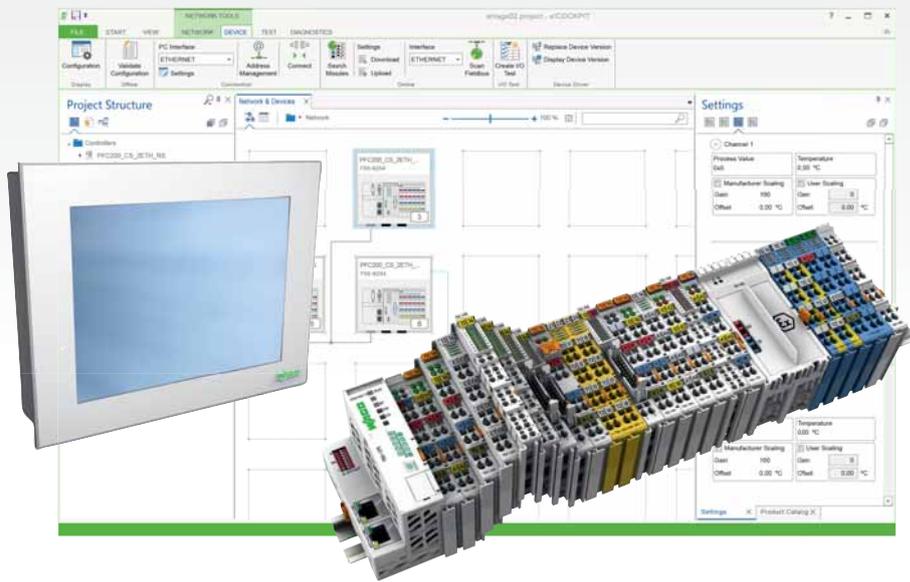


Automation Technology Interface Electronic

Supplementary Catalog to
Full Line Catalogs, Volumes 3/4
Edition 2015/2



**WE
INNOVATE!**

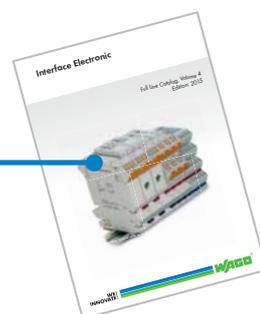


WAGO®

The new items in this catalog supplement products found in the following main catalogs

3/4

Volume 4
Interface Electronic



Volume 3
Automation Technology



Contents



Automation Technology

Volume 3

4 - 31



Interface Electronic

Volume 4

32 - 81



Marking

82

Item Number Index

84

Contents *Automation Technology*



Software

DNP3 Configurator	4
IEC 61850 Configurator	5



e!DISPLAY 7300T, Web Panel

WP 4.3 480x272 PIO1	6
WP 5.7 640x480 PIO1	6
WP 7.0 800x480 PIO1	7
WP 10.1 1280x800 PIO1	7



PLC – PFC200 Controller

PFC200 CS 2ETH RS 3G	8 – 9
----------------------	-------



PLC – PFC200 Controller For eXTReme environmental conditions

PFC200 CS 2ETH RS CAN DPS/XTR	10 – 11
PFC200 CS 2ETH RS/XTR	12 – 13



PLC – PFC100 Controller

PFC100 CS 2ETH RS	14 – 15
PFC100 CS 2ETH	16 – 17
PFC100 CS 2ETH ECO	18 – 19



I/O-System – 750 Series

4-Channel Analog Input Module, 4 ... 20 mA	20
8-Channel Analog Input Module, 0/4 ... 20 mA	21
8-Channel Analog Input Module, 0 ... 10 V / ±10 V	22
8-Channel Analog Input Module for Thermocouples	23



I/O-System – 750 XTR Series For eXTReme environmental conditions

2-Channel Digital Input Module 60 V DC	24
2-Channel Digital Input Module 110 V DC	25
8-Channel Digital Input Module 24 V DC	26
2-Channel Analog Input Module, 4 ... 20 mA	27
3-Phase Power Measurement Module	28
Separation Module	29



Industrial Switches

8-Port 100Base-TX + 2-Slot 1000Base-SX/LX Industrial Managed Switch	30
8-Port 1000Base-T + 4-Slot 1000Base-SX/LX Industrial Managed Switch	31

Contents *Interface Electronic*



Relay Modules

Relay Sockets with Miniature Switching Relays, 857 Series	32
Socket with Industrial Relay, 858 Series	33
Accessories, 858 Series	34



Optocoupler Module

Rail-Mounted Terminal Block with Optocoupler, 859 Series	35
--	----



JUMPFLEX® Signal Conditioners

Temperature Signal Conditioner for Pt46 and Cu53, 857 Series	36 - 37
Temperature Signal Conditioner for Thermocouples of Types K, S, B and R, 857 Series	38 - 39



Current and Energy Measurement Technology

Plug-In Current Transformers with CAGE CLAMP® connector, 855 Series	40 - 41
Plug-In Current Transformer with the picoMAX® pluggable connector, 855 Series	42 - 43
Voltage Taps, 855 Series	44 - 45



EPSITRON® Power Supplies

EPSITRON® CLASSIC Power - Switched-Mode Power Supply, 1-/2-Phase, 787 Series	46
EPSITRON® CLASSIC Power - Switched-Mode Power Supplies, 3-Phase, 787 Series	47 - 49
EPSITRON® ECO Power - Switched-Mode Power Supplies, 1-Phase, 787 Series	50 - 53



EPSITRON® - DC/DC Converter

EPSITRON® COMPACT Power - DC/DC Converter, 787 Series	54
EPSITRON® - DC/DC Converter, 787 Series	55 - 57



EPSITRON® - Electronic Circuit Breakers

EPSITRON® - Electronic Circuit Breakers, 787 Series	58 - 77
---	---------



Interface Module

RJ-45 Cat. 6 Interface Module, 289 Series	78
---	----

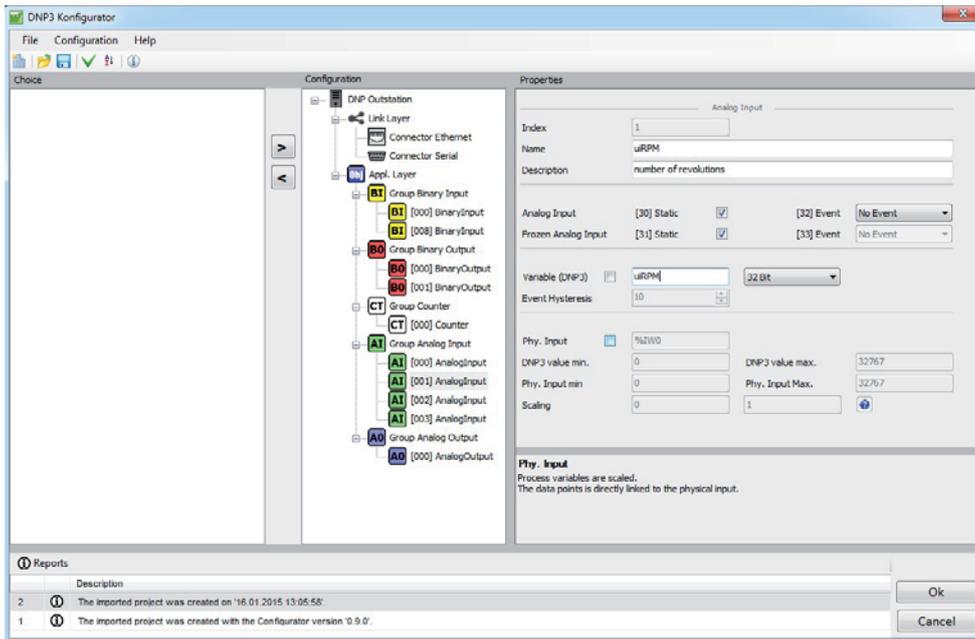


Potential Multiplication Modules

DIN-Rail-Mount Potential Multiplication Modules, 288 Series	80 - 81
---	---------

DNP3 Configurator

Configuration dialog integrated in WAGO-I/O-PRO v2.3 for DNP3 communication parameterization



DNP3 configuration dialog

The DNP3 Configurator is part of the WAGO-I/O-PRO v2.3. Software. The configurator fully supports the DNP3 specific functions of all WAGO telecontrollers.

The configurator sets up DNP3 objects, while configuring data exchange to the PLC application or I/O modules. The settings can be imported and exported in DNP3 XML device profile format.

WAGO's telecontrollers can work as TCP, UDP and serial DNP3 slave.

Cyclical time synchronization of the telecontrol outstation (slave) can be performed by the master according to DNP3 Device Profile 1.7.2.

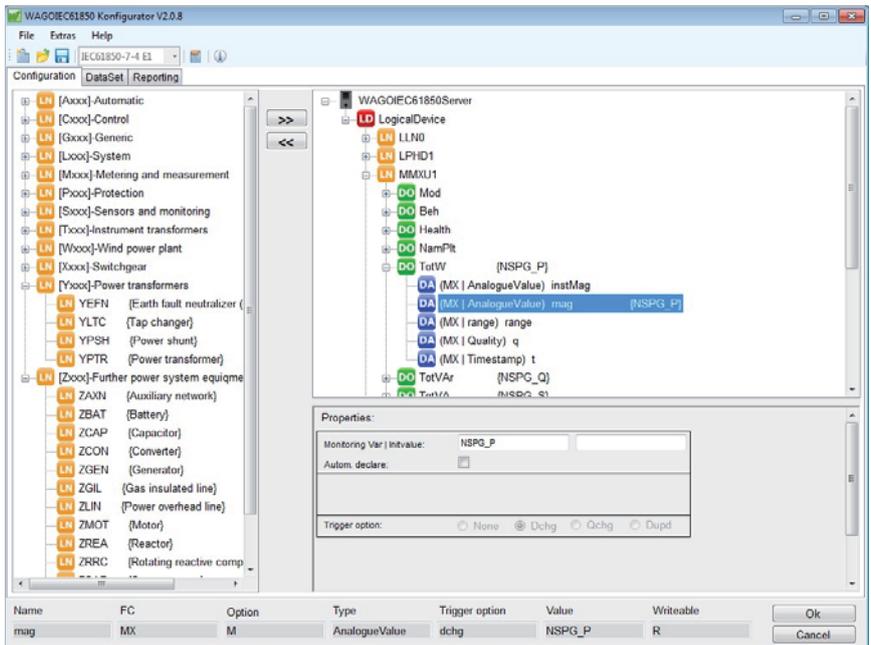
In the monitoring direction, the WAGO DNP3 slave can send digital, analog and count values to the master. Both digital and analog values can be received in control direction. Analog values can be processed in 16-bit, 32-bit or FLOAT format. Count values can be processed in 16-bit or 32-bit format.

