

## Technical data sheet

### Load monitoring · LOCC-Box-EC

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#### Electronic load monitoring up to DC 10 A

Single-channel design, Adjustable current range: DC 1 A – 10 A

Fixed characteristic: fast, medium, slow 1, -2, -3 (see order code)



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#### Identification

Type	LOCC-Box-EC-I-C
Part No.	<a href="#">716412.xxxx</a>

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#### Product version

Hardware revision	2.0
Software version	2.6
Datasheet version	02

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#### Input

Rated voltage $U_N$	DC 12/24 V
Operation voltage range	DC 10–30 V
Rated current $I_N$	DC 10 A
Supply current	DC 40 A over Cu-rails 10 × 3 mm
Reverse voltage protection	internal electronics
Connection type input	screwless contact slide

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#### Output

Switching element	MOSFET
Output current	max. DC 10 A
Voltage drop	max. 215 mV (10 A)
Status display output	LED green: operating voltage present, no error LED red: error in load circuit
Switch-on capacity	10000 $\mu$ F
Current range	1 A – 10 A (adjustable via switch in 1 A steps)

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Characteristic fast (1), medium (2), slow 1 (3), slow 2 (4), slow 3 (5) (see order code), see 'Characteristic curves'

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#### Signal output

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Signal level DC 12/24 V: operating voltage on standby, no error,  
DC 0 V: error, output switched off and manual "OFF"

Switching element Transistor, collector with pull-up resistance

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#### General

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Dimensions (w × h × d) 8.1 mm × 107.4 mm × 116.0 mm

Housing material PA 6.6 (UL 94 V-0, NFF I2, F2)

Mounting DIN rail mountable TS35  
(EN 60715)

Installation position Any

MTBF 690000 h

Degree of protection IP20 (only as complete system with power terminal and end block)

Connection type Push-In  
0.25 mm<sup>2</sup> – 2.5 mm<sup>2</sup>  
AWG 24 – AWG 14

Weight/unit 0.07 kg

PU (units) 1

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#### General ambient conditions

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Operation temperature range -25 °C ... +50 °C

Storage temperature range -40 °C ... +85 °C

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#### Certifications/Standards

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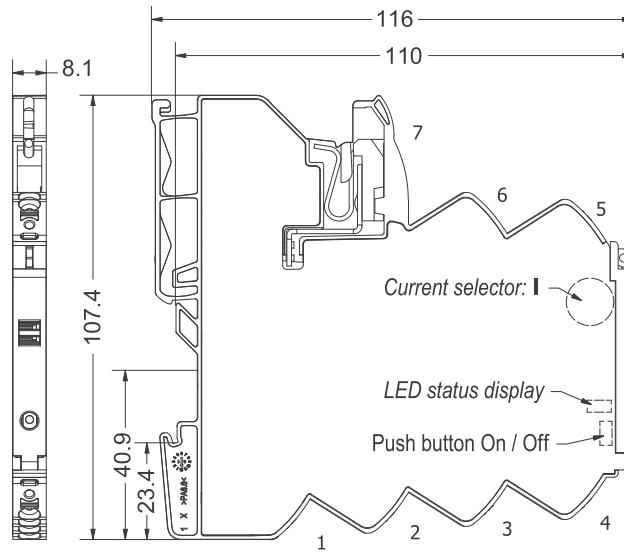
Conformity CE  
UKCA

Certifications cULus (E135145)  
URus (E490188)

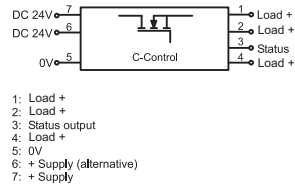
Standards EN 61000-6-2  
EN 61000-6-3  
UL 60947-5-1  
UL 2367

