

SELECTION GUIDE



POWERGOOD Product Model Number Structure

AC / DC Part Number Structure

120 ACQ100

Series Name Output Voltage (VDC) ACE25 050: 5 ACE60 120: 12 **ACQ100** 150: 15 **ACH250** 240: 24 **ACF700** 280: 28 **ACO100** 360: 36

Output Quantity Output Power (W) S: Single

DC / DC Part Number Structure

SQB - 018

ACO250

120

480: 48

100 B

Output

Series Name Input Output Voltage (VDC) Voltage (VDC) **ESB** 012:9-18 033: 3.3 **ESC** 018:9-36 050: 5 **STB** 024:18-36 120:12 SQB 036:18-75 150:15 048:36-75 240:24 SHB **SFB** 110:40-160 280:28 (40-180)480:48 300:180-425 050:± 5 028:9-75 MQB

054:14-154

120:±12

150:±15 240: ±24

Output Remote **Control Option** Quantity P : Positive S: Single (Dosa pin out) logic D: Dual N: Negative V: Vicor pin out

logic

Power (W) F: Flat (Baseplate without Flange) P:PV

(Heat sink embedded) B:Baseplate

Shape

(with Flange)

DC / DC Encapsulated-Bricks-S Part Number Structure

SQBS - 024W

120

В

100

S Shape Output **Series Name** Output Output Remote Input Voltage (VDC) Voltage (VDC) Quantity **Control Option** Power (W) **ESAS** 024W:9-36 050: 5 P: Positive F: Flat S: Single **ESBS** 048W:18-75 120:12 logic (Baseplate (Dosa pin out) **ESCS** 024:18-36 150: 15 N: Negative without Flange) D: Dual **SQBS** V: Vicor pin out 240: 24 048:36-75 logic B: Baseplate **SHBS** 110:40-160 280: 28 (with Flange) **SFBS** (40-180)480: 48 300:180-425 120: ±12

150: ±15

AC to DC Encapsulated Bricks











Series	ACE25	ACE60	ACQ100	ACH250	ACF700
Features	2"X1" compact size 50W Peak load Capability Easy Hold-up time extension Low No Load Power Consumption<0.3W Low leakage current 100uA ±10% Output Trimming Function OCP OVP OTP SCP	2"X2" compact size 120W Peak load Capability Easy Hold-up time extension Low No Load Power Consumption<0.5W Low leakage current 100uA ±10% Output Trimming Function OCP OVP OTP SCP	Quarter Brick size No aluminum and tantalum electrolytic capacitor inside for High Reliability Easy Hold-up time extension Baseplate cooled Built-in Active PFC OCP OVP OTP SCP	Half Brick size No aluminum and tantalum electrolytic capacitor inside for High Reliability Easy Hold-up time extension Baseplate cooled Built-in Active PFC OCP OVP OTP SCP	Full Brick size No aluminum and tantalum electrolytic capacitor inside for High Reliability Easy Hold-up time extension Built-in Active PFC Parallel function OCP OVP OTP SCP
Output Power (W)	25W	60W	100W	250W	700W
Input Voltage (VAC)	90 ~ 264	90 ~ 264	90 ~ 264	90 ~ 264	90 ~ 264
Output Voltage (VDC)	5, 12, 15, 24, 36, 48	5, 12, 15, 24, 36, 48	5, 12, 24, 28, 36, 48	12, 24, 28, 36, 48	24, 28, 36, 48
Efficiency	Up to 88%	Up to 90%	Up to 91%	Up to 91%	Up to 90%
Isolation	Up to 4000VAC	Up to 4000VAC	Up to 3000VAC	Up to 3000VAC	Up to 3000VAC
Dimension	2.10"x 1.10"x 0.96"	2.10"x 2.10"x 1.10"	2.36"x 1.57"x 0.50"	2.36"x 2.30"x 0.50"	4.62" x 2.36" x 0.50"
Case Temperature	-40°C ∼+80°C	-40°C ~+80°C	- 40°C ∼ +100°C	- 40°C ∼ +100°C	-40°C ∼+100°C
Package	Plastic case	Plastic case	Aluminum base with plastic case	Aluminum base with plastic case	Aluminum base with plastic case
EMI	EN55032 Class B	EN55032 Class B	EN55032 Class B (with external filter)	EN55032 Class B (with external filter)	EN55032 Class B (with external filter)
Safety	CE RÓHS SANCH	CE RÓHS	CE RÓHS	CE RÓHS	CE RÓHS
Warranty	2 Years	2 Years	3 Years	3 Years	3 Years