WAGO's DNP3 slave can simultaneously maintain connections to up four DNP3 masters.

Description	Technical Data
DNP3 Configurator	System requirements
	WAGO-I/O-PRO, Version 2.3.9.47 or higher
	Function
	DNP3 serial (RS-232) Slave
	DNP3 TCP/IP Slave
	Supported controllers
	Controller
	0750-0872
	0750-0880/0025-0001
	0750-0880/0025-0002
	0750-0880/0040-0001
	PFC200
	0750-8202/0025-0001
	0750-8202/0025-0002
	0750-8206/0025-0001
	I/O-IPC
	0758-0874/0000-0130
	0758-0874/0000-0131
	Baud rates
	300, 600, 1200, 2400, 4800, 9600, 19200, 38400
	Number of control stations
	max. 4

IEC 61850 Configurator

Configuration dialog integrated in WAGO-I/O-PRO v2.3 for IEC 61850 communication parameterization



IEC 61850 configuration dialog

The IEC 61850 Configurator is part of the WAGO-I/O-PRO v2.3 software. The configurator fully supports the IEC 61850-specific functions of the WAGO telecontrollers.

The configurator sets up IEC 61850 objects, while configuring data exchange to the PLC application or I/O modules. Import and export functions in IEC 61850 SCL exchange format allow configured data to be transmitted to other engineering tools.

On the server side, the IEC 61850 Protocol is supported for MMS* communication to the control system. The controllers can also be operated as a GOOSE publisher or subscriber. This permits the creation of gateways that convert one protocol into another, e.g., allowing data from protection devices to be received via IEC 61850 Client and transmitted to the network control system via IEC 60870-5-104 Protocol.

Time synchronization is performed via SNTP, NTP, DCF77 and GPS (750-640 Module is also required for GPS).

Various options are available for the time synchronization of telecontrol substations (server). Synchronization can be performed via (S)NTP or clock time can be synchronized via DCF77 or GPS using the WAGO 750-640 Module.

The IEC 61850 MMS server can simultaneously maintain up to five connections to the control system (client).

The IEC 61850 Client processes data from up to 10 servers with each 32 requests.

*MMS = Manufacturing Messaging Specification

Description	Technical Data
IEC 61850 Configurator	System requirements: WAGO-I/O-PRO Version 2.3.9.40 or higher
	Function: IEC 61850 server
	Object types: IEC 61850-7-4 and IEC 61400-25
	Data sets: static and dynamic
	Reporting: buffered and unbuffered
	Supported controllers:
	IEC 61850 Server: 0750-0872
	IEC 61850 Server and Client: 0750-0880/0025-0001
	0750-0880/0025-0002
	0750-0880/0040-0001
	0750-8202/0025-0001
	0750-8202/0025-0002
	0750-8202/0040-0001
	0750-8206/0025-0001
	0750-8206/0040-0001
	0750-8207/0025-0001
	0758-0874/0000-0130
	0758-0874/0000-0131

e!DISPLAY 7300T, Web Panel

Specifically configured as a Web browser, the Web Panel directly connects to controllers with their own Webservers. The CODESYS 3 or 2.3 Web visualization has been specifically optimized for the Web Panel.



*Available
January 2016*

Description	Description	Item No.	Pack. Unit	Description	Item No.	Pack. Unit
e!DISPLAY 7300T, Web Panel	WP 4.3 480x272 PIO1	762-3000	1	WP 5.7 640x480 PIO1	762-3001	1
Technical Data						
Display	TFT, Wide Viewing Angle			TFT, Wide Viewing Angle		
Screen size (diagonal)	10.9 cm (4.3")			14.5 cm (5.7")		
Aspect ratio	16:9			4:3		
Display colors	16 million			262,000		
Graphics resolution	480 x 272			640 x 480		
Contrast ratio	600:1			300:1		
Viewing angle, horizontal/vertical	80° / 80°			80° / 80°		
Brightness	500 cd/m ²			630 cd/m ²		
HBT	50000 hrs.			30000 hrs.		
Operating system	Linux® 3.6.11			Linux® 3.6.11		
Processor	ARM® Cortex™ A8 600 MHz			ARM® Cortex™ A8 600 MHz		
RAM / Flash	256 MB / 1024 Mbytes			256 MB / 1024 Mbytes		
Memory expansion	microSD (max. 2 GB), microSDHC (max. 32 GB)			microSD (max. 2 GB), microSDHC (max. 32 GB)		
Panel	Resistive touch panel, two capacitive keys, proximity sensor			Resistive touch panel, two capacitive keys, proximity sensor		
Diagnostic LEDs	Three-color LED (red, green, blue)			Three-color LED (red, green, blue)		
Durability	100,000 activations with touch pen			100,000 activations with touch pen		
Interfaces (USB)	2 x USB 2.0 Host (type A)			2 x USB 2.0 Host (type A)		
Interface (ETHERNET)	2 Ports 10/100Base-T (RJ-45), switch functionality			2 Ports 10/100Base-T (RJ-45), switch functionality		
Front panel	Plastic, polyester film			Anodized aluminum, polyester film		
Housing material	Anodized aluminum			Anodized aluminum		
Dimensions (W x H x D)	155 x 135 x 58			172 x 163 x 58		
Panel cutout (W x H)	140 x 120			157 x 148		
Fixing	Clamping elements (included) or VESA mount (4 x M4x8)			Clamping elements (included) or VESA mount (4 x M4x8)		
Power supply	24 VDC, SELV (-25 % ... +30 %) with reverse voltage protection			24 VDC, SELV (-25 % ... +30 %) with reverse voltage protection		
Max. input current (24 V)	170 mA			210 mA		
Operating power	max. 4.0 W			max. 5.0 W		
Operating temperature	0 °C ... +55 °C			0 °C ... +55 °C		
Storage temperature	-20 °C ... +80 °C			-20 °C ... +80 °C		
Relative air humidity (no condensation)	10 % ... 90 %			10 % ... 90 %		
Weight	800 g			1000 g		
Degree of protection	IP65 (front side), IP20 (rear side), per EN 60529			IP65 (front side), IP20 (rear side), per EN 60529		
Approvals	CE, pending			CE, pending		
Accessories	see Full Line Catalog "Automation Technology"			see Full Line Catalog "Automation Technology"		
* The HBT (Half Brightness Time) is defined as the LED chip brightness decreases to 50% of the original brightness, based on Ta = 25 ± 2 °C; RH = 60 ± 10 % condition.						

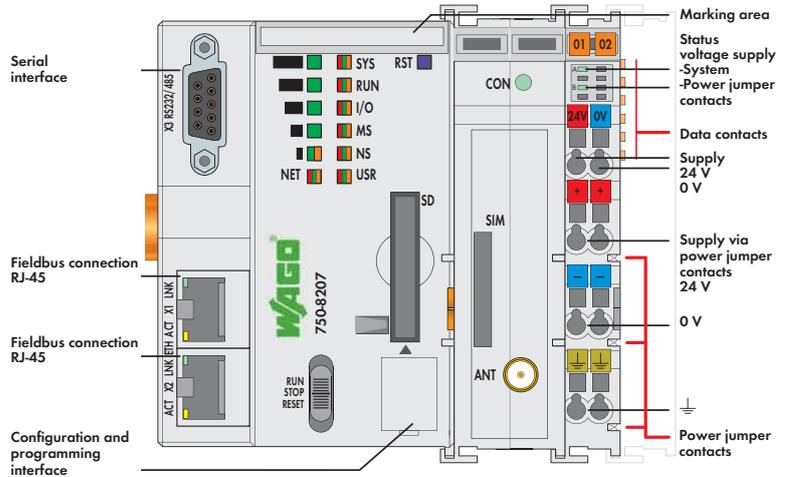


Available
January 2016

Description	Description	Item No.	Pack. Unit	Description	Item No.	Pack. Unit
e!DISPLAY 7300T, Web Panel	WP 7.0 800x480 PIO1	762-3002	1	WP 10.1 1280x800 PIO1	762-3003	1
Technical Data						
Display	TFT, Wide Viewing Angle		TFT, Wide Viewing Angle			
Screen size (diagonal)	18 cm (7.0")		25.7 cm (10.1")			
Aspect ratio	16:9		16:9			
Display colors	16 million		16 million			
Graphics resolution	800 x 480		1280 x 800			
Contrast ratio	800:1		800:1			
Viewing angle, horizontal/vertical	89° / 89°		85° / 85°			
Brightness	450 cd/m ²		800 cd/m ²			
HBT	30000 hrs.		70000 hrs.			
Operating system	Linux® 3.6.11		Linux® 3.6.11			
Processor	ARM® Cortex™ A8 600 MHz		ARM® Cortex™ A8 600 MHz			
RAM / Flash	256 MB / 1024 Mbytes		256 MB / 1024 Mbytes			
Memory expansion	microSD (max. 2 GB), microSDHC (max. 32 GB)		microSD (max. 2 GB), microSDHC (max. 32 GB)			
Panel	Resistive touch panel, two capacitive keys, proximity sensor		Resistive touch panel, two capacitive keys, proximity sensor			
Diagnostic LEDs	Three-color LED (red, green, blue)		Three-color LED (red, green, blue)			
Durability	100,000 activations with touch pen		100,000 activations with touch pen			
Interfaces (USB)	2 x USB 2.0 Host (type A)		2 x USB 2.0 Host (type A)			
Interface (ETHERNET)	2 Ports 10/100Base-T (RJ-45), switch functionality		2 Ports 10/100Base-T (RJ-45), switch functionality			
Front panel	Anodized aluminum, polyester film		Anodized aluminum, polyester film			
Housing material	Anodized aluminum		Anodized aluminum			
Dimensions (W x H x D)	213 x 167 x 58		293 x 223 x 58			
Panel cutout (W x H)	198 x 152		278 x 208			
Fixing	Clamping elements (included) or VESA mount (4 x M4x8)		Clamping elements (included) or VESA mount (4 x M4x8)			
Power supply	24 VDC, SELV (-25 % ... +30 %) with reverse voltage protection		24 VDC, SELV (-25 % ... +30 %) with reverse voltage protection			
Max. input current (24 V)	290 mA		390 mA			
Operating power	max. 7.0 W		max. 9.5 W			
Operating temperature	0 °C ... +55 °C		0 °C ... +50 °C; 0 °C ... +55 °C (vertical mounting position)			
Storage temperature	-20 °C ... +80 °C		-20 °C ... +80 °C			
Relative air humidity (no condensation)	10 % ... 90 %		10 % ... 90 %			
Weight	1200 g		2050 g			
Degree of protection	IP65 (front side), IP20 (rear side), per EN 60529		IP65 (front side), IP20 (rear side), per EN 60529			
Approvals	CE, RoHS pending		CE, RoHS pending			
Accessories	see Full Line Catalog "Automation Technology"		see Full Line Catalog "Automation Technology"			

PLC – PFC200 Controller

PFC200 CS 2ETH RS 3G



The PFC200 Controller is a compact PLC for the modular WAGO-I/O-SYSTEM. In addition to providing commonly used network and fieldbus interfaces, the controller supports all digital, analog and specialty I/O modules in the 750/753 Series.

