



Features:

- Space-saving ECB with one channel
- Reliably and safely trips in the event of an overload and short circuit on the secondary side
- Switch-on capacity > 50,000 µF
- Enables the use of an economical, standard power supply
- Minimizes wiring via two voltage outputs and maximizes commoning options on both input and output sides (e.g., commoning of the output voltage on 857 and 2857 Series devices)
- Status signal – adjustable as single or group message
- Reset, switch on/off via remote input or local switch
- Prevents power supply overload due to total inrush current thanks to time-delayed switching on during interconnected operation

Notes	
Note	The device is designed for use in SELV circuits. Depending on the output current, please use the approved minimum conductor cross-sections.



Technical data

Input		Output	
Nominal input voltage $U_{i\,nom}$	24 VDC	Total number of channels (module)	1
Input voltage range	18 ... 30 VDC	Nominal output voltage $U_{o\,nom}$	1 x 24 VDC
		Output voltage range	18 ... 30 VDC (U_e – voltage drop)
		Voltage drop	$\leq 80\text{ mV}$ (1 A); $\leq 160\text{ mV}$ (2 A); $\leq 240\text{ mV}$ (3 A); $\leq 320\text{ mV}$ (4 A); $\leq 150\text{ mV}$ (5 A); $\leq 180\text{ mV}$ (6 A); $\leq 210\text{ mV}$ (7 A); $\leq 240\text{ mV}$ (8 A)
		Nominal output current $I_{o\,nom}$	1 x 1 / 2 / 3 / 4 / 5 / 6 / 7 / 8 A (adjustable)
		Default Setting	DC 1 A; switched off
		Trip time	10 ms ... 90 s (load-dependent)
		Switch-on capacity	
		Switch-on behavior	Time-delayed channel switching (load-dependent, min. 0 ms / max. 500 ms)

Signaling and communication	
Signaling	1 x Status LED (green/yellow/red) 1 x Signal output (18 ... 30 VDC, max. 0.015 A), Default setting: triggered
Operation status indicator	Green LED (channel OK) Red LED (channel switched off)
Remote input	1 x Control input (15 ... 30 VDC (active high); 0 ... 5 VDC (active low); max. 0.015 A)

Efficiency/power losses	
Power loss P_I	$\leq 0.4\text{ W}$ (no load)
Efficiency (typ.)	98 %

Circuit protection	
Internal fuse	T 10 A

Safety and protection

Safety and protection		Insulation coordination (UL)	
Isolation voltage (connectors – housing)	1.5 kVDC	Overvoltage category	II
Protection class	III	Pollution degree	2
Protection type	IP20; per EN 60529		
Reverse voltage protection	No		
Transient suppression (primary)	Suppressor diode (33 V)		
Parallel operation of single channels	Not permitted		
Series operation	No		
MTBF	807,840 h		

Insulation coordination	
Overvoltage category	II
Pollution degree	2



Connection data		
Number of jumper slots	8	
Connection 1		
Connection technology	Push-in CAGE CLAMP®	
WAGO connector	WAGO 857 Series	
Solid conductor	0.08 ... 2.5 mm² / 24 ... 14 AWG	
Fine-stranded conductor	0.34 ... 2.5 mm² / 22 ... 14 AWG	
Strip length	9 ... 10 mm / 0.35 ... 0.39 inches	
Note (conductor cross-section)	Depending on the output current, use the conductor cross-sections tested and approved by UL: 26 ... 14 AWG (0.5 A); 24 ... 14 AWG (1 A); 22 ... 14 AWG (2 A); 20 ... 14 AWG (3 A / 4 A); 18 ... 14 AWG (5 A / 6 A); 16 ... 14 AWG (7 A / 8 A)	

Physical data		
Width	6 mm / 0.236 inches	
Height	94 mm / 3.701 inches	
Depth from upper-edge of DIN-rail	97.8 mm / 3.85 inches	

Mechanical data		
Mounting type	DIN-35 rail	

Material data		
Fire load	0.634 MJ	
Weight	55.7 g	

Environmental requirements		
Ambient temperature (operation)	-25 ... +70 °C	
Ambient temperature (storage)	-40 ... +85 °C	
Relative humidity	10 ... 95 % (no condensation permissible)	
Derating	No derating	
Operating altitude	≤ 2000 m (a.s.l.)	

