

Technical data sheet

Load monitoring · LOCC-Box ECK

Electronic load monitoring up to DC 10 A

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

Fixed Characteristics: slow-1



Identification

Type	LOCC-Box ECK I-C3
Part No.	716416.803.1

Product version

Hardware revision	2.0
Software version	2.6
Datasheet version	05

Input

Type of function	1-channel 1 pin switching
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

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 μ F
Current range	1 A – 10 A (adjustable via switch in 1 A steps)
Characteristic	Slow 1 (3), fixed setting

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Power Dissipation 2,15 W

Signal output

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

General

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)

Color of the housing Basalt grey

Mounting DIN rail mountable TS35
(EN 60715)

Installation position Any

MTBF 690000 h

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

Connection type Push-In
0.25 mm² – 2.5 mm²
AWG 24 – AWG 14

Weight/unit 0.07 kg

PU (units) 1

General ambient conditions

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

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

Relative air humidity 10 % – 95 %, without condensation

Vibration resistance 4 g acc. to EN 60068-2-6

Shock resistance 15 g acc. EN 60068-2-27

Certifications/Standards

Conformity CE
UKCA

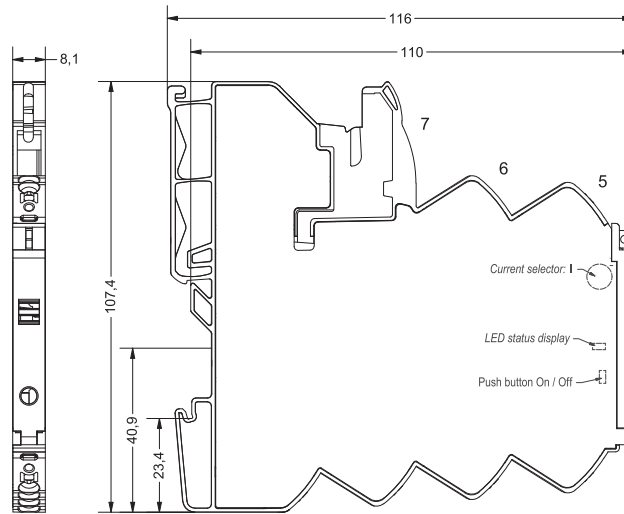
Certifications cULus (E135145)
URus (E490188)

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

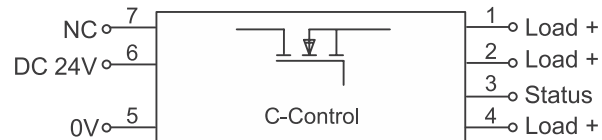
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Dimensions

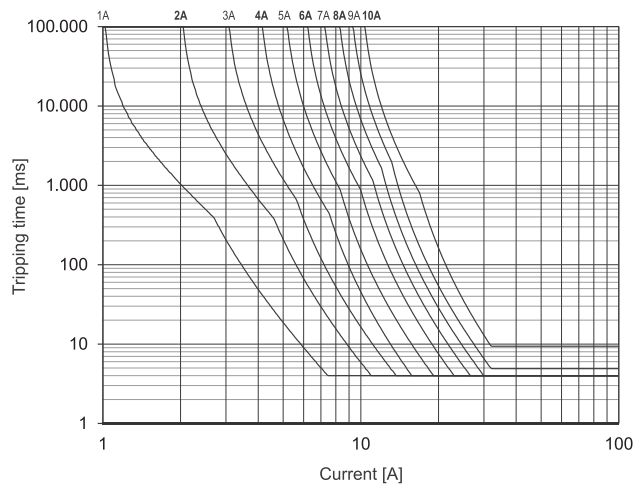


PIN assignment



- 1: + Output
- 2: + Output
- 3: Status output
- 4: + Output
- 5: 0V
- 6: + Supply
- 7: not used