Two ETHERNET interfaces and an integrated switch enable line topology wiring – no extra-cost hardware is needed.

The controller's mobile radio module sends and receives SMS while providing wireless Internet connectivity.

An integrated Webserver provides user configuration options and displays PFC200 status information.

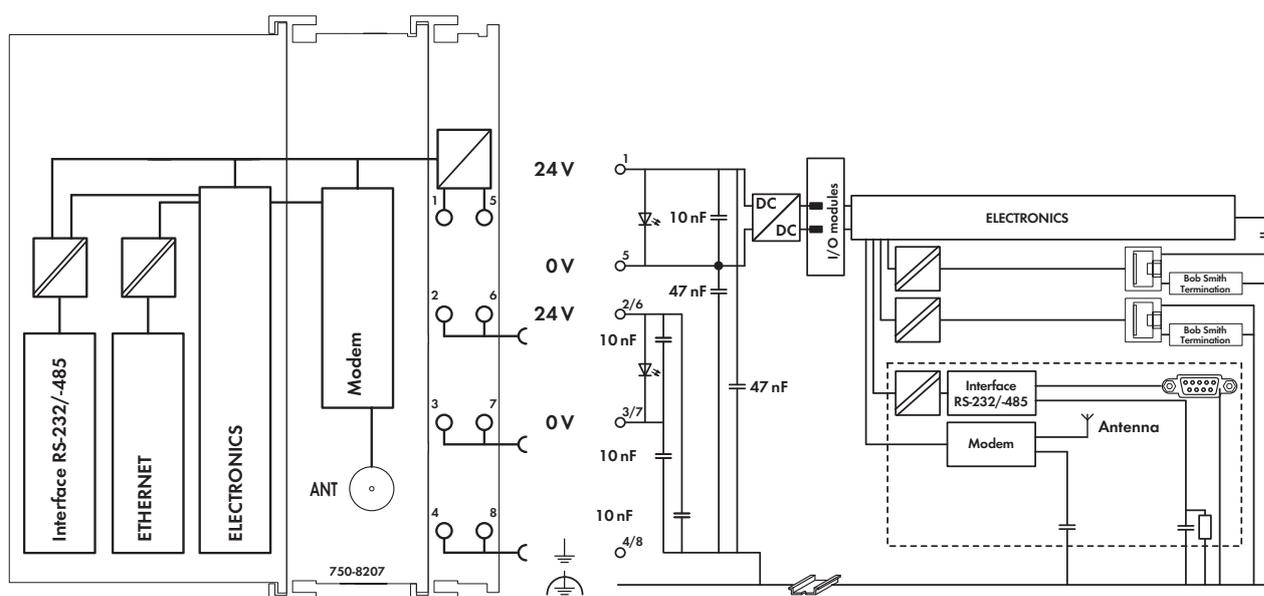
Besides standard machinery and equipment control, as well as building automation, typical applications for the PFC200 include decentralized data logging for the process industry.

The controller's programming complies with IEC 61131-3.

- Programmable via WAGO-I/O-PRO V2.3
- Direct connection of WAGO I/O modules
- 2 x ETHERNET (configurable), RS-232/-485
- Linux 3.6 operating system with RT-Preemption patch
- Configuration via CODESYS, e!COCKPIT (750-8207, 750-8207/025-000) or Web-Based Management user interface
- Maintenance-free

Description	Item No.	Pack. Unit
PFC200 CS 2ETH RS 3G	750-8207	1
PFC200 CS 2ETH RS 3G/T	750-8207/025-000	1
Extended temperature range: -20 °C ... +60 °C		
PFC200 CS 2ETH RS 3G Telecontrol/T	750-8207/025-001	1
Extended temperature range: -20 °C ... +60 °C		
Accessories		
Item No.	Pack. Unit	
WAGO-I/O-PRO V2.3, RS-232 kit	759-333	1
SD memory card, 2 GB	758-879/000-001	1
Self-adhesive antenna	758-961	1
Theft-proof antenna	758-962	1
Rod antenna	758-963	1
Magnetic foot antenna	758-965	1
Miniature WSB Quick marking system		
plain	248-501	50
with marking	see Full Line Catalog Automation Technology	
Approvals		
Conformity marking	CE	
Marine applications	GL	
UL 508		

System Data	
CPU	Cortex A8, 600 MHz
Operating system	Real-time Linux 3.6 (with RT-Preemption patch)
Main memory (RAM)	256 Mbytes
Internal memory (flash)	256 Mbytes
Retain memory	128 Kbytes
ETHERNET	2 x RJ-45 (switched)
Transmission medium	Twisted Pair S-UTP
	100 Ω, Cat 5;
	Max. line length: 100 m
Baud rate	10/100 Mbit/s; 10Base-T/100Base-TX
Interface (serial)	RS-232/-485 (switchable)
Antenna connection	SMA
Wireless technology	GSM/Edge/UMTS/HSPA+;
	SIM card/slot: mini, push/push mechanism
Protocols	DHCP, DNS, NTP, FTP, FTPS, SNMP, HTTP, HTTPS, SSH, MODBUS (TCP, UDP, RTU),
	750-8207/025-001 IEC 60870-5-101/-103/-104,
	IEC 61850-7-4, IEC 61400-25, DNP3
Safety	OpenVPN, IPsec, firewall
Programming	WAGO-I/O-PRO V2.3, e!COCKPIT
IEC 61131-3	IL, LD, FBD (FC), ST, FC
SD card slot	Push-push mechanism, sealable cover lid
Type of memory card	SD and SDHC up to 32 GB (All
	guaranteed properties are only valid when
	used with WAGO's 758-879/000-001
	memory card.)

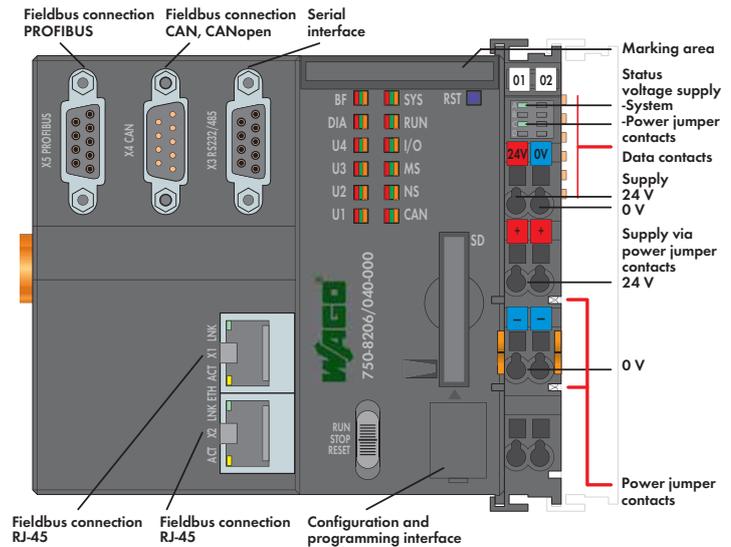


Technical Data	
Number of I/O modules (per node)	64
with bus extension	250
Input and output process image (max.)	
Data width process image	Internal data bus: 1000 words; MODBUS: 1000 words
I/O interfaces (serial)	1 x serial interface per TIA/EIA 232 and TIA/EIA 485 (switchable), 9-pole D-sub female connector
Diagnostic LEDs	Power supply; SYS; RUN; FIELDBUS (MS, NS); USER (U7); Internal data bus; Mobile radio network; field strength
Indicators	User LEDs: via CODESYS library
Memory configuration CODESYS 2.3	
Program memory	16 MB
Data memory	64 MB
Non-volatile memory (retain)	128 KB
Memory configuration e!RUNTIME	
Program and data memory	80 MB (dynamically distributed)
Non-volatile memory (retain)	128 KB
Communication	GSM quad-band
Communication types	SMS (bidirectional), GPRS connection to Internet
Power supply	24 V DC (-25 % ... +30 %)
Max. input current (24 V)	550 mA
Total current for I/O modules (5 V)	700 mA
Isolation	500V system/supply

General Specifications	
Dimensions (mm) W x H x L	103 x 65 x 100
	Height from upper-edge of DIN 35 rail
EMC immunity of interference	acc. to EN 61000-6-2, marine applications
EMC emission of interference	acc. to EN 61000-6-3, marine applications
Degree of protection	IP20 acc. to DIN 60529
Type of mounting	DIN 35 rail
Housing material	PC
Ambient conditions	
Operating temperature	0 °C ... +55 °C
Storage temperature	-25 °C ... +85 °C
Relative air humidity (no condensation)	95 %
Wire connection	CAGE CLAMP®
Cross sections	0.08 mm² ... 2.5 mm² / AWG 28 ... 14
Strip lengths	8 ... 9 mm / 0.33 in

PLC – PFC200 Controller

For eXTReme environmental conditions; PFC200 CS 2ETH RS CAN DPS



The PFC200 Controller is a compact PLC for the modular WAGO-I/O-SYSTEM. Besides network and fieldbus interfaces, the controller supports all digital, analog and specialty modules found within the 750/753 Series. Two ETHERNET interfaces and an integrated switch enable line topology wiring. The integrated Web server provides configuration options and status information from the PFC200. Besides the processing industry and building automation, typical markets for the PFC200 include the standard machine and plant industries (e.g., packaging, bottling, textiles, production and metal & wood processing).

