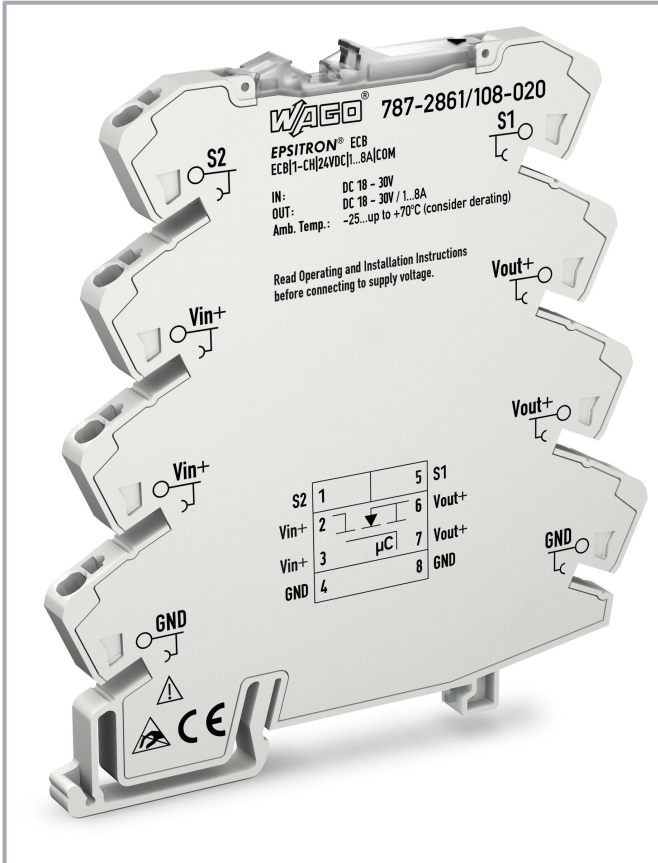


Data sheet | Item number: 787-2861/108-020

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



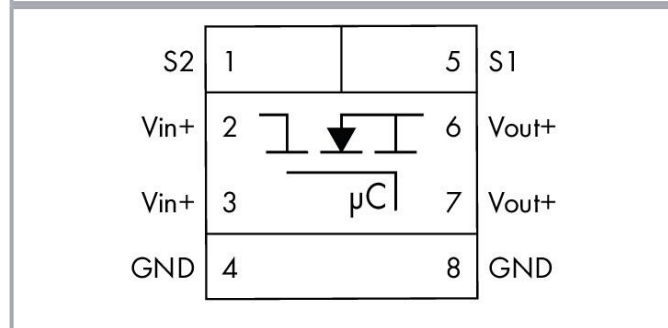
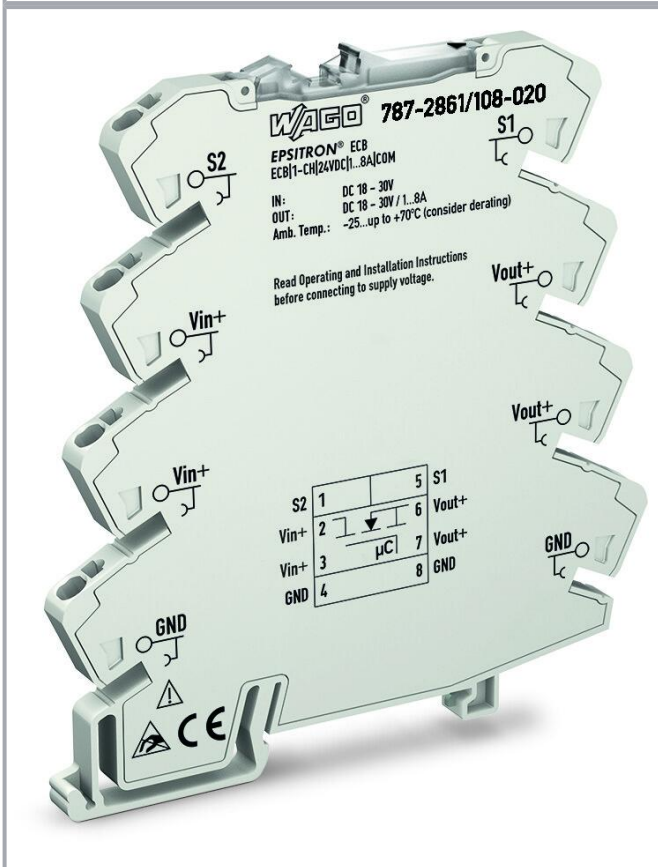
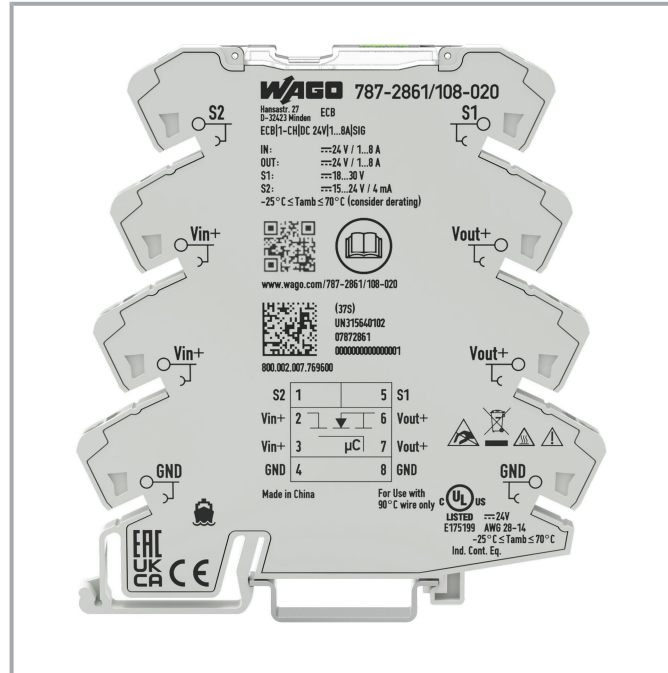
[www.wago.com/787-2861/108-020](http://www.wago.com/787-2861/108-020)



