P(N)	12 (4.5-14.4)	15	0.6-5.5	12000	92/95	1000	12.20 x 12.20 x 8.70	RoHS	
K12MT-16A-P(N)	12 (4.5-14.4)	15	0.6-3.63	16000	87/92	330	12.20 x 12.20 x 8.40	RoHS	
KD12T-40A	12 (4.5-14.4)	15	0.6-4.5	40000	86.5/91.5	10000	33.03 x 13.46 x 10.49	RoHS	
KD12T-60A	12 (7.5-14.4)	15	0.6-4.5	60000	86.1/89.1	——	24.50 x 12.70 x 13.00	RoHS	

Notes

1. "P" indicates that the ON/OFF pin is positive logic control, "N" indicates that the ON/OFF pin is negative logic control.
2. Exceeding the maximum input voltage may cause permanent damage.

• This catalog is a collection of the latest products. For more information, please contact our sales team.

Buck/Buck-Boost Power Supply

KJB/KUB Series (7-20A)

Features

- Efficiency up to 97%
- Input under-voltage, output short-circuit, over-current protections
- Operating temperature up to 105℃
- International standard pin-out
- Adjustable input starting (under-voltage) voltage
- EN62368 approved

KJB48_SBO-10A

Selection Guide

Part No.	Input voltage range(VDC)	Output voltage(VDC)	Output current Max.(mA)	Capacitive load Max.(μF)	Eff(%) @Full load
KJB4805SBO-10A	48(18-85)	5	10000	8500	91
KJB4812SBO-10A	48(18-85)	12	10000	5500	95
KJB4815SBO-10A	48(21-85)	15	10000	3300	95
KJB4824SBO-10A	48(30-85)	24	10000	3300	97

Dimension LxWxH: 33.02 x 22.86 x 11.80(mm)

KJB48_EB(F)-10A

Selection Guide

Part No.	Input voltage range(VDC)	Output voltage(VDC)	Output current Max.(mA)	Capacitive load Max.(μF)	Eff(%) @Full load
KJB4805EB(F)-10A	48,72(18-85)	5	10000	8500	90/92
KJB4812EB(F)-10A	48,72(18-85)	12	10000	5500	93/95
KJB4815EB(F)-10A	48,72(21-85)	15	10000	4400	93/95
KJB4824EB(F)-10A	48,72(30-85)	24	10000	3300	94/96
KJB4836EB(F)-10A	48,72(43-85)	36	10000	1800	96/98

Dimension LxWxH: 60.80 x 25.00 x 12.70(mm)

KUB48_QB-10A

Selection Guide

Part No.	Input voltage range(VDC)	Output voltage(VDC)	Output current Max.(mA)	Capacitive load Max.(μF)	Eff(%) @Full load
KUB4812QB-10A	48(30-75)	12	10000	5500	92/95
KUB4824QB-10A	48(30-75)	24	10000	3300	94/97

Dimension LxWxH: 59.20 x 37.60 x 13.00(mm)

KJB48_EB(F)-15A

Selection Guide

Part No.	Input voltage range(VDC)	Output voltage(VDC)	Output current Max.(mA)	Capacitive load Max.(μF)	Eff(%) @Full load
KJB4836EB(F)-15A	48(43-85)	36	15000	680	96/98

Dimension LxWxH: 60.80 x 25.00 x 12.70(mm)

Note

"H" suffix for products with heat sink mounting. We recommend choosing modules with a heat sink for applications that require high requirement for temperature.

KJB48_EB(F)-20A

Selection Guide

Part No.	Input voltage range(VDC)	Output voltage(VDC)	Output current Max.(mA)	Capacitive load Max.(μF)	Eff(%) @Full load
KJB4805EB(F)-20A	48(14.5-85)	5	20000	8500	90/92
KJB4812EB(F)-20A	48(18-85)	12	20000	5500	93/95
KJB4815EB(F)-20A	48(21-85)	15	20000	4400	93/95
KJB4824EB(F)-20A	48(30-85)	24	20000	2200	96/98

Dimension LxWxH: 60.80 x 25.00 x 12.70(mm)

KUB48_EB(F)-10A(-RS)

Selection Guide

Part No.	Input Rated value (VDC)	Input Max. value (VDC)	Input Current limit (mA) typ.	Output Rated value (VDC)	Output Current limit (mA) typ.	Output Current setting range(mA)	Eff(%) @Full load
KUB4836EB(F)-10A	48(9-60)	65	12500	36(0-60)	12500	0-10000	93/95
KUB4836EB(F)-10A-RS	48(9-60)	65	12500	36(0-60)	12500	0-10000	93/95

KUB4836EB-10A(-RS) Dimension LxWxH: 60.80 x 25.00 x 12.70(mm)
KUB4836EBF-10A(-RS) Dimension LxWxH: 60.80 x 36.83 x 12.70(mm)

KUB_48EB(F)-10A

Selection Guide

Part No.	Input Rated value (VDC)	Input Max. value (VDC)	Input Current limit (mA) typ.	Output Rated value (VDC)	Output Current limit (mA) typ.	Output Power(W) Max.	Eff(%) @Full load	Capacitive load Max.(μF)
KUB4848EB(F)-10A	48(14.5-75)	75	10000	48(20-55)	10000	480	95/97.5	220
KUB6048EB(F)-10A	60(14.5-90)	90	10000	48(20-55)	10000	480	95/97.0	220

KUB_48EB-10A Dimension LxWxH: 60.80 x 25.00 x 12.70(mm)
KUB_48EBF-10A Dimension LxWxH: 60.80 x 36.83 x 12.70(mm)

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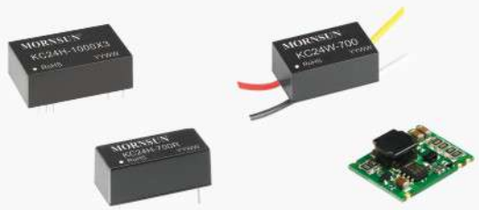
LED Driver

KC Series

Features

- Operating temperature up to 85℃
- Efficiency up to 97%
- Constant current mode, great power output
- Analogue dimming + PWM dimming
- Remote ON/OFF
- Continuous short-circuit protection



KC24H

Selection Guide

Part No.	Input voltage(VDC) Rated value	Input current(mA) @Vin=24V Vo=17V	Output Voltage(VDC)	Output Current(mA)	Eff(%) typ.	Capacitive load Max.(μF)	Dimension(mm) (LxWxH)	Markings	Datasheet
KC24H-1000	24 (5.5-48)	740	3.3-36	1000	97	1000	31.70 x 20.30 x 12.65	RoHS	
KC24H-1200		892		1200					

KC24H-R

Selection Guide

Part No.	Input voltage(VDC) Rated value	Input current(mA) (Typ.) (5LEDs)	Output Voltage(VDC)	Output Current(mA)	Eff(%) typ.	Capacitive load Max.(μF)	Dimension(mm) (LxWxH)	Markings	Datasheet
KC24H-300R	24 (5.5-46)	237	3.3-36	0-300	95	1000	22.80 x 10.20 x 9.00	RoHS	
KC24H-350R		276		0-350					
KC24H-500R		395		0-500					
KC24H-600R		474		0-600					
KC24H-700R		553		0-700					

KC24W

Selection Guide

Part No.	Input voltage(VDC) Rated value	Output Voltage(VDC)	Output Current(mA)	Dimming control	Eff(%) typ.	Capacitive load Max.(μF)	Dimension(mm) (LxWxH)	Markings	Datasheet
KC24W-300	24 (5.5-48)	3.3-36	0-300	PWM+Analogue	96	1000	22.10 x 12.55 x 9.10	RoHS	
KC24W-350			0-350						
KC24W-500			0-500						
KC24W-600			0-600						
KC24W-700			0-700						

KC24JT-R3

Selection Guide

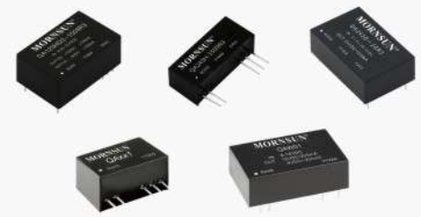
Part No.	Input voltage(VDC) Rated value	Output current(mA)	Eff(%) (Min./ typ.)	Capacitive load Max.(μF)	Dimension(mm) (LxWxH)	Markings	Datasheet
KC24JT-300R3	24 (6-36)	300	97	1000	21.50 x 16.72 x 5.20	RoHS CE UKCA	
KC24JT-700R3		700					

DC/DC Converter for IGBT Driver

QA Series

Features

- Isolation voltage up to 5000VAC
- Operating temperature range: -40℃ to +85℃
  -40℃ to +105℃ (QA-R3)
- High efficiency up to 88%
- Great power output
- Continuous short-circuit protection, self-recovery
- SIP/DIP packages



QAxx3HD2-1509R3

Selection Guide RoHS

Part No.	Input voltage (VDC)	Output voltage (VDC)	Output current (mA)	Isolation (VAC)	Eff(%) (min./typ.)
QA123HD2-1509R3	12	+15/-9	+100/-100	5000	80/85
QA153HD2-1509R3	15	+15/-9	+100/-100	5000	80/85
QA243HD2-1509R3	24	+15/-9	+100/-100	5000	74/80

Dimension LxWxH: 31.70 x 20.30 x 12.65(mm)

QAxx3-1509R3

Selection Guide cULus CE RoHS

Part No.	Input voltage (VDC)	Output voltage (VDC)	Output current (mA)	Isolation (VAC)	Eff(%) (min./typ.)
QA053-1509R3	5	+15/-8.7	+80/-40	5000	78/82
QA123-1509R3	12	+15/-9	+100/-100	5000	82/87
QAW123-1509R3	12	+15/-9	+100/-100	5000	82/87
QA153-1509R3	15	+15/-9	+100/-100	5000	82/87
QA243-1509R3	24	+15/-9	+100/-100	5000	77/82

Dimension LxWxH: 19.50 x 9.80 x 12.50(mm)

QAxx3H-1509R3

Selection Guide cULus CE RoHS

Part No.	Input voltage (VDC)	Output voltage (VDC)	Output current (mA)	Isolation (VAC)	Eff(%) (min./typ.)
QA123H-1509R3	12	+15/-9	+100/-100	5000	82/87
QA153H-1509R3	15	+15/-9	+100/-100	5000	82/87
QA243H-1509R3	24	+15/-9	+100/-100	5000	77/82

Dimension LxWxH: 27.40 x 9.50 x 12.00(mm)

QAxx3D-2GR3

Selection Guide CE RoHS

Part No.	Input voltage (VDC)	Output voltage (VDC)	Output current (mA)	Isolation (VAC)	Eff(%) (min./typ.)
QA123D-2GR3	12	+24/+24	+100/+100	5000	85/88
QA153D-2GR3	15	+24/+24	+100/+100	5000	85/88
QA243D-2GR3	24	+24/+24	+100/+100	5000	85/88

Dimension LxWxH: 31.60 x 20.30 x 10.20(mm)