- Programmable to IEC 61131-3
- Programmable via WAGO-I/O-PRO V2.3 or e!COCKPIT

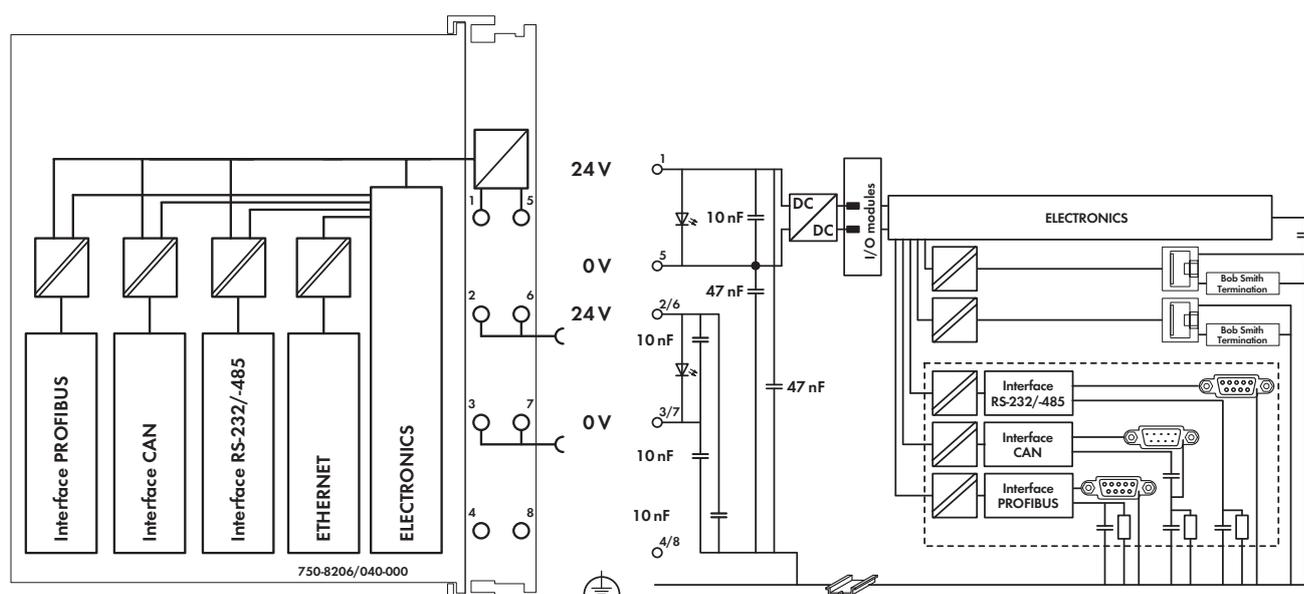
- Direct connection of WAGO I/O modules
- 2 x ETHERNET (configurable), RS-232/-485, CAN, CANopen, PROFIBUS DP Slave
- Linux 3.6 operating system with RT-Preemption patch
- Configuration via CODESYS, e!COCKPIT or Web-based management interface
- Maintenance-free

The module is ideal for operation in harsh environments:

- extended temperature range
- higher dielectric strength and EMC resistance
- greater vibration and shock resistance

Description	Item No.	Pack. Unit
PFC200 CS 2ETH RS CAN DPS/XTR	750-8206/040-000	
PFC200 CS 2ETH RS CAN DPS Telecontrol/XTR	750-8206/040-001	
Accessories		
SD memory card, 2 GB	758-879/000-001	1
WAGO-I/O-PRO V2.3, RS-232 kit	759-333	1
Miniature WSB Quick marking system		
 plain	248-501	50
with marking	see Full Line Catalog Automation Technology	
Approvals		
Conformity marking	CE	
UL 508	pending	

System Data	
CPU	Cortex A8, 600 MHz
Operating system	Real-time Linux 3.6 (with RT-Preemption patch)
Main memory (RAM)	256 Mbytes
Internal memory (flash)	256 Mbytes
Retain memory	128 Kbytes
ETHERNET	2 x RJ-45 (switched)
Transmission medium	Twisted Pair S-UTP
	100 Ω, Cat 5;
	Max. line length: 100 m
Baud rate	10/100 Mbit/s; 10Base-T/100Base-TX
Interface (serial)	RS-232/-485 (switchable)
Fieldbus	PROFIBUS DP Slave, CAN, CANopen
Protocols	DHCP, DNS, NTP, FTP, FTPS, SNMP, HTTP, HTTPS, SSH, MODBUS (TCP, UDP, RTU)
	750-8206/040-001
	IEC 60870-5-101/-103/-104,
	IEC 61850-7, IEC 61400-25, DNP3
Programming	WAGO-I/O-PRO V2.3, e!COCKPIT
IEC 61131-3	IL, LD, FBD (CFC), ST, FC
SD card slot	Push-push mechanism, sealable cover lid
Type of memory card	SD and SDHC up to 32 GB (All guaranteed properties are only valid in connection with the WAGO 758-879/000-001 memory card.)

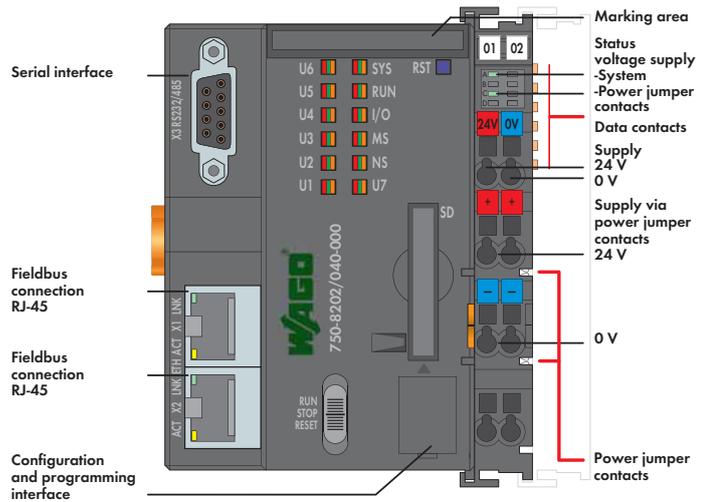


Technical Data	
Number of I/O modules (per node)	64
with bus extension	250
Input and output process image (max.)	
Data width process image	Internal data bus: 1000 words; MODBUS: 1000 words; PROFIBUS: 244 bytes in 80 slots; CAN: 2000 words
I/O interfaces (serial)	1 x serial interface per TIA/EIA 232 and TIA/EIA 485 (switchable), 9-pole D-sub female connector
Diagnostic LEDs	Power supply; SYS; RUN; FIELDBUS (MS, NS, CAN, DIA, BF); USER (U1 ... U4); Internal data bus
Indicators	User LEDs: via CODESYS library
Memory configuration CODESYS 2.3	
Program memory	16 MB
Data memory	64 MB
Non-volatile memory (retain)	128 KB
Memory configuration e!RUNTIME	
Program and data memory	80 MB (dynamically distributed)
Non-volatile memory (retain)	128 KB
Voltage via power jumper contacts	24 VDC
under laboratory conditions +15 °C ... +35 °C	18 V ... 31.2 V (17.4 V ... 31.2 V) ¹⁾
for -40 °C ... +55 °C	18 V ... 28.8 V (17.4 V ... 28.8 V) ¹⁾
for +55 °C ... +70 °C	18 V ... 26.4 V (17.4 V ... 26.4 V) ¹⁾
	¹⁾ including residual ripple of 15 %
Input current typ. at rated load (24 V)	550 mA
Internal current consumption (5 V)	600 mA
Total current for I/O modules (5 V)	1700 mA
Efficiency of the power supply (typ.) at nominal load (24 V)	90 %
Rated surge voltage	1 kV
Overvoltage category	III

General Specifications	
Dimensions (mm) W x H x L	112 x 65 x 100
	Height from upper-edge of DIN 35 rail
Weight	260 g
Shock resistance	acc. to IEC 60068-2-27 (15g/11 ms/half- sine/1000 shocks; 25g/6 ms/1000 shocks), EN 50155, EN 61373
Vibration resistance	acc. to IEC 60068-2-6 (acceleration: 5g), EN 60870-2-2, IEC 60721-3-1, -3, EN 50155, EN 61373
EMC immunity of interference	acc. to EN 61000-6-1, -2, EN 61131-2, marine applications, EN 50121-3-2, -4, -5, EN 60255-26, EN 60870-2-1, EN 61850-3, IEC 61000-6-5, IEEE 1613, VDEW: 1994
EMC emission of interference	acc. to EN 61000-6-3, -4, EN 61131-2, EN 60255-26, marine applications, EN 60870-2-1, EN 61850-3, EN 50121-3-2, -4, -5
Degree of protection	IP20 acc. to DIN 60529
Type of mounting	DIN 35 rail
Housing material	PC
Wire connection	CAGE CLAMP®
Cross sections	0.25 mm ² ... 2.5 mm ² / AWG 24 ... 14
Strip lengths	8 ... 9 mm / 0.33 in
Ambient conditions	
Operating temperature	-40 °C ... +70 °C
Storage temperature	-40 °C ... +85 °C
Relative humidity	95 %, short-term condensation acc. to class 3K7 / IEC EN 60721-3-3 (except wind- driven precipitation, water and ice formation)
Operating altitude	without temperature derating: 0 m ... 2000 m; with temperature derating: 2000 m ... 5000 m (0.5 K/100 m); max.: 5000 m

PLC – PFC200 Controller

For eXTReme environmental conditions; PFC200 CS 2ETH RS



The PFC200 Controller is a compact PLC for the modular WAGO-I/O-SYSTEM. Besides network and fieldbus interfaces, the controller supports all digital, analog and specialty modules found within the 750/753 Series. Two ETHERNET interfaces and an integrated switch enable line topology wiring. The integrated Web server provides configuration options and status information from the PFC200.

Besides the processing industry and building automation, typical markets for the PFC200 include the standard machine and plant industries (e.g., packaging, bottling, textiles, production and metal & wood processing).

Programmable to IEC 61131-3

- Programmable via WAGO-I/O-PRO V2.3 or e!COCKPIT

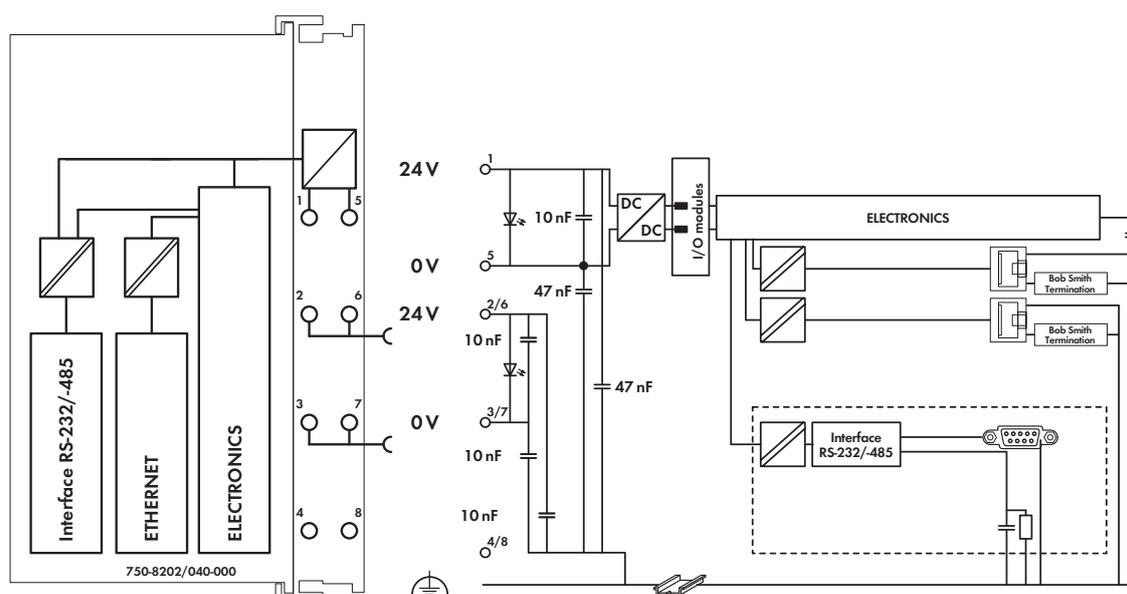
- Direct connection of WAGO I/O modules
- 2 x ETHERNET (configurable), RS-232/-485
- Linux 3.6 operating system with RT-Preemption patch
- Configuration via CODESYS, e!COCKPIT or Web-based management interface
- Maintenance-free

