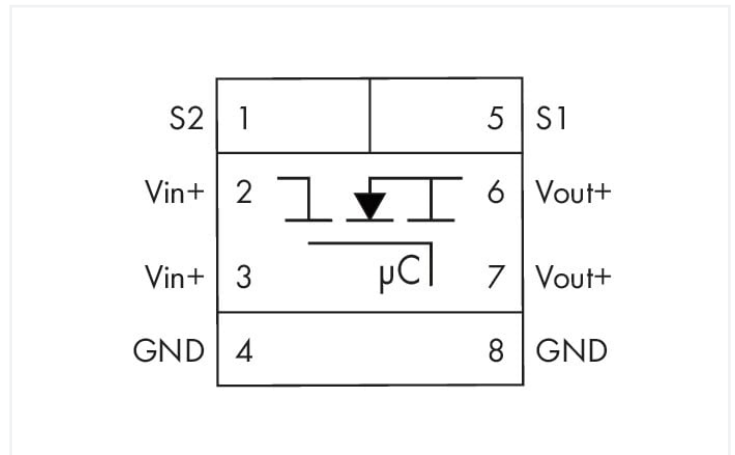
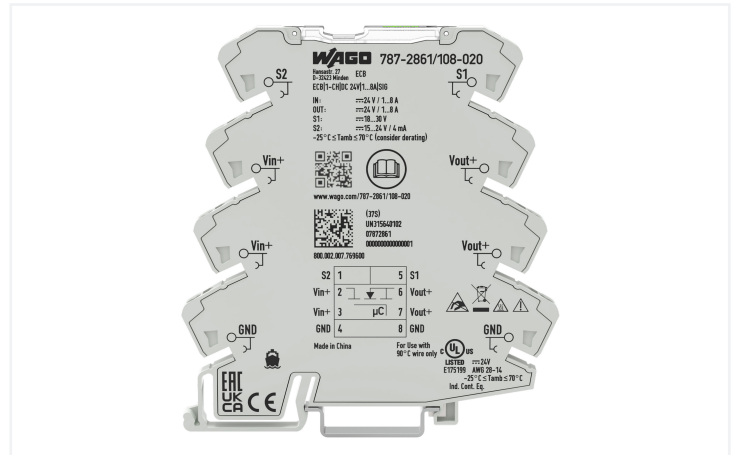


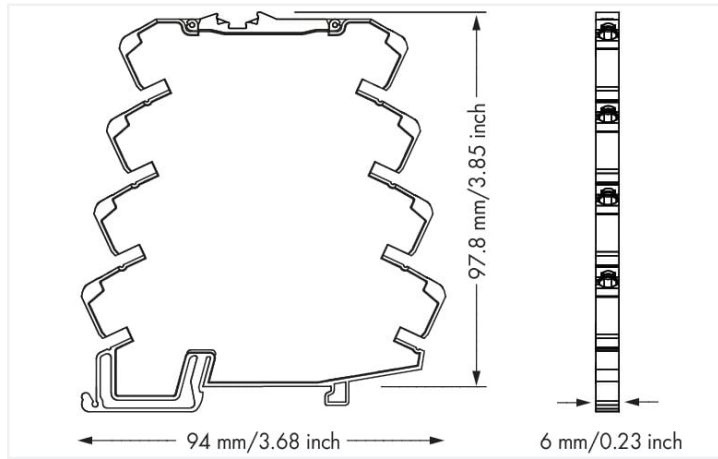
# Data Sheet | Item Number: 787-2861/108-020

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



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





Dimensions in mm

**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  $\mu\text{F}$
- 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 $U_{i, \text{nom}}$	DC 24 V
Input voltage range	DC 18 ... 30 V

**Output**

Total number of channels (module)	1
Nominal output voltage $U_{o, \text{nom}}$	1 x DC 24 V
Output voltage range	DC 18 ... 30 V ( $U_e$ – voltage drop)
Voltage drop	$\leq 25$ mV (8 A)
Nominal output current $I_{o, \text{nom}}$	1 x 1 / 2 / 3 / 4 / 5 / 6 / 7 / 8 A (adjustable)
Default setting	DC 1 A; switched off
Switch-on capacity	
Switch-on behavior	Time-delayed channel switching (load-dependent, min. 170 ms/max. 500 ms)
Active 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 $P_I$	$\leq 0.36$ W
Efficiency (typ.)	96 %

**Circuit protection**

Internal fuse	T 15 A
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### Safety and protection

