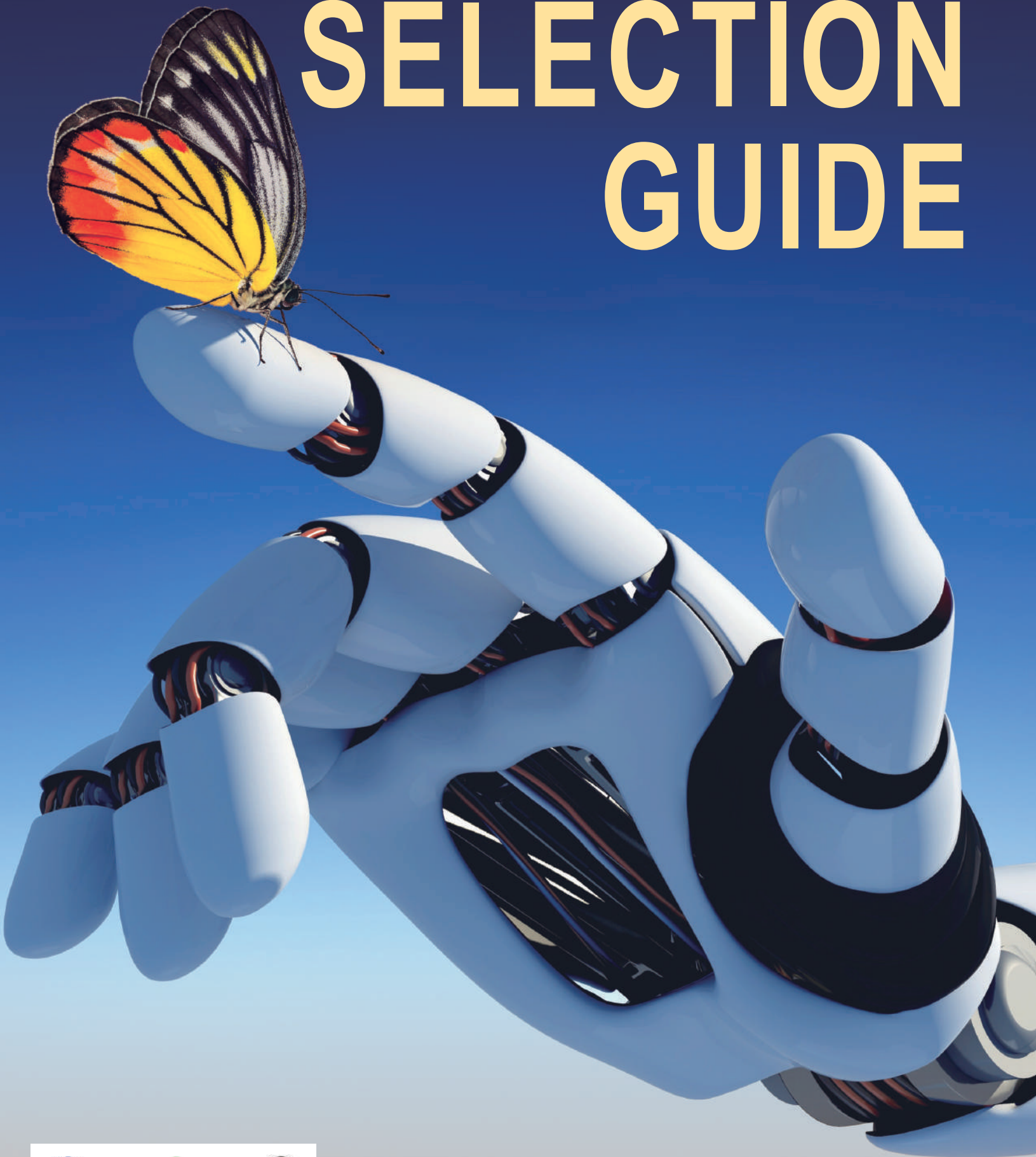




SELECTION GUIDE



POWERGOOD Develops Reliable Power Modules.