The module is ideal for operation in harsh environments:

- extended temperature range
- higher dielectric strength and EMC resistance
- greater vibration and shock resistance

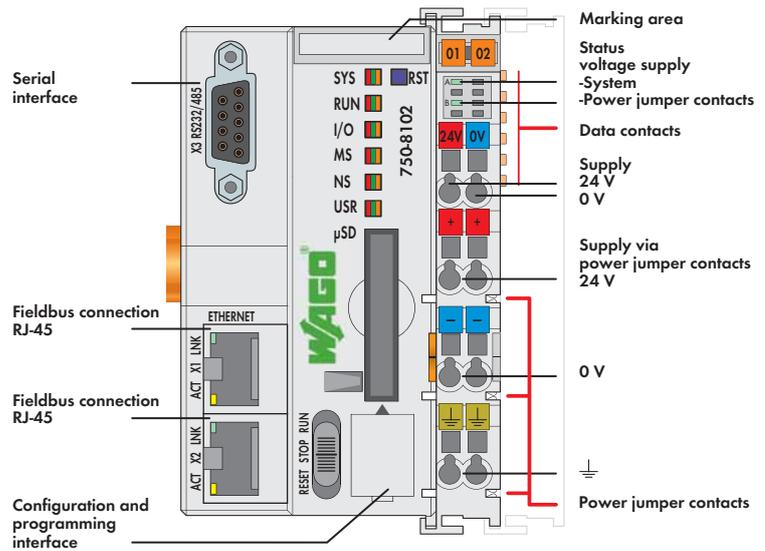
Description	Item No.	Pack. Unit
PFC200 CS 2ETH RS/XTR	750-8202/040-000	1
PFC200 CS 2ETH RS Telecontrol /XTR	750-8202/040-001	1
Accessories		
SD memory card, 2 GB	758-879/000-001	1
WAGO-I/O-PRO V2.3, RS-232 kit	759-333	1
Miniature WSB Quick marking system		
 plain	248-501	50
with marking	see Full Line Catalog Automation Technology	
Approvals		
Conformity marking	CE	
UL 508	pending	

System Data	
CPU	Cortex A8, 600 MHz
Operating system	Real-time Linux 3.6 (with RT-Preemption patch)
Main memory (RAM)	256 Mbytes
Internal memory (flash)	256 Mbytes
Retain memory	128 Kbytes
ETHERNET	2 x RJ-45 (switched)
Transmission medium	Twisted Pair S-UTP
	100 Ω, Cat 5;
	Max. line length: 100 m
Baud rate	10/100 Mbit/s; 10Base-T/100Base-TX
Interface (serial)	RS-232/-485 (switchable)
Protocols	DHCP, DNS, NTP, FTP, FTPS, SNMP, HTTP, HTTPS, SSH, MODBUS (TCP, UDP, RTU)
750-8202/040-001	IEC 60870-5-101/-103/-104, IEC 61850-7, IEC 61400-25, DNP3
Programming	WAGO-I/O-PRO V2.3, e!COCKPIT
IEC 61131-3	IL, LD, FBD (CFC), ST, FC
SD card slot	Push-push mechanism, sealable cover lid
Type of memory card	SD and SDHC up to 32 GB (All guaranteed properties are only valid in connection with the WAGO 758-879/000-001 memory card.)



Technical Data		General Specifications	
Number of I/O modules (per node)	64	Dimensions (mm) W x H x L	79 x 65 x 100
with bus extension	250		Height from upper-edge of DIN 35 rail
Input and output process image (max.)		Weight	210 g
Data width process image	Internal data bus: 1000 words; MODBUS: 1000 words; PROFIBUS: 244 bytes in 80 slots; CAN: 2000 words	Shock resistance	acc. to IEC 60068-2-27 (15g/11 ms/half-sine/1000 shocks; 25g/6 ms/1000 shocks), EN 50155, EN 61373
I/O interfaces (serial)	1 x serial interface per TIA/EIA 232 and TIA/EIA 485 (switchable), 9-pole D-sub female connector	Vibration resistance	acc. to IEC 60068-2-6 (acceleration: 5g), EN 60870-2-2, IEC 60721-3-1, -3, EN 50155, EN 61373
Diagnostic LEDs	Power supply; SYS; RUN; FIELDBUS (MS, NS); USER (U1 ... U7); Internal data bus	EMC immunity of interference	acc. to EN 61000-6-1, -2, EN 61131-2, marine applications, EN 50121-3-2, -4, -5, EN 60255-26, EN 60870-2-1, EN 61850-3, IEC 61000-6-5, IEEE 1613, VDEW: 1994
Indicators	User LEDs: via CODESYS library	EMC emission of interference	acc. to EN 61000-6-3, -4, EN 61131-2, EN 60255-26, marine applications, EN 60870-2-1, EN 61850-3, EN 50121-3-2, -4, -5
Memory configuration CODESYS 2.3		Degree of protection	IP20 acc. to DIN 60529
Program memory	16 MB	Type of mounting	DIN 35 rail
Data memory	64 MB	Housing material	PC
Non-volatile memory (retain)	128 KB	Wire connection	CAGE CLAMP®
Memory configuration e!RUNTIME		Cross sections	0.25 mm ² ... 2.5 mm ² / AWG 24 ... 14
Program and data memory	80 MB (dynamically distributed)	Strip lengths	8 ... 9 mm / 0.33 in
Non-volatile memory (retain)	128 KB	Ambient conditions	
Voltage via power jumper contacts	24 VDC	Operating temperature	-40 °C ... +70 °C vertical mounting position: -40 °C ... +65 °C
under laboratory conditions +15 °C ... +35 °C	18 V ... 31.2 V (17.4 V ... 31.2 V) ¹⁾	Storage temperature	-40 °C ... +85 °C
for -40 °C ... +55 °C	18 V ... 28.8 V (17.4 V ... 28.8 V) ¹⁾	Relative humidity	95 %, short-term condensation acc. to class 3K7 / IEC EN 60721-3-3 (except wind-driven precipitation, water and ice formation)
for +55 °C ... +70 °C	18 V ... 26.4 V (17.4 V ... 26.4 V) ¹⁾	Operating altitude	without temperature derating: 0 m ... 2000 m; with temperature derating: 2000 m ... 5000 m (0.5 K/100 m); max.: 5000 m
	¹⁾ including residual ripple of 15 %		
Input current typ. at rated load (24 V)	550 mA		
Internal current consumption (5 V)	510 mA		
Total current for I/O modules (5 V)	1700 mA		
Efficiency of the power supply (typ.) at nominal load (24 V)	90 %		
Rated surge voltage	1 kV		
Overvoltage category	III		

PLC – PFC100 Controller PFC100 CS 2ETH RS



The PFC100 Controller is a compact PLC for the modular WAGO-I/O-SYSTEM. In addition to providing commonly used network and fieldbus interfaces, the controller supports all digital, analog and specialty I/O modules in the 750/753 Series.

Two ETHERNET interfaces and an integrated switch enable line topology wiring – no extra-cost hardware is needed.

An integrated Webserver provides user configuration options and displays PFC100 status information.

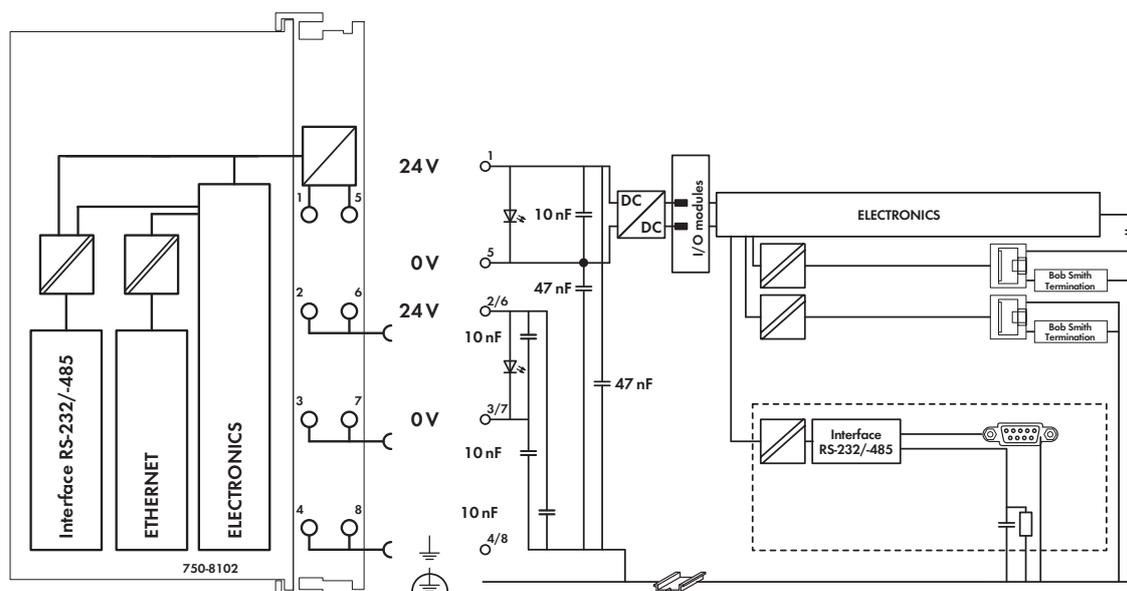
Besides the processing industry and building automation, typical applications for the PFC100 include standard machinery and equipment control (e.g., packaging, bottling and manufacturing systems, as well as textile, metal and wood processing machines).

