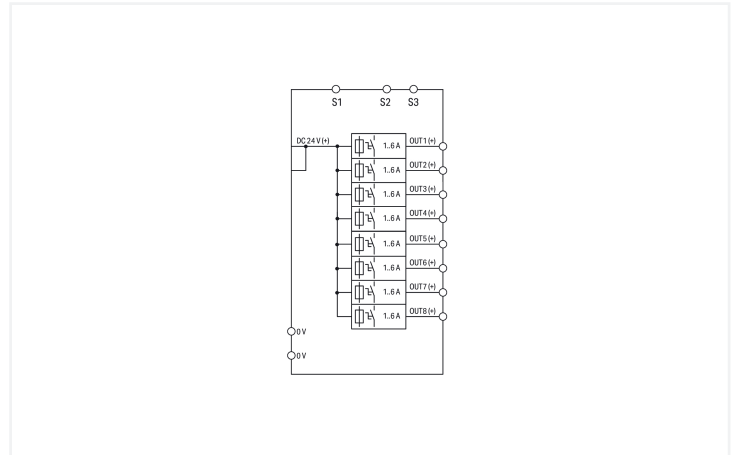


Data Sheet | Item Number: 787-1668/106-000

Electronic circuit breaker; 8-channel; 24 VDC input voltage; adjustable 1 ... 6 A; communication capability

<https://www.wago.com/787-1668/106-000>



Similar to illustration

Features:

- Space-saving ECB with eight channels
- Nominal current: 1 ... 6 A (adjustable for each channel via sealable selector switch)
- 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)
- Status message for each channel via pulse sequence
- Remote input resets tripped channels or switches on/off any number of channels via pulse sequence

Technical data

Input		Output	
Nominal input voltage $U_{i, \text{nom}}$	24 VDC	Total number of channels (module)	8
Input voltage range	18 ... 30 VDC	Nominal output voltage $U_{o, \text{nom}}$	8 x 24 VDC
		Output voltage range	18 ... 30 VDC (U_o - voltage drop)
		Voltage drop	$\leq 120 \text{ mV}$ (6 A) (Input (+))
		Nominal output current $I_{o, \text{nom}}$	8 x 1 / 2 / 3 / 4 / 5 / 6 A (adjustable for each channel via selector switch)
		Default Setting	DC 6 A; switched on
		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) 2 x Active signal output (S2; S3)
Operation status indicator	Green LED (channel OK) Red LED (tripped channel)

Signaling and Communication

Remote input	Reactivation of all tripped channels via 15 ... 30 VDC pulse for min. 500 ms Switching on/off any number of channels via pulse sequence
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Efficiency/Power Losses

Power loss P_1	$\leq 1.32 \text{ W}; \leq 8 \text{ W (8 x 6 A)}$
Efficiency (typ.)	99 %

Circuit Protection

Internal fuse	T 15 A per channel
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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	$\leq 35 \text{ VDC}$
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 type	Input (+)
Connection technology	Push-in CAGE CLAMP®
WAGO connector	WAGO 831 Series
Solid conductor	0.5 ... 10 mm ² / 20 ... 8 AWG
Fine-stranded conductor	0.5 ... 10 mm ² / 20 ... 8 AWG
Strip length	13 ... 15 mm / 0.51 ... 0.59 inches

Connection 2

Connection type	Input (-); output; signaling
Connection technology	CAGE CLAMP®
WAGO connector	WAGO 721 Series
Solid conductor	0.08 ... 2.5 mm ² / 28 ... 12 AWG
Fine-stranded conductor	0.08 ... 2.5 mm ² / 28 ... 12 AWG
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
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Material data

Fire load	0 MJ
Weight	490 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

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
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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	Certificate Name
EU-Declaration of Confor- mity 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
787-1668/106-000



Documentation

Manual

Product Manual br/
Electronic Circuit Breaker

V 1.1.0

pdf
1320.16 KB



Bid Text

787-1668/106-000

03.07.2019

xml
7.06 KB



787-1668/106-000

03.07.2019

docx
20.46 KB



Instruction Leaflet

Elektronische Schutzschalter

pdf
409.78 KB



CAD/CAE-Data

CAD data

2D/3D Models
787-1668/106-000



CAE data

EPLAN Data Portal
787-1668/106-000



WSCAD Universe
787-1668/106-000



ZUKEN Portal
787-1668/106-000



Libraries

Library

Anbindung Stromversorgungen Serie 787

1.0.0
28.08.2017

zip
340.24 KB



Anbindung Stromversorgungen Serie 787

1.3.0
14.05.2014

zip
549.48 KB



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