QA0x

Selection Guide cULus CE CB RoHS

Part No.	Input voltage (VDC)	Output voltage (VDC)	Output current (mA)	Isolation (VAC)	Eff(%) (min./typ.)
QA01	15	+15/-8.7	+80/-40	3000	77/80
QA01-09	15	+9/--	+111/--	3000	77/80
QA01-A09	15	+9/-9	+55/-55	3000	77/80
QA01-17	15	+17/-8.7	+80/-40	3000	77/80
QA02	12	+15/-8.7	+80/-40	3000	77/80
QA03	24	+15/-8.7	+80/-40	3000	77/80
QA04	12	+15/-8	+100/-40	3000	77/80

Dimension LxWxH: 19.50 x 9.80 x 12.50(mm)

QAxx1

Selection Guide CE RoHS

Part No.	Input voltage (VDC)	Output voltage (VDC)	Output current (mA)	Isolation (VAC)	Eff(%) (min./typ.)
QA121	12	+15/-8	+120/-120	3000	78/81
QA151	15	+15/-8	+120/-120	3000	78/81
QA241	24	+15/-8	+120/-120	3000	78/81

Dimension LxWxH: 19.50 x 9.80 x 12.50(mm)

QAWxx

Selection Guide RoHS

Part No.	Input voltage (VDC)	Output voltage (VDC)	Output current (mA)	Isolation (VDC)	Eff(%) (min./typ.)
QAW01	12	+15/-9	±200/±10	3000	85
QAW02	24	+15/-9	±200/±10	3000	85

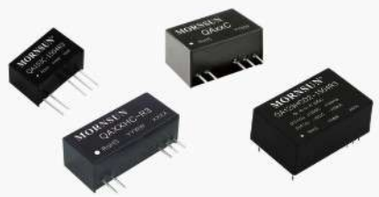
Dimension LxWxH: 31.60 x 20.30 x 10.20(mm)

DC/DC Converter for SiC MOSFET Driver

QA Series

Features

- Isolation voltage up to 5000VAC
- Operating temperature range: -40℃ to +85℃
  -40℃ to +105℃ (QA-R3)
- Great power output
- Continuous short-circuit protection, self-recovery
- SIP package



QAxx3C-1504R3

Selection Guide

Part No.	Input voltage (VDC)	Output voltage (VDC)	Output current (mA)	Isolation (VAC)	Eff(%) (min./typ.)
QA053C-1505R3	5	+15/-5	+80/-40	5000	78/82
QA123C-1504R3	12	+15/-4	+120/-120	5000	82/87
QA153C-1504R3	15	+15/-4	+120/-120	5000	82/87
QA243C-1504R3	24	+15/-4	+120/-120	5000	77/82

Dimension LxWxH: 19.50 x 9.80 x 12.50(mm)

QAxx3C-1803R3

Selection Guide

Part No.	Input voltage (VDC)	Output voltage (VDC)	Output current (mA)	Isolation (VAC)	Eff(%) (min./typ.)
QA053C-1803R3	5	+18/-3.5	+80/-80	5000	78/82
QA123C-1803R3	12	+18/-3	+100/-100	5000	82/87

Dimension LxWxH: 19.50 x 9.80 x 12.50(mm)

QAxx3HCD2-1504R3

Selection Guide

Part No.	Input voltage (VDC)	Output voltage (VDC)	Output current (mA)	Isolation (VAC)	Eff(%) (min./typ.)
QA123HCD2-1504R3	12	+15/-4	+120/-120	5000	80/85
QA153HCD2-1504R3	15	+15/-4	+120/-120	5000	80/85
QA243HCD2-1504R3	24	+15/-4	+120/-120	5000	74/80

Dimension LxWxH: 31.70 x 20.30 x 12.65(mm)

QAxx3C-2005R3

Selection Guide

Part No.	Input voltage (VDC)	Output voltage (VDC)	Output current (mA)	Isolation (VAC)	Eff(%) (min./typ.)
QA053C-2004R3	5	+20/-4	+80/-40	5000	78/82
QA123C-2005R3	12	+20/-5	+90/-90	5000	82/87
QA153C-2005R3	15	+20/-5	+90/-90	5000	82/87
QA243C-2005R3	24	+20/-5	+90/-90	5000	76/81

Dimension LxWxH: 19.50 x 9.80 x 12.50(mm)

QAxx3HCD2-1803R3

Selection Guide

Part No.	Input voltage (VDC)	Output voltage (VDC)	Output current (mA)	Isolation (VAC)	Eff(%) (min./typ.)
QA123HCD2-1803R3	12	+18/-3	+110/-110	5000	80/85
QA153HCD2-1803R3	15	+18/-3	+110/-110	5000	80/85
QA243HCD2-1803R3	24	+18/-3	+110/-110	5000	74/80

Dimension LxWxH: 31.70 x 20.30 x 12.65(mm)

QAxx3HC-1504R3

Selection Guide

Part No.	Input voltage (VDC)	Output voltage (VDC)	Output current (mA)	Isolation (VAC)	Eff(%) (min./typ.)
QA123HC-1504R3	12	+15/-4	+120/-120	5000	82/87
QA153HC-1504R3	15	+15/-4	+120/-120	5000	82/87
QA243HC-1504R3	24	+15/-4	+120/-120	5000	77/82

Dimension LxWxH: 27.40 x 9.50 x 12.00(mm)

QAxx3HCD2-2005R3

Selection Guide

Part No.	Input voltage (VDC)	Output voltage (VDC)	Output current (mA)	Isolation (VAC)	Eff(%) (min./typ.)
QA123HCD2-2005R3	12	+20/-5	+90/-90	5000	80/85
QA153HCD2-2005R3	15	+20/-5	+90/-90	5000	80/85
QA243HCD2-2005R3	24	+20/-5	+90/-90	5000	74/80

Dimension LxWxH: 31.70 x 20.30 x 12.65(mm)

QAxx3HC-2005R3

Selection Guide

Part No.	Input voltage (VDC)	Output voltage (VDC)	Output current (mA)	Isolation (VAC)	Eff(%) (min./typ.)
QA123HC-2005R3	12	+20/-5	+90/-90	5000	82/87
QA153HC-2005R3	15	+20/-5	+90/-90	5000	82/87
QA243HC-2005R3	24	+20/-5	+90/-90	5000	76/81

Dimension LxWxH: 27.40 x 9.50 x 12.00(mm)

QAxx1C

(For more detail approval, please check the datasheet.)

Selection Guide

Part No.	Input voltage (VDC)	Output voltage (VDC)	Output current (mA)	Isolation (VAC)	Eff(%) (min./typ.)
QA01C	15	+20/-4	+100/-100	3500	76/80
QA01C-18	15	+18/-3	+100/-100	3500	76/79
QA051C	5	+20/-5	+80/-40	3500	75/79
QA151C	15	+20/-5	+80/-40	3500	73/75
QA121C2	12	+15/-3.5	+111/-111	3500	77/81
QA151C3	15	+15/-4	+100/-100	3500	77/82

Dimension LxWxH: 19.50 x 9.80 x 12.50(mm)

QAxx1C-20

Selection Guide

Part No.	Input voltage (VDC)	Output voltage (VDC)	Output current (mA)	Isolation (VAC)	Eff(%) (min./typ.)
QA121C-20	12	+20/-5	+100/-100	3500	77/79
QA1201C-20	12	+20/-4	+100/-100	3500	79/80
QA2401C-20	24	+20/-4	+100/-100	3500	75/80

Dimension LxWxH: 19.50 x 9.80 x 12.50(mm)

• This catalog is a collection of the latest products. For more information, please contact our sales team.

Two-way Switching Power Supply

MBP Series (2-5A)

Features

- Two-way switching power supply
- Wide input voltage range
- Efficiency up to 83%
- Isolation voltage 3000VAC/4200VDC/5000VAC (for different series)
- Forward constant current output
- Operating temperature range: -40℃ to +65℃

MBP2403RP-2A

Selection Guide

Part No.		Input voltage(VDC)		Output voltage (VDC)	Output current (A)	Eff(%) (min./typ.)	Isolation (VAC)
MBP2403RP-2A	Forward	+Vin Voltage	Max. value	+Vo Voltage	2	76/73	5000
		24 (15-30)	40	3.3 (1.8-4.5)			
	Reverse	+Vo Voltage	Max. value	+Vin Voltage	-0.21	78/75	5000
		3.3 (1.8-4.5)	5.2	24 (15-30)			

Dimension LxWxH: 60.00 x 30.00 x 12.00(mm)

MBP2403RP-3A

Selection Guide

Part No.		Input voltage(VDC)		Output voltage (VDC)	Output current (A)	Eff(%) (min./typ.)	Isolation (VAC)
MBP2403RP-3A	Forward	+Vin Voltage	Max. value	+Vo Voltage	3	76/73	5000
		24 (15-30)	40	3.3 (1.8-4.5)			
	Reverse	+Vo Voltage	Max. value	+Vin Voltage	-0.34	78/75	5000
		3.3 (1.8-4.5)	5.2	24 (15-30)			

Dimension LxWxH: 60.00 x 30.00 x 12.00(mm)

MBP2403JD-3A

Selection Guide

Part No.		Input voltage(VDC)		Output voltage (VDC)	Output current (A)	Eff(%) (typ.)	Isolation
MBP2403JD-3A	Forward	+Vin Voltage	Max. value	+Vo Voltage	3	83	3000VAC/ 4200VDC
		24 (10-36)	40	3.3 (1.8-5)			
	Reverse	+Vo Voltage	Max. value	+Vin Voltage	-0.34	81	3000VAC/ 4200VDC
		3.3 (1.8-5)	5.3	24 (10-36)			

Dimension LxWxH: 49.00 x 23.60 x 17.05(mm)

MBP2403RP-5A

Selection Guide

Part No.		Input voltage(VDC)		Output voltage (VDC)	Output current (A)	Eff(%) (min./typ.)	Isolation (VAC)
MBP2403RP-5A	Forward	+Vin Voltage	Max. value	+Vo Voltage	5	82/79	5000
		24 (15-30)	40	3.3 (1.8-4.5)			
	Reverse	+Vo Voltage	Max. value	+Vin Voltage	-0.5	75/72	5000
		3.3 (1.8-4.5)	5.2	24 (15-30)			

Dimension LxWxH: 60.00 x 30.00 x 12.00(mm)

Notes

1. Forward: energy transfer from +Vin to +Vo; Forward: energy transfer from +Vo to +Vin.
2. Exceeding the maximum input/output voltage may cause permanent damage.
3. The full text of reverse current is expressed as negative value.

• This catalog is for reference only, not being the judgment basis for the use. For detailed datasheets please visit our website: www.mornsun-power.com.