The controller’s programming complies with IEC 61131-3. Programmable via e!COCKPIT

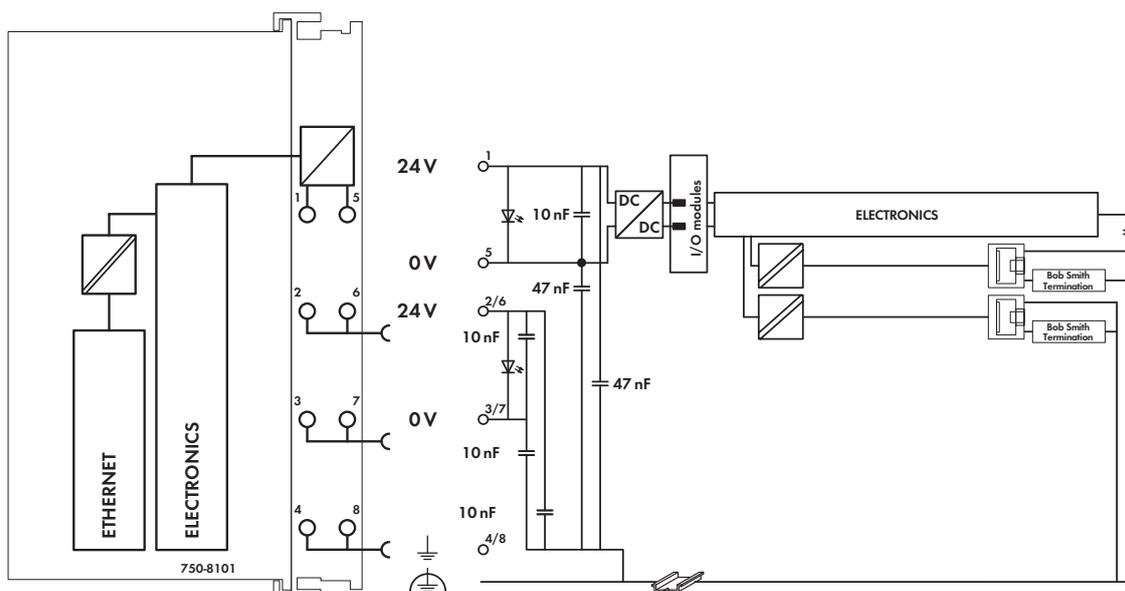
- Direct connection of WAGO I/O modules
- 2 x ETHERNET (configurable), RS-232/-485
- Linux 3.18 operating system with RT-Preemption patch
- Configuration via e!COCKPIT or Web-Based Management user interface
- Maintenance-free

Description	Item No.	Pack. Unit
PFC100 CS 2ETH RS	750-8102	1
PFC100 CS 2ETH RS/T	750-8102/025-000	1
Extended temperature range: -20 °C ... +60 °C		
Accessories	Item No.	Pack. Unit
microSD memory card, 2 GB	758-879/000-3102	1
Miniature WSB Quick marking system		
plain	248-501	50
with marking	see Full Line Catalog Automation Technology	
Approvals		
Conformity marking	CE	
Marine applications (versions upon request)	pending	
UL 508	pending	
TÜV 14 ATEX 148929 X	pending	
IECEx TUN 14.0035 X	pending	

System Data	
CPU	Cortex A8, 600 MHz
Operating system	Real-time Linux 3.18 (with RT-Preemption patch)
Retain memory	64 Kbytes
ETHERNET	2 x RJ-45 (configurable)
Transmission medium	Twisted Pair S-UTP
	100 Ω, Cat 5;
	Max. line length: 100 m
Baud rate	10/100 Mbit/s; 10Base-T/100Base-TX
Protocols	DHCP, DNS, NTP, FTP, FTPS, SNMP, HTTP, HTTPS, SSH, MODBUS (TCP, UDP)
Programming	e!COCKPIT
IEC 61131-3	IL, LD, FBD (CFC), ST, FC
SD card slot	Push-push mechanism, sealable cover lid
Type of memory card	microSD up to 32 GB (All guaranteed properties are only valid when used with WAGO’s 758-879/000-3102 memory card.)



Technical Data		General Specifications	
Number of I/O modules (per node)	64	Dimensions (mm) W x H x L	62 x 65 x 100
with bus extension	250		Height from upper-edge of DIN 35 rail
Input and output process image (max.)		EMC immunity of interference	acc. to EN 61000-6-2, marine applications
Data width process image	Internal data bus: 1000 words; MODBUS: 1000 words	EMC emission of interference	acc. to EN 61000-6-3, marine applications
Diagnostic LEDs	Power supply; SYS; RUN; FIELDBUS (MS, NS); USER (U1); Internal data bus	Degree of protection	IP20 acc. to DIN 60529
Indicators	User LEDs: via CODESYS library	Type of mounting	DIN 35 rail
Memory configuration e!RUNTIME		Housing material	PC
Program and data memory	12 MB (dynamically distributed)	Wire connection	CAGE CLAMP®
Non-volatile memory (retain)	128 KB	Cross sections	0.08 mm ² ... 2.5 mm ² / AWG 28 ... 14
Power supply	24 V DC (-25 % ... +30 %)	Strip lengths	8 ... 9 mm / 0.33 in
Max. input current (24 V)	550 mA	Ambient conditions	
Total current for I/O modules (5 V)	1700 mA	Operating temperature	0 °C ... +55 °C
Isolation	500 V system/supply	Storage temperature	-25 °C ... +85 °C
		Relative air humidity (no condensation)	95 %

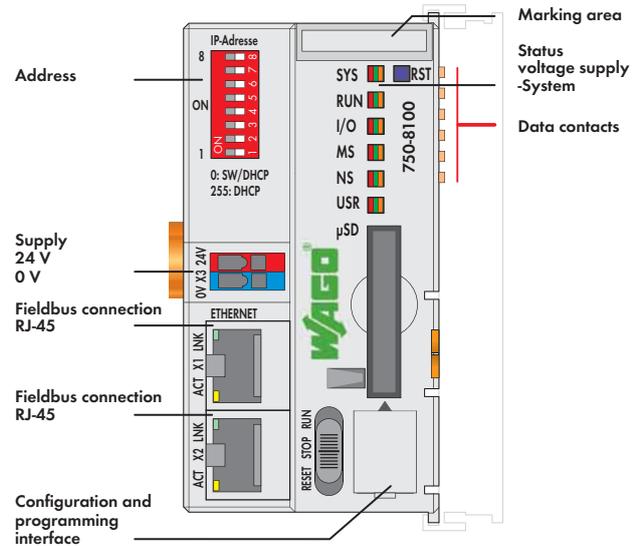


Technical Data

Number of I/O modules (per node)	64
with bus extension	250
Input and output process image (max.)	
Data width process image	Internal data bus: 1000 words; MODBUS: 1000 words
Diagnostic LEDs	Power supply; SYS; RUN; FIELDBUS (MS, NS); USER (U1); Internal data bus
Indicators	User LEDs: via CODESYS library
Memory configuration e!RUNTIME	
Program and data memory	12 MB (dynamically distributed)
Non-volatile memory (retain)	64 KB
Power supply	24 V DC (-25 % ... +30 %)
Max. input current (24 V)	550 mA
Total current for I/O modules (5 V)	1700 mA
Isolation	500 V system/supply

General Specifications

Dimensions (mm) W x H x L	62 x 65 x 100
	Height from upper-edge of DIN 35 rail
EMC immunity of interference	acc. to EN 61000-6-2, marine applications
EMC emission of interference	acc. to EN 61000-6-3, marine applications
Degree of protection	IP20 acc. to DIN 60529
Type of mounting	DIN 35 rail
Housing material	PC
Wire connection	CAGE CLAMP®
Cross sections	0.08 mm ² ... 2.5 mm ² / AWG 28 ... 14
Strip lengths	8 ... 9 mm / 0.33 in
Ambient conditions	
Operating temperature	0 °C ... +55 °C
Storage temperature	-25 °C ... +85 °C
Relative air humidity (no condensation)	95 %



The PFC100 Controller is a compact PLC for the modular WAGO-I/O-SYSTEM. In addition to providing commonly used network and fieldbus interfaces, the controller supports all digital, analog and specialty I/O modules in the 750/753 Series.

Two ETHERNET interfaces and an integrated switch enable line topology wiring – no extra-cost hardware is needed.

An integrated Webserver provides user configuration options and displays PFC100 status information.

Besides the processing industry and building automation, typical applications for the PFC100 include standard machinery and equipment control (e.g., packaging, bottling and manufacturing systems, as well as textile, metal and wood processing machines).

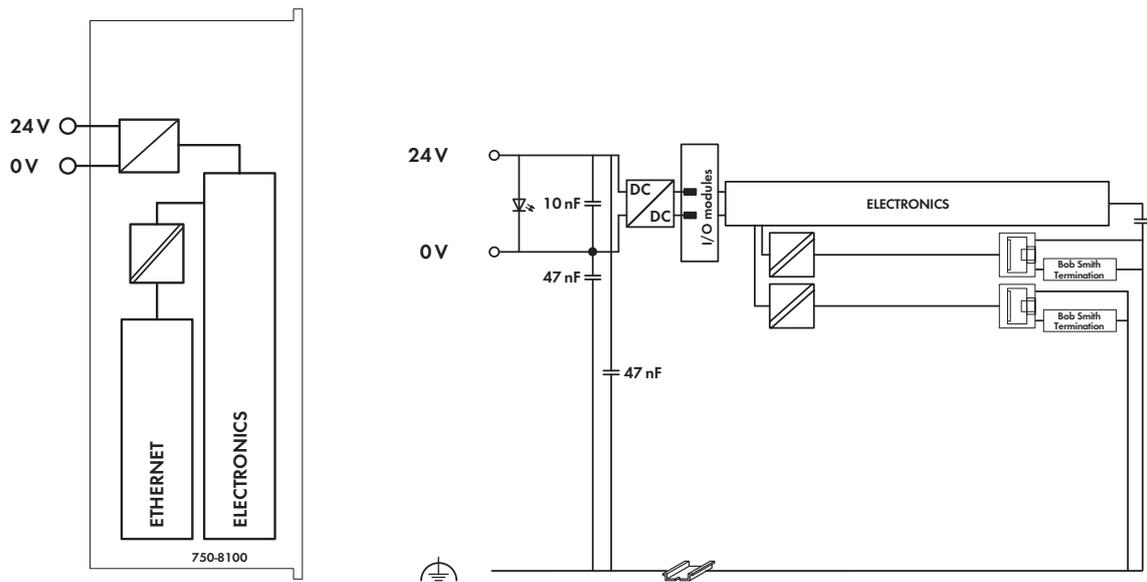
The DIP switch configures the last byte of the IP address and may be used for IP address assignment.

The controller's programming complies with IEC 61131-3.

