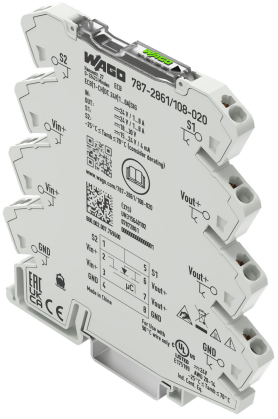
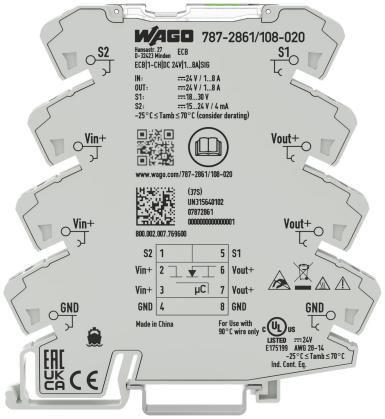
Data Sheet | Item Number: 787-2861/108-020

Electronic circuit breaker; 1-channel; 24 VDC input voltage; adjustable 1 … 8 A; Signal contact

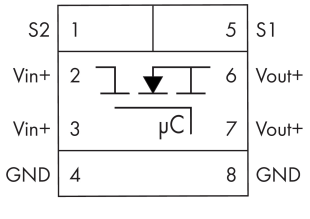
https://www.wago.com/787-2861/108-020

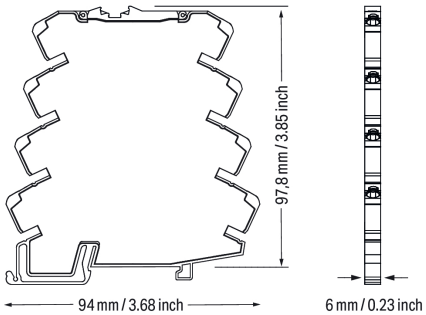












Features:

- 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

Technical data

Input

Nominal input voltage $U_{i\,nom}$	24 VDC
Input voltage range	18 … 30 VDC

Output

Total number of channels (module)	1
Nominal output voltage $U_{o\,nom}$	1 x 24 VDC
Output voltage range	18 … 30 VDC (U_e - voltage drop)
Voltage drop	≤ 25 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	4 ms … 100 s (load-dependent)
Switch-on capacity	
Switch-on behavior	Time-delayed channel switching (load-dependent, min. 170 ms / max. 500 ms)
Active current limitation	No
Current limitation	No

Signaling and Communication

Signaling	1 x Status LED (green/yellow/red/blue/violet) 1 x Control input 1 x Active signal output (U_i, max. 4 mA)
Operation status indicator	Green LED (channel OK) Red LED (tripped channel)
Remote input	18 … 30 VDC signal, switches on/off and resets the channel

Efficiency/Power Losses

Power loss P_l	≤ 0.36 W
Efficiency (typ.)	96 %

Circuit Protection

Internal fuse	T 15 A

Safety and protection

Isolation voltage (connectors – housing)	0.5 kVDC
Protection class	III
Protection type	IP20; per EN 60529
Reverse voltage protection	No
Pollution degree	2
Transient suppression (primary)	Suppressor diode (33 V)
Parallel operation of single channels	Not permitted
Series operation	No
MTBF	1,262,142 h (per MIL-HDBK-217F2)

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 / 28 … 14 AWG
Fine-stranded conductor	0.34 … 2.5 mm² / 22 … 14 AWG
Strip length	9 … 10 mm / 0.35 … 0.39 inches

Continued on next page

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

Weight	37 g

Environmental requirements

Ambient temperature (operation)	-25 … +70 °C (Device starts at -40 °C (type-tested); derating must be observed)
Ambient temperature (storage)	-40 … +85 °C
Relative humidity	10 … 95 % (no condensation permissible)
Derating	See instruction manual

Standards and Specifications

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

Commercial data

PU (SPU)	1 pcs
Packaging type	Bag
Country of origin	CN
Customs tariff number	85362010900

Product Classification

UNSPSC	39121630
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

CAS-No.	1303-86-2 1317-36-8 7439-92-1
REACH Candidate List Substance	Diboron trioxide Lead Lead monoxide
RoHS Compliance Status	Compliant,With Exemption
RoHS Exemption	6(c) 7(a) 7(c)-I 7(c)-II
SCIP notification number (Austria)	ad637ba0-c51f-44a2-b8ff-698cbefc51ed
SCIP notification number (Belgium)	b9d40650-cacb-4859-9d7f-9e8d56e09db4
SCIP notification number (Bulgaria)	d644b413-03d7-4b54-91f8-74efdb896cc6

Continued on next page

Environmental Product Compliance

SCIP notification number (Czech Republic)	26461ced-0081-473c-a4f7-e0052cd02021
SCIP notification number (Denmark)	876bec22-164d-4230-a8e8-c291b1cef7e9
SCIP notification number (Finland)	fb61e357-adfd-4dc2-b7cc-8895b1b1bfec
SCIP notification number (France)	a543535a-89e4-4209-ae61-75ad11911c03
SCIP notification number (Germany)	99b35031-4afa-467c-8291-187612075f67
SCIP notification number (Hungary)	22782ca1-1e17-4739-b396-2315822c2d14
SCIP notification number (Italy)	3345dcef-f8e6-4692-ae81-a6831afb3e9b
SCIP notification number (Poland)	224e2e49-fee4-4dd0-b2ef-0943e1019bc8
SCIP notification number (Sweden)	f32ab49c-378d-43d7-86c6-99df1ed9df56

Approvals / Certificates

General approvals

Approval	Standard	Certificate Name
EAC GZO Almaty Standart	TP TC 020/2011	EAC CoC 03081
UL Underwriters Laboratories Inc. (ORDINARY LOCATIONS)	UL 2367,UL 61010-2-201	E175199 Vol.3 Sec.2 Series 0787 ECB

Declarations of conformity and manufacturer's declarations

Approval	Standard	Certificate Name
EU-Declaration of Conformity WAGO GmbH & Co. KG	-	-
UK-Declaration of Conformity WAGO GmbH & Co. KG	-	-

Approvals for marine applications

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

Downloads

Environmental Product Compliance

Compliance Search

Environmental Product Compliance 787-2861/108-020

Documentation

Manual

Product Manual Electronic Circuit Breaker	V 1.3.1 16.12.2019	pdf 2933.00 KB	

Bid Text

787-2861/108-020	03.07.2019	xml 7.12 KB	
787-2861/108-020	02.07.2019	docx 33.89 KB	
ausschreiben.de 787-2861/108-020			

Continued on next page

Instruction Leaflet		
Electronic Circuit Breaker	V 2.0.0 27.02.2023	pdf 3477.29 KB

CAD/CAE-Data

CAD data	CAE data
2D/3D Models 787-2861/108-020	EPLAN Data Portal 787-2861/108-020
	ZUKEN Portal 787-2861/108-020

1 Compatible Products

1.1 Optional Accessories

1.1.1 Jumper

1.1.1.1 Jumper



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



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



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



Item No.: 859-405
Jumper; for jumper slot; 5-way; insulated; light gray



Item No.: 859-406
Jumper; for jumper slot; 6-way; insulated; light gray



Item No.: 859-407
Jumper; for jumper slot; 7-way; insulated; light gray



Item No.: 859-408
Jumper; for jumper slot; 8-way; insulated; light gray



Item No.: 859-409
Jumper; for jumper slot; 9-way; insulated; light gray

1.1.2 Marking

1.1.2.1 Marker



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

Continued on next page

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