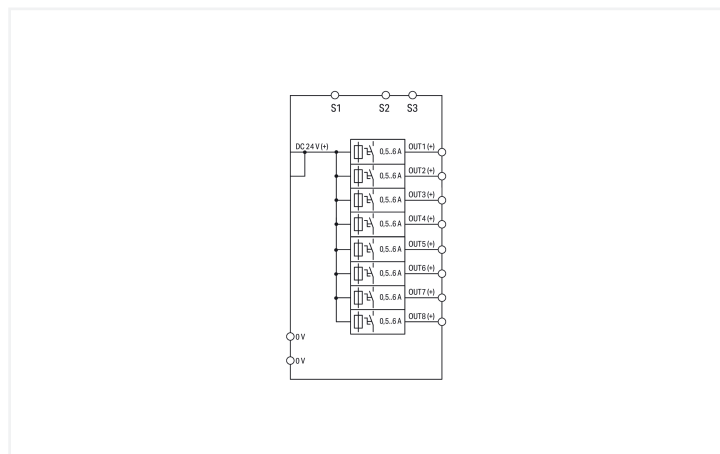


Data Sheet | Item Number: 787-1668/006-1000

Electronic circuit breaker; 8-channel; 24 VDC input voltage; adjustable 0.5 ... 6 A; active current limitation; communication capability

<https://www.wago.com/787-1668/006-1000>



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)
- 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	
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	$\leq 155\text{ mV}$ (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 6 A; switched on
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	$1.7 \times I_{o\,nom}$ (typ.)



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)
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

Efficiency/Power Losses	
Power loss P _I	≤ 1.15 W; ≤ 8.6 W (8 x 6 A)
Efficiency (typ.)	99 %

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	
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	
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	TP TC 020/2011	EAC CoC 03081	EU-Declaration of Conformity	-	-
GZO Almaty Standart			WAGO GmbH & Co. KG		
UL	UL 508	E255817	UK-Declaration of Conformity	-	-
Underwriters Laboratories Inc.			WAGO GmbH & Co. KG		
UR	UL 2367	E363438			
Underwriters Laboratories Inc.					



Approvals for marine applications



Approval	Standard	Certificate Name
DNV DNV GL SE	-	TAA0000281

Downloads

Environmental Product Compliance

Compliance Search
Environmental Product Compliance 787-1668/006-1000



Documentation

Manual
Product Manual br/Elec- tronic Circuit Breaker

V 1.1.0

pdf
1320.16 KB



Bid Text			
787-1668/006-1000	03.07.2019	xml 7.23 KB	
787-1668/006-1000	02.07.2019	docx 20.92 KB	

Instruction Leaflet
Elektronische Schutzschalter

pdf
671.88 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 787-1668/006-1000



CAE data	
EPLAN Data Portal 787-1668/006-1000	
WSCAD Universe 787-1668/006-1000	
ZUKEN Portal 787-1668/006-1000	

Libraries

Library			
Anbindung Stromver-sorgungen Serie 787	1.0.0 28.08.2017	zip 340.24 KB	
Anbindung Stromver-sorgungen 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

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

Current addresses can be found at: www.wago.com