- Programmable via e!COCKPIT
- Direct connection of WAGO I/O modules
- 2 x ETHERNET (configurable)
- Linux 3.18 operating system with RT-Preemption patch
- Configuration via e!COCKPIT or Web-Based Management user interface
- Maintenance-free

Description	Item No.	Pack. Unit
PFC100 CS 2ETH ECO	750-8100	1
Accessories		
microSD memory card, 2 GB	758-879/000-3102	1
Miniature WSB Quick marking system		
plain	248-501	50
with marking	see Full Line Catalog Automation Technology	
Approvals		
Conformity marking	CE	
Marine applications	pending	
UL 508	pending	
TÜV 14 ATEX 148929 X	pending	
IECEx TUN 14.0035 X	pending	

System Data	
CPU	Cortex A8, 600 MHz
Operating system	Real-time Linux 3.18 (with RT-Preemption patch)
Retain memory	64 Kbytes
ETHERNET	2 x RJ-45 (configurable)
Transmission medium	Twisted Pair S-UTP
	100 Ω, Cat 5;
	Max. line length: 100 m
Baud rate	10/100 Mbit/s; 10Base-T/100Base-TX
Protocols	DHCP, DNS, NTP, FTP, FTPS, SNMP, HTTP, HTTPS, SSH, MODBUS (TCP, UDP)
Programming	e!COCKPIT
IEC 61131-3	IL, LD, FBD (CFC), ST, FC
SD card slot	Push-push mechanism, sealable cover lid
Type of memory card	microSD up to 32 GB (All guaranteed properties are only valid when used with WAGO's 758-879/000-3102 memory card.)



Technical Data

Number of I/O modules (per node)	64
with bus extension	250
Input and output process image (max.)	
Data width process image	Internal data bus: 1000 words; MODBUS: 1000 words
Diagnostic LEDs	Power supply; SYS; RUN; FIELDBUS (MS, NS); USER (U1); Internal data bus
Indicators	User LEDs: via CODESYS library
Memory configuration e!RUNTIME	
Program and data memory	10 MB (dynamically distributed)
Non-volatile memory (retain)	64 KB
Power supply	24 V DC (-25 % ... +30 %)
Max. input current [24 V]	550 mA
Total current for I/O modules (5 V)	700 mA
Isolation	500 V system/supply

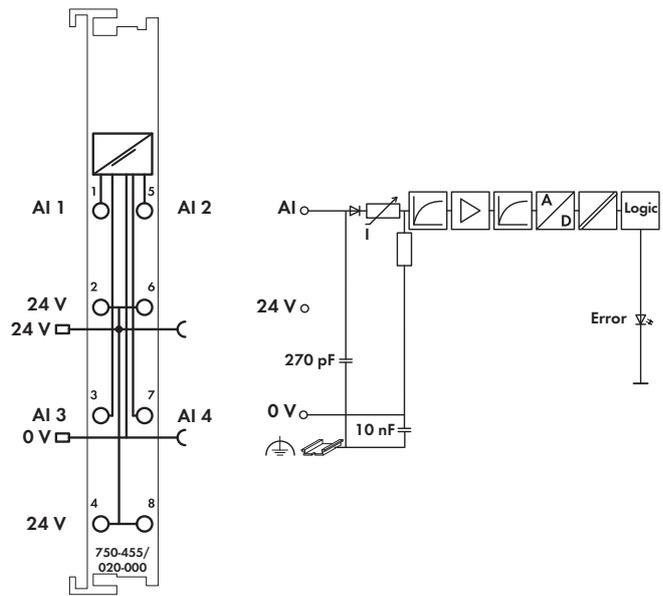
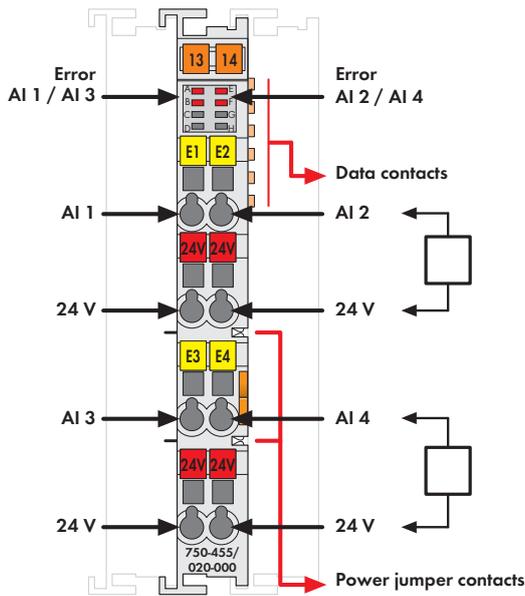
General Specifications

Dimensions (mm) W x H x L	50 x 65 x 100
	Height from upper-edge of DIN 35 rail
EMC immunity of interference	acc. to EN 61000-6-2, marine applications
EMC emission of interference	acc. to EN 61000-6-3, marine applications
Degree of protection	IP20 acc. to DIN 60529
Type of mounting	DIN 35 rail
Housing material	PC
Wire connection	CAGE CLAMP®
Cross sections	0.08 mm ² ... 2.5 mm ² / AWG 28 ... 14
Strip lengths	8 ... 9 mm / 0.33 in
Ambient conditions	
Operating temperature	0 °C ... +55 °C
Storage temperature	-25 °C ... +85 °C
Relative air humidity (no condensation)	95 %

4-Channel Analog Input Module, 4 ... 20 mA

20 Single-ended (S.E.)

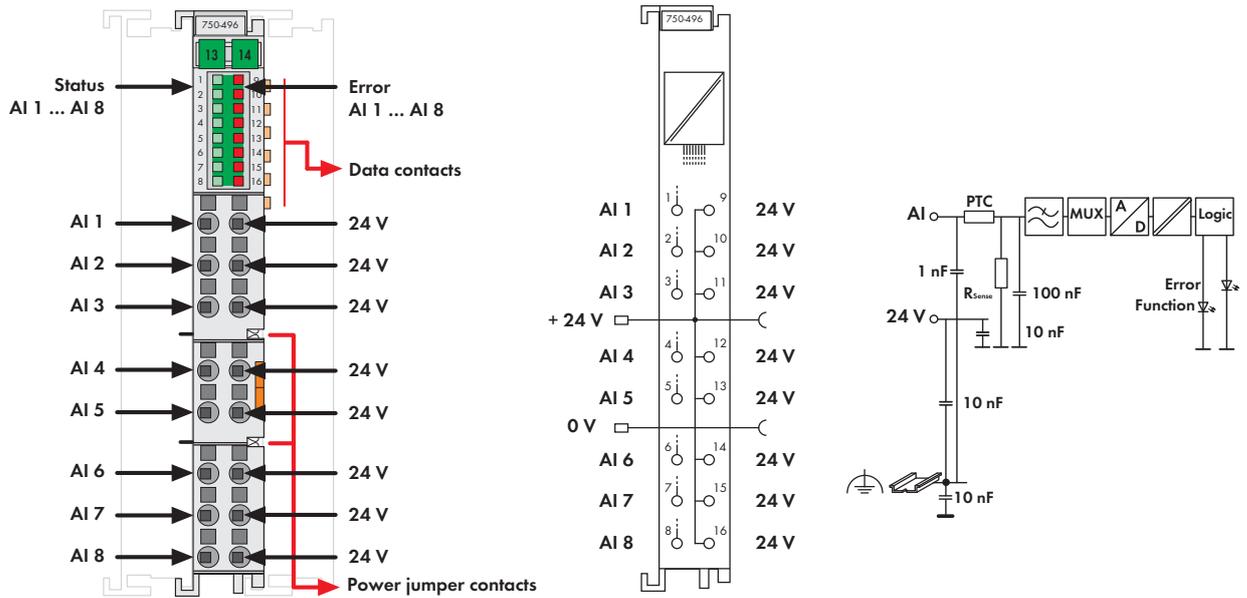
Automation Technology



The analog input module processes standard 4–20 V signals. The input signal is electrically isolated and transmitted with a resolution of 12 bits. The internal system supply powers the module. The input channels of the module have a common ground potential. The bus module provides a 24 V power supply, providing a direct connection to 2-wire sensors.

Description	Item No.	Pack. Unit
4AI 4-20mA S.E. / 4x24V	750-455/020-000	1
Accessories		
Miniature WSB Quick marking system		
 plain	248-501	50
with marking	see Full Line Catalog Automation Technology	
Approvals		
Conformity marking	CE	
UL 508		
ANSI/ISA 12.12.01	Class I, Div. 2, Grp. ABCD, T4	
TÜV 14 ATEX 148929 X	II 3 G Ex nA IIC T4 Gc	
IECEx TUN 14.0035 X	Ex nA IIC T4 Gc	

Technical Data	
Number of inputs	4
Power supply	via system voltage DC/DC
Current consumption (internal)	65 mA
Signal current	4 ... 20mA
Input voltage (max.)	32V
Input resistance	< 100Ω / 20mA
Resolution	12 bits
Conversion time (typ.)	10 ms
Measuring error (25 °C)	< ± 0.2 % of the full scale value
Temperature coefficient	< ± 0.01 % / K of the full scale value
Isolation	500 V system/supply
Bit width	4 x 16 bits data; 4 x 8 bits control/status (optional)
Wire connection	CAGE CLAMP®
Cross sections	0.08 mm² ... 2.5 mm² / AWG 28 ... 14
Strip lengths	8 ... 9 mm / 0.33 in
Width	12 mm
EMC immunity of interference	acc. to EN 61000-6-2, marine applications
EMC emission of interference	acc. to EN 61000-6-4, marine applications



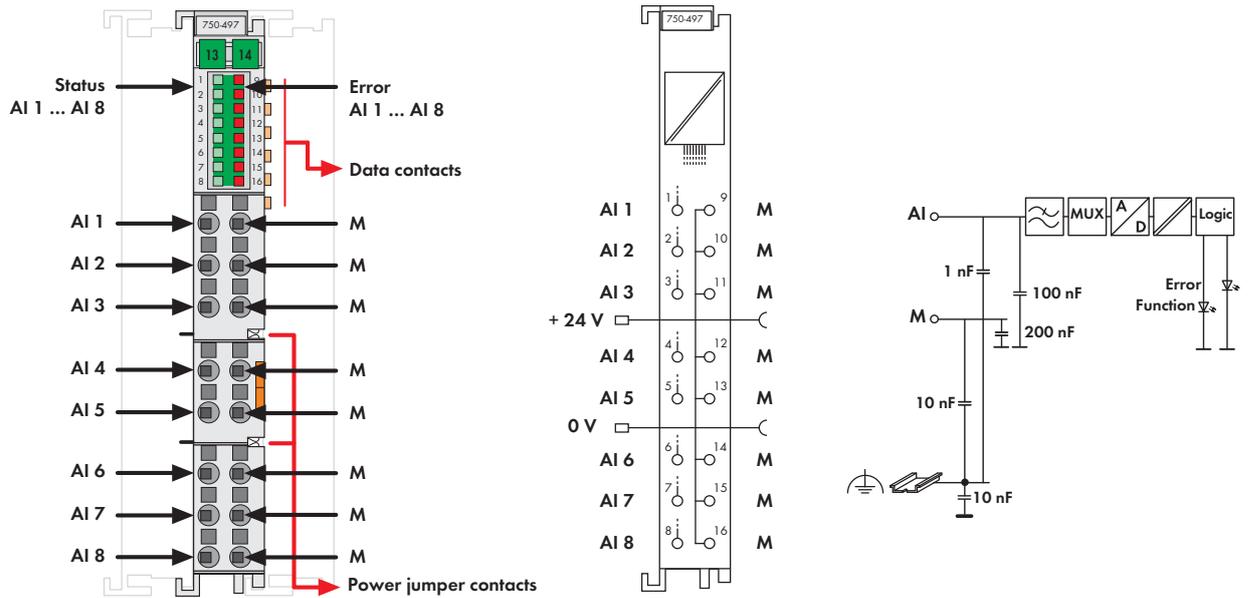
The analog input module processes standard 0-20 mA, 4-20 mA and 3.6-21 mA signals (Namur NE43).
 The bus module provides a 24 V power supply, providing a direct connection to 2-wire sensors.
 The input signal is electrically isolated and transmitted with a resolution of 12 bits.
 Wire break, short circuit and out-of-measurement range are indicated by a red LED.
 Unused channels can be deactivated.
 The module can be configured via WAGO-I/O-CHECK or GSD files.
 It features an extremely compact design and low measurement errors.

