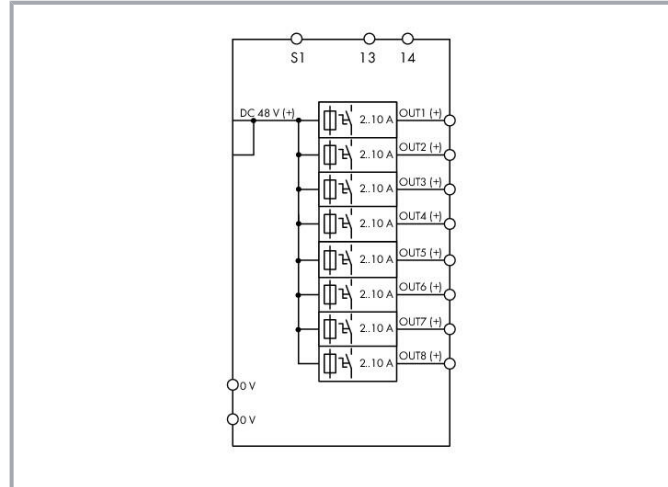


Data sheet | Item number: 787-1668/000-250

Electronic circuit breaker; 8-channel; 48 VDC input voltage; adjustable 2 ... 10 A; Signal contact



[www.wago.com/787-1668/000-250](http://www.wago.com/787-1668/000-250)



## Item description

### Features:

- Space-saving ECB with eight channels
- Nominal current: 2 ... 10 A (adjustable for each channel via sealable selector switch)

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

WAGO GmbH & Co. KG  
Hansastr. 27  
32423 Minden  
Phone: +49571 887-0 | Fax: +49571 887-169  
Email: [info.de@wago.com](mailto:info.de@wago.com) | Web: [www.wago.com](http://www.wago.com)

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- Switch-on capacity > 23000  $\mu$ F 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 (common 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 $U_{i\text{nom}}$	DC 48 V
Input voltage range	DC 32 ... 58 V

#### Output

Total number of channels (module)	8
Nominal output voltage $U_{o\text{nom}}$	8 x DC 48 V
Output voltage range	DC 32 ... 58 V ( $U_e$ – voltage drop)
Voltage drop	$\leq$ 200 mV (10 A) (Input (+))
Nominal output current $I_{o\text{nom}}$	8 x 2 / 3 / 4 / 6 / 8 / 10 A (adjustable for each channel via selector switch; 70 A (max.) in total)
Default setting	DC 10 A; switched on
Switch-on capacity	> 23000 $\mu$ F per channel at 48 VDC, 2.5 mm <sup>2</sup> 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	8 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.

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



500 ms

## Efficiency/power losses

Power loss $P_l$	$\leq 1.3 \text{ W}; \leq 20 \text{ W (8 x 10 A)}$
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	$\leq \text{DC } 58 \text{ V}$
Pollution degree	2
Transient suppression (primary)	Suppressor diode (68 V)
Parallel operation of single channels	Not permitted
Series operation	No
MTBF	> 500,000 h (per IEC 61709)

## Connection data

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

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



## Physical data

Width	42 mm / 1.654 inches
Height	127 mm / 5 inches
Depth from upper-edge of DIN-rail	142.5 mm / 5.61 inches

## Mechanical data

Mounting type	DIN-35 rail
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## Material data

Fire load	0.85 MJ
Weight	440 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)

## 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

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




## Environmental Product Compliance

RoHS Compliance Status


Compliant, No Exemption

## 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
	UL Underwriters Laboratories Inc.	UL 508	E255817
	UR Underwriters Laboratories Inc.	UL 2367	E363438

### 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

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

## Optional accessories

### Tool

Operating tool

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

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Hansastr. 27

32423 Minden

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Item no.: 210-721

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

[www.wago.com/210-721](http://www.wago.com/210-721)



Item no.: 210-769

SCREWDRIVER; green

[www.wago.com/210-769](http://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](http://www.wago.com/210-720)

### Mounting adapter

DIN-rail adapter



Item no.: 787-897/000-010

Carrier rail adapter made of zinc die-cast; horizontal mounting of 787-16xx (TS35)

[www.wago.com/787-897/000-010](http://www.wago.com/787-897/000-010)

### 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](http://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](http://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](http://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](http://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](http://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](http://www.wago.com/248-501)



Item no.: 793-501

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

[www.wago.com/793-501](http://www.wago.com/793-501)

Item no.: 793-5501

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

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Hansastr. 27

32423 Minden

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WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on [www.wago.com/793-5501](http://www.wago.com/793-5501)  
type; white

## Downloads

### Documentation

#### Bid Text

787-1668/000-250 X81 - Datei	2019 Jul 3	xml 7.3 kB	Download
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787-1668/000-250 docx - Datei	2019 Jul 3	docx 21.5 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 787-1668/000-250		URL	Download
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WSCAD Universe 787-1668/000-250		URL	Download
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ZUKEN Portal 787-1668/000-250		URL	Download
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EPLAN Data Portal 787-1668/000-250		URL	Download
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#### CAD data

2D/3D Models 787-1668/000-250		URL	Download
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#### Asset Administration Shell

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



Asset Administration Shell 787-1668/000-250

[URL](#)

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## Environmental Product Compliance

### Compliance Search

Environmental Product Compliance 787-1668/000-250

[URL](#)

[Download](#)

Electronic circuit breaker; 8-channel; 48 VDC input voltage; adjustable 2 ... 10 A;  
Signal contact

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## Installation Notes

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32423 Minden

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