Signal & EMC Auxiliary Device

Isolated CAN Bus Transceiver Module

CAN Series

Features

- Ultra-small chip level SOIC/DFN package / compact SMD package
- Baud rate up to 5Mbps
- ESD protection: IEC/EN61000-4-2 Contact ±4KV perf. Criteria B
- Two-terminal isolation (input and output are mutually isolated), built-in isolated power supply bus protection
- Dual channels isolation (input and output are mutually isolated, two channels are mutually isolated)
- Meets the "ISO 11898-2" standard
- Meets EN62368 standard
- CMTI: >150KV/MS

Selection Guide

Part No.	Input voltage (VDC)	Baud rate	Nodes	Protocol	Package	Integrated power	Isolation voltage	Type	Dimension(mm) (LxWxH)	Markings	Datasheet
TDA51SCANHC	4.5-5.5	1Mbps	110	CAN	SOIC	YES	5000Vrms	High-rate	10.20 x 10.10 x 2.35	RoHS	
TD541SCANH-S	4.5-5.5	40k-1Mbps	110	CAN	DFN	YES	5000VDC	High-rate	13.00 x 10.00 x 2.70	RoHS	
TD341SCANH	3.15-3.45	40k-1Mbps	110	CAN	DFN	YES	3750Vrms	High-rate	13.00 x 10.00 x 3.10	RoHS	
TD541SCANH	4.75-5.25	1Mbps	110	CAN	DFN	YES	3000VDC	High-rate	13.00 x 10.00 x 3.10	RoHS	
TD541SCANFD	4.75-5.25	5Mbps	110	CANFD	DFN	YES	3000VDC	High-rate	13.00 x 10.00 x 3.10	RoHS	
TD041SCANH-S	2.375-5.5, 4.5-5.5	40k-1Mbps	110	CAN	DFN	NO	3750Vrms	High-rate	10.00 x 10.00 x 1.20	RoHS	
TD041SCANH	2.375-5.5, 4.75-5.25	40k-1Mbps	110	CAN	DFN	NO	3750Vrms	High-rate	10.00 x 10.00 x 1.60	RoHS	
TD041SCANFD	2.375-5.5, 4.5-5.5	40k-5Mbps	110	CANFD	DFN	NO	3750Vrms	High-rate	10.00 x 10.00 x 1.60	RoHS	
TD331SCANH	3.15-3.45	40k-1Mbps	110	CAN	SMD	YES	2500VDC	High-rate	17.00 x 12.14 x 9.45	RoHS CE UKCA	
TD531SCANH	4.75-5.25	40k-1Mbps	110	CAN	SMD	YES	2500VDC				
TD331SCANFD	3.15-3.45	40k-5Mbps	110	CANFD	SMD	YES	2500VDC	High-rate	17.00 x 12.14 x 9.45	RoHS CE UKCA	
TD531SCANFD	4.75-5.25	40k-5Mbps	110	CANFD	SMD	YES	2500VDC				
CTD331SCANH	3.15-3.45	40k-1Mbps	110	CAN	SMD	YES	2500VDC	Automotive & High-rate	17.00 x 12.14 x 9.45	RoHS CE UKCA	
CTD531SCANH	4.75-5.25	40k-1Mbps	110	CAN	SMD	YES	2500VDC				
TD321SCAN	3.15-3.45	5k-1Mbps	110	CAN	SMD	YES	3000VDC	Universal	18.20 x 14.80 x 7.20	RoHS CE UKCA	
TD521SCAN	4.75-5.25	5k-1Mbps	110	CAN	SMD	YES	3000VDC				
TD321SCANH	3.15-3.45	40k-1Mbps	110	CAN	SMD	YES	3000VDC	Universal	18.20 x 14.80 x 7.20	RoHS CE UKCA	
TD521SCANH	4.75-5.25	40k-1Mbps	110	CAN	SMD	YES	3000VDC				
TD322DCAN	3.15-3.45	40k-1Mbps	110	CAN	DIP	YES	2500VDC	Universal	20.00 x 17.00 x 7.00	RoHS CE UKCA	
TD522DCAN	4.75-5.25	40k-1Mbps	110	CAN	DIP	YES	2500VDC				
TDH301DCAN	3.15-3.45	5k-1Mbps	110	CAN	DIP	YES	5000VAC	High-isolated & High-rate	20.00 x 17.00 x 12.80	RoHS CE UKCA	
TDH501DCAN	4.75-5.25	5k-1Mbps	110	CAN	DIP	YES	5000VAC				
TD301DCANH-W	3.15-3.45	40k-1Mbps	110	CAN	DIP	YES	3000VDC	Wake-up & High-rate	20.00 x 17.00 x 7.00	RoHS CE UKCA	
TD501DCANH-W	4.75-5.25	40k-1Mbps	110	CAN	DIP	YES	3000VDC				
TD301MCAN	3.15-3.45	40k-1Mbps	110	CAN	DIP	YES	2500VDC	Ultra-compact Size	12.70 x 10.16 x 7.70	RoHS CE UKCA	
TD501MCAN	4.75-5.25	40k-1Mbps	110	CAN	DIP	YES	2500VDC				

* This catalog is for reference only, not being the judgment basis for the use. For detailed datasheets please visit our website: www.mornsun-power.com.

Isolated RS-485 Transceiver Module

RS-485 Series

Features

- Ultra-small and ultra-thin, chip level DFN/SOIC package
- Build-in high-efficient isolated DC/DC converter
- Bus-Pin ESD protection up to 15kV(HBM)
- Baud rate up to 20Mbps
- Low communication delay
- Multiple protections
- Operating temperature range: -40℃ to +105℃
- Meets AEC-Q100 standard
- Meets EN62368 standard
- CMTI: >150KV/MS

Selection Guide

Part No.	Input voltage (VDC)	Baud rate	Nodes	Protocol	Package	Integrated power	Isolation voltage	Type	Dimension(mm) (LxWxH)	Markings	Datasheet
TDA51S485HC	3.0-5.5	500kbps	256	485	SOIC	YES	5000VAC	High-rate & Half-duplex	10.40 x 10.50 x 2.65	RoHS	
TD541S485H-S	4.5-5.5	1Mbps	256	485	DFN	YES	5000VDC	High-rate & Half-duplex	13.00 x 10.00 x 2.70	RoHS	
TD341S485H	3.15-3.45	1Mbps	256	485	DFN	YES	3000VDC	High-rate & Half-duplex	13.00 x 10.00 x 3.10	RoHS	
TD541S485H	4.75-5.25	1Mbps	256	485	DFN	YES	5000VDC	High-rate & Half-duplex	13.00 x 10.00 x 3.10	RoHS	
TD341S485H-A	3.15-3.45	500kbps	256	485	DFN	YES	3000VDC	Automatic send/receive	14.00 x 10.00 x 3.10	RoHS	
TD541S485H-A	4.5-5.5	500kbps	256	485	DFN	YES	3000VDC	Automatic send/receive	13.00 x 10.00 x 3.10	RoHS	
TD041S485H	2.375-5.5, 4.5-5.5	1Mbps	256	485	DFN	NO	3750VAC	High-rate & Half-duplex	10.00 x 10.00 x 1.60	RoHS	
TD041S485H-A	2.375-5.5, 4.5-5.5	500kbps	256	485	DFN	NO	3750VAC	Automatic send/receive	10.00 x 10.00 x 1.60	RoHS	
TD041S485S-F	2.375-5.5, 4.5-5.5	20Mbps	256	485/422	DFN	NO	3750VAC	High-rate & Full-duplex	10.00 x 10.00 x 1.60	RoHS	
TD041S485S-F1	2.375-5.5 3.0-5.5	20Mbps	256	485/422	DFN	NO	3750VAC	High-rate & Full-duplex	10.00 x 10.00 x 1.60	RoHS	
TD341S485S-F	3.15-3.45	20Mbps	256	485/422	DFN	YES	3000VDC	High-rate & Full-duplex	14.00 x 10.00 x 3.10	RoHS	
TD541S485S-F	4.5-5.5	20Mbps	256	485/422	DFN	YES	3000VDC	High-rate & Full-duplex	13.00 x 10.00 x 3.10	RoHS	
TD341S485S-F1	3.15-3.45	20Mbps	256	485/422	DFN	YES	3000VDC	High-rate & Full-duplex	14.00 x 10.00 x 3.10	RoHS	
TD541S485S-F1	4.5-5.5	20Mbps	256	485/422	DFN	YES	3000VDC	High-rate & Full-duplex	13.00 x 10.00 x 3.10	RoHS	
TD341S485S-FT	3.15-3.45	20Mbps	256	485/422	DFN	YES	3000VDC	High-rate & Full-duplex	14.00 x 10.00 x 3.10	RoHS	
TD541S485S-FT	4.5-5.5	20Mbps	256	485/422	DFN	YES	3000VDC	High-rate & Full-duplex	13.00 x 10.00 x 3.10	RoHS	

Selection Guide

Part No.	Input voltage (VDC)	Baud rate	Nodes	Protocol	Package	Integrated power	Isolation voltage	Type	Dimension(mm) (LxWxH)	Markings	Datasheet
TD331S485	3.15-3.45	19.2kbps	64	485	SMD	YES	2500VDC	Universal & Half-duplex	17.00 x 12.14 x 9.45	RoHS	
TD531S485	4.75-5.25	19.2kbps	64	485	SMD	YES	2500VDC				
TD331S485H	3.15-3.45	150kbps	128	485	SMD	YES	2500VDC	High-rate & Half-duplex	17.00 x 12.14 x 9.45	RoHS	
TD531S485H	4.75-5.25	150kbps	128	485	SMD	YES	2500VDC				
TD331S485H-A	3.15-3.45	150kbps	128	485	SMD	YES	2500VDC	High-rate & Half-duplex	17.00 x 12.14 x 9.45	RoHS	
TD531S485H-A	4.75-5.25	150kbps	128	485	SMD	YES	2500VDC				
TD331S485H-E	3.15-3.45	500kbps	256	485	SMD	YES	2500VDC	High-rate & Half-duplex	17.00 x 12.14 x 9.45	RoHS	
TD531S485H-E	4.75-5.25	500kbps	256	485	SMD	YES	2500VDC				
TD321S485	3.15-3.45	19.2kbps	64	485	SMD	YES	2500VDC	Universal & Half-duplex	18.20 x 14.80 x 7.20	RoHS	
TD521S485	4.75-5.25	19.2kbps	64	485	SMD	YES	2500VDC				
TD321S485H	3.15-3.45	200kbps	64	485	SMD	YES	3000VDC	High-rate & Half-duplex	18.20 x 14.80 x 7.20	RoHS	
TD521S485H	4.75-5.25	200kbps	64	485	SMD	YES	3000VDC				
TD321S485H-A	3.15-3.45	500kbps	128	485	SMD	YES	3000VDC	High-rate & Half-duplex	18.20 x 14.80 x 7.20	RoHS	
TD521S485H-A	4.75-5.25	500kbps	128	485	SMD	YES	3000VDC				
TD321S485H-E	3.15-3.45	500kbps	256	485	SMD	YES	3000VDC	High-rate & Half-duplex	18.20 x 14.80 x 7.20	RoHS	
TD521S485H-E	4.75-5.25	500kbps	256	485	SMD	YES	3000VDC				
TD321D485	3.15-3.45	19.2kbps	64	485	DIP	YES	2500VDC	Universal & Half-duplex	18.20 x 14.80 x 7.10	RoHS	
TD521D485	4.75-5.25	19.2kbps	64	485	DIP	YES	2500VDC				
TD321D485H	3.15-3.45	200kbps	64	485	DIP	YES	3000VDC	High-rate & Half-duplex	18.20 x 14.80 x 7.10	RoHS	
TD521D485H	4.75-5.25	200kbps	64	485	DIP	YES	3000VDC				
TD321D485H-A	3.15-3.45	500kbps	128	485	DIP	YES	3000VDC	High-rate & Half-duplex	18.20 x 14.80 x 7.10	RoHS	
TD521D485H-A	4.75-5.25	500kbps	128	485	DIP	YES	3000VDC				
TD321D485H-E	3.15-3.45	500kbps	256	485	DIP	YES	3000VDC	High-rate & Half-duplex	18.20 x 14.80 x 7.10	RoHS	
TD521D485H-E	4.75-5.25	500kbps	256	485	DIP	YES	3000VDC				
TD301D485	3.17-3.45	9.6kbps	32	485	DIP	YES	2500VDC	High-rate & Half-duplex	20.00 x 17.00 x 7.00	RoHS	
TD501D485	4.75-5.25	9.6kbps	32	485	DIP	YES	2500VDC				
TD301D485H	3.15-3.45	200kbps	32	485	DIP	YES	2500VDC	High-rate & Half-duplex	20.00 x 17.00 x 7.00	RoHS	
TD501D485H	4.75-5.25	200kbps	32	485	DIP	YES	2500VDC				
TD301D485H-A	3.17-3.45	115.2kbps	32	485	DIP	YES	2500VDC	High-rate & Half-duplex	20.00 x 17.00 x 7.00	RoHS	
TD501D485H-A	4.75-5.25	115.2kbps	32	485	DIP	YES	2500VDC				
TD301D485H-E	3.15-3.45	500kbps	256	485	DIP	YES	3000VDC	High-rate & Half-duplex	20.00 x 17.00 x 7.00	RoHS	
TD501D485H-E	4.75-5.25	500kbps	256	485	DIP	YES	3000VDC				
TDH301D485H	3.15-3.45	115.2kbps	32	485	DIP	YES	3750VAC	High-isolated & Half-duplex	20.00 x 17.00 x 7.00	RoHS	
TDH501D485H	4.75-5.25	115.2kbps	32	485	DIP	YES	3750VAC				
TDH301D485H2	3.15-3.45	1Mbps	128	485	DIP	YES	5000VAC	High-isolated & Half-duplex	20.00 x 17.00 x 12.80	RoHS	
TDH501D485H2	4.75-5.25	1Mbps	128	485	DIP	YES	5000VAC				
TDH301D485H-E	3.15-3.45	1Mbps	256	485	DIP	YES	5000VAC	High-isolated & Half-duplex	20.00 x 17.00 x 12.80	RoHS	
TDH501D485H-E	4.75-5.25	1Mbps	256	485	DIP	YES	5000VAC				
TD301M485	3.15-3.45	500kbps	64	485	DIP	YES	2500VDC	Ultra-compact Size	12.70 x 10.16 x 7.70	RoHS	
TD501M485	4.75-5.25	500kbps	64	485	DIP	YES	2500VDC				