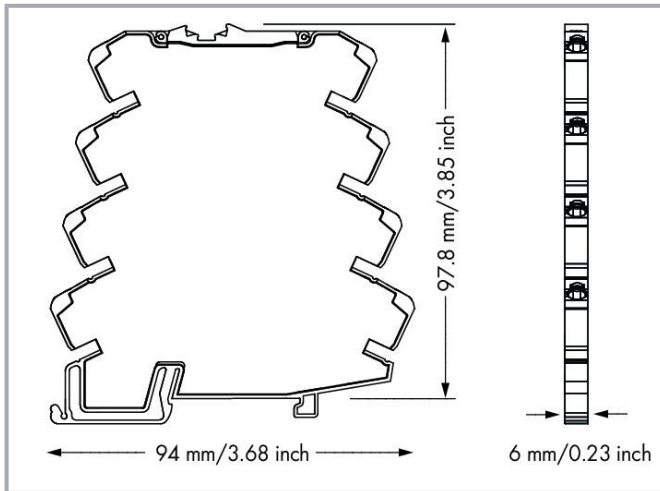
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## Item description

### 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  $\mu$ 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

## Data

### 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)

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Voltage drop	≤ 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
Trip time	4 ms ... 100 s (Load-dependent)
Switch-on capacity	> 50000 $\mu\text{F}$ per channel
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 $P_l$	≤ 0.36 W
Efficiency (typ.)	96 %

## Circuit protection

Internal fuse	T 15 A
---------------	--------

## Safety and protection

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
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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
---------------	-------------

### Material Data

Weight	37 g
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### 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

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PU (SPU)	1 pcs
Packaging type	bag
Country of origin	CN
GTIN	4066966213348
Customs tariff number	85363010900


**Environmental Product Compliance**

RoHS Compliance Status	Compliant, No Exemption
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**Approvals / Certificates****General approvals**

Logo	Approval	Additional Approval Text	Certificate name
	<b>EAC</b> Brjansker Zertifizierungsstelle	TP TC 020/2011	EAC_Certificate_RU_C-DE.AM02.B.00115_19
	<b>UL</b> 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**

Logo	Approval	Additional Approval Text	Certificate name
	<b>EU-Declaration of Conformity</b> WAGO GmbH & Co. KG	-	-

**Approvals for marine applications**

Logo	Approval	Additional Approval Text	Certificate name
	<b>DNV</b> DNV Germany GmbH	DNV-CG-0339, Aug. 2021	TAA00001D1














