

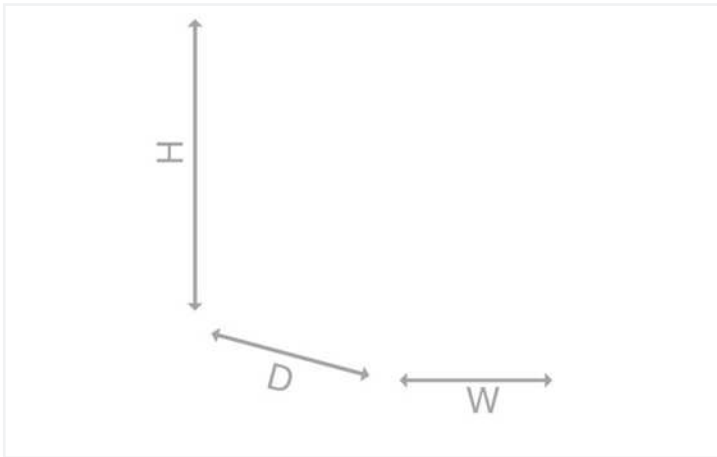
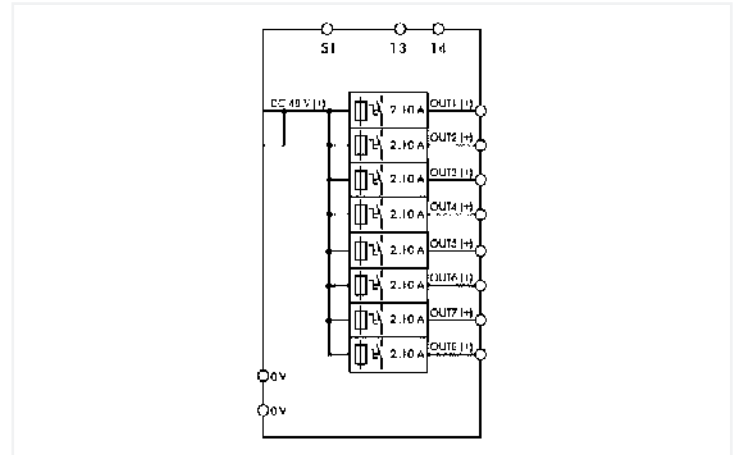
Data Sheet | Item Number: 787-1668/000-250

Electronic circuit breaker; 8-channel; 48 VDC input voltage; adjustable 2 ... 10 A; Signal contact

<https://www.wago.com/787-1668/000-250>



Similar to illustration



Features:

- Space-saving ECB with eight channels
- Nominal current: 2 ... 10 A (adjustable for each channel via sealable selector switch)
- Switch-on capacity > 23000 µF per channel
- One illuminated, three-colored button per channel simplifies switching (on/off), resetting, and on-site diagnostics
- Time-delayed switching of channels
- Tripped message (common group signal)
- Remote input resets all tripped channels
- Potential-free signal contact 13 / 14 reports "channel switched off" and "tripped channel" – does not support communication via pulse sequence

Technical data

Input	
Nominal input voltage $U_{i, nom}$	DC 48 V
Input voltage range	DC 32 ... 58 V

Output	
Total number of channels (module)	8
Nominal output voltage $U_{o, nom}$	8 x DC 48 V
Output voltage range	DC 32 ... 58 V (U_e – voltage drop)
Voltage drop	≤ 200 mV (10 A) (Input +)
Nominal output current $I_{o, nom}$	8 x 2 / 3 / 4 / 6 / 8 / 10 A (adjustable for each channel via selector switch; 70 A (max.) in total)
Default setting	DC 10 A; switched on
Switch-on capacity	
Switch-on behavior	Time-delayed channel switching (load-dependent, min. 50 ms / max. 5 s)
Active current limitation	No

Signaling and Communication

Signaling	8 x LED (green/red/orange) 1 x Remote control input (S1) 1 x Group signal contact (13; 14)
Operation status indicator	Green LED (channel OK) Red LED (tripped channel)
Remote input	Reactivation of all tripped channels via 15 ... 58 VDC pulse for min. 500 ms

Efficiency/power losses

Power loss P_I	$\leq 1.3 \text{ W}; \leq 20 \text{ W (8 x 10 A)}$
Efficiency (typ.)	99 %

Circuit protection

Internal fuse	T 15 A per channel
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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
Resistance to reverse feed	$\leq \text{DC } 58 \text{ V}$
Pollution degree	2
Transient suppression (primary)	Suppressor diode (68 V)
Parallel operation of single channels	not permitted
Series operation	No
MTBF	

Connection data

Connection type 1	Input (+)
Connection technology	Push-in CAGE CLAMP®
WAGO connector	WAGO 831 Series
Solid conductor	0.5 ... 10 mm ² / 20 ... 8 AWG
Fine-stranded conductor	0.5 ... 10 mm ² / 20 ... 8 AWG
Strip length	13 ... 15 mm / 0.51 ... 0.59 inches
Connection type 2	Input (-); output; signaling
Connection technology 2	CAGE CLAMP®
WAGO connector 2	WAGO 721 Series
Solid conductor 2	0.08 ... 2.5 mm ² / 28 ... 12 AWG
Fine-stranded conductor 2	0.08 ... 2.5 mm ² / 28 ... 12 AWG
Strip length 2	8 ... 9 mm / 0.31 ... 0.35 inches

Physical data

Width	42 mm / 1.654 inches
Height	127 mm / 5 inches
Depth from upper-edge of DIN-rail	142.5 mm / 5.61 inches

Mechanical Data

Mounting type	DIN-35 rail
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Material Data

Fire load	0.687 MJ
Weight	440 g

Environmental requirements

Ambient temperature (operation at U_N)	-25 ... +70 °C
Surrounding air temperature (storage)	-25 ... +85 °C
Relative humidity	5 ... 96 % (no condensation permissible)
Derating	≥ 50 °C (see instruction manual)

Standards and specifications

Conformity marking	CE
Standards/specifications	EN 61000-6-2 EN 61000-6-3 UL 508 UL 2367 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	Box
Country of origin	DE
GTIN	4055143329620
Customs tariff number	85363010900