

TECHNICAL DATA FOR PSG240E

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	2.9 A @ 115 VAC, 1.5 A @ 230 VAC
Inrush current limitation. I^2t (+25 °C) typ.	No damage & I^2t rating of all I/P devices shall not exceed their rating
Mains buffering at nominal load (typ.)	> 20 ms @ 115 VAC & 230 VAC
Turn-on time	< 1 sec.
Internal fuse	T 6.3 AH / 250 V
Recommended backup fuse	10 A or 16 A
Power circuit-breaker characteristic	B
Leakage current	< 3.5 mA

Output (DC)

Nominal output voltage UN / tolerance	24 VDC ± 2 %
Adjustment range of the voltage	22-28 VDC
Nominal current	10 A
Derating above +50 °C	2.5 % / K. (>70 °C 4% / K.)
Startup with capacitive loads	Max. 10,000 µF
Max. power dissipation idling / nominal load approx.	42.5 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	> 300,000 hrs.
Dimensions (L x W x H)	121 mm x 85 mm x 118.5 mm
Weight	1.04 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 ² , 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	EN50178 / IEC62103
Safety entry low voltage	PELV (EN60204), SELV (EN60950)
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	DIN57100-410
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.	$I_{surge} = 150\%$ of P_{0max} 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 ²) in all directions according to IEC 68-2-27