POWERGOOD Product Model Number Structure

AC / DC Part Number Structure

<u>ACQ100</u>	-	<u>120</u>		<u>S</u>	-	<u>100</u>
Series Name		Output Voltage (VDC)		Output Quantity		Output Power (W)
ACE30		050: 5		S : Single		
ACE60		120: 12				
ACQ100		150: 15				
ACH250		240: 24				
ACF700		280: 28				
ACO100		360: 36				
ACO250		480: 48				

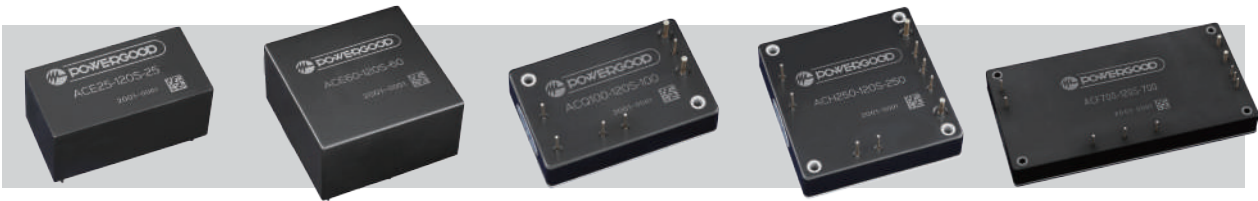
DC / DC Part Number Structure

<u>SQB</u>	-	<u>018</u>		<u>120</u>	-	<u>S</u>	-	<u>P</u>	-	<u>B</u>		<u>100</u>
Series Name		Input Voltage (VDC)		Output Voltage (VDC)		Output Quantity		Remote Control Option		Shape		Output Power (W)
ESB		012: 9-18		033: 3.3		S : Single		P : Positive		F : Flat		
ESC		018: 9-36		050: 5		(Dosa		logic		(Baseplate		
STB		024: 18-36		120: 12		pin out)		N : Negative		without Flange)		
SQB		036: 18-75		150: 15		D : Dual		logic		P : PV		
SQBF		048: 36-75		240: 24		V : Vicor				(Heat sink embedded)		
SHB		110: 40-160		280: 28		pin out				B : Baseplate		
SHBF		(40-180)		480: 48						(with Flange)		
SFB		(66-180)		050: ± 5								
MQB		300: 180-425		120: ±12								
		028: 9-75		150: ±15								
		054: 14-154		240: ±24								

DC / DC Encapsulated-S、Bricks-S Part Number Structure

<u>SQBS</u>	-	<u>024W</u>		<u>120</u>	-	<u>S</u>	-	<u>P</u>	-	<u>B</u>		<u>100</u>
Series Name		Input Voltage (VDC)		Output Voltage (VDC)		Output Quantity		Remote Control Option		Shape		Output Power (W)
ESAS		024W: 9-36		050: 5		S : Single		P : Positive		F : Flat		
ESBS		036W: 18-75		120: 12		(Dosa		logic		(Baseplate		
ESCS		048W: 18-75		150: 15		pin out)		N : Negative		without Flange)		
SQBS		024 : 18-36		240: 24		D : Dual		logic		B : Baseplate		
SHBS		048 : 36-75		280: 28		V : Vicor				(with Flange)		
SFBS		110 : 40-160		480: 48		pin out						
		(40-180)		120: ±12								
		300 : 180-425		150: ±15								

AC to DC Encapsulated Bricks



Series	ACE30	ACE60	ACQ100	ACH250	ACF700
Features	<ul style="list-style-type: none">▪ 2"X1" compact size▪ 50W / 60W 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	<ul style="list-style-type: none">▪ 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	<ul style="list-style-type: none">▪ 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	<ul style="list-style-type: none">▪ Half Brick size▪ No aluminum and tantalum electrolytic capacitor inside for High Reliability▪ Easy Hold-up time extension▪ Remote On / Off (Optional)▪ Built-in Active PFC OCP OVP OTP SCP	<ul style="list-style-type: none">▪ 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 / 30W	60W	100W / 150W	250W / 350W	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, 15, 19, 24, 28, 36, 48	12, 15, 19, 24, 28, 36, 48	12, 15, 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 2.40" 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					
Warranty	2 Years	2 Years	3 Years	3 Years	3 Years

