ENGLISH

Datasheet

RS PRO Primary switchmode power supply, PFC, Single-phase

Stock No: 192-7581

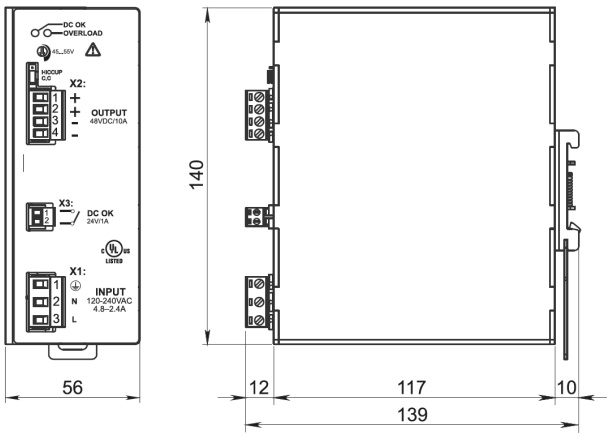
Technical Specifications:

Input	
Number of phases 1	1
Rated voltage UN	AC 120/240 V (UL certified)
Operation voltage range	AC 90–264 V / DC 110–345 V
Line frequency	47 – 63 Hz
Rated current	IN 4.8 A @ AC 120 V / 2.4 A @ AC 240 V 4.9 A @ DC 110 V / 1.7 A @ AC 345 V
Inrush peak current	≤ 23 A / 0.56 A2s
Touch current	(leakage current) ≤ 0.9 mA
Internal fuse	8AT (not user replacable)
External fuse	10AT or MCB 10A C-curve
	It is strongly recommended that external surge arresters (SPDs) be provided in accor- dance with local regulations.
Power factor correction P.F.C.	>0,90, enabled

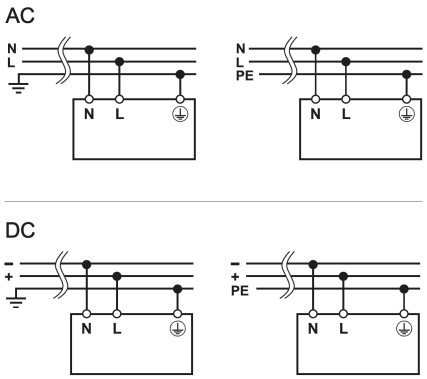
Features & Benefits:

- Primary switchmode power supply, PFC, Single-phase
- Input: AC 90–264 V, DC 110–345 V
- Output: 48 V, adjustable output voltage range (DC 45–55 V)
- Properties High efficiency and extremely compact dimensions
- Only 56 mm wide aluminium housing
- Active PFC (Power factor correction)
- Overload 150 %
- Constant current or hiccup mode limitation (in case of overload), user definable
- Wide output voltage range
- Easy to connect in parallel to increase performance
- Up to 60 °C operating temperature without derating

Dimensions



PIN assignment



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Output	
Rated voltage UN	DC 48 V
Rated current	IN 10 A
Overload limit in constant current mode	12A
Max. output current	17 A, 5 s @ Hiccup Mode
Heat dissipation	<31 W
Setting range Uout min./Uout max.	DC 45–55 V
Load regulation	<0.5 %
Ripple and Noise	<200 mV pp
	Ripple and noise are measured with 20 MHz bandwidth, the probe is terminated with a 0.1 µF MKP parallel capacitor.
Hold up time	>25 ms @ AC 240 V Status indication DC ON LED green ≥21.6 V
Status indication DC LOW LED red	≤21.6 V
Parallel / redundant mode	yes/via external decoupling diode e.g. Part-No. 722999
	NOTE: Be sure to set the current limiting mode jumper to DC mode when connecting multiple devices in parallel.
Efficiency	>94 % @ AC 240 V
Overtemperature protection	yes
Over voltage protection	≥DC 68 V (UA=24 V)
Short circuit	Hiccup Mode

Technical Data

Monitoring	
DC ON Control (Rdy)	N/O contact
Switching voltage	AC/DC 300 V / DC 150 V
Switching current	AC/DC 1 A
Switching capacity	300 VA / 30 W
Switching current	AC/DC 1 A
Switching capacity	300 VA / 30 W
Isolation voltage	AC 500 V

General	
Insulation voltage input / output	DC 4.2 kV, 1 min.
Insulation voltage input / ground	DC 2.2 kV, 1 min.
Insulation voltage output / ground	DC 750 V, 1 min.
Derating	>50 °C: -7.6 W/°C @ AC 120 V
	>60 °C: -7.2 W/°C @ AC 240 V
Operation temperature range	-40 °C … +70 °C
	UL certified up to 50 °C at AC 120 V or up to 60 °C at AC 240 V
Storage temperature range	-40 °C … +80 °C
Relative air humidity	5 – 95 %, non-condensing
Cooling	Air convection, 100 mm distance top/bottom, 20 mm side
Housing material	Aluminum
Mounting	DIN rail mountable TS35
	(EN 60715)
Installation position	vertical
Protection class	IP20 (IEC 529 / EN 60529)
Protection class	I
Over voltage category	III (EN 50178)
Degree of polution	2 (IEC 60664-1)
Weight	1.100 kg/piece
Connection type	Screw terminal
	0,20 mm2 – 2,5 mm2 / AWG 24 – 12
Strip length	6.0-7.5 mm / 0.24-0.30 in
Schraubendreher	3,0 Б~ 0,5 mm
Tightening torque	0.5 – 0.6 Nm / 4.42 – 5.30 lbf in
Dimensions	(w Б~ h Б~ d) 56.0 Б~ 140.0 Б~ 139.0 mm
Approvals	cULus (E249179)

Technical Data

General	
Standards	EN 60950 (Safety Standard, reference)
	EN 50178 (Safety Standard, reference)
	EN 55011 (CISPR11) Class B (EMC Emission)
	EN 55022 (CISPR22) Class B (EMC Emission)
	EN 60529 (Protection degree, IP20)
	IEC 61000-4-2/3/4/5/11 (EMC Immunity)
	IEC 60068-2-6 (Vibration sinuosoidal), 5-17.8 Hz: ±1.6 mm, 17.8-500 Hz: 2 g 2 hours / axis (X,Y,Z)
	IEC 60068-2-27 (Shock), 30 g 6 ms, 20 g 11 ms, 3 bumps / direction, 18 bumps total
Life-cycle expectancy	167’953 h (19.1 years) at 25 °C ambient full load
MTBF	MIL-HDBK-217F, > 600'000 h at 25 °C ambient full load
PU	1 piece