

Data sheet

PTi-F-C12 24 V AC/DC

Page 1/6

P/N

1105010870

EAN 4251394629414

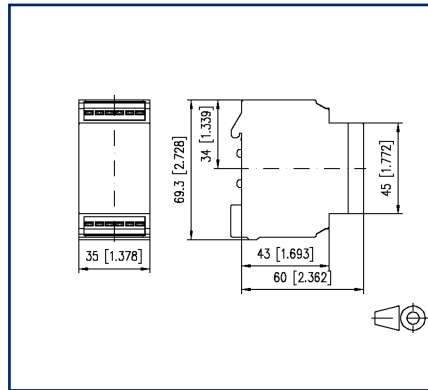
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Version: K

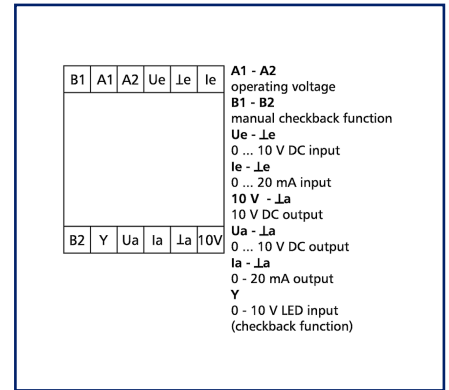
Illustrations



Dimensional drawing



Wiring diagram



See enlarged drawings at the end of document

Product specification

The potential isolator / signal converter is used for isolating analog signals in the range from 0 to 10 V DC, and 0 to 20 mA DC or for a signal conversion from 0 to 10 V DC to 0 to 20 mA DC or 0 to 20 mA DC to 0 to 10 V DC. The input and output signals as well as the supply voltage are electrically isolated from each other. An input signal from 0 to 10 V or 0 to 20 mA can be connected to the device. Electrical isolation function: With the PT-C12, the input signal 0 to 10 V is adjusted proportionally to the output signal 0 to 10 V. The PTi-C12 adjusts the input signal from 0 to 20 mA proportional to the output signal from 0 to 20 mA. Function Signal conversion with potential separation: With a signal conversion from 0 to 10 V to 0 to 20 mA, or from 0 to 20 mA to 0 to 10 V, the output signal converted thereby can be readjusted using an integrated spindle trimmer. In addition, a manual emergency operating option with a MANUAL AUTO switch with feedback contact is also integrated. The output signal from 0 to 10 V or 0 to 20 mA can be set via the front potentiometer when the switch is in the MANUAL position. A constant output voltage of max. 10 V DC and 5 mA is available at the 10 V terminal. Input Y is used for the LED display of the output voltage Ua. The brightness of the LED depends on the level of the output signal (bridge between Ua and Y). Alternatively, an external signal at the input Y can be connected to the LED display from 0 to 10 V DC.

- Connection with spring clamp terminal blocks (push-in)

Data sheet

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Page 2/6

P/N
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Technical Data

Supply

Operating voltage	24 V AC/DC -20% ... +15%
Power consumption AC (max.)	200 mA
Power consumption DC (max.)	110 mA
Power consumption AC (max.)	4.8 VA
Power consumption DC (max.)	2.64 W
Duty cycle relative	100 %

Inputs

Voltage input

Voltage input - input signal	0 - 10 V DC
Voltage input - input resistance	> 50 K/W

Current input

Current input - input resistance	45
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Outputs

Current output current load	max. 500 Ohm
Indicator	green LED

General information

Isolation	1000 V DC, 50 Hz, 1 min.
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Housing

Dimensions

Dimension (W x H x D)	35 mm x 69.3 mm x 60 mm
Dimension (W x H x D)	1.378 in. x 2.728 in. x 2.362 in.

Weight	78 g
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Mounting style	Standard rail TH35
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Mounting position	any
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Apposition	without distance
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Connection type	Spring clamp terminal blocks
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Data sheet

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Page 3/6

P/N
1105010870
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Technical Data

Terminal blocks

Wire cross section solid	0.2 mm ² - 2.5 mm ² / AWG 24-14
Wire cross section multi	0.25 mm ² - 2.5 mm ² / AWG 24-12
Wire cross section with wire ferrule	0.25 mm ² - 1.5 mm ² / AWG 24-16
Stripping length (min.)	8 mm

Material

Material - Housing	Polyamid 6.6 V0
Color	gray
Material - Terminal block	Polyamid 6.6 V0
Material - Covers	Polycarbonat

Protection category according to IEC 60529

Protection category - housing (acc. to IEC 60529)	IP40
Protection category - terminal blocks (acc. to IEC 60529)	IP20