**Optional accessories****Jumpers**

Jumper
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	<b>Item no.: 859-408</b> Jumper; for jumper slot; 8-way; insulated; light gray	<a href="http://www.wago.com/859-408">www.wago.com/859-408</a>
	<b>Item no.: 859-405</b> Jumper; for jumper slot; 5-way; insulated; light gray	<a href="http://www.wago.com/859-405">www.wago.com/859-405</a>
	<b>Item no.: 859-406</b> Jumper; for jumper slot; 6-way; insulated; light gray	<a href="http://www.wago.com/859-406">www.wago.com/859-406</a>
	<b>Item no.: 859-409</b> Jumper; for jumper slot; 9-way; insulated; light gray	<a href="http://www.wago.com/859-409">www.wago.com/859-409</a>
	<b>Item no.: 859-403</b> Jumper; for jumper slot; 3-way; insulated; light gray	<a href="http://www.wago.com/859-403">www.wago.com/859-403</a>
	<b>Item no.: 859-404</b> Jumper; for jumper slot; 4-way; insulated; light gray	<a href="http://www.wago.com/859-404">www.wago.com/859-404</a>
	<b>Item no.: 859-402</b> Jumper; for jumper slot; 2-way; insulated; light gray	<a href="http://www.wago.com/859-402">www.wago.com/859-402</a>
	<b>Item no.: 859-407</b> Jumper; for jumper slot; 7-way; insulated; light gray	<a href="http://www.wago.com/859-407">www.wago.com/859-407</a>
<b>Tool</b>		
Operating tool		
	<b>Item no.: 210-720</b> Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft; multicoloured	<a href="http://www.wago.com/210-720">www.wago.com/210-720</a>
<b>Marking accessories</b>		
Marking strip		
	<b>Item no.: 2009-110</b> Marking strips; for Smart Printer; on reel; not stretchable; plain; snap-on type; white	<a href="http://www.wago.com/2009-110">www.wago.com/2009-110</a>
Marker		
	<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	<a href="http://www.wago.com/2009-115">www.wago.com/2009-115</a>
	<b>Item no.: 793-501</b> WMB marking card; as card; not stretchable; plain; snap-on type; white	<a href="http://www.wago.com/793-501">www.wago.com/793-501</a>
	<b>Item no.: 793-502</b> WMB marking card; as card; MARKED; 1 ... 10 (10x); not stretchable; Horizontal marking; snap-on type; white	<a href="http://www.wago.com/793-502">www.wago.com/793-502</a>
	<b>Item no.: 793-503</b>	

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	WMB marking card; as card; MARKED; 11 ... 20 (10x); not stretchable; Horizontal marking; snap-on type; <a href="http://www.wago.com/793-503">www.wago.com/793-503</a> white
	<b>Item no.: 793-504</b> WMB marking card; as card; MARKED; 21 ... 30 (10x); not stretchable; Horizontal marking; snap-on type; <a href="http://www.wago.com/793-504">www.wago.com/793-504</a> white
	<b>Item no.: 793-505</b> WMB marking card; as card; MARKED; 31 ... 40 (10x); not stretchable; Horizontal marking; snap-on type; <a href="http://www.wago.com/793-505">www.wago.com/793-505</a> white
	<b>Item no.: 793-506</b> WMB marking card; as card; MARKED; 41 ... 50 (10x); not stretchable; Horizontal marking; snap-on type; <a href="http://www.wago.com/793-506">www.wago.com/793-506</a> white
	<b>Item no.: 793-566</b> WMB marking card; as card; MARKED; 1 ... 50 (2x); not stretchable; Horizontal marking; snap-on type; <a href="http://www.wago.com/793-566">www.wago.com/793-566</a> white

## Ferrule

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	<a href="http://www.wago.com/216-241">www.wago.com/216-241</a>	
	<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	<a href="http://www.wago.com/216-242">www.wago.com/216-242</a>	
	<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	<a href="http://www.wago.com/216-243">www.wago.com/216-243</a>	
	<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	<a href="http://www.wago.com/216-244">www.wago.com/216-244</a>	

## Downloads

### Documentation

#### Manual

Product Manual Electronic Circuit Breaker 24 VDC / 0.5...8 A	V 1.3.1 2019 Dec 16	pdf 3.0 MB	Download
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#### Bid Text

787-2861/108-020 X81 - Datei	2019 Jul 3	xml 7.2 kB	Download
787-2861/108-020 docx - Datei	2019 Jul 2	docx 34.7 kB	Download

[ausschreiben.de 787-2861/108-020](http://ausschreiben.de/787-2861/108-020)

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### Instruction Leaflet

Electronic Circuit Breaker	V 2.0.0 2023 Feb 27	pdf 3.6 MB	Download
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Disposal and Recycling Electrical and electronic equipment, Batteries, Packaging	V 1.1.0 2022 Aug 18	pdf 2.2 MB	Download
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### CAD/CAE-Data

#### CAE data

ZUKEN Portal 787-2861/108-020	URL	Download
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EPLAN Data Portal 787-2861/108-020	URL	Download
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#### CAD data

2D/3D Models 787-2861/108-020	URL	Download
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### Environmental Product Compliance

#### Compliance Search

Environmental Product Compliance 787-2861/108-020 Electronic circuit breaker; 1-channel; 24 VDC input voltage; adjustable 1 ... 8 A; Signal contact	URL	Download
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### Installation Notes

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