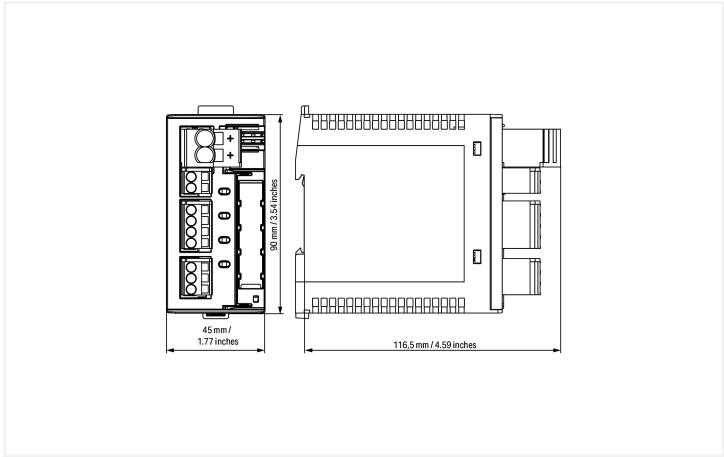
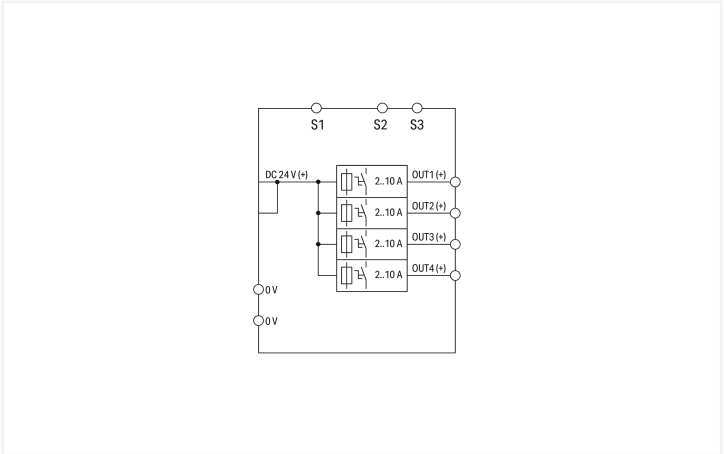


Data Sheet | Item Number: 787-1664

Electronic circuit breaker; 4-channel; 24 VDC input voltage; adjustable 2 ... 10 A; communication capability; 10,00 mm²

<https://www.wago.com/787-1664>



Features:

- Space-saving ECB with four channels
- Nominal current: 2 ... 10 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)	4
Input voltage range	18 ... 30 VDC	Nominal output voltage $U_{o\text{ nom}}$	4 x 24 VDC
		Output voltage range	18 ... 30 VDC (U_e - voltage drop)
		Voltage drop	≤ 200 mV (10 A) (Input +)
		Nominal output current $I_{o\text{ nom}}$	4 x 2 / 3 / 4 / 6 / 8 / 10 A (adjustable for each channel via selector switch)
		Default Setting	DC 10 A; switched on
		Trip time	16 ms ... 100 s (load-dependent)



Output	
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	4 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	≤ 0.84 W; ≤ 10 W (4 x 10 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	45 mm / 1.772 inches
Height	90 mm / 3.543 inches
Depth from upper-edge of DIN-rail	115.5 mm / 4.547 inches

Mechanical data	
Mounting type	DIN-35 rail



Material data	
Weight	170 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	
Product Group	6 (INTERFACE ELECTRONIC)
PU (SPU)	1 pcs
Packaging type	Box
Country of origin	PL
Customs tariff number	85363030888

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						
		<table><tr><th>Approval</th><th>Standard</th><th>Certificate Name</th></tr><tr><td>EU-Declaration of Conformity WAGO GmbH & Co. KG</td><td>-</td><td>-</td></tr></table>	Approval	Standard	Certificate Name	EU-Declaration of Conformity WAGO GmbH & Co. KG	-	-
Approval	Standard	Certificate Name						
EU-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 787-1664 

Documentation

Manual
Product Manual Electronic Circuit Breaker V 1.1.0 pdf 1278.57 KB 

Bid Text
787-1664 03.07.2019 xml 6.92 KB 
787-1664 02.07.2019 docx 20.38 KB 
ausschreiben.de 787-1664 

Instruction Leaflet
Elektronische Schutzschalter pdf 968.67 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 787-1664 

CAE data
EPLAN Data Portal 787-1664 
WSCAD Universe 787-1664 
ZUKEN Portal 787-1664 



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 Tool

1.1.2.1 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