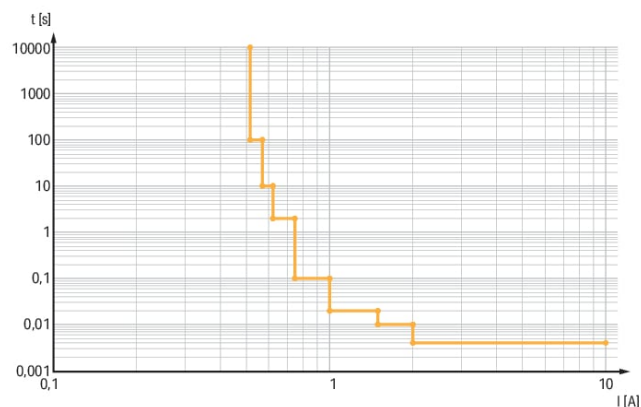
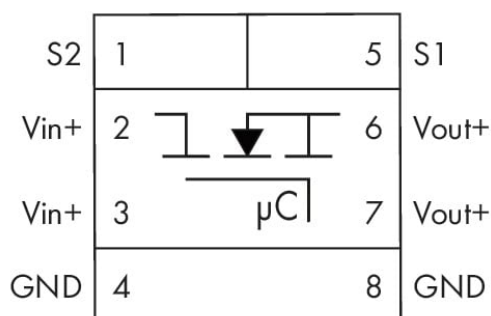
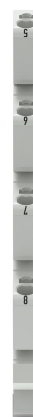
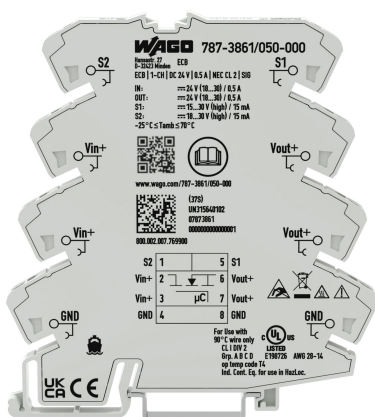


Data Sheet | Item Number: 787-3861/050-000

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 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: 26 AWG (0.5 A)

Technical data			
Input		Output	
Nominal input voltage $U_{i\,nom}$	DC 24 V	Total number of channels (module)	1
Input voltage range	DC 18 ... 30 V	Nominal output voltage $U_{o\,nom}$	1 x DC 24 V
		Output voltage range	DC 18 ... 30 V (U_e – voltage drop)
		Voltage drop	≤ 40 mV
		Nominal output current $I_{o\,nom}$	1 x 0.5 A (fixed setting)
		Default setting	; switched off
		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_l	≤ 0.4 W (no load)
Efficiency (typ.)	96 %

Circuit protection	
Internal fuse	T 8 A

Safety and protection			
Isolation voltage (connectors – housing)	DC 1.5 kV	Insulation coordination (UL)	
Protection class	III	Overvoltage category	II
Protection type	IP20; per EN 60529	Pollution degree	2
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 mm² / 26 ... 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)

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

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		
PU (SPU)		1 pcs
Country of origin		IN



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			Approvals for marine applications		
Approval	Standard	Certificate Name	Approval	Standard	Certificate Name
UL Underwriters Laboratories Inc. (ORDINARY LOCATIONS)	UL 61010-2-201	UL E175199 Vol.3 Sec.5	DNV DNV Germany GmbH	DNV-CG-0339, Aug.2021	TAA00001D1
UR Underwriters Laboratories Inc.	-	E175199			

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



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; insulated; blue



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



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



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



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; signal 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

1.1.1.1 Jumper



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