Standards and specifications		
Conformity marking	CE; UKCA	
Standards/specifications	EN 61000-6-2 EN 61000-6-3 UL 61010-2-201 DNV UL 2367	






Commercial data		
PU (SPU)		1 pcs
Packaging type		Bag
Country of origin		IN
Customs tariff number		85363010000

Product classification		
UNSPSC		39121601
ETIM 9.0		EC001440
ETIM 8.0		EC001440
ECCN		NO US CLASSIFICATION

Environmental Product Compliance		
CAS-No.		11120-22-2 1303-86-2 1317-36-8 7439-92-1
REACH Candidate List Substance		Diboron trioxide Lead Lead monoxide Lead silicate
RoHS Compliance Status		Compliant,With Exemption
RoHS Exemption		6(c) 7(a) 7(c)-I 7(c)-II
SCIP notification number (Austria)		b32c6b38-8acb-4713-ba41-a31e9089ed9f
SCIP notification number (Belgium)		98ce4f37-7a53-47bb-8e75-f78fe7c0a170
SCIP notification number (Bulgaria)		3a6e9043-eb26-458e-bab1-c3c216570d55
SCIP notification number (Czech Republic)		eb3aca50-2f42-4ff8-a48c-c2689192a43d
SCIP notification number (Denmark)		b71bc243-6a14-4104-8685-4afcaab2d81f
SCIP notification number (Finland)		d5168b8b-dfdd-4732-aaaa-3bfaa59ec9f9
SCIP notification number (France)		e8ebf949-b28b-4d9a-9e11-a681e960a351
SCIP notification number (Germany)		96ebdc4a-6d4a-4b95-947c-274f3d488737
SCIP notification number (Hungary)		2a464243-9905-4fff-bc55-2ffd254e9d5e
SCIP notification number (Italy)		30bca2bc-5ac1-4dec-95d0-9582c48d5f74
SCIP notification number (Netherlands)		1edc6ced-04aa-44f5-a4b9-d16e8c935329
SCIP notification number (Poland)		864b9dfe-fa85-40dd-8514-69fa1aca7fe7
SCIP notification number (Romania)		f6023abb-54ce-461f-87bb-20fa6de4be7a
SCIP notification number (Sweden)		2f5c1de5-de39-4215-866a-90168d171204

Approvals / Certificates

General approvals			Declarations of conformity and manufacturer's declarations		
  					
Approval	Standard	Certificate Name	Approval	Standard	Certificate Name
EAC GZO Almaty Standart	TP TC 020/2011	EAC CoC 03081	EU-Declaration of Confor- mity WAGO GmbH & Co. KG	-	-
UL Underwriters Laboratories Inc. (ORDINARY LOCATI- ONS)	UL 61010-2-201	UL E175199 Vol.3 Sec.5	UK-Declaration of Confor- mity WAGO GmbH & Co. KG	-	-
UR Underwriters Laboratories Inc.	-	E175199			



Approvals for marine applications



Approval	Standard	Certificate Name
DNV DNV Germany GmbH	DNV-CG-0339,Aug.2021	TAA00001D1

Approvals for hazardous areas



Approval	Standard	Certificate Name
UL Underwriters Laboratories Inc. (HAZARDOUS LOCATIONS)	UL 121201	E198726

Downloads

Environmental Product Compliance

Compliance Search
Environmental Product Compliance 787-3861/108-020



Documentation

Manual
Product Manual Elec- tronic circuit breaker
V 1.0.0 25.03.2024
pdf 7471.95 KB



Instruction Leaflet
Electronic Circuit Brea- ker
V 1.1.1 11.09.2023
pdf 2491.12 KB



