



Micropack 24/240 WOR Rectifier Module

GREAT SMALL POWER

Convection cooled rectifier for system installation in harsh and noise sensitive environments.



Product Description

Wide input operating and temperature range give the system superior system availability with extendable system blocks and high current ability for selective fuse tripping.

A power supply for small power systems that can extend your power supply one step further. Suitable for load ranges typically between 240W and 960W. Perfect for control cabinets, safety systems and building automation applications.

A complete power system consist of a few DIN rail mountable building blocks, designed for on site configuration and assembly. This allows a fast and efficient logistics and more flexibility.

Stand-alone DIN rail mounting available for the power supplies.



See reverse side for specifications

Micropack 24/240 WOR

Additional Technical Specifications

AC Input	
Voltage	85-300 VAC (Nominal 185 – 275 VAC) Linear output derating below 185VAC
Frequency	45 to 66Hz
Maximum Current	1.2 A _{rms} maximum at 230VAC at full load 1.3 A _{rms} maximum at 85VAC and 100W load
Maximum earth leakage	2.0 mA at 250VAC/50Hz
Power Factor	0.99 at 75% load or more
THD	< 5% at nominal input and 50-100% load
Input Protection	<ul style="list-style-type: none"> o Varistor for transient protection o Mains fuse in both lines (2x 2.5A) o Shut down above 300 VAC

DC Output	
Voltage	Default: 27.2 VDC Float/Boost: 24.0-36.0VDC Standby test range: 21.5 – 24.0VDC Stand alone: adj. range: 21.5-30.0 VDC
Output Power	<ul style="list-style-type: none"> o 240 W at nominal input o 100W at 85VAC
Maximum Current	10 A at 24 VDC and nominal input 15 A for 1min at 21.5V <ul style="list-style-type: none"> o Capacitive load start-up o 55 A for 35ms < 5V o Selective fuse tripping
Current Sharing	±5% of maximum current from 10 to 100% load
U/I Characteristics	Constant Power: 21.5 - 36VDC Constant Current: 21.5 - 5VDC Selective fuse tripping < 5VDC
Static voltage regulation	±0.5% from 10% to 100% load
Dynamic voltage regulation	±5.0% for 10-90% or 90-10% load variation, regulation time < 10ms
Hold up time	> 20ms; output voltage > 21.5 VDC at 240W load
Ripple and Noise	<ul style="list-style-type: none"> o < 200 mV peak to peak, 30 MHz bandwidth o < 5 mV rms psophometric
Output Protection	<ul style="list-style-type: none"> o Overvoltage shutdown o Hot plug-in - Inrush current limiting o Short circuit proof o High temperature protection o Fuse

Part no.	Description
241120.200	Micropack 24/240 WOR
241120.900	Stand alone DIN rail fixing
241120.930	Marine Filter

Other Specifications	
Efficiency	>92% at 50-90% load
Isolation	3.0 KVAC – input and output 1.5 KVAC – input earth 0.5 KVDC – output earth
Alarms:	<ul style="list-style-type: none"> o Low mains shutdown o High temperature shutdown o Rectifier Failure o Overvoltage shutdown on output o Low voltage alarm at 21.7V o CAN bus failure
Warnings:	<ul style="list-style-type: none"> o Low temperature shutdown o Rectifier in power derate mode o Remote battery current limit activated o Input voltage out of range, flashing at overvoltage o Loss of CAN communication with control unit, stand alone mode
Visual indications	<ul style="list-style-type: none"> o Green LED: ON, no faults o Red LED: rectifier failure o Yellow LED : rectifier warning
Alarm output (isolated)	<ul style="list-style-type: none"> o NO (+positive terminal) o COM (-negative terminal) o 60V / 100mA max
Operating temp	-40 to +60°C (-40 to +142°F), derating linear above +45°C to 80W at +60°C
Storage temp	-40 to +85°C (-40 to +185°F)
Cooling	Convection
MTBF	> 480, 000 hours Telcordia SR-332 Issue I, method III (a) (T _{ambient} : 25°C)
Humidity	Operating: 5% to 95% RH non-condensing Storage: 0% to 99% RH non-condensing
Dimensions	39.0 x 88.5 x 149mm (wxhxd) (1.54 x 3.48 x 5.87")
Weight	0.5 kg (1.1 lbs)

Applicable Standards	
Electrical safety	IEC 60950-1 UL 60950-1 CSA 22.2
EMC	ETSI EN 300 386 V.1.3.2 EN 61000-6-1 (immunity, light industry) EN 61000-6-2 (immunity, industry) EN 61000-6-3 (emission, light industry) EN 61000-6-4 (emission, industry) EN 61000-6-5 (immunity, power station and substation)
Mains Harmonics	EN 61000-3-2
Environment	ETSI EN 300 019-2-1 Class 1.2 ETSI EN 300 019-2-2 Class 2.3 ETSI EN 300 019-2-3 Class 3.2 ETSI EN 300 132-2 RoHS compliant
Marine compliant (w/ additional filter module)	DnV Rules for Classification of Ships, High Speed & Light Craft and DnV Offshore Standards

Specifications are subject to change without notice

241120.200.DS3 – v2