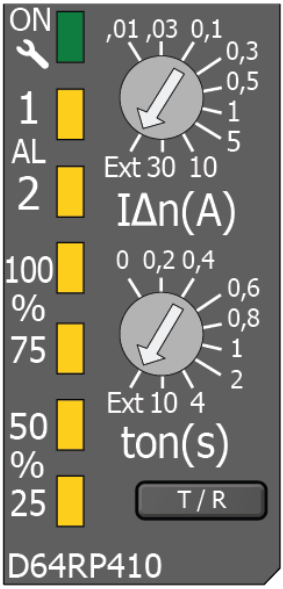
Quickstart-guide

GROWND FAULT RELAY D64RP410



Scope of delivery:

D64RP410, Quickstart

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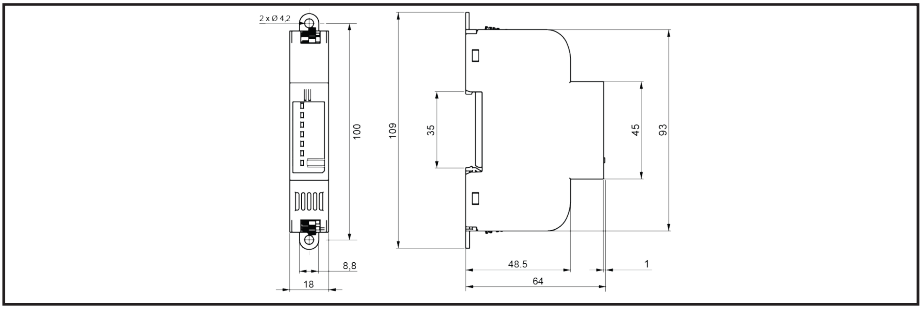


Figure 1. Dimensions in mm

Table 1. Ordering details:

Type	Supply voltage Us	Manual No.
D64RP410	AC/DC 100…240 V (47…63 Hz)	IL54012

Scope of delivery:

D64RP410, Quickstart.

Intended Use

For intended operation, the specifications in the Technical Data and in the manual must be observed.

Any use other than that described in this manual is regarded as improper.

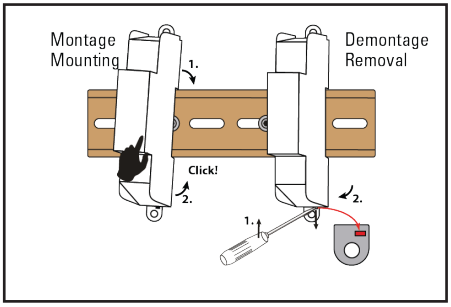


Figure 2. DIN rail mounting

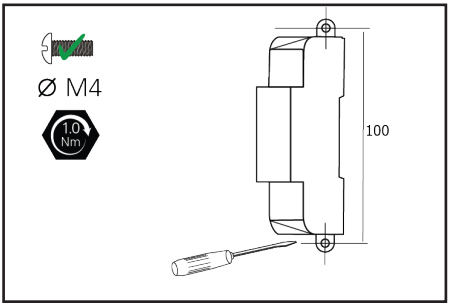


Figure 3. Mounting: Screw mounting

Connection

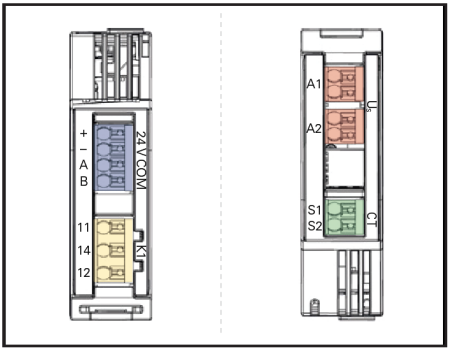


Figure 4. D64RP410

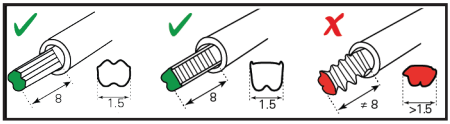


Figure 5. Connection

IMPORTANT

From 0.75 mm², use crimping pliers similar to CRIMPFOX 6 or Weidmüller PZ6/PZ6/5 only.

Table 2. Connection

Terminal	Connection
A1, A2	Supply voltage Us
S1, S2	Current transformer
11, 14, 12	Alarm relay K1
+	+24 V
-	Ground
A	RS-485 A
B	RS-485 B

CAUTION

Short circuit. When finely stranded cables are inserted directly into the push-in terminals, spliced wires can cause a short circuit. Use ferrules.

IMPORTANT

The connection capacity for the push-in terminals is specified in the technical data and in the manual. In UL applications use 60/75 °C copper lines only!

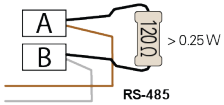


Figure 6. Termination RS-485

IMPORTANT

If there are more than 16 bus devices of the D64RP410 device, the interface must be designed to be touchproof, because maximum operating current of 0.5 mA could be exceeded.