Applications ▪ Wireless Network ▪ Telecom / Data Communication ▪ Industrial Control System
▪ Semiconductor Equipment ▪ Medical Application ▪ Defense

AC to DC PSU



Series	ACO100	ACO250
Features	<ul style="list-style-type: none">▪ Quarter Brick module Built-in▪ Built-in Radiator▪ High Power Density Ratio▪ Metal Baseplate & Cover▪ Built-in Active PFC OCP OVP OTP SCP	<ul style="list-style-type: none">▪ Half Brick module Built-in▪ Built-in Radiator▪ High Power Density Ratio▪ Metal Baseplate & Cover▪ Built-in Active PFC OCP OVP OTP SCP
Output Power (W)	100W / 150W	250W / 350W
Input Voltage (VAC)	90 ~ 264	90 ~ 264
Output Voltage (VDC)	12, 15, 24, 28, 36, 48	12, 15, 24, 28, 36, 48
Efficiency	Up to 90%	Up to 91%
Isolation	Up to 3000VAC	Up to 3000VAC
Dimension	5.00" x 1.64" x 1.00"	5.00" x 3.00" x 1.00"
Case Temperature	-40°C ~ +85°C	-40°C ~ +85°C
Package	Metal case	Metal case
EMI	EN55032 Class B	EN55032 Class B
Safety		
Warranty	3 Years	3 Years

Applications ▪ Wireless Network ▪ Telecom / Data Communication ▪ Industrial Control System
▪ Semiconductor Equipment ▪ Medical Application ▪ Defense

Encapsulated-E Encapsulated-S



Series	ESB	ESC	ESAS	ESBS	ESCS
Features	<ul style="list-style-type: none">Built-in EMI filterWide range operating temperatureSingle / Dual Outputs+70°C without derating UVLO OCP OVP OTP	<ul style="list-style-type: none">Built-in EMI filterWide range operating temperatureSingle / Dual Outputs+70°C without derating UVLO OCP OVP OTP	<ul style="list-style-type: none">Highly automated production to ensure greatest reliabilityBuilt-in PI filterWide range operating temperatureSMD optional+70°C without derating UVLO OCP OVP OTP	<ul style="list-style-type: none">Highly automated production to ensure greatest reliabilityBuilt-in PI filterWide range operating temperatureSingle / Dual Outputs+70°C without derating UVLO OCP OVP OTP	<ul style="list-style-type: none">Highly automated production to ensure greatest reliabilityBuilt-in PI filterWide range operating temperatureSingle / Dual Outputs+60°C without derating UVLO OCP OVP OTP
Output Power (W)	15W ~ 30W	20W ~ 50W	10W ~ 15W	20W ~ 50W	50W ~ 100W
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	9~36, 9~75, 18~75, 40~160	9~36, 9~75, 18~75	9~36, 9~75, 18~75, 40~160
Output Voltage (VDC)	3.3, 5, 12, 15, 24, ±5, ±12, ±15, ±24	3.3, 5, 12, 15, 24, ±12, ±15, ±24	5, 12, 15, 24, 28, 48, ±12, ±15	5, 12, 15, 24, 28, 48, ±12, ±15, ±24	5, 12, 15, 24, 28, 48, ±12, ±15, ±24
Efficiency	Up to 91%	Up to 90%	Up to 88%	Up to 88%	Up to 89%
Isolation	Up to 2250VDC	Up to 2250VDC	Up to 1600VDC	Up to 2000VDC	Up to 2000VDC
Dimension	1.6"x1.0"x0.4" (Flat) 1.6"x1.0"x0.5" (Heat sink embedded)	2.00"x1.20"x0.40" (Flat) 2.00"x1.20"x0.50" (Heat sink embedded) 2.03"x1.68"x0.46" (Baseplate)	1.27"x0.65"x0.40" (DIP 24) 1.27"x0.65"x0.40" (SMD 24)	1.00"x1.00"x0.40"	2.00"x1.00"x0.40"
Case Temperature	-45°C ~ +115°C -55°C ~ +125°C (Optional)	-45°C ~ +115°C -55°C ~ +125°C (Optional)	-40°C ~ +100°C	-40°C ~ +100°C	-40°C ~ +100°C
Package	Heat sink embedded & Flat	Heat sink embedded & Flat & Baseplate	DIP 24, SMD 24 (Metal or PVC)	Flat	Flat
EMI	EN55032 Class A & Class B	EN55032 Class A & Class B	EN55032 Class A	EN55032 Class A	EN55032 Class A
Safety					
Warranty	3 Years	3 Years	3 Years	3 Years	3 Years