Isolation voltage (connectors – housing)	DC 0.5 kV
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 technology	Push-in CAGE CLAMP®
WAGO connector	WAGO 857 Series
Solid conductor	0.08 ... 2.5 mm <sup>2</sup> / 28 ... 14 AWG
Fine-stranded conductor	0.34 ... 2.5 mm <sup>2</sup> / 22 ... 14 AWG
Strip length	9 ... 10 mm / 0.35 ... 0.39 inches

### Physical data

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

### Mechanical data

Mounting type	DIN-35 rail
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### Material data

Fire load	0 MJ
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	
eCl@ss 10.0	27-37-18-02
eCl@ss 9.0	27-37-18-02
ETIM 8.0	EC001440
ETIM 7.0	EC001440
PU (SPU)	1 pcs
Packaging type	Bag
Country of origin	CN
GTIN	4066966213348
Customs tariff number	85363010900

**Approvals / Certificates**

General approvals			Approvals for marine applications		
Approval	Standard	Certificate Name	Approval	Standard	Certificate Name
EAC Brjansker Zertifizierungs- stelle	TP TC 020/2011	EAC_Certificate_RU_C- DE.AM02.B.00115_19	DNV DNV Germany GmbH	DNV-CG-0339,Aug.2021	TAA00001D1
UL Underwriters Laboratories Inc. (ORDINARY LOCATI- ONS)	UL 2367,UL 61010-2-201	E175199 Vol.3 Sec.2 Se- ries 0787 ECB			

**Downloads**

Environmental Product Compliance	
Compliance Search	
Environmental Product Compliance 787-2861/108-020	↓

**Documentation**

Manual				Bid Text			
Product Manual Elec- tronic Circuit Breaker	V 1.3.1 16.12.2019	pdf 2933.00 KB	↓	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			↓

Instruction Leaflet			
Electronic Circuit Breaker	V 2.0.0 27.02.2023	pdf 3477.29 KB	

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

## 1 Compatible Products

### 1.1 Optional Accessories

#### 1.1.1 Ferrule

##### 1.1.1.1 Ferrule

<b>Item No.: 216-241</b> Ferrule; Sleeve for 0.5 mm <sup>2</sup> / 20 AWG; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; white	<b>Item No.: 216-242</b> Ferrule; Sleeve for 0.75 mm <sup>2</sup> / 18 AWG; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; gray	<b>Item No.: 216-243</b> Ferrule; Sleeve for 1 mm <sup>2</sup> / AWG 18; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; red	<b>Item No.: 216-244</b> Ferrule; Sleeve for 1.5 mm <sup>2</sup> / AWG 16; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; black

#### 1.1.2 Jumper

##### 1.1.2.1 Jumper

<b>Item No.: 859-402</b> Jumper; for jumper slot; 2-way; insulated; light gray	<b>Item No.: 859-403</b> Jumper; for jumper slot; 3-way; insulated; light gray	<b>Item No.: 859-404</b> Jumper; for jumper slot; 4-way; insulated; light gray	<b>Item No.: 859-405</b> Jumper; for jumper slot; 5-way; insulated; light gray
<b>Item No.: 859-406</b> Jumper; for jumper slot; 6-way; insulated; light gray	<b>Item No.: 859-407</b> Jumper; for jumper slot; 7-way; insulated; light gray	<b>Item No.: 859-408</b> Jumper; for jumper slot; 8-way; insulated; light gray	<b>Item No.: 859-409</b> Jumper; for jumper slot; 9-way; insulated; light gray

#### 1.1.3 Marking

##### 1.1.3.1 Marker

<b>Item No.: 793-502</b> WMB marking card; as card; MARKED; 1 ... 10 (10x); not stretchable; Horizontal marking; snap-on type; white	<b>Item No.: 793-566</b> WMB marking card; as card; MARKED; 1 ... 50 (2x); not stretchable; Horizontal marking; snap-on type; white	<b>Item No.: 793-503</b> WMB marking card; as card; MARKED; 11 ... 20 (10x); not stretchable; Horizontal marking; snap-on type; white	<b>Item No.: 793-504</b> WMB marking card; as card; MARKED; 21 ... 30 (10x); not stretchable; Horizontal marking; snap-on type; white
<b>Item No.: 793-505</b> WMB marking card; as card; MARKED; 31 ... 40 (10x); not stretchable; Horizontal marking; snap-on type; white	<b>Item No.: 793-506</b> WMB marking card; as card; MARKED; 41 ... 50 (10x); not stretchable; Horizontal marking; snap-on type; white	<b>Item No.: 793-501</b> WMB marking card; as card; not stretchable; plain; snap-on type; white	<b>Item No.: 2009-115</b> WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; white

### 1.1.3.2 Marking strip



**Item No.: 2009-110**

Marking strips; for Smart Printer; on reel;  
not stretchable; plain; snap-on type; white

### 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