

**TECHNICAL DATA FOR PSG120E**
**Input (AC)**

Nominal input voltage	100-240 VAC
Voltage range	85-264 VAC (DC input range 120-375 VDC)
Frequency	47-63 Hz (0 Hz @ DC input)
Nominal current	1.4 A @ 115 VAC, 0.8 A @ 230 VAC
Inrush current limitation. $I^2t$ (+25 °C) typ.	< 80 A @ 115 VAC
Mains buffering at nominal load (typ.)	> 35 ms @ 115 VAC, > 70 ms @ 230 VAC
Turn-on time	< 1 sec.
Internal fuse	T 3.15 AH / 250 V
Recommended backup fuse	6 A, 10 A or 16 A
Power circuit-breaker characteristic	B
Leakage current	< 1 mA

**Output (DC)**

Nominal output voltage UN / tolerance	24 VDC ± 2 %
Adjustment range of the voltage	22-28 VDC
Nominal current	5 A
Derating above +50 °C	2.5 % / K.
Startup with capacitive loads	Max. 10,000 µF
Max. power dissipation idling / nominal load approx.	22.5 W
Efficiency (at 400V AC and nominal values)	> 84 % typical
Residual ripple/ peak switching (20 MHz) (at nominal values)	< 50 mV / < 240 mVpp
Parallel operation	With oring diode

**General Data**

Type of housing	Aluminium (Al5052)
Signals	Green LED DC OK
MTBF	> 800,000 hrs.
Dimensions (L x W x H)	121 mm x 50 mm x 118.2 mm
Weight	0.54 kg
Connection method	Screw connection
Stripping length	7 mm or use suitable lug to crimp
Operating temperature	-20 °C to +75°C (> 50°C derating)
Storage temperature	-25 °C to +85 °C
Humidity at +25 °C, no condensation	< 95 % RH
Vibration (operating)	10 to 150 Hz, 0.35 mm acc. 50 m / s <sup>2</sup> , single amplitude (5 G max.) for 90 min. in each X, Y & Z directions, in acc. with IEC 68-2-6
Pollution degree	2
Climatic class	3K3 according to EN 60721

**Certification and Standards**

Electrical equipments of machines	IEC60204-1 (over voltage category III)
Electronic equipment for use in electrical power installations	EN 50178 / IEC62103
Safety entry low voltage	PELV (EN 60204), SELV (EN 60950)
Electrical safety (of information technology equipment)	EN60950-1 (GS-mark), UL/C-UL recognized to UL60950-1, CSA C22.2 No.60950-1, CB scheme to IEC60950-1, cCSAus to UL60950-1 and CSA C22.2 No.60950-1 (file no.181564)
Industrial control equipment	UL / C-UL listed to UL508 and CSA C22.2 No.107.1-01 CSA to CSA C22.2 No.107.1-01 (file no.181564)
Protection against electric shock	DIN 57100-410
CE	In conformance with EMC directive 2004/108/EC and low voltage directive 2006/95/EC
ITE	EN55022, EN61000-3-2, EN61000-3-3, EN55024
Industrial	EN55011
Limitation of mains harmonic currents	EN61000-3-2


**RoHS Compliant**

Yes

**Safety and Protection**

Transient surge voltage protection	VARISTOR
Current limitation at short-circuits approx.	$I_{surge} = 150\% \text{ of } P_{0,\max}$ typically
Surge voltage protection against internal surge voltages	Yes
Isolation voltage:	
Input / output (type test/routine test)	4 kVAC / 3 kVAC
Input / PE (type test/routine test)	1.5 kVAC / 1.5 kVAC
Output / PE (type test/routine test)	1.5 kVAC / 500 VAC
Protection degree	IPX0
Safety class	Class I with PE connection
Shock (in all directions)	30 G (300 m/s <sup>2</sup> ) in all directions according to IEC 68-2-27