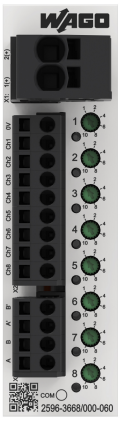
Data Sheet | Item Number: 2596-3668/000-060

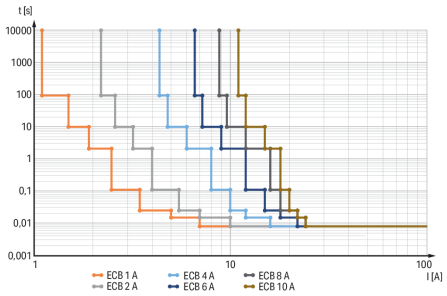
Electronic circuit breaker; 8-channel; 24 VDC input voltage; adjustable 1 … 10 A; Modbus RTU

https://www.wago.com/2596-3668/000-060

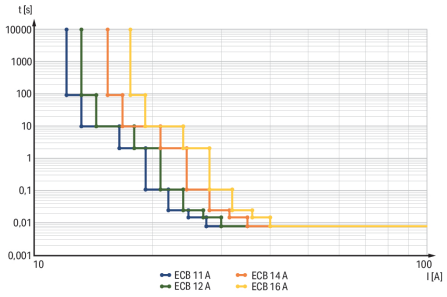


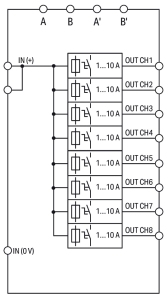






Tripping characteristic “Normal mode”





Tripping characteristic “Parallel mode”

Features:

- Space-saving ECB with eight channels
- Nominal current: 1 … 10 A (adjustable for each channel via rotary selector switch, software, or communication interface)
- Switch-on capacity > 50,000 µF per channel

- One illuminated, three-colored button per channel simplifies switching (on/off), resetting, and on-site diagnostics
- Time-delayed switching of channels
- Status, configuration and control for each specific channel via RS-485 Modbus RTU
- Configuration port for use with intuitive IF-Config software

Technical data

Input

Nominal input voltage $U_{i\,nom}$	24 VDC
Input voltage range	18 … 30 VDC
Input current I_i	≤ 70 A

Output

Total number of channels (module)	8
Nominal output voltage $U_{o\,nom}$	8 x 24 VDC
Output voltage range	18 … 30 VDC (U_e - voltage drop)
Voltage drop	≤ 250 mV (Input (+))
Nominal output current $I_{o\,nom}$	8 x 1 / 2 / 4 / 6 / 8 / 10 A (adjustable for each channel via selector switch)
Default Setting	C (Communication); switched off
Trip time	7 ms … 90 s (load-dependent)
Switch-on capacity	
Switch-on behavior	Sequential switching per channel (load-dependent, min. 50 ms / max. 250 ms)
Active current limitation	No
Switch-on threshold	DC 20.3 V

Signaling and Communication

Signaling	8 x Status LED (green/red/orange) 1 x COM LED (red/green) 2 x RS-485 interface (A, B) 2 x RS-485 interface (A', B' for daisy-chain out)
Operation status indicator	Green LED (channel OK) Red LED (channel switched off)
Communications	Modbus RTU
Remote input	Switching any number of channels on/off via Modbus RTU
Number of devices (max.)	32
Cable length (max.)	1200 m
Signal type	RS-485
Transmission rate	4.8 … 230.4 kBd (19200 baud (default setting))

Efficiency/Power Losses

Power loss P_l	≤ 1.6 W; ≤ 20 W (8 x 10 A)
Efficiency (typ.)	98 %

Circuit Protection

Internal fuse	T 12 A per channel

Safety and protection

Isolation voltage (connectors – housing)	0.5 kVDC
Protection class	III
Protection type	IP20; per EN 60529
Reverse voltage protection	No
Resistance to reverse feed	≤ 35 VDC
Pollution degree	2
Transient suppression (primary)	Suppressor diode (33 V)
Parallel operation of single channels	Permissible
Series operation	No

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Connection Data

Connection 1

Connection type	Input (+)
Connection technology	Push-in CAGE CLAMP®
WAGO connector	WAGO 831 Series
Solid conductor	0.5 … 10 mm² / 20 … 8 AWG
Fine-stranded conductor	0.5 … 10 mm² / 20 … 8 AWG
Strip length	13 … 15 mm / 0.51 … 0.59 inches

Connection 2

Connection type	Input (-); output; signaling
Connection technology	CAGE CLAMP®
WAGO connector	WAGO 721 Series
Solid conductor	0.08 … 2.5 mm² / 28 … 12 AWG
Fine-stranded conductor	0.08 … 2.5 mm² / 28 … 12 AWG
Strip length	8 … 9 mm / 0.31 … 0.35 inches

Physical data

Width	32 mm / 1.26 inches
Height	115 mm / 4.527 inches
Depth from upper-edge of DIN-rail	157.5 mm / 6.2 inches

Mechanical data

Mounting type	DIN-35 rail

Material data

Color	light gray
Insulation material (main housing)	Polycarbonate (PC)
Fire load	3.603 MJ
Weight	251.8 g

Environmental requirements

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

Standards and Specifications

Conformity marking	CE; UKCA
Standards/specifications	EN 61000-6-2 EN 61000-6-3 UL 61010-2-201 UL 2367

Commercial data

PU (SPU)	1 pcs
Packaging type	Box
Country of origin	IN
Customs tariff number	85362010900

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Product Classification

UNSPSC	39121601
ETIM 9.0	EC001440
ETIM 10.0	EC001440
ECCN	NO US CLASSIFICATION

Environmental Product Compliance

RoHS Compliance Status	Compliant,No Exemption

Approvals / Certificates

General approvals

Approval	Standard	Certificate Name
UL Underwriters Laboratories Inc. (ORDINARY LOCATIONS)	UL 61010-2-201	E175199
UL Underwriters Laboratories Inc. (ORDINARY LOCATIONS)	-	E175199

Declarations of conformity and manufacturer's declarations

Approval	Standard	Certificate Name
EU-Declaration of Conformity WAGO GmbH & Co. KG	-	-
UK-Declaration of Conformity WAGO GmbH & Co. KG	-	-

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 2596-3668/000-060

Continued on next page

Documentation

Manual

Product manual Electronic WAGO Circuit Breakers	4809753099 | 3 | en-US | 2026-03-31 10:57 02.04.2026	pdf 2372.92 KB	

Instruction Leaflet

Elektronischer Schutzschalter; 8-kanalig;	V 2.0.0 30.03.2026	pdf 1074.98 KB	

Application Notes

Application note SIEMENS

Electronic Circuit Breakers 2596 Series (aXXXX-XX)	1.0.0.0 24.08.2026	zip 1412.17 KB	

CAD/CAE-Data

CAD data

2D/3D Models
2596-3668/000-060

Libraries

Library

WAGO-CoDeSys-V3.5 - V1.0.1.0	V3.5 - V1.0.1.0 11.05.2026	zip 7280.94 KB	

1 Compatible Products

1.1 Optional Accessories

1.1.1 Communication

1.1.1.1 Communication cable



Item No.: 750-923
Configuration cable; USB connector; Length: 2.5 m



Item No.: 750-923/000-001
Configuration cable; USB connector; Length: 5 m

1.1.2 Tool

1.1.2.1 Operating tool



Item No.: 210-720
Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft; multicoloured



Item No.: 210-721
Operating tool; Blade: 5.5 x 0.8 mm; with a partially insulated shaft; multicoloured



Item No.: 210-769
SCREWDRIVER; green