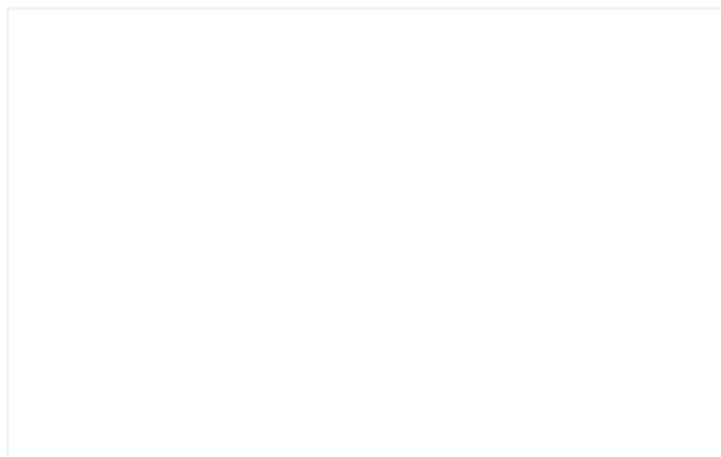
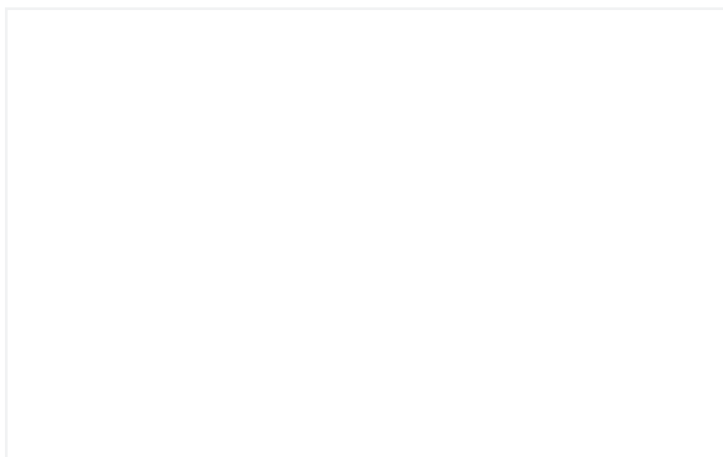
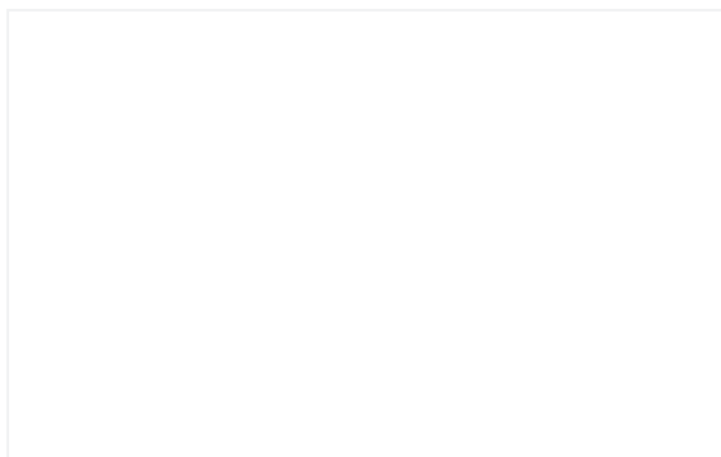
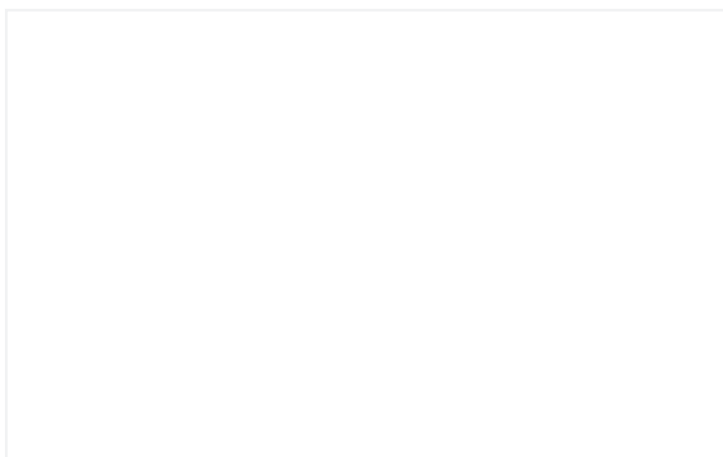
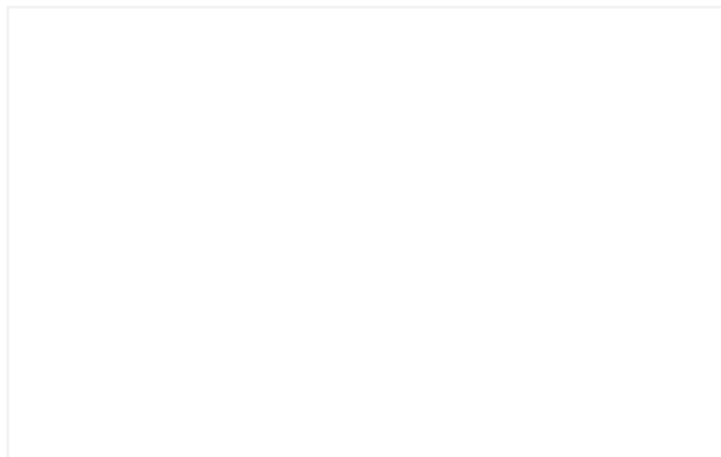
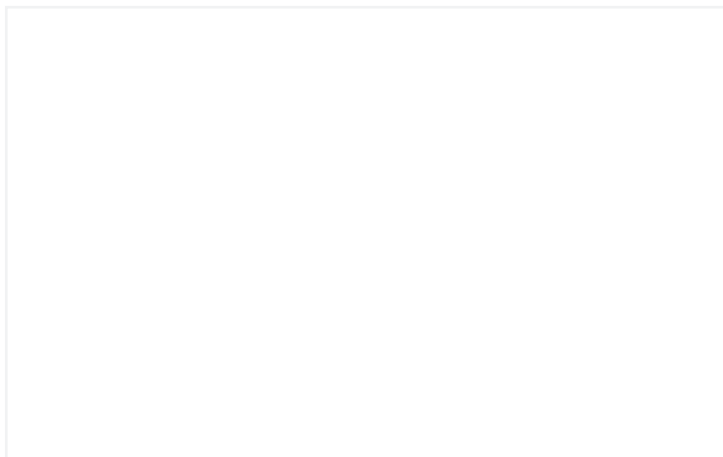


