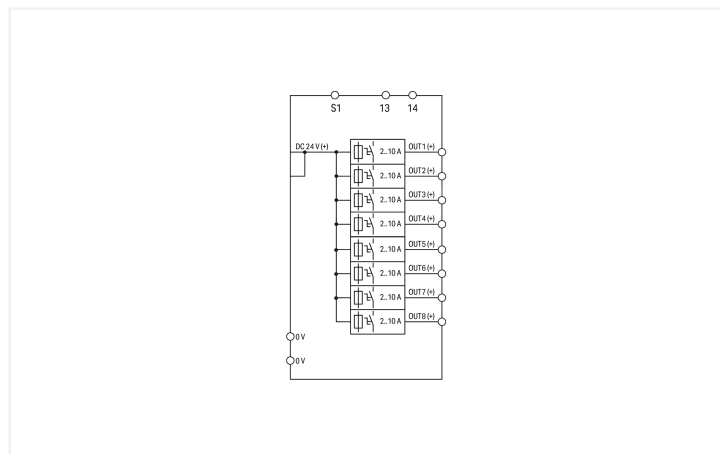


Data Sheet | Item Number: 787-1668/000-054

Electronic circuit breaker; 8-channel; 24 VDC input voltage; adjustable 2 ... 10 A; Signal contact; Specialty configuration

<https://www.wago.com/787-1668/000-054>



Similar to illustration

Features:

- Space-saving ECB with eight channels
- Nominal current: 2 ... 10 A (adjustable for each channel via sealable selector switch); Factory preset: 2 A (when switched off)
- Switch-on capacity > 50000 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.

Technical data

Input	
Nominal input voltage $U_{i\,nom}$	24 VDC
Input voltage range	18 ... 30 VDC

Output	
Total number of channels (module)	8
Nominal output voltage $U_{o\,nom}$	8 x 24 VDC
Output voltage range	18 ... 30 VDC (U_e - voltage drop)
Voltage drop	≤ 200 mV (10 A) (Input (+))
Nominal output current $I_{o\,nom}$	8 x 2 / 3 / 4 / 6 / 8 / 10 A (adjustable for each channel via selector switch; 70 A (max.) in total)
Default Setting	DC 2 A; switched off
Trip time	16 ms ... 100 s (load-dependent)
Switch-on capacity	
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 ... 30 VDC pulse for min. 500 ms

Circuit Protection	
Internal fuse	T 15 A per channel

Safety and protection	
Isolation voltage (connectors – housing)	0.5 kVDC
Protection class	III
Protection type	IP20; per EN 60529
Reverse voltage protection	No
Resistance to reverse feed	≤ 35 VDC
Pollution degree	2
Transient suppression (primary)	Suppressor diode (33 V)
Parallel operation of single channels	Not permitted
Series operation	No
MTBF	> 500,000 h (per IEC 61709)

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

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



Material data	
Fire load	0.687 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	
PU (SPU)	1 pcs
Packaging type	Box
Country of origin	DE
Customs tariff number	85362010900

Product Classification	
UNSPSC	39121601
eCl@ss 10.0	27-37-18-02
eCl@ss 9.0	27-37-18-02
ETIM 9.0	EC001440
ETIM 10.0	EC001440
ECCN	NO US CLASSIFICATION

Environmental Product Compliance	
RoHS Compliance Status	Compliant, No Exemption

Approvals / Certificates		
General approvals		Declarations of conformity and manufacturer's declarations
  		
Approval	Standard	Certificate Name
EAC GZO Almaty Standart	TP TC 020/2011	EAC CoC 03081
UL Underwriters Laboratories Inc.	UL 508	E255817
UR Underwriters Laboratories Inc.	UL 2367	E363438
Declarations of conformity and manufacturer's declarations		
Approval	Standard	Certificate Name
EU-Declaration of Conformity WAGO GmbH & Co. KG	-	-
UK-Declaration of Conformity WAGO GmbH & Co. KG	-	-



Approvals for marine applications



Approval	Standard	Certificate Name
DNV DNV GL SE	-	TAA0000281

Downloads

Environmental Product Compliance

Compliance Search
Environmental Product Compliance 787-1668/000-054



Documentation

Bid Text
787-1668/000-054
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xml 7.11 KB
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787-1668/000-054
03.07.2019
docx 20.61 KB
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Instruction Leaflet
Elektronische Schutzschalter
pdf 590.18 KB
↓

Application Notes

Application Note e!COCKPIT
e!COCKPIT Application Note WagoAppFuse (a2019001)
2021-11-08 06.12.2021
pdf 548.17 KB
↓

CAD/CAE-Data

CAD data
2D/3D Models 787-1668/000-054
↓

CAE data
EPLAN Data Portal 787-1668/000-054
↓
WSCAD Universe 787-1668/000-054
↓
ZUKEN Portal 787-1668/000-054
↓

1 Compatible Products

1.1 Optional Accessories

1.1.1 Marking

1.1.1.1 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



Item No.: 248-501
Mini-WSB marking card; as card; not stretchable; plain; snap-on type; white



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



Item No.: 793-501
WMB marking card; as card; not stretchable; plain; snap-on type; white



Item No.: 2009-115
WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; white

1.1.1.2 Marking strip



Item No.: 2009-110
Marking strips; for Smart Printer; on reel; not stretchable; plain; snap-on type; white



Item No.: 210-831
Marking strips; on reel; 2.3 mm wide; plain; Self-adhesive; white



Item No.: 210-832
Marking strips; on reel; 3 mm wide; plain; Self-adhesive; white

1.1.2 Mounting adapter

1.1.2.1 DIN-rail adapter



Item No.: 787-897/000-010
Carrier rail adapter made of zinc die-cast; horizontal mounting of 787-16xx (TS35)

1.1.3 Tool

1.1.3.1 Operating tool



Item No.: 210-720
Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft; multicoloured



Item No.: 210-721
Operating tool; Blade: 5.5 x 0.8 mm; with a partially insulated shaft; multicoloured



Item No.: 210-769
SCREWDRIVER; green