Climatic Data

Operating	
Temperature - Operating °C	0 °C - 55 °C
Temperature - Operating °F	32 °F - 131 °F
Relative humidity	max. 85 % non-condensing

Storage

Temperature - Storage °C	-20 °C - 70 °C
Temperature - Storage °F	-4 °F - 158 °F

Power loss

Power loss (typical)	2.6 W
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Classifications

ETIM 7.0	EC000310
ETIM 8.0	EC000310
ETIM 9.0	EC000310
ETIM 10.0	EC000310

Data sheet

Page 4/6

PTi-F-C12 24 V AC/DC

P/N

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EAN 4251394629414

2026/09/23

Version: K

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Application note

This product is a standard product of METZ CONNECT. METZ CONNECT is not aware of the specific intended use of the goods by the Customer or any customers of the Customer. The Customer guarantees that it has fully and sufficiently tested the use of the goods and any product modifications, product changes or product enhancements with regard to the specific intended use in accordance with the state of the art or in any other way.



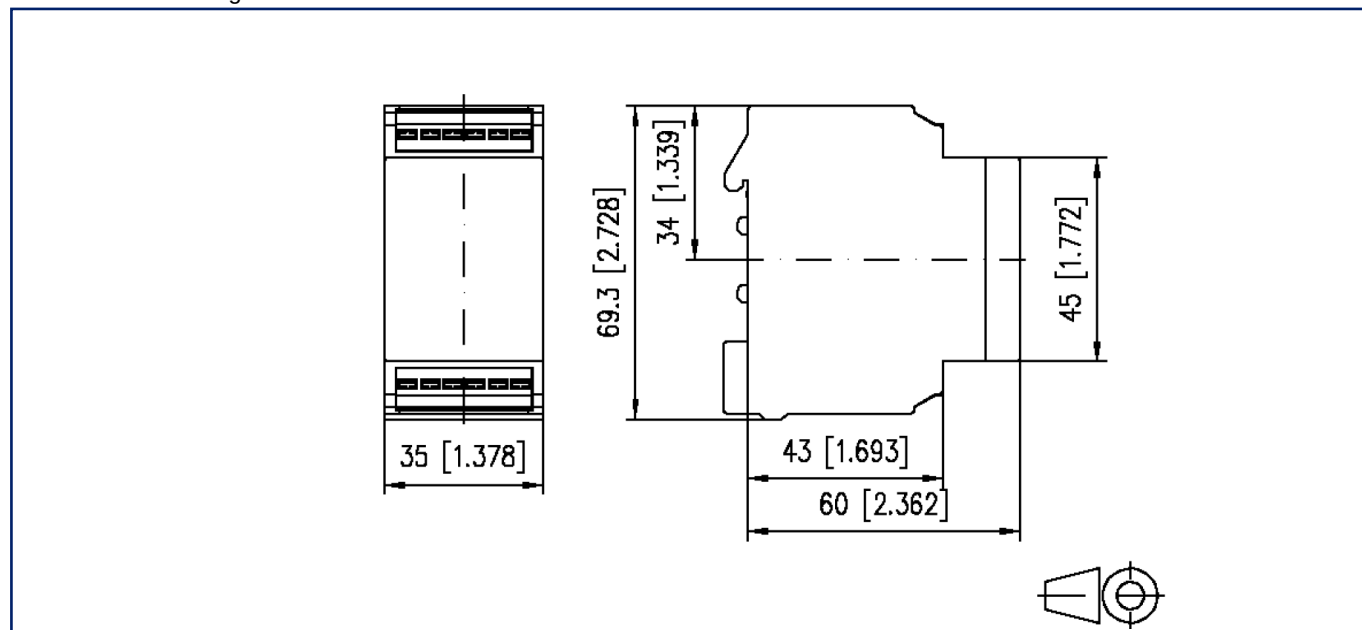
Data sheet PTi-F-C12 24 V AC/DC

Page 5/6

P/N
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Illustrations

Dimensional drawing



Wiring diagram

B1	A1	A2	Ue	Ie	Ie
B2	Y	Ua	Ia	Ia	10V

A1 - A2
operating voltage

B1 - B2
manual checkback function

Ue - Ie
0 ... 10 V DC input

Ie - Ie
0 ... 20 mA input

10 V - Ia
10 V DC output

Ua - Ia
0 ... 10 V DC output

Ia - Ia
0 - 20 mA output

Y
0 - 10 V LED input
(checkback function)

Data sheet
PTi-F-C12 24 V AC/DC

Page 6/6

P/N
1105010870
EAN 4251394629414
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 Version: K

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Circuit diagram