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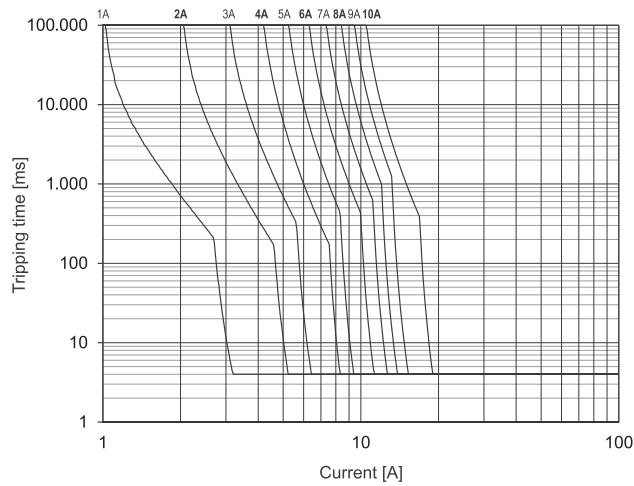
**Dimensions**



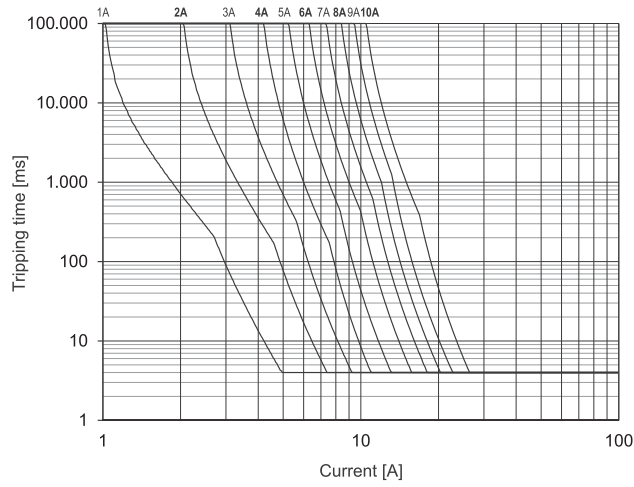
**PIN assignment**



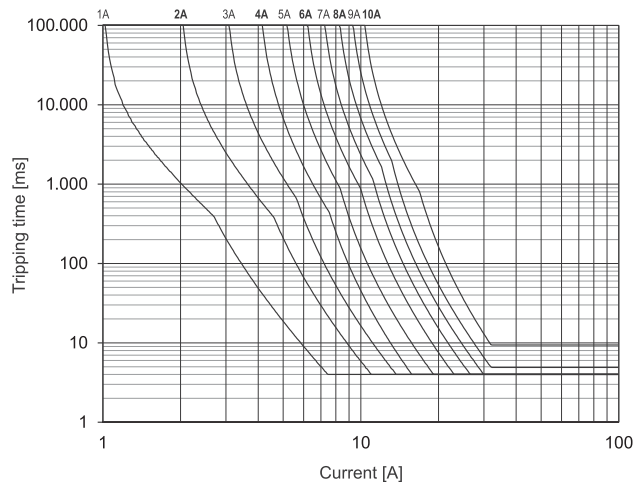
**1: Characteristic fast**



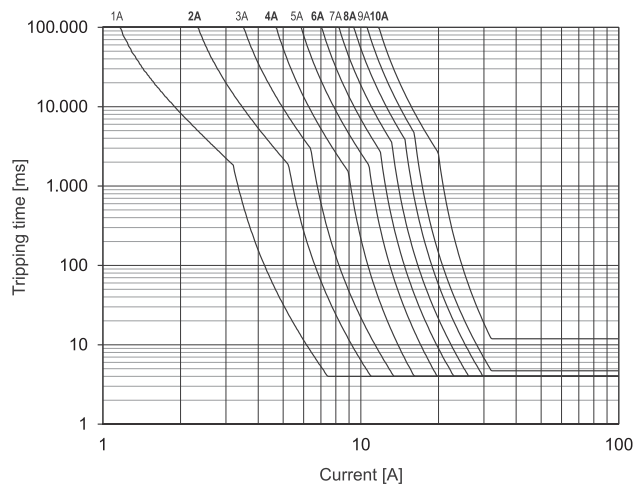
2: Characteristic medium