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Isolated RS-232 Transceiver Module

RS-232 Series

Features

- Ultra-small, ultra-thin, chip level DFN/SMD package
- Build-in high-efficient isolated DC/DC converter (for some series)
- Low communication delay
- Multiple protections
- Operating temperature range: -40℃ to +105℃
- Meets EN62368 standard

Selection Guide

Part No.	Input voltage (VDC)	Baud rate	Nodes	Protocol	Package	Integrated power	Isolation voltage	Type	Dimension(mm) (LxWxH)	Markings	Datasheet
TD(H)341S232H	3.15-3.45	120kbps	1	232	DFN	YES	3000VDC/ 5000VDC	High-rate	14.00 x 10.00 x 3.10	RoHS	
TD(H)541S232H	4.5-5.5	120kbps	1	232	DFN	YES	3000VDC/ 5000VDC	High-rate	13.00 x 10.00 x 3.10	RoHS	
TD041S232H	2.375-5.5, 4.5-5.5	120kbps	1	232	DFN	NO	3750VAC	High-rate	10.00 x 10.00 x 1.60	RoHS	
TD331S232H	3.15-3.45	115.2kbps	1	232	SMD	YES	2500VDC	High-rate	17.00 x 12.14 x 9.45	RoHS CE UKCA	
TD531S232H	4.75-5.25	115.2kbps	1	232	SMD	YES	2500VDC				
TD301D232H	3.15-3.45	115.2kbps	1	232	DIP	YES	3000VDC	High-rate	20.00 x 17.00 x 7.00	RoHS CE cULus UKCA	
TD501D232H	4.75-5.25	115.2kbps	1	232	DIP	YES	3000VDC				

UART/SPI-CAN Protocol Conversion Module

TDxUSPCAN Series

Features

- Supports two-way data communication between UART/SPI and CAN interface
- Built-in high-efficient isolated power supply, two-port isolation voltage (3kVDC)
- UART baud rate up to 921.6kbps
- SPI rate up to 1.5Mbps
- CAN baud rate up to 1Mbps
- Supporting transparent conversion, transparent tape identification conversion, custom protocol conversion
- Operating temperature range: -40℃ to +85℃
- The bus supports maximum 110 nodes
- Set isolation and ESD bus protection in one

Selection Guide

Part No.	Input voltage (VDC)	Static current (mA)	Maximum operating current (mA)	UART baud rate(bps)	SPI rate (Mbit/s)	CAN baud rate (bps)	Nodes	Dimension(mm) (LxWxH)	Markings	Datasheet
TD3USPCAN	3.3	40	110	300-921600	0-1.5	5k-1M	110	31.60 x 20.30 x 10.20	RoHS CE UKCA	
TD5USPCAN	5	40	105	300-921600	0-1.5	5k-1M	110			

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Ethernet Protocol Conversion Module

TD-NET Series

Features

- Comply with IEEE802.3 standard
- Baud rate up to 921600bps
- 10/100M adaptive ethernet interface
- Support TCP, UDP, real COM mode
- Support serial port, configuration software, web server configuration
- 32-bit ARM cortex-M4 microcontroller processor
- Flexible serial data framing settings
- Support local and remote upgrades for system firmware
- Supports AT command configuration

Selection Guide

Part No.	Input voltage (VDC)	Number of serial port channels	Number of Ethernet port channels	Working current (mA)	Package	Integrated power	Type	Dimension(mm) (LxWxH)	Markings	Datasheet
TD1UDNET-RJ45	3.15-3.45, 4.5-30	1	1	3.3V: 115 (typ.) 5V: 100 (typ.)	DIP	YES	Protocol conversion	55.33 x 23.11 x 18.60	RoHS	
TD1UDNET	3.15-3.45, 4.5-30	1	1	3.3V: 115 (typ.) 5V: 100 (typ.)	DIP	YES	Protocol conversion	44.45 x 31.30 x 6.35	RoHS	
TD3UT-NET	3.0-3.6	1	1	3.3V: 150	SMD	YES	Protocol conversion	33.00 x 20.30 x 3.50	RoHS	

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Digital Signal Isolation Module

TD Series

Features

- Build-in high-efficient isolated power supply
- Isolation voltage: 5000VAC
- Baud rate up to 150Mbps
- Extremely low communication delay
- 0-4 channels direction selectable
- Operating temperature range: -40℃ to +125℃
- Meets EN62368 standard
- CMTI: >150KV/MS

Selection Guide

Part No.	Input voltage (VDC)	Operating voltage	Positive no. of channels	No. of channels	Package	Integrated power	Isolation voltage	Type	Dimension(mm) (LxWxH)	Markings	Datasheet
TDA51S-41HC	3.0-5.5	High 3.3V/5V	3	4	SOIC	YES	5000VAC	Quad channels digital isolator	7.60 x 10.40 x 2.35	RoHS	
TD341S-41H3	3.15-3.45	High 3.3V	3	4	DFN	YES	5000VDC	Quad channels digital isolator	14.00 x 10.00 x 3.10	RoHS	
TD341S-42H3	3.15-3.45	High 3.3V	2	4	DFN	YES	5000VDC				
TD541S-40H3	4.75-5.25	High 3.3V	4	4	DFN	YES	5000VDC	Quad channels digital isolator	13.00 x 10.00 x 3.10	RoHS	
TD541S-41H3	4.75-5.25	High 3.3V	3	4	DFN	YES	5000VDC				
TD541S-42H3	4.75-5.25	High 3.3V	2	4	DFN	YES	5000VDC				
TD541S-43H3	4.75-5.25	High 3.3V	1	4	DFN	YES	5000VDC				
TD541S-44H3	4.75-5.25	High 3.3V	0	4	DFN	YES	5000VDC				
TD341S-41H5	3.15-3.45	High 5V	3	4	DFN	YES	5000VDC	Quad channels digital isolator	13.00 x 10.00 x 3.10	RoHS	
TD341S-42H5	3.15-3.45	High 5V	2	4	DFN	YES	5000VDC				
TD541S-40H5	4.75-5.25	High 5V	4	4	DFN	YES	5000VDC	Quad channels digital isolator	13.00 x 10.00 x 3.10	RoHS	
TD541S-41H5	4.75-5.25	High 5V	3	4	DFN	YES	5000VDC				
TD541S-42H5	4.75-5.25	High 5V	2	4	DFN	YES	5000VDC				
TD541S-43H5	4.75-5.25	High 5V	1	4	DFN	YES	5000VDC				
TD541S-44H5	4.75-5.25	High 5V	0	4	DFN	YES	5000VDC				
TD541S-40L3	4.75-5.25	LOW	4	4	DFN	YES	5000VDC	Quad channels digital isolator	13.00 x 10.00 x 3.10	RoHS	
TD541S-41L3	4.75-5.25	LOW	3	4	DFN	YES	5000VDC				
TD541S-42L3	4.75-5.25	LOW	2	4	DFN	YES	5000VDC				
TD541S-43L3	4.75-5.25	LOW	1	4	DFN	YES	5000VDC				
TD541S-44L3	4.75-5.25	LOW	0	4	DFN	YES	5000VDC				
TD541S-40L5	4.75-5.25	LOW	4	4	DFN	YES	5000VDC	Quad channels digital isolator	13.00 x 10.00 x 3.10	RoHS	
TD541S-41L5	4.75-5.25	LOW	3	4	DFN	YES	5000VDC				
TD541S-42L5	4.75-5.25	LOW	2	4	DFN	YES	5000VDC				
TD541S-43L5	4.75-5.25	LOW	1	4	DFN	YES	5000VDC				
TD541S-44L5	4.75-5.25	LOW	0	4	DFN	YES	5000VDC				

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Analog Signal Conditioning Module

T Series

Features

- Isolation voltage: 2000VAC/60s
- Two-port isolation (signal input and signal output)
- Frequency response ≥ 2kHz
- Full and zeros adjustment functions
- High linearity of 0.1% Full Scale
- Extremely low-temperature coefficient: 50PPM/℃ (within -40℃ to +85℃)

