

Data sheet | Item number: 787-1664/000-250

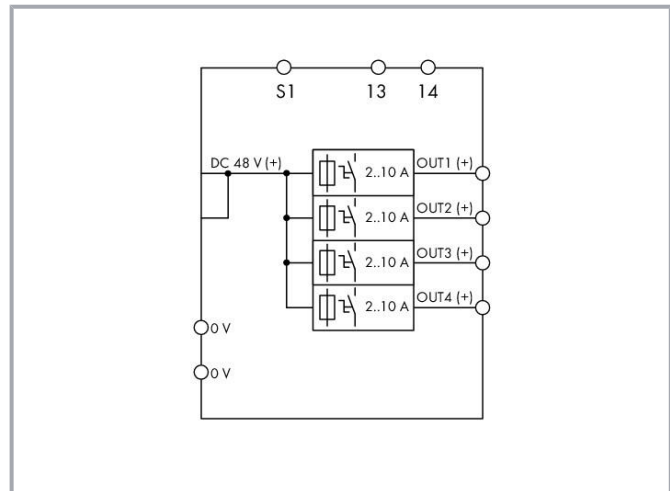
Electronic circuit breaker; 4-channel; 48 VDC input voltage; adjustable 2 ...
10 A; Signal contact

www.wago.com/787-1664/000-250



 Picture differs from the item.

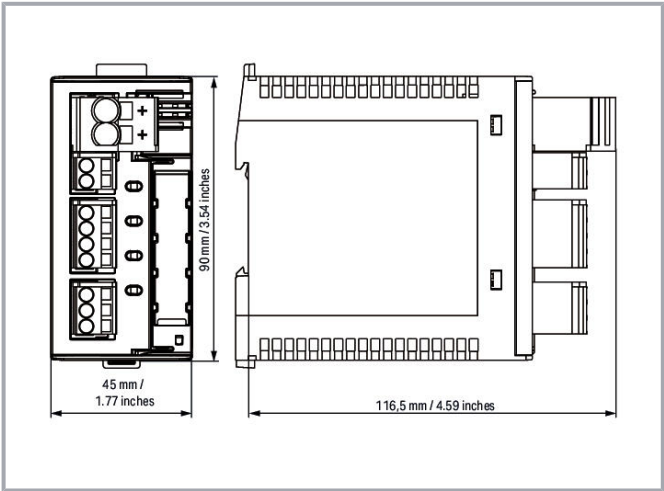
Similar to picture



Subject to changes. Please also observe the further product documentation!

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Item description

Features:

- Space-saving ECB with four channels
- Nominal current: 2 ... 10 A (adjustable for each channel via sealable selector switch)
- Switch-on capacity > 23000 µF per channel
- One illuminated, three-colored button per channel simplifies switching (on/off), resetting, and on-site diagnostics
- Time-delayed switching of channels
- Tripped message (group signal)
- Remote input resets all tripped channels
- Potential-free signal contact 13 / 14 reports “channel switched off” and “tripped channel” – does not support communication via pulse sequence

Data
Technical data

Input

Nominal input voltage $U_{i\,nom}$	DC 48 V
Input voltage range	DC 32 ... 58 V

Output

Total number of channels (module)	4
Nominal output voltage $U_{o\,nom}$	4 x DC 48 V

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Output voltage range	DC 32 ... 58 V (U_e – voltage drop)
Voltage drop	≤ 175 mV (10 A) (Input (+))
Nominal output current $I_{o\text{ nom}}$	4 x 2 / 3 / 4 / 6 / 8 / 10 A (adjustable for each channel via selector switch)
Default setting	DC 10 A; switched on
Switch-on capacity	> 23000 μ F per channel at 48 VDC, 2.5 mm ² cable cross section and 2.5 m cable length
Switch-on behavior	Time-delayed channel switching (load-dependent, min. 50 ms / max. 5 s)
Active current limitation	No
Current limitation	No

Signaling and communication

Signaling	4 x LED (green/red/orange) 1 x Remote control input (S1) 1 x Group signal contact (13; 14)
Operation status indicator	Green LED (channel OK) Red LED (tripped channel)
Remote input	Reactivation of all tripped channels via 15 ... 58 VDC pulse for min. 500 ms

Efficiency/power losses

Power loss P_l	≤ 0.84 W; ≤ 8 W (4 x 10 A)
Efficiency (typ.)	99 %

Circuit protection

Internal fuse	T 15 A per channel
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Safety and protection

Isolation voltage (connectors – housing)	DC 0.5 kV
Protection class	III
Protection type	IP20; per EN 60529
Reverse voltage protection	No
Resistance to reverse feed	$\leq$ DC 58 V
Pollution degree	2
Transient suppression (primary)	Suppressor diode (68 V)
Parallel operation of single channels	Not permitted

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Series operation	No
MTBF	> 500,000 h (per IEC 61709)