CAD/CAE-Data

CAD data
2D/3D Models 787-3861/108-020



1 Compatible Products

1.1 Optional Accessories

1.1.1 Jumper

1.1.1.1 Jumper



Item No.: 859-410/000-006
Jumper; for jumper slot; 10-way; insula- ted; blue



Item No.: 859-410
Jumper; for jumper slot; 10-way; insula- ted; light gray



Item No.: 859-410/000-005
Jumper; for jumper slot; 10-way; insula- ted; red



Item No.: 859-410/000-029
Jumper; for jumper slot; 10-way; insula- ted; yellow



Item No.: 859-402/000-006
Jumper; for jumper slot; 2-way; insulated; blue



Item No.: 859-402
Jumper; for jumper slot; 2-way; insulated; light gray



Item No.: 859-402/000-029
Jumper; for jumper slot; 2-way; insulated; yellow



Item No.: 859-403/000-006
Jumper; for jumper slot; 3-way; insulated; blue



Item No.: 859-403
Jumper; for jumper slot; 3-way; insulated; light gray



Item No.: 859-403/000-005
Jumper; for jumper slot; 3-way; insulated; red



Item No.: 859-403/000-029
Jumper; for jumper slot; 3-way; insulated; yellow



Item No.: 859-404/000-006
Jumper; for jumper slot; 4-way; insulated; blue



Item No.: 859-404
Jumper; for jumper slot; 4-way; insulated; light gray



Item No.: 859-404/000-005
Jumper; for jumper slot; 4-way; insulated; red






















Item No.: 859-404/000-029
Jumper; for jumper slot; 4-way; insulated; yellow



Item No.: 859-405/000-006
Jumper; for jumper slot; 5-way; insulated; blue












1.1.1.1 Jumper


 Item No.: 859-405 Jumper; for jumper slot; 5-way; insulated; light gray	 Item No.: 859-405/000-005 Jumper; for jumper slot; 5-way; insulated; red	 Item No.: 859-405/000-029 Jumper; for jumper slot; 5-way; insulated; yellow	 Item No.: 859-406/000-006 Jumper; for jumper slot; 6-way; insulated; blue
 Item No.: 859-406 Jumper; for jumper slot; 6-way; insulated; light gray	 Item No.: 859-406/000-005 Jumper; for jumper slot; 6-way; insulated; red	 Item No.: 859-406/000-029 Jumper; for jumper slot; 6-way; insulated; yellow	 Item No.: 859-407/000-006 Jumper; for jumper slot; 7-way; insulated; blue
 Item No.: 859-407 Jumper; for jumper slot; 7-way; insulated; light gray	 Item No.: 859-407/000-005 Jumper; for jumper slot; 7-way; insulated; red	 Item No.: 859-407/000-029 Jumper; for jumper slot; 7-way; insulated; yellow	 Item No.: 859-408/000-006 Jumper; for jumper slot; 8-way; insulated; blue
 Item No.: 859-408 Jumper; for jumper slot; 8-way; insulated; light gray	 Item No.: 859-408/000-005 Jumper; for jumper slot; 8-way; insulated; red	 Item No.: 859-408/000-029 Jumper; for jumper slot; 8-way; insulated; yellow	 Item No.: 859-409/000-006 Jumper; for jumper slot; 9-way; insulated; blue
 Item No.: 859-409 Jumper; for jumper slot; 9-way; insulated; light gray	 Item No.: 859-409/000-005 Jumper; for jumper slot; 9-way; insulated; red	 Item No.: 859-409/000-029 Jumper; for jumper slot; 9-way; insulated; yellow	

1.1.2 Marking

1.1.2.1 Marker

 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.: 793-502 WMB marking card; as card; MARKED; 1 ... 10 (10x); not stretchable; Horizontal marking; snap-on type; white	 Item No.: 793-566 WMB marking card; as card; MARKED; 1 ... 50 (2x); not stretchable; Horizontal marking; snap-on type; white	 Item No.: 793-503 WMB marking card; as card; MARKED; 11 ... 20 (10x); not stretchable; Horizontal marking; snap-on type; white
 Item No.: 793-504 WMB marking card; as card; MARKED; 21 ... 30 (10x); not stretchable; Horizontal marking; snap-on type; white	 Item No.: 793-505 WMB marking card; as card; MARKED; 31 ... 40 (10x); not stretchable; Horizontal marking; snap-on type; white	 Item No.: 793-506 WMB marking card; as card; MARKED; 41 ... 50 (10x); not stretchable; Horizontal marking; 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			

1.1.2.2 Marking strip

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



1.1.3 Potential distribution

1.1.3.1 Potential distribution module



Item No.: 787-3861/000-1000
Potential distribution module; 1 potential;
with 8 clamping points 0V; Conductor
cross-section up to 2.5 mm²



Item No.: 787-3861/000-2000
Potential distribution module; 1 potential;
with 8 clamping points 24V; Conductor
cross-section up to 2.5 mm²



Item No.: 787-3861/000-3000
Potential distribution module; 2 potentials;
with 4 clamping points each (0V / 24V);
Conductor cross-section up to 2.5 mm²

1.1.4 Tool

1.1.4.1 Operating tool



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