TE_N

Selection Guide

Part No.	Input voltage (VDC)	Input signal	Output signal	Package	Isolated power output
TE5534N	24	0-10V	0-10V	DIP	15V
TE5544N	15	0-10V	0-10V	DIP	15V
TE5554N	12	0-10V	0-10V	DIP	15V
TE5634N	24	0-10V	0-5V	DIP	15V
TE6634N	24	0-5V	0-5V	DIP	15V
TE6644N	15	0-5V	0-5V	DIP	15V
TE6650N	12	0-5V	0-5V	DIP	None
TE6654N	12	0-5V	0-5V	DIP	15V
TE6664N	5	0-5V	0-5V	DIP	15V
TE1533N	24	4-20mA	0-10V	DIP	24V
TE1530N	24	4-20mA	0-10V	DIP	None
TE1550N	12	4-20mA	0-10V	DIP	None
TE1633N	24	4-20mA	0-5V	DIP	24V
TE1630N	24	4-20mA	0-5V	DIP	None
TE1650N	12	4-20mA	0-5V	DIP	None
TE1660N	5	4-20mA	0-5V	DIP	None
TE1430N	24	4-20mA	1-5V	DIP	None
TE1433N	24	4-20mA	1-5V	DIP	24V
TE1450N	12	4-20mA	1-5V	DIP	None
TE1S34N-2.5	24	4-20mA	0-2.5V	DIP	15V
TE1S60N-2.5	5	4-20mA	0-2.5V	DIP	None
TE1S60N-3.3	5	4-20mA	0-3.3V	DIP	None
TE1S65N-3.3	5	4-20mA	0-3.3V	DIP	12V
TESS64N-1-1	5	0-1V	0-1V	DIP	15V
TE2530N	24	0-20mA	0-10V	DIP	None
TE2650N	12	0-20mA	0-5V	DIP	None
TE6S6SN-3.3-9	5	0-5V	0-3.3V	DIP	9V
TE6660N-HK	5	0-5V	0-5V	DIP	None
TE6664N-G	5	0-5V	0-5V	DIP	24V

Dimension LxWxH: 26.00 x 9.50 x 12.50(mm)

TEM_N

Selection Guide

Part No.	Input voltage (VDC)	Input signal	Output signal	Package	Isolated power output
TEM5630AN	24	±75mV	0-5VDC	DIP	None
TEM6650AN	12	±100mV	0-5VDC	DIP	None
TEM6640AN	15	±100mV	0-5VDC	DIP	None
TEM4540CN	15	±50mV	±10V	DIP	None
TEM6540CN	15	±100mV	±10V	DIP	None
TEM6640CN	15	±100mV	±5V	DIP	None
TEM7650CN	12	±200mV	±5V	DIP	None

Package Dimension LxWxH: 26.00 x 9.50 x 12.50(mm)

TF_N

(For more detail approval, please check the datasheet.)

Selection Guide

Part No.	Input voltage (VDC)	Input signal	Output signal	Package	Isolated power output
TF5134N	24	0-10V	4-20mA	DIP	15
TF5234N	24	0-10V	0-20mA	DIP	15
TF5534N	24	0-10V	0-10V	DIP	15
TF5554N	12	0-10V	0-10V	DIP	15
TF5634N	24	0-10V	0-5V	DIP	15
TF6134N	24	0-5V	4-20mA	DIP	15
TF6234N	24	0-5V	0-20mA	DIP	15
TF6250N	12	0-5V	0-20mA	DIP	None
TF6254N	12	0-5V	0-20mA	DIP	15
TF6664N	5	0-5V	0-5V	DIP	15
TFS160N-3.3	5	0-3.3V	4-20mA	DIP	None
TF6250N-G	12	0-5V	0-20mA	DIP	None
TF6234N-G	24	0-5V	0-20mA	DIP	15

Dimension LxWxH: 26.00 x 9.50 x 12.50(mm)

TFW_N

Selection Guide

Part No.	Input voltage (VDC)	Input signal	Output signal	Package	Isolated power output
TFW260N	5	0-100	0-20mA	DIP	None
TFW560N	5	0-100	0-10V	DIP	None
TFW660N	5	0-100	0-5V	DIP	None

Dimension LxWxH: 26.00 x 9.50 x 12.50(mm)

Note

If the looped voltage is exceeded the maximum value, the module will be damaged.

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Analog Signal Conditioning Module — T Series

Features

- Four-port isolation (T_P)
- Three-port isolation (Among input, output, and power) (TM_P)
- High precision & linearity: 0.1% Full Scale
- Isolation voltage: 2500VDC
- Extremely low-temperature coefficient: 50PPM/℃ (within -40℃ to +85℃, T_P)
  50PPM/℃ (within -25℃ to +71℃, TM_P)
- Low cost, compact package, high reliability, convenient to use

T_P

(For more detail approval, please check the datasheet.)

Selection Guide

Part No.	Input voltage (VDC)	Input signal	Output signal	Package	Isolated power output
T1130P	24	4-20mA	4-20mA	DIP	None
T1133P	24	4-20mA	4-20mA	DIP	24
T1430P	24	4-20mA	1-5V	DIP	None
T1433P	24	4-20mA	1-5V	DIP	24
T1450P	12	4-20mA	1-5V	DIP	None
T1530P	24	4-20mA	0-10V	DIP	None
T1533P	24	4-20mA	0-10V	DIP	24
T1630P	24	4-20mA	0-5V	DIP	None
T1633P	24	4-20mA	0-5V	DIP	24
T1650P	12	4-20mA	0-5V	DIP	None
T1S33P-2.5	24	4-20mA	0-2.5V	DIP	24
T2230P	24	0-20mA	0-20mA	DIP	None
T2233P	24	0-20mA	0-20mA	DIP	24
T2633P	24	0-20mA	0-5V	DIP	24
T2650P	12	0-20mA	0-5V	DIP	None
T4130P	24	1-5V	4-20mA	DIP	None
T4630P	24	1-5V	0-5V	DIP	None
T5130P	24	0-10V	4-20mA	DIP	None
T5133P	24	0-10V	4-20mA	DIP	24
T5150P	12	0-10V	4-20mA	DIP	None
T5153P	12	0-10V	4-20mA	DIP	24
T5230P	24	0-10V	0-20mA	DIP	None
T5530P	24	0-10V	0-10V	DIP	None
T5533P	24	0-10V	0-10V	DIP	24
T5535P	24	0-10V	0-10V	DIP	12
T5544P	15	0-10V	0-10V	DIP	15
T5550P	12	0-10V	0-10V	DIP	None
T5555P	12	0-10V	0-10V	DIP	12
T5630P	24	0-10V	0-5V	DIP	None
T5650P	12	0-10V	0-5V	DIP	None
T5660P	5	0-10V	0-5V	DIP	None
T6130P	24	0-5V	4-20mA	DIP	None
T6150P	12	0-5V	4-20mA	DIP	None
T6230P	24	0-5V	0-20mA	DIP	None
T6233P	24	0-5V	0-20mA	DIP	24
T6235P	24	0-5V	0-20mA	DIP	12
T6250P	12	0-5V	0-20mA	DIP	None
T6530P	24	0-5V	0-10V	DIP	None
T6560P	5	0-5V	0-10V	DIP	None
T6630P	24	0-5V	0-5V	DIP	None
T6640P	15	0-5V	0-5V	DIP	None
T6650P	12	0-5V	0-5V	DIP	None
T6S36P-2.5	24	0-5V	0-2.5V	DIP	5
T6S60P-3	5	0-5V	0-3V	DIP	None

Dimension LxWxH: 31.60 x 20.30 x 10.20(mm)

Note

Support customized service.

TM_P

Selection Guide

Part No.	Input voltage (VDC)	Input signal	Output signal	Package	Isolated power output
TM1130P	24	0-10mV	4-20mA	DIP	None
TM3130P	24	0-30mV	4-20mA	DIP	None
TM4130P	24	0-50mV	4-20mA	DIP	None
TM4150P	12	0-50mV	4-20mA	DIP	None
TM5230P	24	0-75mV	0-20mA	DIP	None
TM6130P	24	0-100mV	4-20mA	DIP	None
TM2550P	12	0-20mV	0-10V	DIP	None
TM2650P	12	0-20mV	0-5V	DIP	None
TM3650P	12	0-30mV	0-5V	DIP	None
TM4530P	24	0-50mV	0-10V	DIP	None
TM4630P	24	0-50mV	0-5V	DIP	None
TM4650P	12	0-50mV	0-5V	DIP	None
TM4660P	5	0-50mV	0-5V	DIP	None
TM4S50P-2.5	12	0-50mV	0-2.5V	DIP	None
TM5530P	24	0-75mV	0-10V	DIP	None
TM5630P	24	0-75mV	0-5V	DIP	None
TM5650P	12	0-75mV	0-5V	DIP	None
TM6530P	24	0-100mV	0-10V	DIP	None
TM6630P	24	0-100mV	0-5V	DIP	None
TM6650P	12	0-100mV	0-5V	DIP	None
TM6S50P-3.3	12	0-100mV	0-3.3V	DIP	None
TM2S60P-2.5	5	0-20mV	0-2.5V	DIP	None
TM5130P	24	0-75mV	4-20mA	DIP	None
TM6660P	5	0-100mV	0-5V	DIP	None

Dimension LxWxH: 31.60 x 20.30 x 10.20(mm)

Note

Support customized service.

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Analog Signal Conditioning Module — T Series

Features

- Isolation voltage: 3000VDC
- Two-port isolation (signal input and signal output)
- High precision & linearity: 0.1% Full Scale
- Extremely low-temperature coefficient: 35PPM/℃
- Low voltage-drop: 3V Typ. (20mA input)
- High reliability (MTBF > 500,000 hours)

Selection Guide

Part No.	Input voltage (VDC)	Input signal	Output signal	No. of channels	Package	Isolated power output	Type	Dimension(mm) (LxWxH)	Markings	Datasheet
T1100N	None	4-20mA	4-20mA	1	DIP	None	Passive high-precision signal conditioning	23.80 x 16.75 x 8.00	RoHS	
T1100L	None	4-20mA	4-20mA	1	SIP	None	Passive high-precision signal conditioning	32.00 x 7.90 x 14.50	RoHS	
T1100L-F	10-24	4-20mA	4-20mA	1	SIP	None	Passive loop power supply signal conditioning	32.00 x 7.90 x 14.50	RoHS	

Note

If the looped voltage is exceeded the maximum value, the module will be damaged.

Analog Signal Conditioning Module — T Series

Features

- 4-20mA Loop power collection, 3.3V regulated output (loop power)
- Isolation voltage: 2000VAC/1mA/60s
- High precision & linearity: 0.1% Full Scale
- Extremely low-temperature coefficient: 50PPM/℃
- HART compatible
- Convert digital signal (PWM) into 4-20mA (TW147HL)

Selection Guide

Part No.	Power supply input	Input signal	Output signal	Package	Isolated power output	Type	Dimension(mm) (LxWxH)	Markings	Datasheet
T797HL	15-24V	0-2.5V	3.7-22mA	SIP	3.3V	Two-wire loop power supply signal isolation(with HART)	26.00 x 9.50 x 12.50	RoHS	
T747HL	10-24V	0-2.5V	3.7-22mA	SIP	3.3V				
T747L	10-24V	0-2.5V	3.7-22mA	SIP	3.3V	Two-wire loop power supply signal isolation	26.00 x 9.50 x 12.50	RoHS	

Notes

1. Support customized service.
2. T747L does not support HART protocol.

Analog Signal Conditioning Module

TRP_P Series

Features

- Two-wire, three-wire, four-wire pt100 RTD signal input
- Isolation voltage: 2000VAC
- High precision & linearity: 0.2% Full Scale
- Extremely low-temperature coefficient: 50PPM/℃ (within -40℃ to +85℃)
- International standard signal output: 4-20mA/0-2.5V
- Low cost, compact size, high reliability, convenient to use

TRP_P

Selection Guide

Part No.	Power supply input	Input signal	Output signal	Package	Isolated power output	Protocol	Type	Markings	Datasheet
TRP16130P	24	Pt100 (0℃ to +200℃)	4-20mA	DIP	None	Two-terminal isolation	Input signal conditioning (thermistor)	RoHS CE UKCA	
TRP15130P	24	Pt100 (0℃ to +100℃)	4-20mA	DIP	None				
TRP18130P	24	Pt100 (-50℃ to +150℃)	4-20mA	DIP	None				
TRP15S30P-2.5	24	Pt100 (0℃ to +100℃)	0-2.5V	DIP	None				
TRP16150P	12	Pt100 (0℃ to +200℃)	4-20mA	DIP	None				
TRP17130P	24	Pt100 (0℃ to +500℃)	4-20mA	DIP	None				
TRP17150P	12	Pt100 (0℃ to +500℃)	4-20mA	DIP	None				

Dimension LxWxH: 31.60 x 20.30 x 10.20(mm)

Note

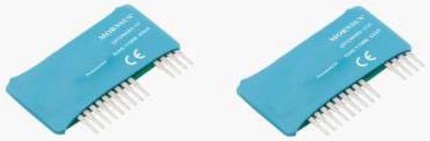
Support customized service.