**Data Sheet | Item Number: 787-3861/050-000**

Electronic circuit breaker; 1-channel; 24 VDC input voltage; 0.5 A; Signal contact

<https://www.wago.com/787-3861/050-000>



**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

## Notes

Note	The device is designed for use in SELV circuits. Depending on the output current, please use the approved minimum conductor cross-sections: 26 AWG (0.5 A)
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## Technical data

Input		Output	
Nominal input voltage $U_{i, \text{nom}}$	DC 24 V	Total number of channels (module)	1
Input voltage range	DC 18 ... 30 V	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	$\leq 40$ mV
		Nominal output current $I_{o, \text{nom}}$	1 x 0.5 A (fixed setting)
		Default Setting	switched off
		Trip time	4 ms ... 100 s (load-dependent)
		Switch-on capacity	
		Switch-on behavior	Time-delayed channel switching (load-dependent, min. 0 ms/max. 500 ms)
		Current limitation	No

## 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 $P_i$	$\leq 0.4$ W (no load)
Efficiency (typ.)	96 %

## Circuit protection

Internal fuse	T 8 A
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## Safety and protection

		Insulation coordination (UL)	
Isolation voltage (connectors – housing)	DC 1.5 kV	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	1,168,394 h		

## Insulation coordination

Overvoltage category	II
Pollution degree	2

### 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> / 26 ... 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
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)

### Physical data

Width	6 mm / 0.236 inches
Height	94 mm / 3.701 inches
Depth	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
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### Material data

Fire load	0.631 MJ
Weight	55.6 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

ETIM 9.0	EC001440
ETIM 8.0	EC001440
PU (SPU)	1 pcs
Packaging type	Bag
Country of origin	IN
Customs tariff number	85363010900