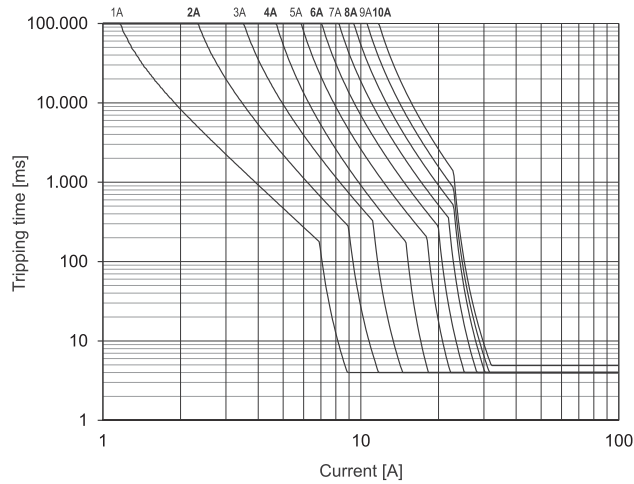
3: Characteristic slow-1



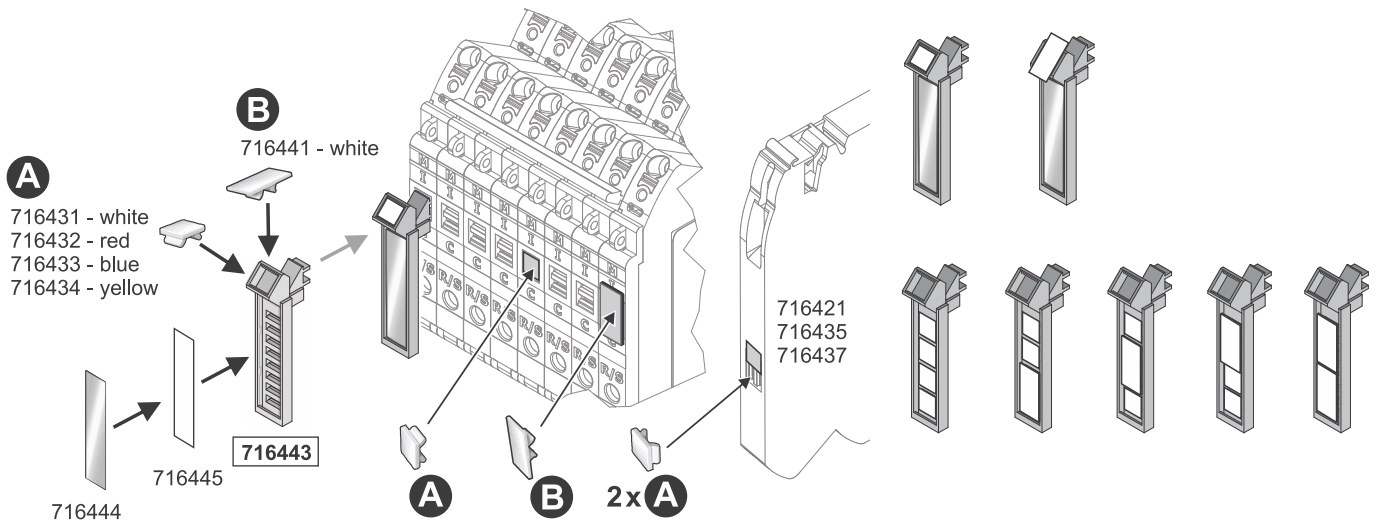
4: Characteristic slow-2



**5: Characteristic slow-3**



**Use**



**Order code**

<b>716412.03.50</b>	
Type	PU
	00 1 pc.
	<b>50 50 pcs.</b>
Characteristic	
	01 fast
	02 medium
	<b>03 slow-1</b>
	04 slow-2
	05 slow-3

