

PT507 75W DIN-Rail AC/DC power supply for marine and offshore applications



- GL Approved Env. cat. D
- EN60945 compliant EMC2
- Universal input (90 - 265Vac)
- Efficiency above 85%
- Adjustable output
- Overload and overvoltage protection
- Conformal coating
- DC OK LED
- Cooling by free air convection
- DIN-Rail mounting on back or side
- RoHS compliant

Features

Input

Input Range	90 - 265 V _{ac} , 125 – 375 V _{dc}
Frequency	47 - 440 Hz
Inrush Current	10 A; cold start @ 230Vac / 25°C
Input Current	<0.6 A @ 230V _{ac}
Input fuse	1 AT; internal, not user serviceable
Efficiency	>85%
Safety ground leakage current	<3.5 mA

EMC Specifications

Emissions	EN60945 EMC2 conducted & radiated
Harmonics	EN61000-3-2 compliant
ESD	EN61000-4-2 Air ± 8 kV Contact ± 4 kV
Electromagnetic fields	EN61000-4-3 10V/m 8MHz-2GHz
EFT/Burst	EN61000-4-4 2kV
Surge	EN61000-4-5 Line - Line 0.5kV Line - GND 1kV
Conducted immunity	EN61000-4-6 3V _{RMS} , 150kHz-80MHz
Conducted LF	IEC60533 3V _{RMS} , 50Hz-12kHz
HV immunity	IEC60947-2 2kV, 60s

Output

Output Voltage	24V adjustable 23 - 29 V
Output Power	75 W
Minimum load	0 A
Load Regulation	± 0.5 %
Temperature coefficient	± 0.02 %/°C
Overvoltage protection	32 V
Overload protection	Constant current
Peak short circuit current	5 A (≤ 100 ms)
Turn-on delay	≤ 0.5 s @ 90 V _{ac}
DC OK signalling	Green LED on front
DC OK Relay	Potential free contacts NO & NC , I<1A , V<30V

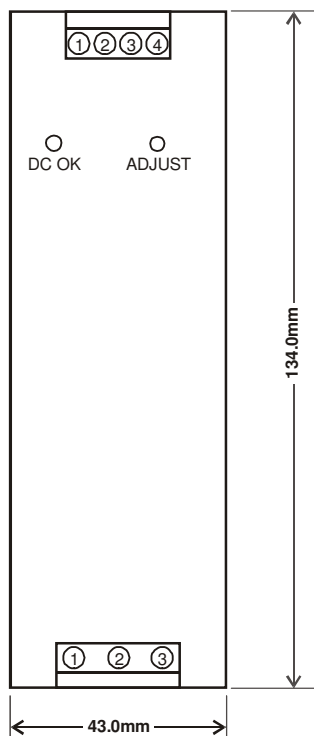
Environmental

Thermal performance	
Operating	-25 - +70°C without derating
Storage	-40 - +85°C
Humidity	5 - 95%; non-condensing @ +55°C Conformal coating
Vibration	Germanischer Lloyd table 3.16 High vibration strain ±1.6 mm displacement; 2 – 25 Hz 4g; 25 - 100 Hz (1 octave/min)
Altitude	10,000 feet; operating 30,000 feet; non-operating

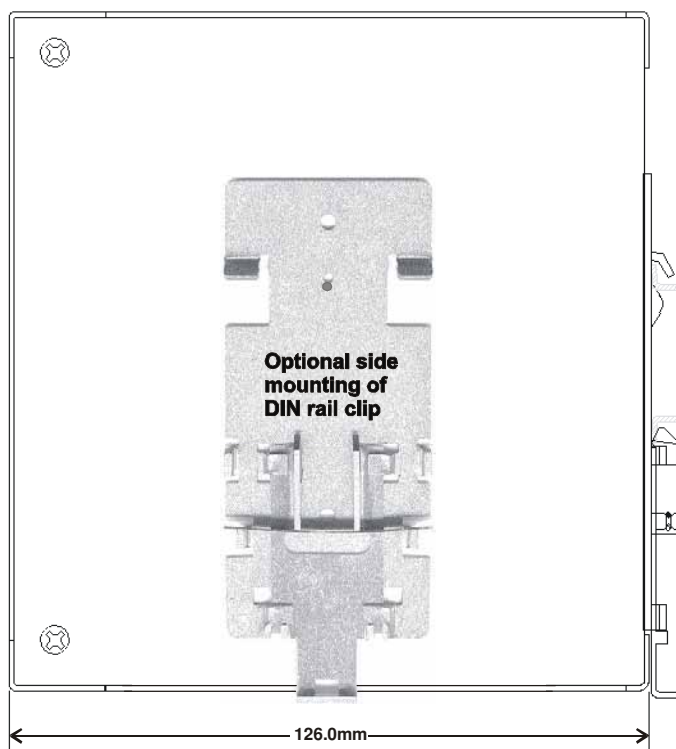
General

Isolation voltage	Input/Output	3000 V _{ac}
	Input/Chassis	1500 V _{ac}
Safety	According to UL60950	
Weight	Approximately 0.6 kg	
Warranty	2 Years	

Front view



Side view



Input Connector

Pin	Function
1	Safety Ground
2	Neutral
3	Line

Dimensions

Height	134 mm
Width	43 mm
Depth	126 mm Excluding DIN-Rail mounting device
	Add 10 mm for standard mounting device and EN50022 DIN-Rail

Output Connector

Pin	Function
1	Output DC -
2	Output DC -
3	Output DC +
4	Output DC +

Approvals



Germanischer Lloyd
Environmental category: D, EMC2
Guidelines for the Performance of Type
Approvals Chapter 2, Edition 2003



Low Voltage Directive 73/23/EEC and 93/68/EEC
EMC Directive 89/336/EEC and 92/31/EEC and 93/68/EEC

Wire Gauge

AWG	24 - 12
Solid	0.2 - 4 mm ²
Flexible	0.2 - 2.5 mm ²

Other Power Technics products for Marine and Offshore Applications

PT502	125 W	DIN-Rail AC/DC Power Supply
PT503	250 W	DIN-Rail AC/DC Power Supply
PT504	500 W	DIN-Rail AC/DC Power Supply
PT506	75 W	DIN-Rail AC/DC Power Supply
PT505	250 W	DIN-Rail DC/DC Power Supply
PT510		DIN-Rail Redundancy Module

Specifications subject to change without notice

Rev. 4