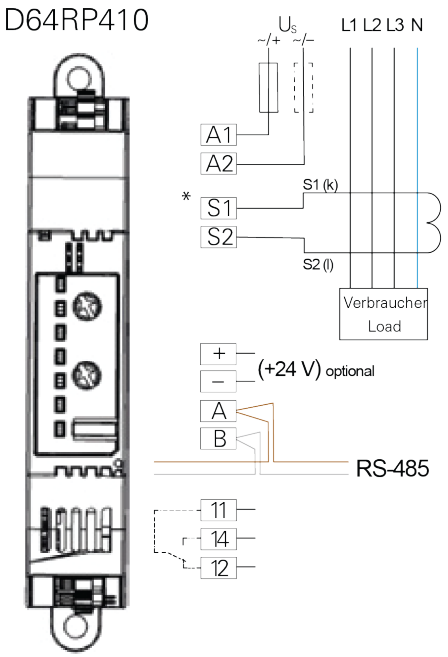


Figure 7. Connection

IMPORTANT

* Attention! In UL applications, current transformers must be connected before operation.

Operating mode ON (Standard)

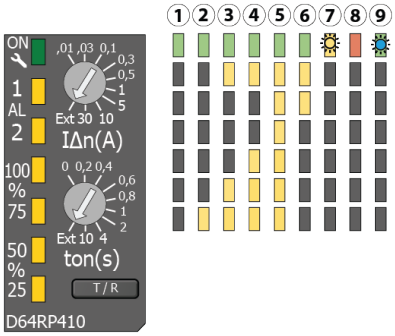
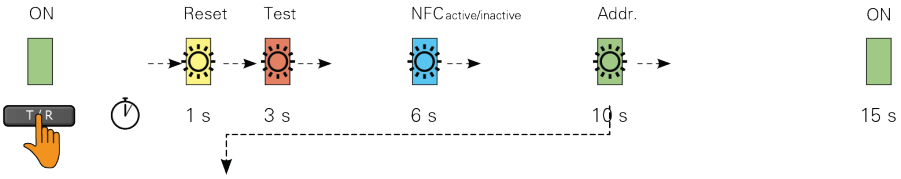


Figure 8. Diagram

Table 3. Function

NO.	Function	Description
1	No alarm	Device in normal condition
2	IΔn ≥ 25%	Fault current detected
3	IΔn ≥ 50% & AL1 (prewarning)	Prewarning triggered
4	IΔn ≥ 75% & AL1 (prewarning)	Prewarning triggered
5	IΔn ≥ 100% & AL1 & AL2 (main alarm)	Alarm relay is energised
6	Alarm history	A fault existed
7	Connection error CT	Troubleshooting or service required
8	Device error	The device is defective.

T/R functions (Configuration)



Addr.-Modus: Adressierung / Addr. mode: address setting

Figure 9. Overview

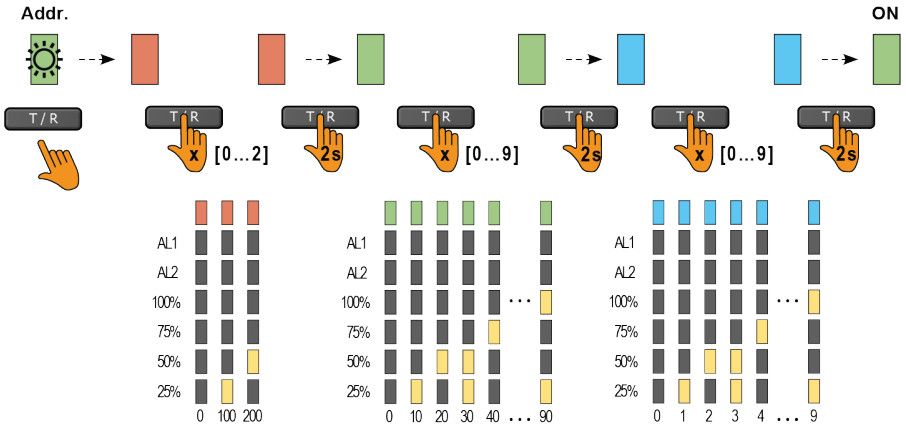


Figure 10. Modbus address input via BCD

⚠ IMPORTANT

If no entry is made for a period of 5 minutes, theAddr. mode is automatically exited. The device then adopts the currently set Modbus address.transformers must be connected before operation.

Technical data D64RP410:

Supply voltage Us.....AC/DC 100…240 V (47…63 Hz)

Tolerance Us.....±15%

Power consumption..... ≤ 2 W / ≤ 3,5VA

Measuring circuit

Measuring current transf type...C311CT...

Load.....33 Ω

Operating characteristics..... Typ A

Rated voltage Un.....see datasheet measuring current transformer

Frequency range.....42...70 Hz

Measuring range RMS..... 2 mA…50 A

Residual operating current IΔn..... .....10 mA…30 A

Operating uncertainty.....±10 % (at 0.5…5 x IΔn)

Relative uncertainty.....0…–20 %

Contact data acc. to IEC 60947-5-1:

Utilisation category ....AC 13 / AC 14 / DC-12 / DC-12 / DC-12

Rated op. voltage..... .....230 V / 230 V / 24 V / 110 V / 220 V

Rated op. current..... .....5A / 3A / 1A / 0,2A / 0,1A

Minimum contact rating.....1mA bei AC/DC≥10V*

* Refers to relays that have not been operated with high contact currents.

Connection

Connection type.....push-in

Connection properties

Rigid.....0,2…1,5 mm²(AWG 24…16)

Flexible without ferrule ....0,2…1,5 mm² (AWG 24…16)

Flexible with ferrule and plastic ferrule..... .....0,2…0,75 mm²

Flexible with ferrule without plastic ferrule .....0.2…1.5 mm²*

*> 0.75 mm² use crimping pliers simlar CRIMPFOX 6 / Weidmüller PZ6/PZ6/5 verwenden.

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