

## Power module - MINI-PS- 10- 42AC/15-60DC/3 - 2320199

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The AC feed module supplies the MINI DC/DC converter with a rectified and filtered supply voltage.

### Product Description


The AC power module converts the 10 V AC ... 42 V AC input voltage into a 15 V DC ... 60 V DC output voltage. The output voltage level depends on the AC input voltage. With an overall width of just 22.5 mm, the housing is particularly narrow.

### Your advantages

- ✔ Enables the operation of the MINI DC/DC converters in an AC network.
- ✔ AC voltage of a transformer is rectified and filtered



### Key Commercial Data

Packing unit	1 pc
GTIN	 4 046356 577731
GTIN	4046356577731
Weight per Piece (excluding packing)	220.000 g
Custom tariff number	85044030
Country of origin	China

### Technical data

#### Dimensions

Width	22.5 mm
Height	99 mm
Depth	107 mm

#### Ambient conditions

Degree of protection	IP20
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## Technical data

### Ambient conditions

Ambient temperature (operation)	-25 °C ... 70 °C (> 60 °C Derating: 2.5 %/K)
Ambient temperature (storage/transport)	-40 °C ... 85 °C
Max. permissible relative humidity (operation)	≤ 95 % (at 25 °C, non-condensing)
Climatic class	3K3 (in acc. with EN 60721)
Degree of pollution	2

### Input data

Nominal input voltage	24 V AC
Nominal input voltage range	10 V AC ... 42 V AC
Input voltage range	10 V AC ... 42 V AC
AC frequency range	45 Hz ... 65 Hz
Current consumption	6.5 A
Inrush current	< 45 A (typical)
Recommended breaker for input protection	16 A (Characteristic C)

### Output data

Nominal output voltage	28 V DC ±1 %
	60 V DC
Output voltage range	15 V DC ... 60 V DC
Nominal output current (I <sub>N</sub> )	3 A (-25 °C ... 60 °C)
Derating	60 °C ... 70 °C (2.5%/K)
Connection in series	No
Residual ripple	< 3.6 V <sub>pp</sub>
Maximum power dissipation in no-load condition	< 0.04 W
Power loss nominal load max.	< 6.9 W

### General

Net weight	0.16 kg
Efficiency	> 95.7 % (For 42 V AC and nominal values)
Protection class	III
Degree of protection	IP20
MTBF (IEC 61709, SN 29500)	> 18175000 h (40 °C)
Mounting position	horizontal DIN rail NS 35, EN 60715
Assembly instructions	alignable: horizontally 0 mm, vertically 50 mm

### Connection data, input

Connection method	Pluggable screw connection
Conductor cross section solid min.	0.2 mm <sup>2</sup>
Conductor cross section solid max.	2.5 mm <sup>2</sup>

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### Technical data

#### Connection data, input

Conductor cross section flexible min.	0.2 mm <sup>2</sup>
Conductor cross section flexible max.	2.5 mm <sup>2</sup>
Conductor cross section AWG min.	24
Conductor cross section AWG max.	12
Stripping length	7 mm
Screw thread	M3

#### Connection data, output

Connection method	Pluggable screw connection
Conductor cross section solid min.	0.2 mm <sup>2</sup>
Conductor cross section solid max.	2.5 mm <sup>2</sup>
Conductor cross section flexible min.	0.2 mm <sup>2</sup>
Conductor cross section flexible max.	2.5 mm <sup>2</sup>
Conductor cross section AWG min.	24
Conductor cross section AWG max.	12
Stripping length	7 mm
Screw thread	M3

#### Standards and Regulations

Electromagnetic compatibility	Conformance with EMC Directive 2014/30/EU
Noise emission	EN 55011 (EN 55022)
Noise immunity	EN 61000-6-2:2005
Connection in acc. with standard	CUL
Standards/regulations	EN 61000-4-2
Contact discharge	8 kV (Contact discharge)
Standards/regulations	EN 61000-4-3
Frequency range	80 MHz ... 3 GHz
Test field strength	10 V/m
Standards/regulations	EN 61000-4-4
Comments	Criterion B
Low Voltage Directive	Conformance with LV directive 2006/95/EC
Standard - Electrical safety	EN 60950-1/VDE 0805 (SELV)
Standard – Electronic equipment for use in electrical power installations and their assembly into electrical power installations	EN 50178/VDE 0160 (PELV)
UL approvals	UL/C-UL listed UL 508
	UL/C-UL Recognized UL 60950-1
Shock	18 ms, 30g, in each space direction (according to IEC 60068-2-27)
Vibration (operation)	< 15 Hz, amplitude ±2.5 mm (according to IEC 60068-2-6)
	15 Hz ...150 Hz, 2.3g

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### Standards and Regulations

Rail applications	EN 50121-4
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### Environmental Product Compliance

	Lead 7439-92-1
China RoHS	Environmentally Friendly Use Period = 25;
	For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration"

## Classifications

### eCl@ss

eCl@ss 5.1	27210900
eCl@ss 6.0	27210900
eCl@ss 7.0	27210990
eCl@ss 8.0	27210990
eCl@ss 9.0	27210901

### ETIM

ETIM 3.0	EC001039
ETIM 4.0	EC000599
ETIM 5.0	EC002046
ETIM 6.0	EC002046
ETIM 7.0	EC002046

### UNSPSC

UNSPSC 6.01	30211502
UNSPSC 7.0901	39121004
UNSPSC 11	39121004
UNSPSC 12.01	39121004
UNSPSC 13.2	39121004

## Approvals

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UL Listed / UL Recognized / cUL Recognized / IECCE CB Scheme / cUL Listed / EAC / EAC / cULus Recognized / cULus Listed

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## Approvals

Ex Approvals

### Approval details

UL Listed		<a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a>	FILE E 123528
UL Recognized		<a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a>	FILE E 211944
cUL Recognized		<a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a>	FILE E 211944
IECEE CB Scheme		<a href="http://www.iecee.org/">http://www.iecee.org/</a>	DK-2825-M1
cUL Listed		<a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a>	FILE E 123528
EAC			EAC-Zulassung
EAC			RU C- DE.A*30.B.01082
cULus Recognized			

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cULus Listed