Applications ▪ Railway Application ▪ Aviation Use ▪ Wireless Network ▪ Telecom / Data Communication
▪ Industrial Control System ▪ Semiconductor Equipment ▪ Defense

Bricks-B





Series	STB (1 / 16 Brick compliant)	SQB (1/8 ~ 1/4 Brick compliant)	SHB (1 / 2 Brick compliant)	SFB (Full Brick)	MQB (1 / 4 Brick compliant)
Features	<ul style="list-style-type: none">DOSA pin outWide range operating temperatureCeramic Capacitor designProvides predictable EMINo minimum load requirement UVLO OCP OVP OTP	<ul style="list-style-type: none">DOSA pin out / Vicor pin outWide range operating temperatureCeramic Capacitor designProvides predictable EMINo minimum load requirement UVLO OCP OVP OTP	<ul style="list-style-type: none">DOSA pin out / Vicor pin outWide range operating temperatureCeramic Capacitor designProvides predictable EMINo minimum load requirement UVLO OCP OVP OTP	<ul style="list-style-type: none">Vicor pin outWide range operating temperatureCeramic Capacitor designProvides predictable EMIOptional parallel output UVLO OCP OVP OTP	<ul style="list-style-type: none">DOSA pin out8:1 & 12:1 Ultra-Wide input voltageWide range operating temperatureSingle / Dual / Multi outputProvides predictable EMINo minimum load requirement UVLO OCP OVP OTP
Output Power (W)	40W ~ 60W	120W ~ 150W	200W ~ 300W	400W ~ 600W	50W ~ 75W
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, 15, 24, 28, 48	5, 12, 15, 24, 28, 48	12, 15, 24, 28, 48	5, 12, 15, 24, ±12, ±15, ±24
Efficiency	Up to 91%	Up to 92%	Up to 92%	Up to 91%	Up to 90%
Isolation	Up to 2250VDC	Up to 2250VDC	Up to 2250VDC	Up to 2250VDC	Up to 2250VDC
Dimension	1.48"x1.08"x0.52" (Flat) 1.49"x1.46"x0.52" (Baseplate) 1.49"x1.50"x0.50" (Wide Baseplate)	2.42"x1.08"x0.50" (1/8 Flat) 2.42"x1.47"x0.50" (1/4 Baseplate)	2.42"x2.40"x0.59"	4.62"x2.40"x0.59"	2.36"x1.57"x0.49"
Case Temperature	-45°C ~ +105°C	-45°C ~ +105°C -55°C ~ +125°C (Optional)	-45°C ~ +105°C -55°C ~ +125°C (Optional)	-45°C ~ +105°C -55°C ~ +125°C (Optional)	-45°C ~ +105°C
Package	6-side baseplate & Flat	6-side baseplate & Flat	6-side baseplate	6-side baseplate	6-side baseplate
Safety					
Warranty	3 Years	3 Years	3 Years	3 Years	3 Years

Applications ▪ Railway Application ▪ Aviation Use ▪ Wireless Network ▪ Telecom / Data Communication
▪ Industrial Control System ▪ Semiconductor Equipment ▪ Defense