IGBT Driver Module

QP Series

Features

- Built-in isolated DC/DC power supply, single power supply required
- Isolation voltage: 3750VAC
- Input signal frequency up to 20kHz
- Short-circuit and fault feedback functions
- Output cut-off after short circuit protection occurs and timing reset
- Adjustable fault detection rejection time (dead zone)
- Adjustable protective soft cut-off time



Selection Guide

Part No.	Nominal input voltage(VDC)	Input voltage range(VDC)	Output High-level voltage VOH(VDC)	Output low-level voltage VOL(VDC)	Max. driving current(A)	Switching frequency (Max.) (kHz)	Dimension(mm) (LxWxH)	Markings	Datasheet
QP12W08S-37	15	14.5-15.5	15	-9	±8	20	52.00 x 26.00 x 10.00	RoHS CE UKCA	
QP12W08S-37A	12	11.6–12.4	15	-9	±8	20	52.00 x 26.00 x 10.00	RoHS CE UKCA	

IGBT Driver Module

QC Series

Features

- Built-in high CMRR opto-coupler (CMRR: Typ: 30KV/ μ s, Min.: 15KV/ μ s)
- High-isolation voltage opto-coupler (3750Vrms/min)
- Short-circuit protection and output fault function
- Soft shut-down and reset timer can be used during over-current fault
- Adjustable controlled time for detecting short circuit
- Switching frequency up to 40kHz
- Suitable for 600V/600A, 1200V/400A and 1700V/200A series of IGBT modules
- Drop-in replacement to M57962AL

Selection Guide

Part No.	VCC voltage (VDC)	VEE voltage (VDC)	Gate voltage (VDC)	Max. driving current(A)	Switching frequency (Max.) (kHz)	Isolation (VAC)	Dimension(mm) (LxWxH)	Markings	Datasheet
QC962-8A	15	-10	+14/-9	±8	40	3750	49.00 x 25.00 x 10.00	RoHS	

EMC Auxiliary Device — FC Series

Features

- Operating temperature range: -40℃ to +85℃
- Used with a power supply to meet EMI requirements of CISPR32/EN50155 standards
- Surge meets IEC/EN61000-4-5 ±2KV/±4KV perf. Criteria B
- EMC meets IEC/EN61000-4 and CISPR32/EN55032
- Optional packages: PCB mounting, chassis mounting, DIN-Rail mounting

A2S Chassis Mounting

A4S DIN rail Mounting

FC-xxxD

Selection Guide

Part No.	Input voltage range(VDC)	Max. output power/current	Type	Outstanding features	Dimension(mm) (LxWxH)	Markings	Datasheet
FC-AX3D	10-36	30W	DC/DC EMC filter	Reverse voltage protection and slow start-up function	53.80 x 28.80 x 19.00	RoHS	
FC-B02D	18-75	30W	DC/DC EMC filter				
FC-D03D	18-36	50W	DC/DC EMC filter				
FC-E03D	36-75	75W	DC/DC EMC filter				
FC-A01D	9-36	1A	DC/DC EMC filter	Small volume	37.00 x 23.00 x 15.00	RoHS	
FC-B01D	18-75	1A	DC/DC EMC filter				

Notes

1. Used with DC/DC converter.
2. Series with suffix "A2S" are chassis mounting, with suffix "A4S" are DIN rail mounting.

EMC Auxiliary Device — FT Series

Features

- Improve EFT immunity, used with 0-80V DC/DC converters to meet EFT level of IEC/EN61000-4-4 ±4KV
- Compact size, high cost-effective
- Operating temperature range: -40℃ to +85℃ (Good temperature characteristic)
- The attenuation coefficient of frequency meet 30dB
- Design to meet the DC power supplies's EMI requirement
- Optional packages: PCB mounting, chassis mounting, DIN-Rail mounting

A2S Chassis Mounting

A4S DIN rail Mounting

Selection Guide

Part No.	Input voltage range(VDC)	Nominal current (A) (MAX)	Type	Outstanding features	Dimension(mm) (LxWxH)	Markings	Datasheet
FT-AX1D	0-40	1.5	DC/DC pulse group suppressor	Meet ±4KV requirements of pulse group suppressor	33.70 x 22.20 x 18.00	RoHS	
FT-BX1D	0-80	1.5					

Notes

1. Enable MORNSUN DC/DC converter to meet ±4KV requirements of IEC/EN61000-4-4.
2. Series with suffix "A2S" are chassis mounting, with suffix "A4S" are DIN rail mounting.

EMC Auxiliary Device — FC Series

Features

- Wide input voltage range: 14-160VDC
- Efficiency up to 98%
- Operating temperature range: -40℃ to +105℃
- EMC meets IEC/EN61000-4 and CISPR32/EN55032
- Meets Railway standard: EN50155/EN50121-3-2
- Meets EN62368 standard

A2S Chassis Mounting

A4S DIN rail Mounting

FC-CxxD

Selection Guide

Part No.	Input voltage range(VDC)	Max. output power/current	Type	Outstanding features	Dimension(mm) (LxWxH)	Markings	Datasheet
FC-C01D	40-160	10W	DC/DC EMC filter	Reverse voltage protection and slow start-up function	53.80 x 28.80 x 19.00	RoHS CE	
FC-CX1D	40-160	30W	DC/DC EMC filter				
FC-C03D	40-160	50W	DC/DC EMC filter				
FC-C08D	40-160	100W	DC/DC EMC filter	Reverse voltage protection and slow start-up function	67.00 x 37.00 x 19.80	RoHS CE UKCA	

Note

The series with suffix "A2S" are for chassis mounting, eg. FC-C01DA2S; Series with suffix "A4S" are for DIN rail mounting, eg. FC-C01DA4S.

EMC Auxiliary Device — FS Series

Features

- Suppress signal-port lightning surge
- Used with MORNSUN RS485 module to meet surge level of IEC/EN61000-4-5 ±2KV/±4KV
- Compact size, cost-effective
- Impact anti - current: ≤1KA (8/20 μ s simulated lightning waveforms)

FS-TD01D

Selection Guide

Part No.	Operating voltage(VDC)	Clamping voltage(VDC)	Nominal current (A) (MAX)	Type	Data Rate (Max)	Dimension(mm) (LxWxH)	Markings	Datasheet
FS-TD01D	0-5	15	≤0.1	485-AB bus surge protection module	115.2kbps	19.50 x 9.80 x 12.50	RoHS	

Notes

1. Enable RS485 modules to meet surge level of IEC/EN61000-4-5 ±2KV (2Ω internal resistance) / ±4V (12Ω internal resistance)
2. Customization is acceptable.

EMC Auxiliary Device — FL2D Series

Features

- Good temperature characteristic: -40℃ to +125℃
- Compact size
- Strong interference immunity
- Multiple inductances available

FL2D-xx-xxx

Selection Guide

Part No.	Inductance (μH)(Typ.)	Current (A)(Max)	DCR (mΩ)(Max)	Weight (g)(Typ.)	Package	Type	Dimension(mm)(LxWxH)	Markings	Datasheet
FL2D-Z5-103	10000*2	0.5	500*2	4.5	PCB	Common mode filter	17.00 x 9.60 x 18.00	RoHS	
FL2D-Z5-153	15000*2	0.5	600*2	4.5	PCB	Common mode filter	17.00 x 9.60 x 18.00		
FL2D-Z5-223	22000*2	0.5	650*2	4.5	PCB	Common mode filter	17.00 x 9.60 x 18.00		
FL2D-10-102	1000*2	1	70*2	4.5	PCB	Common mode filter	17.00 x 9.60 x 18.00		
FL2D-10-222	2200*2	1	90*2	4.5	PCB	Common mode filter	17.00 x 9.60 x 18.00		
FL2D-10-332	3300*2	1	100*2	4.5	PCB	Common mode filter	17.00 x 9.60 x 18.00		
FL2D-10-472	4700*2	1	140*2	4.5	PCB	Common mode filter	17.00 x 9.60 x 18.00		
FL2D-10-502	3500*2	1	220*2	3.4	PCB	Common mode filter	15.00 x 9.60 x 18.00		
FL2D-10-682	6800*2	1	160*2	6.5	PCB	Common mode filter	19.00 x 11.00 x 23.50		
FL2D-10-822	8200*2	1	180*2	6.5	PCB	Common mode filter	19.00 x 11.00 x 23.50		
FL2D-10-203	20000*2	1	240*2	5.6	PCB	Common mode filter	18.00 x 10.00 x 17.50		
FL2D-30-351	350*2	3	30*2	3.9	PCB	Common mode filter	17.00 x 9.60 x 18.00		
FL2D-30-102	1000*2	3	40*2	4.5	PCB	Common mode filter	17.00 x 9.60 x 18.00		
FL2D-30-222	2200*2	3	50*2	4.5	PCB	Common mode filter	17.00 x 9.60 x 18.00		
FL2D-30-472	4700*2	3	70*2	4.5	PCB	Common mode filter	17.00 x 9.60 x 18.00		
FL2D-30-103	10000*2	3	50*2	13.8	PCB	Common mode filter	24.50 x 22.50 x 15.50		
FL2D-60-402	4000*2	6	35*2	20	PCB	Common mode filter	24.00 x 23.50 x 19.00		
FL2D-60-451	450*2	6	9*2	6.4	PCB	Common mode filter	18.00 x 15.00 x 17.00		
FL2D-A2-202	2000*2	12	145*2	25.2	PCB	Common mode filter	25.50 x 23.80 x 15.50		
FL2D-D0-040	4*2	40	2*2	30.9	PCB	Common mode filter	36.00 x 28.00 x 20.00		
FL2D-50-102	1000*2	5	30*2	13	PCB	Common mode filter	23.00 x 13.20 x 23.00	RoHS	
FL2D-50-332	3300*2	5	38*2	13	PCB	Common mode filter	23.00 x 13.20 x 23.00		
FL2D-50-562	5600*2	5	47*2	13	PCB	Common mode filter	23.00 x 13.20 x 23.00		
FL2D-50-103	10000*2	5	56*2	18	PCB	Common mode filter	27.00 x 13.20 x 27.00		
FL2D-80-102	1000*2	8	30*2	15	PCB	Common mode filter	23.00 x 13.20 x 23.00		
FL2D-80-332	3300*2	8	30*2	15	PCB	Common mode filter	23.00 x 13.20 x 23.00		
FL2D-80-562	5600*2	8	38*2	20	PCB	Common mode filter	27.00 x 13.20 x 27.00		

Notes

1. Data mentioned above should be tested under the conditions of Ta=25℃, humidity<75%RH.
2. The inductances of FL2D-30-103 & FL2D-A2-202 are the minimum value, and the rests' are the typical value.