Connection data

Connection type 1	Input (+)
Connection technology	Push-in CAGE CLAMP®
WAGO connector	WAGO 831 Series
Solid conductor	0.5 ... 10 mm² / 20 ... 8 AWG
Fine-stranded conductor	0.5 ... 10 mm² / 20 ... 8 AWG
Strip length	13 ... 15 mm / 0.51 ... 0.59 inches
Connection type 2	Input (-); output; signaling
Connection technology 2	CAGE CLAMP®
WAGO connector 2	WAGO 721 Series
Solid conductor 2	0.08 ... 2.5 mm² / 28 ... 12 AWG
Fine-stranded conductor 2	0.08 ... 2.5 mm² / 28 ... 12 AWG
Strip length 2	8 ... 9 mm / 0.31 ... 0.35 inches

Physical data

Width	45 mm / 1.772 inches
Height	90 mm / 3.543 inches
Depth from upper-edge of DIN-rail	115.5 mm / 4.547 inches

Mechanical data

Mounting type	DIN-35 rail
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Material data

Fire load	0.853 MJ
Weight	199 g

Environmental requirements

Ambient temperature (operation)	-25 ... +70 °C
Ambient temperature (storage)	-25 ... +85 °C
Relative humidity	5 ... 96 % (no condensation permissible)
Derating	≥ 50 °C (see instruction manual)

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Standards and specifications

Conformity marking	CE
Standards/specifications	EN 61000-6-2 EN 61000-6-3 UL 508 UL 2367 DNV

Commercial data

eCl@ss 10.0	27-37-18-02
eCl@ss 9.0	27-37-18-02
ETIM 8.0	EC001440
ETIM 7.0	EC001440
Recupel Type	
PU (SPU)	1 pcs
Packaging type	Box
Country of origin	DE
Customs tariff number	85363010900

Environmental Product Compliance

RoHS Compliance Status	Compliant, No Exemption
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Approvals / Certificates

General approvals

Logo	Approval	Additional Approval Text	Certificate name
	EAC Brjansker Zertifizierungsstelle	TP TC 020/2011	EAC_Certificate_RU_C- DE.AM02.B.00115_19

Declarations of conformity and manufacturer's declarations

Logo	Approval	Additional Approval Text	Certificate name
	EU-Declaration of Conformity WAGO GmbH & Co. KG	-	-

Approvals for marine applications

Certificate

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Logo	Approval	Additional Approval Text	name
	DNV DNV GL SE	-	TAA0000281

Optional accessories

Tool

Operating tool


Item no.: 210-721

Operating tool; Blade: 5.5 x 0.8 mm; with a partially insulated shaft; multicoloured

www.wago.com/210-721
Item no.: 210-769

SCREWDRIVER; green

www.wago.com/210-769
Item no.: 210-720

Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft; multicoloured

www.wago.com/210-720

Marking accessories

Marking strip


Item no.: 2009-110

Marking strips; for Smart Printer; on reel; not stretchable; plain; snap-on type; white

www.wago.com/2009-110
Item no.: 210-831

Marking strips; on reel; 2.3 mm wide; plain; Self-adhesive; white

www.wago.com/210-831
Item no.: 210-832

Marking strips; on reel; 3 mm wide; plain; Self-adhesive; white

www.wago.com/210-832

Marker


Item no.: 2009-145

Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; white

www.wago.com/2009-145
Item no.: 2009-115

WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; white

www.wago.com/2009-115
Item no.: 248-501

Mini-WSB marking card; as card; not stretchable; plain; snap-on type; white

www.wago.com/248-501

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**Item no.: 793-501**

WMB marking card; as card; not stretchable; plain; snap-on type; white

www.wago.com/793-501**Item no.: 793-5501**

WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; white

www.wago.com/793-5501**Downloads****Documentation****Bid Text**

787-1664/000-250 X81 - Datei	2019 Jul 3	xml 7.3 kB	Download
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787-1664/000-250 docx - Datei	2019 Jul 2	docx 21.4 kB	Download
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Instruction Leaflet

Elektronische Schutzschalter Elektronische Absicherung, DC 24 V / 2x10 A		pdf 585.7 kB	Download
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Additional Information

Disposal and Recycling Electrical and electronic equipment, Batteries, Packaging	V 1.1.0 2022 Aug 18	pdf 2.2 MB	Download
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CAD/CAE-Data**CAE data**

EPLAN Data Portal 787-1664/000-250	URL	Download
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WSCAD Universe 787-1664/000-250	URL	Download
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ZUKEN Portal 787-1664/000-250	URL	Download
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WSCAD Universe 787-1664/000-250	URL	Download
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EPLAN Data Portal 787-1664/000-250	URL	Download
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CAD data

2D/3D Models 787-1664/000-250

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URL Download

Asset Administration Shell

Asset Administration Shell 787-1664/000-250 URL Download

Environmental Product Compliance

Compliance Search

Environmental Product Compliance 787-1664/000-250 URL Download
Electronic circuit breaker; 4-channel; 48 VDC input voltage; adjustable 2 ... 10 A;
Signal contact

Installation Notes

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