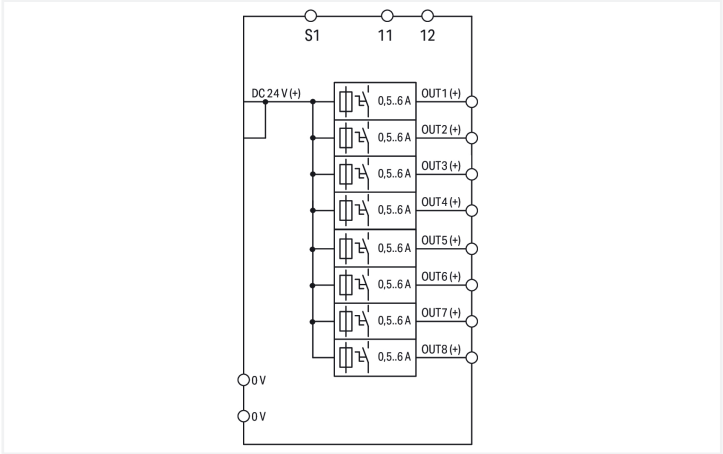


Data Sheet | Item Number: 787-1668/006-1054

Electronic circuit breaker; 8-channel; 24 VDC input voltage; adjustable 0.5 ... 6 A; active current limitation; Signal contact; Specialty configuration

<https://www.wago.com/787-1668/006-1054>



Similar to illustration

- Features:**
- Space-saving ECB with eight channels
 - Nominal current: 0.5 ... 6 A (adjustable for each channel via sealable selector switch)
 - Active current limitation
 - Switch-on capacity > 65000 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 11 / 12 reports "channel switched off" and "tripped channel" – does not support communication via pulse sequence

Technical data			
Input		Output	
Nominal input voltage $U_{i\,nom}$	24 VDC	Total number of channels (module)	8
Input voltage range	18 ... 30 VDC	Nominal output voltage $U_{o\,nom}$	8 x 24 VDC
		Output voltage range	18 ... 30 VDC (U_e – voltage drop)
		Voltage drop	≤ 155 mV (6 A) (Input (+))
		Nominal output current $I_{o\,nom}$	8 x 0.5 / 1 / 2 / 3 / 4 / 6 A (adjustable for each channel via selector switch)
		Default Setting	DC 0.5 A; switched off
		Trip time	16 ms ... 5 s (load-dependent)
		Switch-on capacity	
		Switch-on behavior	Time-delayed channel switching (load-dependent, min. 50 ms / max. 5 s)
		Active current limitation	Yes
		Current limitation	1.3 x $I_{o\,nom}$ (typ.)
Signaling and communication		Efficiency/power losses	
Signaling	8 x LED (green/red/orange) 1 x Remote control input (S1) 1 x Group signal contact (11; 12)	Power loss P_l	≤ 1.15 W; ≤ 8.6 W (8 x 6 A)
Operation status indicator	Green LED (channel OK) Red LED (tripped channel)	Efficiency (typ.)	99 %
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 type 1	Input (+)
Connection technology	Push-in CAGE CLAMP® CAGE CLAMP®
WAGO connector	WAGO 831 Series
Solid conductor	0.5 ... 10 mm² / 20 ... 8 AWG 0.08 ... 2.5 mm² / 28 ... 12 AWG
Fine-stranded conductor	0.5 ... 10 mm² / 20 ... 8 AWG 0.08 ... 2.5 mm² / 28 ... 12 AWG
Strip length	13 ... 15 mm / 0.51 ... 0.59 inches 8 ... 9 mm / 0.31 ... 0.35 inches
Connection type	Input (-); output; signaling
WAGO connector 2	WAGO 721 Series

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	0.768 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	No derating



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 9.0	EC001440
ETIM 8.0	EC001440
PU (SPU)	1 pcs
Packaging type	Box
Country of origin	DE
Customs tariff number	85363010900

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	
		Approval	Standard
		EU-Declaration of Confor- mity WAGO GmbH & Co. KG	Certificate Name -

Approvals for marine applications

		
Approval	Standard	Certificate Name
DNV DNV GL SE	-	TAA0000281



Downloads

Environmental Product Compliance

Compliance Search

Environmental Product Compliance
787-1668/006-1054

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Documentation

Bid Text

787-1668/006-105403.07.2019xml7.16 KB↓

787-1668/006-105402.07.2019docx20.89 KB↓

Instruction Leaflet

Elektronische Schutzschalterpdf3554.57 KB↓

CAD/CAE-Data

CAD data

2D/3D Models
787-1668/006-1054↓

CAE data

EPLAN Data Portal
787-1668/006-1054↓

WSCAD Universe
787-1668/006-1054↓

ZUKEN Portal
787-1668/006-1054↓

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