

Anixter Level 1 for Industrial Network Environments

Power Supplies: 48V 10 A Three Phase



Anixter Item #	Product Description
L1-48V-10A-3P-DIN	Primary Switched-Mode Power Supply, Three Phase, 48 VDC / 10 A, DIN-rail mount.

Technical Data	
Input:	
Nominal input voltage V_i nom	3x (2x) 400 ... 500 VAC
Input voltage range	340 ... 550 VAC; 480 ... 780 VDC (use of DC requires external protection)
Frequency	50 - 60 Hz
Input current I_i	3 x 1.1 A at 340 VAC and 10 ADC
Discharge current	1 mA typ.
Inrush current	< 30 A (peak)
Mains failure hold-up time	12 ms typ. at 3 x 400 VAC

Output:	
Nominal output voltage V_o nom	48 VDC (SELV)
Output voltage range	39 ... 53 VDC adjustable
Output current I_o	10 A at 48 V DC
PowerBoost	15 ADC (for 4 s); 12.5 ADC (for 16 s)
TopBoost	55 ADC (for 50 ms)
Factory preset	48 VDC
Adjustment accuracy	1%
Residual ripple	< 70 mV (peak-peak)
Current limitation	1.1 x I_o typ.
Overload behavior	TopBoost / PowerBoost / Constant current
Operational indication	LED green (V_o), LED red (error)
Efficiency / power losses:	
Efficiency	93 % typ.
Power loss PV	0.8 W (stand-by) / 8.2 W (no load) / 38 W (rated load)
Fuse protection:	
Internal fuse	3 x 3.2 AT
External fuse	3x Circuit breakers 6 A, 10 A, 16 A, Characteristic: B or C; or motor circuit breakers setpoint: 2.5 A, setting range: 2.5 ... 4.0 A
Environmental requirements:	
Ambient operating temperature	-25 °C ... +70 °C; Device start at -40 °C (type-tested)
Storage temperature	-25 °C ... +85 °C
Rel. humidity	30 % ... 85 % (no condensation)
Derating	-3 % / K (> +50 °C)
Degree of pollution	2 (acc. to EN 50178)
Climatic category	3K3 (acc. to EN 60721)
Safety and protection:	
Test voltage pri.-sec./ pri.-gr. / sec.-gr.	4.2 kV DC / 2.2 kV DC / 0.7 kV DC

Protection class	Prepared for class I equipment
Degree of protection	IP20 (acc. to EN 60529)
Overvoltage protection	via varistor at primary circuit
Short circuit protection	yes
No-load proof	yes
Feedback voltage	Max 63 VDC
Parallel operation	yes
Series connection	yes
Connection and type of mounting:	
Cross sections	Input: 0.08 mm ² ... 2.5 mm ² / AWG 28 ... 12 Output: 0.5 mm ² ... 10 mm ² / AWG 20 ... 8 Signalising: 0.08 mm ² ... 0.5 mm ² / AWG 28 ... 20
Strip lengths	Input: 8 ... 9 mm / 0.33 in Output: 13 ... 15 mm / 0.55 in Signalising: 5 ... 6 mm / 0.22 in
Type of mounting	DIN-rail mounting (EN 60715) in 2 positions
Dimensions and weight:	
Dimensions (mm) W x H x L	77 x 171 x 179 (incl female connector) Length from upper-edge of DIN 35 rail
Weight	1900 g
Standards and approvals:	
Standards/Specifications	EN 60950, EN 61204-3, UL 60950, UL 508

Electrical and Electronic Wire & Cable • Enterprise Cabling & Security Solutions • OEM Supply – Fasteners
 Anixter Inc. World Headquarters • 2301 Patriot Boulevard, Glenview, IL 60026-8020 • 1.800.ANIXTER • 224.521.8000 • anixter.com

Anixter is a leading global distributor of enterprise cabling and security solutions, electrical and electronic wire and cable, and OEM supply – fasteners and other small parts.

We reduce risk, complexity and cost from our customers' purchasing decisions, business processes and supply chains.

Anixter does not manufacture these products. Any product warranties are provided by the applicable manufacturers. Data and suggestions made are not to be construed as recommendations to purchase or as authorizations to use any products in violation of any law or regulation. TO THE FULLEST EXTENT PERMITTED BY LAW, ANIXTER DISCLAIMS ALL WARRANTIES, EITHER EXPRESS OR IMPLIED. ANIXTER MAKES NO WARRANTY OR REPRESENTATION, EXPRESS OR IMPLIED, ABOUT THE ACCURACY OR COMPLETENESS OF ANY INFORMATION PROVIDED.