**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)	2c687b67-17c4-429a-af69-cba7ea7d8126
SCIP notification number (Belgium)	b226009e-63e5-4185-b604-e6524ddbc9e1
SCIP notification number (Bulgaria)	7d4d6958-772e-43af-907c-7a2524f2b7a8
SCIP notification number (Czech Republic)	5117adb9-3638-4a4d-91fd-f7aceaa32a44
SCIP notification number (Denmark)	c7338c05-d5d7-4ba6-9d4e-3943aeacaad3
SCIP notification number (Finland)	c11408c5-060e-49dc-b069-a614874afded
SCIP notification number (France)	ac7b5a2a-2fda-4643-8162-669ded93a828
SCIP notification number (Germany)	b17eff02-2df1-439e-a9c3-528dbb4e79ef
SCIP notification number (Hungary)	4c56c711-da61-47e2-978b-43f9aa52a3ed
SCIP notification number (Italy)	b71d8fb2-d4a7-4aed-998e-27fa9eb65362
SCIP notification number (Netherlands)	2de6833b-6ad9-4c3f-9945-a931002413d7
SCIP notification number (Poland)	f2a46191-1e08-4a55-bb29-3797952dafeb
SCIP notification number (Romania)	be4a0ea4-645b-449a-b867-1686b995804c
SCIP notification number (Sweden)	fb6ba1fb-c7c1-4c2b-bb59-c62178e24b52

**Approvals / Certificates**

**General approvals**



Approval	Standard	Certificate Name
UL Underwriters Laboratories Inc. (ORDINARY LOCATIONS)	UL 61010-2-201	UL E175199 Vol.3 Sec.5
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 787-3861/050-000	↓

**Documentation**

Manual			
Product Manual Electronic circuit breaker	V 1.0.0 25.03.2024	pdf 7265.78 KB	↓

Instruction Leaflet			
Electronic Circuit Breaker	V 1.1.1 11.09.2023	pdf 2491.12 KB	↓

**CAD/CAE-Data**

CAD data	
2D/3D Models 787-3861/050-000	↓

**1 Compatible Products**

**1.1 Optional Accessories**

**1.1.1 Jumper**

**1.1.1.1 Jumper**

<a href="#">Item No.: 859-410/000-006</a> Jumper; for jumper slot; 10-way; insulated; blue	<a href="#">Item No.: 859-410</a> Jumper; for jumper slot; 10-way; insulated; light gray	<a href="#">Item No.: 859-410/000-005</a> Jumper; for jumper slot; 10-way; insulated; red	<a href="#">Item No.: 859-410/000-029</a> Jumper; for jumper slot; 10-way; insulated; yellow
<a href="#">Item No.: 859-402/000-006</a> Jumper; for jumper slot; 2-way; insulated; blue	<a href="#">Item No.: 859-402</a> Jumper; for jumper slot; 2-way; insulated; light gray	<a href="#">Item No.: 859-402/000-029</a> Jumper; for jumper slot; 2-way; insulated; yellow	<a href="#">Item No.: 859-403/000-006</a> Jumper; for jumper slot; 3-way; insulated; blue
<a href="#">Item No.: 859-403</a> Jumper; for jumper slot; 3-way; insulated; light gray	<a href="#">Item No.: 859-403/000-005</a> Jumper; for jumper slot; 3-way; insulated; red	<a href="#">Item No.: 859-403/000-029</a> Jumper; for jumper slot; 3-way; insulated; yellow	<a href="#">Item No.: 859-404/000-006</a> Jumper; for jumper slot; 4-way; insulated; blue
<a href="#">Item No.: 859-404</a> Jumper; for jumper slot; 4-way; insulated; light gray	<a href="#">Item No.: 859-404/000-005</a> Jumper; for jumper slot; 4-way; insulated; red	<a href="#">Item No.: 859-404/000-029</a> Jumper; for jumper slot; 4-way; insulated; yellow	<a href="#">Item No.: 859-405/000-006</a> Jumper; for jumper slot; 5-way; insulated; blue
<a href="#">Item No.: 859-405</a> Jumper; for jumper slot; 5-way; insulated; light gray	<a href="#">Item No.: 859-405/000-005</a> Jumper; for jumper slot; 5-way; insulated; red	<a href="#">Item No.: 859-405/000-029</a> Jumper; for jumper slot; 5-way; insulated; yellow	<a href="#">Item No.: 859-406/000-006</a> Jumper; for jumper slot; 6-way; insulated; blue
<a href="#">Item No.: 859-406</a> Jumper; for jumper slot; 6-way; insulated; light gray	<a href="#">Item No.: 859-406/000-005</a> Jumper; for jumper slot; 6-way; insulated; red	<a href="#">Item No.: 859-406/000-029</a> Jumper; for jumper slot; 6-way; insulated; signal yellow	<a href="#">Item No.: 859-407/000-006</a> Jumper; for jumper slot; 7-way; insulated; blue

1.1.1.1 Jumper



**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 mm<sup>2</sup>

**Item No.: 787-3861/000-2000**  
Potential distribution module; 1 potential; with 8 clamping points 24V; Conductor cross-section up to 2.5 mm<sup>2</sup>

**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 mm<sup>2</sup>

## 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