- Applications

 Wireless Network Telecom / Data Comunication Industrial Control System
 Semiconductor Equipment Medical Application

AC to DC







3-Phase PFC			0
Series	ACO100	ACO250	PFF1500-600S-3PH
Features	2" x 4" size Built-in Radiator Terminal block design and easy to use Baseplate cooled Built-in Active PFC OCP OVP OTP SCP	3" x 5" size Built-in Radiator Terminal block design and easy to use Baseplate cooled Built-in Active PFC OCP OVP OTP SCP	3-Phase Full Brick PFC No aluminum and tantalum electrolytic capacitor inside for High Reliability Compatiple with 50 60 400Hz system Baseplate cooled Built-in Active PFC OCP OVP OTP SCP
Output Power (W)	100W	250W	1500W
Input Voltage (VAC)	90 ~ 264	90~264	380VAC ±10%
Output Voltage (VDC)	5, 12, 24, 28, 36, 48	12, 24, 28, 36, 48	600
Efficiency	Up to 91%	Up to 91%	Up to 97%
Isolation	Up to 3000VAC	Up to 3000VAC	Non-Isolated
Dimension	4.00" x 2.06" x 1.57"	5.00" x 3.03" x 1.57"	4.62" x 2.36" x 0.52"
Case Temperature	-40°C ∼+100°C	-40°C ∼+100°C	-40°C ∼+100°C
Package	Open Frame & Aluminum case	Open Frame & Aluminum case	Aluminum base with plastic case
EMI	EN55032 Class B	EN55032 Class B	EN55032 Class B (with external filter)
Safety	CE RÓHS STATE	CE RÖHS	CE ROHS (SCONDLANT)
Warranty	3 Years	3 Years	3 Years

- Wireless Network Telecom / Data Comunication Industrial Control System Semiconductor Equipment Medical Application

Encapsulated-E Series ESB ESC Features - Built-in EMI filter - Wide range operating temperature - Single / Dual Outputs - \$1705 without densiting

Series	ESB	ESC
Features	Built-in EMI filter Wide range operating temperature Single / Dual Outputs +70°C without derating UVLO OCP OVP OTP	Built-in EMI filter Wide range operating temperature Single / Dual Outputs +70°C without derating UVLO OCP OVP OTP
Output Power (W)	$15 \text{W} \sim 30 \text{W}$	$20W\sim50W$
Input Voltage (VDC)	9~18, 9~36, 18~36, 18~75, 36~75	9~18, 9~36, 18~36, 18~75, 36~75, 40~160
Output Voltage (VDC)	3.3, 5, 12, 15, 24, ±5, ±12, ±15, ±24	3.3, 5, 12, 15, 24, ±12, ±15, ±24
Efficiency	Up to 91%	Up to 90%
Isolation	Up to 2250VDC	Up to 2250VDC
Dimension	1.6"x1.0"x0.40" (Flat) 1.6"x1.0"x0.50" (Heat sink embedded)	2.00"x1.00"x0.40" (Flat) 2.00"x1.20"x0.50" (Heat sink embedded) 2.00"x1.60"x0.45" (Baseplate)
Case Temperature	- 45°C \sim +115°C - 55°C \sim +125°C (Optional)	- 45°C ∼ +115°C - 55°C ∼ +125°C (Optional)
Package	Heat sink embedded & Flat	Heat sink embedded & Flat & Baseplate
EMI	EN55032 Class A &Class B	EN55032 Class A & Class B
Safety	C € RŐHS SALANT	CE ROHS
Warranty	3 Years	3 Years

Applications

Applications

- Railway Application Aviation Use Wireless Network Telecom / Data Comunication
- Industrial Control System Semiconductor Equipment