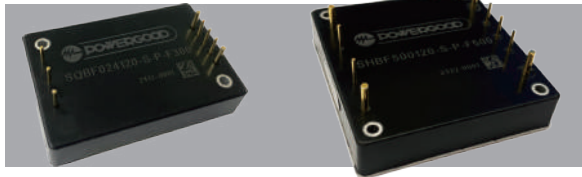
Bricks-S









Series	SQBS (1/8 - 1/4 Brick compliant)	SHBS (1/2 Brick compliant)	SFBS (Full Brick)
Features	<ul style="list-style-type: none">▪ Highly automated production to ensure greatest reliability▪ DOSA pin out / Vicor pin out▪ Wide range operating temperature▪ Ceramic Capacitor design▪ Provides predictable EMI▪ No minimum load requirement UVLO OCP OVP OTP	<ul style="list-style-type: none">▪ Highly automated production to ensure greatest reliability▪ Vicor pin out▪ Wide range operating temperature▪ Ceramic Capacitor design▪ Provides predictable EMI▪ No minimum load requirement UVLO OCP OVP OTP	<ul style="list-style-type: none">▪ Highly automated production to ensure greatest reliability▪ Vicor pin out▪ Wide range operating temperature▪ Ceramic Capacitor design▪ Provides predictable EMI▪ No minimum load requirement UVLO OCP OVP OTP
Output Power (W)	50W ~ 150W	50W ~ 200W	50W ~ 200W
Input Voltage (VDC)	9~36, 9~75, 18~36, 18~75, 40~160, 180~425	9~36, 18~36, 18~75, 40~160, 180~425	9~36, 18~36, 18~75, 40~160, 180~425
Output Voltage (VDC)	12, 15, 24, 28, 48	12, 15, 24, 28, 48	12, 15, 24, 28, 48
Efficiency	Up to 89%	Up to 89%	Up to 89%
Isolation	Up to 2250VDC	Up to 2250VDC	Up to 2250VDC
Dimension	2.42" x 1.08" x 0.50" (1/8 Flat) 2.42" x 1.47" x 0.50" (1/4 Baseplate) 2.42" x 2.20" x 0.50" (1/4 Wide Baseplate)	2.42" x 2.40" x 0.59"	4.62" x 2.40" x 0.59"
Case Temperature	-40°C ~ +100°C -55°C ~ +125°C (Optional)	-40°C ~ +100°C -55°C ~ +125°C (Optional)	-40°C ~ +100°C -55°C ~ +125°C (Optional)
Package	6-side baseplate & Flat	6-side baseplate	6-side baseplate
Safety	  	  	  
Warranty	3 Years	3 Years	3 Years

Applications ▪ Railway Application ▪ Aviation Use ▪ Wireless Network ▪ Telecom / Data Communication
▪ Industrial Control System ▪ Semiconductor Equipment ▪ Defense

Bricks-F



Series	SQBF (1/4 Brick compliant)	SHBF (1/2 Brick compliant)
Features	<ul style="list-style-type: none">▪ DOSA pin out▪ Maximum Power Density Ratio▪ Ceramic Capacitor design▪ Provides predictable EMI▪ No minimum load requirement UVLO OCP OVP OTP	<ul style="list-style-type: none">▪ DOSA pin out▪ Maximum Power Density Ratio▪ Ceramic Capacitor design▪ Provides predictable EMI▪ No minimum load requirement UVLO OCP OVP OTP
Output Power (W)	300W	600W
Input Voltage (VDC)	18~36, 18~75, 180~425	18~36, 36~75, 66~180, 180~425
Output Voltage (VDC)	12, 15, 24, 28, 48	12, 15, 24, 28, 48
Efficiency	Up to 93%	Up to 94%
Isolation	Up to 2250VDC	Up to 2250VDC
Dimension	2.40" x 1.60" x 0.50"	2.40" x 2.30" x 0.50"
Case Temperature	-45°C ~ +105°C	-45°C ~ +105°C
Package	Aluminum base with plastic case	Aluminum base with plastic case
Safety	  	  
Warranty	3 Years	3 Years

Applications ▪ Railway Application ▪ Aviation Use ▪ Wireless Network ▪ Telecom / Data Communication
▪ Industrial Control System ▪ Semiconductor Equipment ▪ Defense



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