EMC Auxiliary Device — FC Series

Features

- Improve EMS performance, enable the MORNSUN AC/DC converter to meet EMI requirement of CISPR22/EN55022 CLASS B
- Operating temperature range: -40℃ to +85℃
- Input voltage range: 85-305VAC
- Design to suppress the AC power interference, and achieve a rough protection
- Compact size, high cost-effective
- Optional packages: PCB mounting, chassis mounting, DIN-Rail mounting

A2S Chassis Mounting

A4S DIN rail Mounting

FC-LxxD

Selection Guide

Part No.	Input voltage range(VAC)	Nominal current (A) (Max)	Outstanding features	Type	Dimension(mm) (LxWxH)	Markings	Datasheet
FC-LX1D	85-305	1.5	Surge: ±2KV/±4KV	AC/DC EMC filter	33.70 x 22.20 x 18.00	RoHS	
FC-LX1D2	85-305	1.5	Surge: ±2KV/±6KV	AC/DC EMC filter	53.80 x 28.80 x 19.00		
FC-L01DR2	85-305	0.2	Surge: ±2KV/±4KV	AC/DC EMC filter	33.70 x 22.20 x 18.00	RoHS	
FC-L01DV1	85-305	0.3	Surge: ±1KV/±2KV	AC/DC EMC filter	33.70 x 22.20 x 18.00	RoHS	
FC-L03D	0-305	3	Surge: ±2KV/±4KV	AC/DC EMC filter	52.40 x 27.20 x 24.00	RoHS	
FC-L03D2	0-305	3	Surge: ±4KV/±6KV	AC/DC EMC filter			

Notes

1. Used with AC/DC converter.
2. Series with suffix "A2S" are chassis mounting, with suffix "A4S" are DIN rail mounting.

EMC Auxiliary Device — FC Series

Features

- Ultra-wide input voltage range: 0-305VAC
- Operating temperature range: -40℃ to +85℃
- EMC meets IEC/EN61000-4 and CISPR22/EN55022
- High surge immunity up to 2KV/4KV, 4KV/6KV
- Meets IEC60939/IEC62368 standards

FC-L03I(x)

Selection Guide

Part No.	Operating voltage (VAC)Typ.	Operating voltage (VAC)Max*	Operating current (A)Max	Surge	Type	Dimension(mm) (LxWxH)	Markings	Datasheet
FC-L03I	230(0-305)	310	3.0	Line-Line ±2kV Line-Ground ±4kV	AC/DC EMC filter	92.66 x 25.00 x 58.00	RoHS CE	
FC-L03I2	230(0-305)	310	3.0	Line-Line ±4kV Line-Ground ±6kV				

Attention

* The input voltage must not exceed the mentioned above value. Otherwise, permanently irreversible damage will result.

EMC Auxiliary Device — FC Series

Features

- Ultra-wide input voltage range: 0-305VAC / 0-403VDC
- Operating temperature range: -40℃ to +85℃
- EMC meets IEC/EN61000-4 and CISPR22/EN55022
- High surge immunity up to 2KV/4KV, 4KV/6KV
- DM up to 75dB & CM up to 50dB
- Meets IEC60939/IEC62368 standards

FC-LxxW

Selection Guide

Part No.	Operating voltage (VAC)Typ.	Operating voltage (VAC)Max*	Operating current (A)Max	Surge	Type	Dimension(mm) (LxWxH)	Markings	Datasheet
FC-L03W	230(0-305)	310	3.0	Line-Line ±2kV, Line-Ground ±4kV	AC/DC EMC filter	85.00 x 39.00 x 28.90	RoHS CE	
FC-L03W2	230(0-305)	310	3.0	Line-Line ±4kV, Line-Ground ±6kV	AC/DC EMC filter	85.00 x 39.00 x 28.90		
FC-L06W	230(0-305)	310	6.0	Line-Line ±2kV, Line-Ground ±4kV	AC/DC EMC filter	85.00 x 39.00 x 28.90		
FC-L06W2	230(0-305)	310	6.0	Line-Line ±4kV, Line-Ground ±6kV	AC/DC EMC filter	85.00 x 39.00 x 28.90		

Attention: The input voltage must not exceed the mentioned above value. Otherwise, permanently irreversible damage will result.

Note: The series with suffix "A2S" are metal baseboard chassis mounting, series with suffix "A4S" are DIN rail mounting, eg. FC-L06WA4S.

CAN/RS-485 Industrial Bus IC — SCM34xxA Series

Features

- Single power supply: 3.0-5.5VDC
- Baud Rate up to 10Mbps
- 1/8 unit load, the bus supports maximum 256 nodes
- Bus-Pin ESD protection up to 15kV
- Driver short circuit protection

Selection Guide

Part No.	Input voltage range(VDC)	Baud rate	Nodes	Protocol	Package	Interface withstand voltage (V)	Type	Dimension(mm) (LxWxH)	Markings	Datasheet
SCM3406A	3.0-5.5	10Mbps	256	485	SOP-8	-15 To +15	High-rate 485 TR	5.10 x 4.00 x 1.55	RoHS	
SCM3421B	4.5-5.5	5Mbps	110	CAN	SOP-8	-58 To +58	High-rate CAN TR	5.10 x 4.00 x 1.55	RoHS	
SCM3422B	4.5-5.5	5Mbps	110	CAN	SOP-8	-58 To +58	High-rate CAN TR	5.10 x 4.00 x 1.55	RoHS	
SCM3425A	4.5-5.5	5Mbps	110	CAN	SOP-8	-42 To +42	High-rate CAN TR	5.00 x 4.00 x 1.55	RoHS	

Signal & EMC Auxiliary Device

EMC Auxiliary Device — FC Series

Features

- Ultra-wide input voltage range: 0-305VAC / 0-403VDC
- Operating temperature range: -40℃ to +105℃
- EMC meets IEC/EN61000-4 and CISPR22/EN55022
- High surge immunity up to 2KV/4KV
- Insertion loss: CM&DM>65dB @ 800kHz
- Meets IEC60939/IEC62368 standards

FC-L04QB

Selection Guide CE RoHS

Part No.	Operating voltage (VAC)Typ.	Operating voltage (VAC)Max*	Operating current (A)Max	Surge
FC-L04QB	230(0-305)	310	4.0	Line-Line ±2kV, Line-Ground ±4kV

Dimension LxWxH: 50.80 x 40.60 x 11.80(mm)

Attention

1. The input voltage must not exceed the mentioned above value. Otherwise, permanently irreversible damage will result.
2. The filter can be adapted to the power supplies according to the actual situation. For more infomation, please contact our FAE team.

FC-L10HB

Selection Guide CE RoHS

Part No.	Operating voltage (VAC)Typ.	Operating voltage (VAC)Max*	Operating current (A)Max	Surge
FC-L10HB	230(0-305)	310	10.0	Line-Line ±2kV, Line-Ground ±4kV

Dimension LxWxH: 60.00 x 63.00 x 14.50(mm)

Attention

* The input voltage must not exceed the mentioned above value. Otherwise, permanently irreversible damage will result.

Digital Signal Isolation IC — SCM37xxA Series

Features

- 3.0V to 5.5V signal level translation
- High common-mode transient immunity: 75kV/μs(typical value)
- High robustness to radiated and conducted noise
- High ESD rating
- Ultra-low-power consumption: 0.58mA/channel(1Mbps)
- Operating temperature range: -40℃ to +125℃
- Isolation voltage: 3000Vrms
- Baud rate up to 10Mbps

Selection Guide

Part No.	Input voltage range(VDC)	Baud rate	Isolation voltage(kV rms)	Package	Operating Voltage	Type	Dimension(mm) (LxWxH)	Markings	Datasheet
SCM3721A	3-5.5	150kbps	3	SOP-8	High 3.3(5)V	Dual channels digital isolator	5.00 x 4.00 x 1.50	RoHS	
SCM3723A	3-5.5	150kbps	3	SOP-8	High 3.3(5)V				
SCM3725A	3-5.5	10Mbps	3	SOP-8	High 3.3(5)V	Dual channels digital isolator	5.00 x 4.00 x 1.50	RoHS	
SCM3728A	3-5.5	10Mbps	3	SOP-8	Low				

• This catalog is a collection of the latest products. For more information, please contact our sales team.

• This catalog is for reference only, not being the judgment basis for the use. For detailed datasheets please visit our website: www.mornsun-power.com.

Signal & EMC Auxiliary Device

Smart Control Module

Current Transducer TL Series

Features

- AC, DC, or pulse currents are measurable
- Wide operating temperature range: -40℃ to +105℃
- Outstanding Accuracy & Linearity
- No insertion losses
- High immunity to external interference

Selection Guide

Part No.	Input voltage (VDC)	Current RMS value	Current measurement range(A)	Turns ratio	Package	Function	Dimension(mm) (LxWxH)	Markings	Datasheet
TLA50-S	±12/±15	50A	-100 to +100	1:2000	Disc type (bolt fixed)	High accuracy hall current transducer	66.00 x 57.30 x 55.10	RoHS	
TLA100-S	±12/±15	100A	-200 to +200	1:2000	Disc type (bolt fixed)				
TLA200-S	±12/±15	200A	-300 to +300	1:2000	Disc type (bolt fixed)				
TL6-A3TPV	5	6A	-20 to +20	1:1600	PCB	PCB-type hall current transducer	22.00 x 13.40 x 19.50	RoHS	
TL15-A3TPV	5	15A	-51 to +51	1:1600	PCB				
TL25-A3TPV	5	25A	-85 to +85	1:1600	PCB				
TL50-A3TPV	5	50A	-150 to +150	1:1600	PCB				
TL100-A2PV	5	100A	-300 to +300	1:1800	PCB	PCB-type hall current transducer	48.40 x 19.04 x 37.75	RoHS	
TL150-A2PV	5	150A	-450 to +450	1:1800	PCB				
TL200-A2PV	5	200A	-500 to +500	1:1800	PCB				
TL100-A2TPV	5	100A	-300 to +300	1:1800	PCB	PCB-type hall current transducer	48.40 x 38.60 x 37.75		
TL150-A2TPV	5	150A	-450 to +450	1:1800	PCB				
TL200-A2TPV	5	200A	-500 to +500	1:1800	PCB				
TL100-D1C	±12/±15	100A	-150 to +150	1:2000	Disc type (bolt fixed)	Disc-type hall current transducer	68.00 x 57.70 x 25.70	RoHS	
TL200-D1C	±12/±15	200A	-300 to +300	1:2000	Disc type (bolt fixed)				
TL300-D1C	±12/±15	300A	-500 to +500	1:2000	Disc type (bolt fixed)				
TL100P-D1C	±12/±15	100A	-150 to +150	1:2000	Disc type (bolt fixed)	Disc-type hall current transducer	68.00 x 57.70 x 25.50		
TL200P-D1C	±12/±15	200A	-300 to +300	1:2000	Disc type (bolt fixed)				
TL300P-D1C	±12/±15	300A	-500 to +500	1:2000	Disc type (bolt fixed)				
TL100-D2C	±12/±15	100A	-150 to +150	1:2000	Disc type (bolt fixed)	Disc-type hall current transducer	72.00 x 55.00 x 37.00	RoHS	
TL300-D2C	±12/±15	300A	-450 to +450	1:3000	Disc type (bolt fixed)				
TL300-D2C-SZ	±12/±15	300A	-450 to +450	1:3000	Disc type (bolt fixed)				
TL500-D1C	±15/±24	500A	-800 to +800	1:5000	Disc type (bolt fixed)	Disc-type hall current transducer	89.00 x 70.00 x 38.58	RoHS	
TL500P-D1C	±15/±24	500A	-800 to +800	1:5000	Disc type (bolt fixed)				

Note

The performance of TLx00-D1C and TLx00P-D1C is the same except for the connection terminals. For more details, please refer to the dimensional drawings in the datasheet.