Encapsulated-S Series **ESAS** ESBS ESCS ■ Built-in EM I filter ■ Built-in EM I filter Built-in EMI filter **Features** Wide range operating temperature Wide range operating temperatureSingle / Dual Outputs Wide range operating temperatureSingle / Dual Outputs ■ Single / Dual Outputs SMD optional ■ +70°C without derating +60°C without derating +70°C without derating UVLO OCP OVP OTP UVLO OCP OVP OTP UVLO OCP OVP OTP Output Power (W) $40W \sim 50W$ 15W $20\text{W}\sim30\text{W}$ Input Voltage (VDC) 9~36, 18~75, 40~160 9~36, 18~36, 18~75, 40~160 9~36, 18~36, 18~75, 40~180 Output Voltage (VDC) 5, 12, 15, ±12, ±15 5, 12, 15, ±12, ±15 5, 12, 15, ±12, ±15 Up to 88% Up to 88% Up to 89% **Efficiency** Up to 1600VDC Isolation Up to 2000VDC Up to 2000VDC Dimension 1.27"x 0.65"x 0.40" (DIP 24) 1.00"x 1.00"x 0.40" 2.00"x 1.00"x 0.40" 1.27"x 0.65"x 0.40" (SMD 24) - 40° C \sim + 100° C -40°C \sim +100°C $-40^{\circ}\text{C} \sim +100^{\circ}\text{C}$ **Case Temperature** DIP 24, SMD 24 (Metal or PVC) Flat Flat **Package EMI** EN55032 Class A EN55032 Class A EN55032 Class A CE ROHS C € RốHS 🗹 C € RốHS 🗹 Safety 3 Years Warranty 3 Years 3 Years

Railway Application Aviation Use Wireless Network Telecom / Data Comunication

Industrial Control System - Semiconductor Equipment

Bricks-B SFB (Full Brick) **Series** STB (1 / 16 Brick compliant) SQB (1 / 8 - 1 / 4 Brick compliant) SHB (1 / 2 Brick compliant) MQB (1 / 4 Brick compliant) DOSA pin out 8:1 & 12:1 Ultra-Wide input voltage ■ DOSA pin out DOSA pin out / Vicor pin out DOSA pin out / Vicor pin out DOSA pin out / Vicor pin out Features • Wide range operating temperature · Wide range operating temperature · Wide range operating temperature Wide range operating temperature Wide range operating temperature Single / Dual / Multi output Ceramic Capacitor design Ceramic Capacitor design Ceramic Capacitor design Ceramic Capacitor design ■ Provides predictable EMI Provides predictable EMI ■ Provides predictable EMI Provides predictable EMI Provides predictable EMI No minimum load requirement • No minimum load requirement No minimum load requirement • No minimum load requirement Optional parallel output UVLO OCP OVP OTP **Output Power (W)** $40W \sim 60W$ $100W \sim 150W$ $\rm 200W \sim 300W$ $400W \sim 600W$ $50\text{W}\sim75\text{W}$ Input Voltage (VDC) 9~18, 9~36, 18~36, 18~75, 36~75 9~36, 18~36, 18~75, 40~180, 180~425 9~36, 18~36, 18~75, 40~180, 180~425 9~36, 18~36, 18~75, 40~180, 180~425 9~75, 14~154 **Output Voltage (VDC)** 3.3, 5, 12, 15, 24 5, 12, 24, 28, 48 5, 12, 24, 28, 48 12, 24, 28, 48 5, 12, 15, 24, ±12, ±15, ±24 Up to 91% Up to 92% Up to 92% Up to 91% Up to 90% Efficiency Isolation Up to 2250VDC Dimension 1.48"x 1.08"x 0.52" (Flat) 2.38"x1.08"x0.56"(1/8 Flat) 2.42"x 2.40"x 0.59" 4.62"x 2.40"x 0.59" 2.36"x1.57"x0.49" 1.49"x 1.46"x 0.52" (Baseplate) 2.38" x 1.47" x 0.56" (1/4 Baseplate) **Case Temperature** - 45° C \sim + 105° C -45°C ~ +105°C $-45^{\circ}\text{C} \sim +105^{\circ}\text{C}$ -45°C ~+105°C - 45° C \sim + 105° C -55°C ~ +125°C (Optional) -55°C ~+125°C (Optional) - 55° C \sim +125 $^{\circ}$ C (Optional) 6-side baseplate & Flat 6-side baseplate & Flat 6-side baseplate 6-side baseplate 6-side baseplate **Package** C € RốHS ✓ CE ROHS V C € RŏHS 🗸 C € RŏHS ✓ C € RŏHS 🗹 Safety 3 Years 3 Years Warranty 3 Years 3 Years 3 Years

Applications

- Railway Application Aviation Use Wireless Network Telecom / Data Comunication
- Industrial Control System Semiconductor Equipment



Applications

- Railway Application Aviation Use Wireless Network Telecom / Data Comunication
- Industrial Control System
 Semiconductor Equipment



POWERGOOD TECH. RESEARCH CO., LTD.

Address: 5F, No.40, Keya Rd., Daya Dist., Taichung City

42881, Taiwan

Website: www.powergood.com E- mail: sales1@powergood.com



Learn More