

Description

For the most demanding railway applications and for other harsh environments industrial applications MICROSENS offers dedicated power supply units.

Main feature of these power supplies is the immunity against electromagnetic interference, which is important for railway, industrial and manufacturing applications.

For railway applications this power supply is according to the standard EN50121-4 (stronger EMC requirements).

Further important features are high efficiency and the easy installation with snap-on for DIN-rails.

The power supplies are available with the wide range of input voltage (AC and DC). MICROSENS offers two options: with 24 VDC and 48 VDC output voltage (60W). All devices are having an excellent overload protection mechanism.

Features

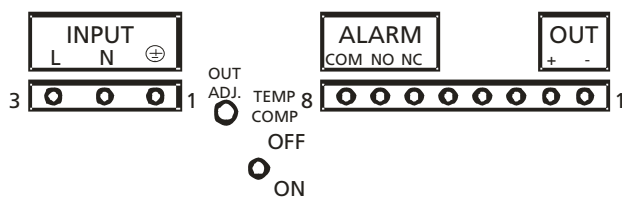
- Highest reliability and availability
- Complies to norm EN50121-4
- Wide range input 90 – 264 VAC
- High efficiency > 80%
- Operating temperature -40 °C to 70 °C
- Adjustable output voltage
- Effective overload protection
- Compact dimensions
- Low weight
- Simple mounting on DIN-rails
- LED display

Technical Specifications

Type	Power supplies for railway applications	
Input	Rated input voltage	90–264 VAC/85-200VAC
	Input frequency (AC)	45 – 65 Hz
	Input current (25 °C) at full load	0,7 A
	AC switch on current (25 °C, 230VAC)	< 25A
	Fuse	T3,15A
Output	Rated output voltage	24 VDC (MS700482-24B) 48 VDC (MS700482-48B)
	Adjustable range	21–29 VDC (MS700482-24B)
		41–58 VDC (MS700482-48B)
	Output current	1.25 A (MS700482-48B) 2.5 A (MS700482-24B)
	Short circuit current	6 A (MS700482-48B) 9 A (MS700482-24B)
	Nominal output power	60 W
Ripple	<100 mV _{pp}	
Efficiency	83% (typ.)	
Connections	2.5 mm ²	
Hold-up time	>50 ms (U _{in} =230 V AC)	
LED-Displays	green	DC on
Safety standards	EN60950-1	
Safety class	Class 1	
Case protection	IP20	
Electromagnetic compatibility (EMC)	EN50121-4, EN55022 Class B, EN61000-6-2, EN61000-6-3, EN61000-3-2, EN61000-3-3, EN61000-4-2, EN61000-4-3, EN-61000-4-4, EN61000-4-5, EN61000-4-6, EN61000-4-8, EN61000-4-11	
Derating (55°C)	5% / K	
Operating temperature range	Operation:	-40 °C to +70 °C
	Storage:	-40 °C to +85 °C
Relative humidity	85 % RH IEC68-2-30	

Shock/Vibration	ETS 300 019-2-4, class 4M5, sin, IEC600868-2-6 3g _n 9-200m/s ² , broadband random, IEC60068-2-64	Vibration, Vibration,
Reliability (MTBF)	> 3.000.000h	
Dimensions	51 x 121 x 81 mm (W x D x H)	
Weights	360 g	
Enclosure material	Aluminium, steel	
Mounting	DIN-rail as per EN50022-35x15/7.5 (snap-on self-locking spring)	

Connections



Input Connector

- 1: PE
- 2: N
- 3: L

Output Connector

- 1: VCC +
- 2: VCC -
- 3: not used
- 4, 5: temperature compensation, NTC sensor
- 6: Alarm relay (normally closed operation)
- 7: Alarm relay (open during normal operation)
- 8: Alarm relay (common port)

Note:

To connect the power supply must be 60/70 or 75 ° C copper wire used. The nominal force of the tightening screw is 0.5 Nm.

Setting the output voltage

With the help of the potentiometer (label: OUT ADJ.) the output voltage can be set.

Jumper for setting the temperature compensation

In addition to the output connector is a jumper (label: TEMP COMP) through which the temperature compensation can be on and off.

Ordering information

Art.-No.	Description	Connectors
MS700482-24B	DIN Rail Power Supply 60Watt for Railway Applications, Output Voltage 24 VDC Input Voltage 90-264VAC, temp. range -40..75°C	In: 3-pin Out: 2-pin
MS700482-48B	DIN Rail Power Supply 60Watt for Railway Applications, Output Voltage 48 VDC Input Voltage 90-264VAC, temp. range -40..75°C	In: 3-pin Out: 2-pin

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