

PT571

PT571 125W low profile AC/DC power supply for marine and offshore applications



- GL Approved for bridge use
- EN60945 compliant
- Universal input (90 – 265Vac)
- Efficiency 90% typical
- Active Power Factor Correction
- Adjustable output
- Overload and overvoltage protection user selectable
- Thermal overload protection
- Conformal coating
- DC OK potential free contact
- Base plate cooled
- Low profile 35 mm
- RoHS compliant

Features

Input

Input range	90-265 V _{ac} , 125-375 V _{dc}
Frequency	47 – 63 Hz 440 Hz with reduced PFC
Inrush current	30 A; cold start @ 230 V _{ac} / 25°C
Input current	<0.65 A @ 230 V _{ac}
Input fuse	2 AT; internal, not user serviceable
Efficiency	90% typical
Safety ground	
leakage current	<3.5 mA

EMC Specifications

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

Output

Output Voltage	24 V adjustable 23 - 29 V
Output Power	125 W continuous 150 W peak (10s)
Minimum load	0 A
Load Regulation	±0.5 %
Temperature coefficient	± 0.02 %/°C
Overvoltage protection	32 V
Overload protection	Hiccup or latch mode, selectable
Peak short circuit current	10 A (<100 ms)
Overtemperature protection	± 105 °C base plate temp.
Turn-on delay	< 2 s @ 90 V _{ac}
Signalling	DC OK Green LED on front Overload Blinking orange LED Fail Red LED
Potential free contact;	
active closed; I < 1 A	
open voltage < 30V	
Redundancy	Internal diode optional

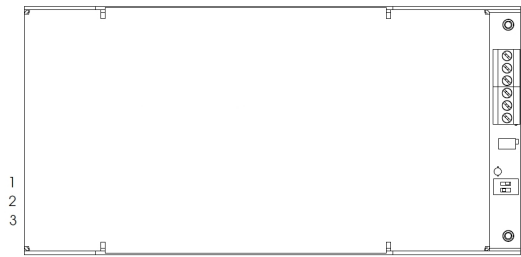
Environmental

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 4 g; 25 – 100 Hz (1 octave/min)
Altitude	Max. 10,000 feet; operating Max. 30,000 feet; non-operating

General

Isolation voltage	Input/Output	EN60945
	Input/Chassis	EN61000-3-2
Safety	According to EN60950	
Weight	< 1.0 kg	
Warranty	2 Years	

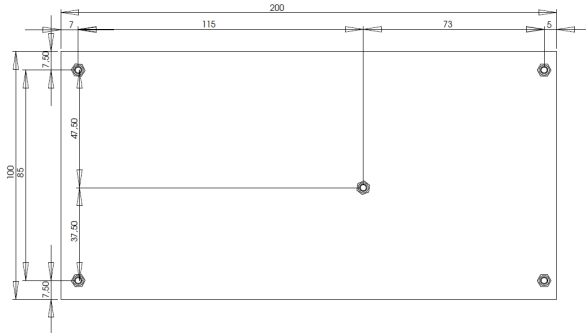
Top view



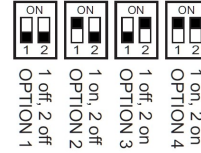
Back view



Bottom view



Dip switch settings



OPTION 1: overload results in latched switch off

OPTION 2: overload results in hiccup mode

OPTION 3: overload results in latched switch off; can be used for other purpose

OPTION 4: overload results in hiccup mode; can be used for other purpose

Mounting of PSU

5 M3 mounting inserts (depth 3.5mm) in bottom, see drawing.

Input Connector

Pin	Function
1	Line
2	Neutral
3	Safety Ground

Dimensions

Length	200 mm
Width	100 mm
Height	35 mm

Output Connector

Pin	Function
1	Output DC +
2	Output DC +
3	Output DC -
4	Output DC -
5	DC OK; Potential Free Contact
6	DC OK; Potential Free Contact

Approvals



Germanischer Lloyd
Environmental category: D, EMC1
Guidelines for the Performance of Type
Approvals Chapter 2, Edition 2003



Low Voltage Directive 2006/95/EC
EMC Directive 2004/108/EC

Wire Gauge

Input	Solid	0.2 - 2.5 mm ²
	Flexible	0.2 - 2.5 mm ²
Output	Solid	0.2 - 4 mm ²
	Flexible	0.2 - 2.5 mm ²

Specifications subject to change without notice

Rev. 4