Residual Current Detection Module | TLB Series

Features

- Suitable for residual current protection
- Complete types of residual current detection
- Ultra-compact layout design
- Comply with IEC61857-1, IEC62752, IEC62955 standards

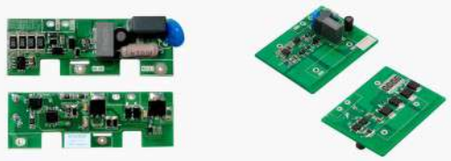
Selection Guide

Part No.	Input voltage range	Rated residual current	Operating temperature	Package	Function	Dimension(mm) (LxWxH)	Markings	Datasheet
TLB6-A1PD	4.85-5.15VDC	DC:6mA, AC:30mA	-40 to 85℃	PCB	EV charging residual current protection module	12.40 x 44.00 x 50.00	RoHS	
TLB6-A1PV	4.85-5.15VDC	DC:6mA, AC:30mA	-40 to 85℃	PCB	EV charging residual current protection module	13.20 x 40.00 x 45.00	RoHS	
TLB6-A1SVE	4.85-5.15VDC	DC:6mA, AC:30mA	-40 to 85℃	PCB	EV charging residual current protection module	26.60 x 28.30 x 23.60	RoHS	
TLB6-A1TDM	4.85-5.15VDC	DC:6mA, AC:30mA	-40 to 85℃	PCB	EV charging residual current protection module	34.00 x 49.00 x 23.00	RoHS	
TLB30-D3	220VAC (single-phase) 380VAC (3-Phase)	30mA	-40 to 85℃	Wiring	Low-voltage electrical residual current protection module	36.66 x 28.46 x 22.30	RoHS	
TLB100-D3		100mA						
TLB300-D3		300mA						

Contactor Control Module | KM Series

Features

- Wide input voltage range: 90-275VAC/VDC
- Apparent power lower than 6.5VA
- High reliability: 3600 times/h of operating frequency
- Quick response, switch delay less than 75ms
- EMS performance meets CISPR22/EN55022 CLASS A
- Support customized service



KM95-C0-0

Selection Guide — RoHS

Part No.	Apparent power	Control voltage	Rated operational current	No-load switching frequency
KM95-C0-0	6.5VA	90-275VAC/VDC	95A	3600 times/h

Dimension LxWxH: 69.00 x 22.90 x 18.50(mm)

KM115-C0-0

Selection Guide — RoHS

Part No.	Apparent power	Control voltage	Rated operational current	No-load switching frequency
KM115-C0-0	6.5VA	75-305VAC/VDC	115A	3600 times/h

Dimension LxWxH: 67.00 x 50.40 x 18.50(mm)

• This catalog is a collection of the latest products. For more information, please contact our sales team.

DC Contactor | KMJ Series

Features

- Low holding power dissipation
- Long mechanical lifespan, electrical lifespan
- Short period of pick-up time & release time
- Meet the requirement of vibration & impulse test
- Epoxy encapsulation

KMJ200-xx

Selection Guide — (Pending) CEC RoHS

Part No.	Continuous current	Max. operating voltage	Coil voltage	Package	Function
KMJ200-24-12M	200A	24VDC	12VDC	Wiring	Low voltage DC contactor
KMJ200-24-24M	200A	24VDC	24VDC		
KMJ200-48-48M	200A	48VDC	48VDC		
KMJ200-24-24MP	200A	24VDC	9-36VDC		

Dimension LxWxH: 58.10 x 57.00 x 92.70(mm)

KMJ250-900-24MP

Selection Guide — RoHS

Part No.	Continuous current	Max. operating voltage	Coil voltage	Package	Function
KMJ250-900-24MP	250A	900VDC	9-36VDC	Wiring	High voltage DC contactor

Dimension LxWxH: 80.50 x 66.00 x 72.30(mm)

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Caution

Purpose:

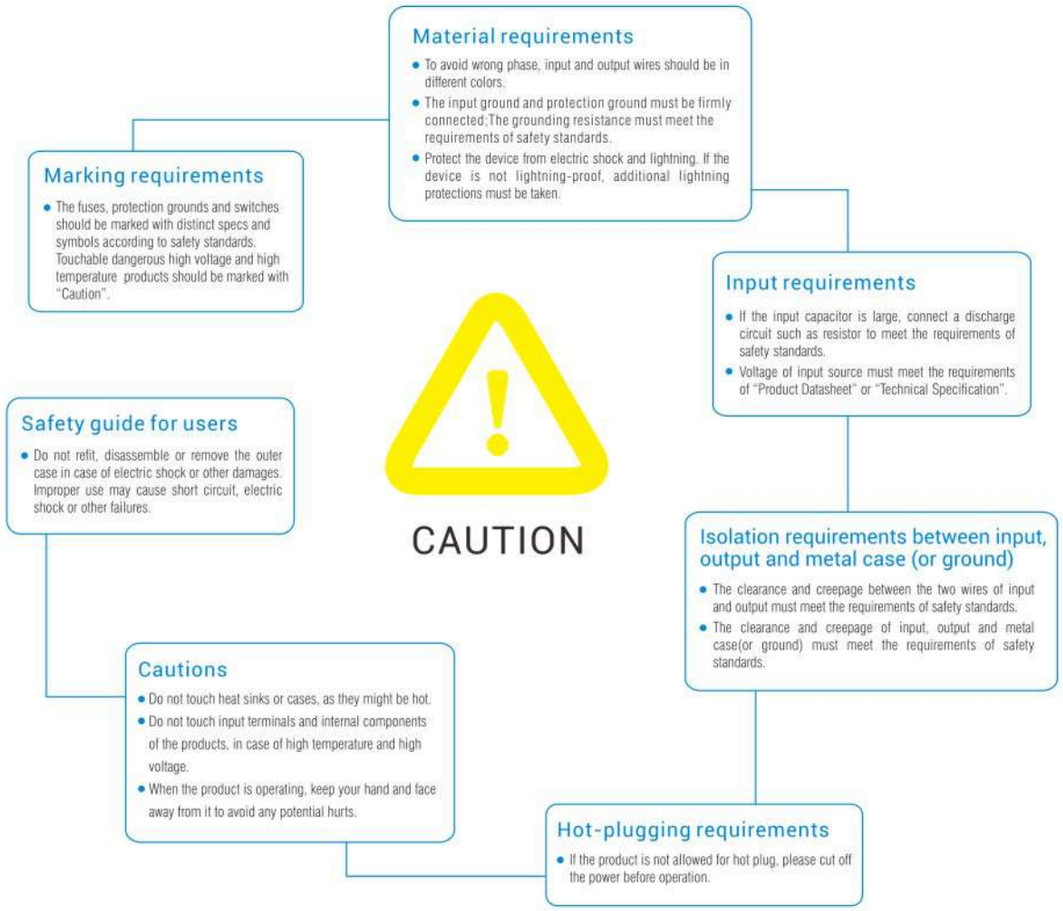
To prevent potential safety problems while using the products.

Scope:

AC/DC, DC/DC, EMC Auxiliary Device, Isolation Transmitter, LED Driver and IGBT Driver manufactured by Mornsun Guangzhou Science & Technology Co., Ltd.

Contents:

Users should comply to all the contents of Product Datasheet carefully before selection, design, or production, and design and use the products according the requirements of Product Datasheet.



More information about application, please contact us.

Tel: 020-38601850 E-mail: fae801@mornsun.cn

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Pin-Out Details

DC/DC Converter Pin-Out

Vin	+Input
GND	Input GND
+Vo	+Output
0V	Output GND
-Vo	Output
DC(-Vin)	-Input
DC(+Vin)	+Input
Vadj	Voltage Adjustable
Vref	Baseline Pins
Ctrl	ON/OFF Control Function
CASE	Connecting to the Pins of the Metal Enclosure
ON/OFF	ON/OFF Control, UVLO & Starting
	Time Delay Function
CS	With External Capacitor (Reduce Ripple)
Trim	Output Voltage Adjustable
-Sense	Voltage Output Remote Compensation (Output GND)
+Sense	Voltage Output Remote Compensation (Output+)
NC	No Electrical Connection
No Pin	No Pin
HV	High Voltage

AC/DC Converter Pin-Out

AC(N)	Neutral Wire
AC(L)	Live Wire
-Vo	-Output
+Vo	+Output
Trim	Output Voltage Adjustable
COM	Common
⏚	GND Protection
+V(CAP)	+External Capacitor
-V(CAP)	-External Capacitor
NC	No Electrical Connection
No Pin	No Pin

Isolation Transmitter Module Pin-Out

Pin+	Power Supply+
Pin-	Power Supply-
Pout+	Isolated Output+
Pout-	Isolated Output-
Pgnd	Isolated Output GND
Vo	Output
+Poss	+Isolated Power, Output
-Poss	-Isolated Power, Output
FB	Input Feedback
Icom	Input Common
Ocom	Output Common
Pin com/GND	Power Common
Io	Current Output
Sin+	Signal Input+
Sin-	Signal Input-
Sout+	Signal Output+
Sout-	Signal Output-
+Piss	+Isolated Power, Input
-Piss	-Isolated Power, Input
-IN	-Input
+IN	+Input
Pin	Power supply
Iin	Current Input
Adj	Gain Adjustable
GR	Gain auxiliary regulation
SG	Gain regulation
ZR	Zero auxiliary regulation
SZ	Zero regulation

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Pin-Out Details

Current Transducer Pin-Out

Output	Power Supply Output
+12/-15V	Power Supply +
-12/-15V	Power Supply -
OCD	Overcurrent Protection Pins
Vref	Baseline Pins
Vout	Output Voltage Pins
GND	Input GDN
NC	No Electrical Connection

Type-B Residual Current Detection Module Pin-Out

L1	Input Pins L1
L2	Input Pins L2
L3	Input Pins L3
N	Input Pins (Neutral Wire)
S	Self-checking Pins
L_1	Leakage detection Pins ±
L_2	Leakage detection Pins ±
TEST-IN	Test Pins
X6-OUT	DC Pins
X30-OUT	AC Pins
PWM-OU	PWM Output Pins

DC Contactor Pin-Out

A1	Contactor terminal
A2	Contactor terminal
1	Coil input pin
2	Coil input pin
3	Pilot switch 1
4	Pilot switch 2