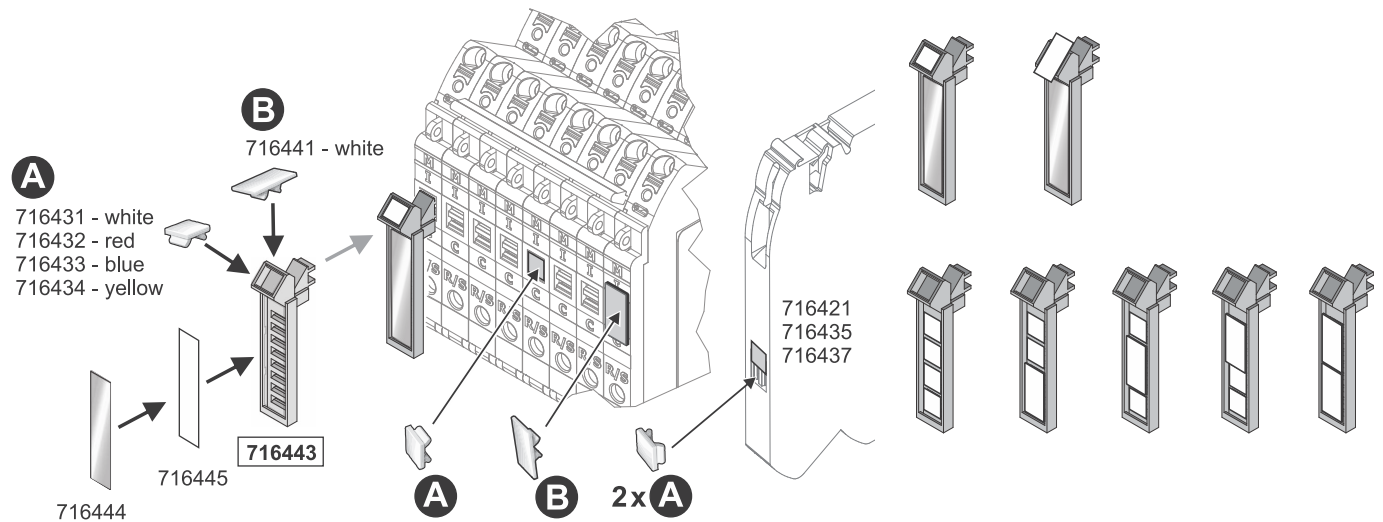
3: Characteristic slow-1



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Use



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. NOTICE: Switching off and on via pushbutton required.
Button ***	ON/OFF	Nominal operation: ON/OFF Load monitoring tripped: 1st push: acknowledge 2nd push: ON
Rotary Switch (I) – Switch Position**	Rated current	

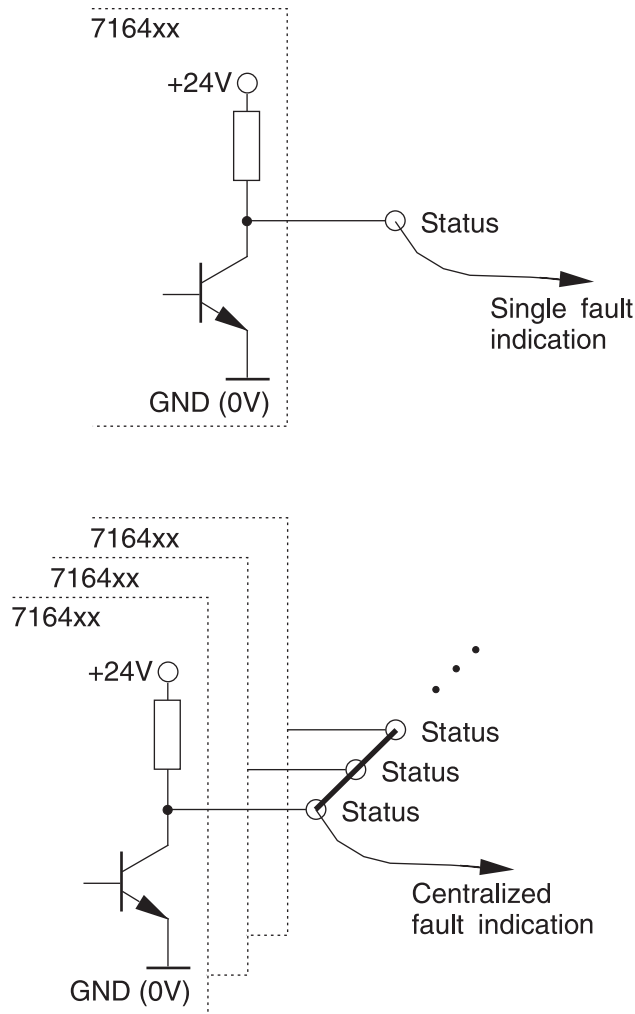
* If the operating voltage is switched off, the last status is saved (Default).

** 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