LED status

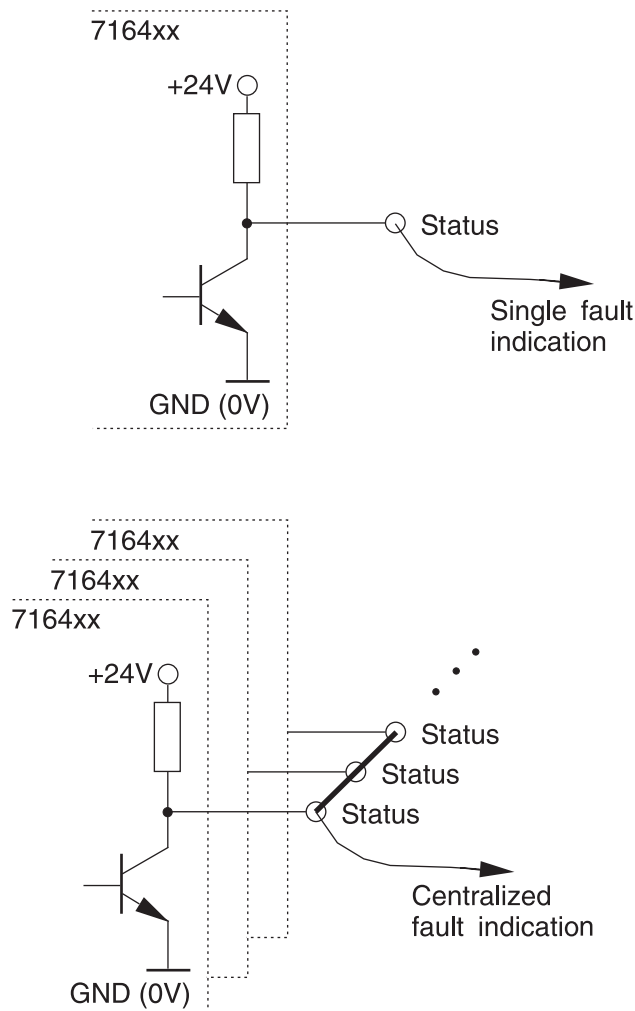
LED Status, Button, Rotary Switch

LED green	ON	Function is OK*
LED green, flashing 1 Hz	Overload	Load above 90 % of I nominal
LED green, flashing 5 Hz	Overload	Load above 100 % of I nominal
LED red	OFF	Module switched off or acknowledged*
LED red, flashing 1 Hz	Overload	Output off due to overload/short circuit*
LED red, flashing 5 Hz	Error	Wiring error – feedback (internal error)
LED red, flashing shortly	OFF	Output off via remote set/reset
LED red/green, flashing 1 Hz ON		Target settings via rotary switch deviate from actual settings. <b>NOTICE: Switching off and on via pushbutton required.</b>
Button ***	ON/OFF	Nominal operation: ON/OFF Load monitoring tripped: 1st push: acknowledge 2nd push: ON
Rotary Switch (I) – Switch Position** Rated current		

\* If the operating voltage is switched off, the last status is saved (Default).  
 \*\* Accept the setting - after switching on again via the button, not by Remote Set/Reset  
 \*\*\* Master function - switch off via push button, can only be switched on again via push button

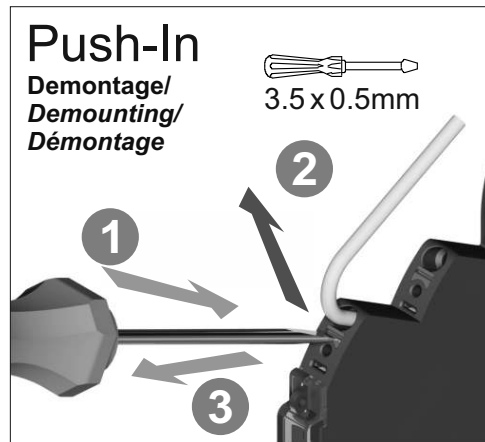
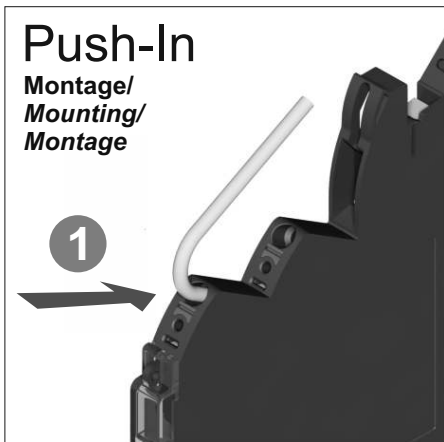
For further information see also the operating instructions

Signal output



Mounting diagram

**! HINWEIS / NOTICE / AVIS**



Typschlüssel