Description	Item No.	Pack. Unit
8AI 0/4-20mA	750-496	
Accessories		
Miniature WSB Quick marking system		
plain	248-501	50
with marking	see Full Line Catalog Automation Technology	
Operating tool, with partially insulated shaft, type 1, blade (2.5 x 0.4) mm	210-719	50
Approvals		
Conformity marking	CE	

Technical Data	
Number of inputs	8
Power supply	via system voltage DC/DC
Current consumption typ. (internal)	69 mA
Signal current	0 mA ... 20 mA, 4 mA ... 20 mA, 3.6 mA ... 21 mA
Input voltage (max.)	31.2V
Input resistance	≤ 220Ω
Resolution	12 bits
Conversion time	per bus module: ≤ 10 ms
Measuring error (25 °C)	< ± 0.1 % of the full scale value
Temperature coefficient	< ± 0.01 % / K of the full scale value
Bit width	8 x 16 bits data; 8 x 8 bits control/status (optional)
Wire connection	Push-in CAGE CLAMP®
Cross sections	solid: 0.08 mm ² ... 1.5 mm ² / AWG 28 ... 16 fine-stranded: 0.25 mm ² ... 1.5 mm ² / AWG 22 ... 16
Strip lengths	8 ... 9 mm / 0.33 in
Width	12 mm
EMC immunity of interference	acc. to EN 61000-6-2
EMC emission of interference	acc. to EN 61000-6-3

4 8-Channel Analog Input Module, 0 ... 10 V / ± 10 V

22



The analog input module processes both standard 0-10 VDC and ± 10 VDC signals.

The input signal is electrically isolated and transmitted with a resolution of 12 bits.

An out-of-measurement range is indicated by a red LED.

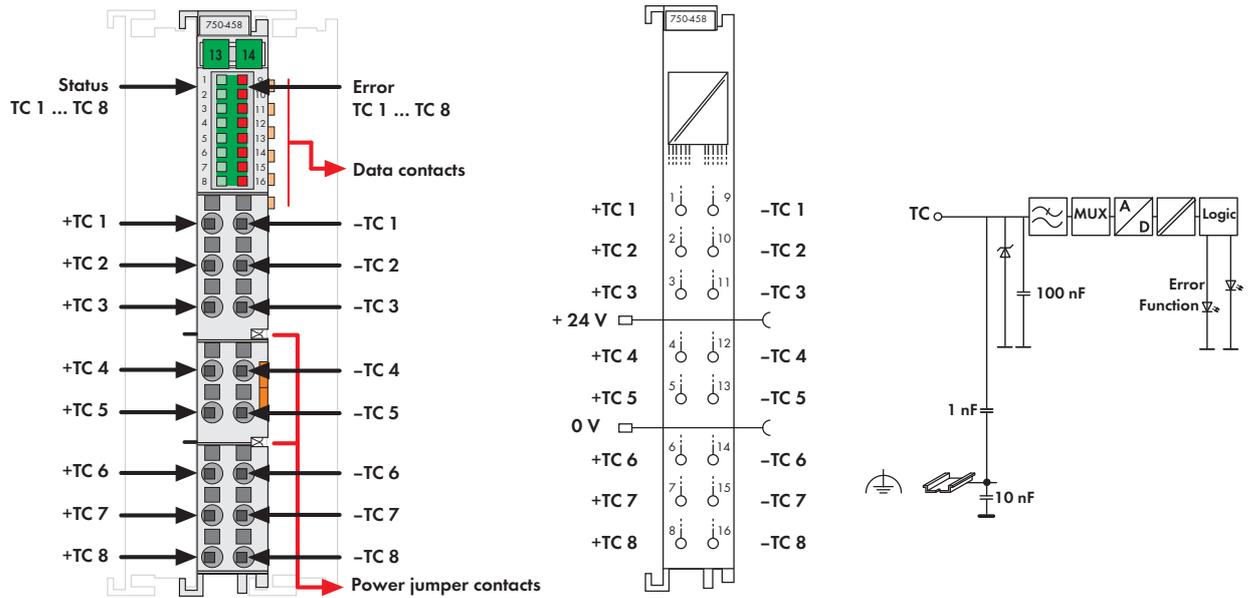
Unused channels can be deactivated.

The module can be configured via WAGO-I/O-CHECK or GSD files.

It features an extremely compact design and low measurement errors.

Description	Item No.	Pack. Unit
8AI 0-10V DC / ± 10 V DC	750-497	
Accessories		
Miniature WSB Quick marking system		
 plain	248-501	50
with marking	see Full Line Catalog Automation Technology	
Operating tool, with partially insulated shaft, type 1, blade (2.5 x 0.4) mm	210-719	50
Approvals		
Conformity marking	CE	

Technical Data	
Number of inputs	8
Power supply	via system voltage DC/DC
Current consumption typ. (internal)	105 mA
Signal voltage	0 V ... 10 V, ± 10 V
Input voltage (max.)	35V
Input resistance	> 100k Ω
Resolution	12 bits
Measuring error (25 °C)	< ± 0.1 % of the full scale value
Temperature coefficient	< ± 0.01 % / K of the full scale value
Bit width	8 x 16 bits data; 8 x 8 bits control/status (optional)
Wire connection	Push-in CAGE CLAMP®
Cross sections	solid: 0.08 mm ² ... 1.5 mm ² / AWG 28 ... 16 fine-stranded: 0.25 mm ² ... 1.5 mm ² / AWG 22 ... 16
Strip lengths	8 ... 9 mm / 0.33 in
Width	12 mm
EMC immunity of interference	acc. to EN 61000-6-2
EMC emission of interference	acc. to EN 61000-6-3



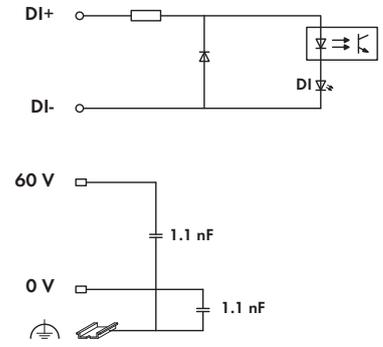
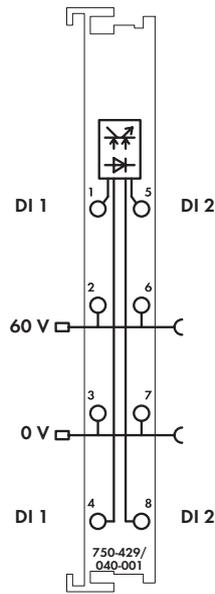
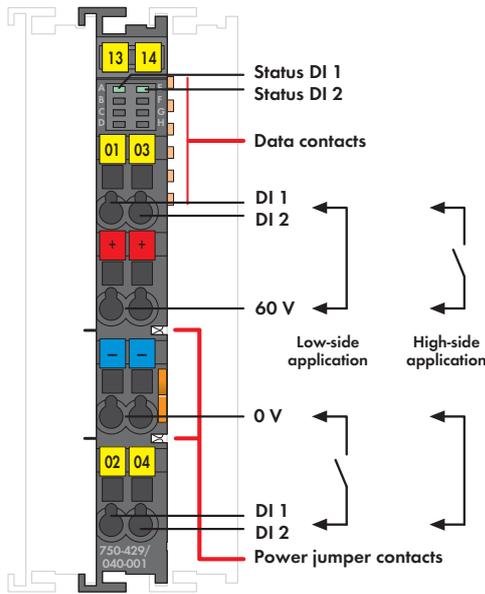
This input module directly connects to thermocouples.
 The module automatically linearizes the entire temperature range.
 Cold junction compensation mitigates the clamping unit offset voltage over the 0–55 °C operating range.
 A line break is indicated by a red LED.
 Unused channels can be deactivated.
 The module can be configured via WAGO-I/O-CHECK or GSD files.
 It features multiple setting options and high accuracy.

Description	Item No.	Pack. Unit
8AI Thermo, freely configurable	750-458	1
Accessories		
Miniature WSB Quick marking system	248-501	50
plain	see Full Line Catalog Automation Technology	
with marking		
Operating tool, with partially insulated shaft, type 1, blade (2.5 x 0.4) mm	210-719	50
Approvals		
Conformity marking	CE	

Technical Data	
Number of inputs	8
Power supply	via system voltage DC/DC
Current consumption typ. (internal)	100 mA
Sensor types	Type K, J, B, E, N, R, S, T, U, C; Voltage measurement -30 mV...+30 mV, -60 mV...+60 mV, -120 mV...+120 mV, -240 mV...+240 mV
Cold junction compensation	at each pair of terminal blocks
Resolution	0.1 °C
Conversion time	per channel: ≤ 100 ms
Measuring error (25 °C)	Without cold junction compensation: ≤ ±1 K (Type E, N, K, T, J, C); ≤ ±2 K (Type S, R); ≤ ±3 K (Type B); Cold-junction compensation measurement error: ≤ ±4 K
Isolation	500 V system/supply
Bit width	8 x 16 bits data; 8 x 8 bits control/status (optional)
Wire connection	Push-in CAGE CLAMP®
Cross sections	solid: 0.08 mm² ... 1.5 mm² / AWG 28 ... 16 fine-stranded: 0.25 mm² ... 1.5 mm² / AWG 22 ... 16
Strip lengths	8 ... 9 mm / 0.33 in
Width	12 mm
EMC immunity of interference	acc. to EN 61000-6-1, EN 61000-6-2
EMC emission of interference	acc. to EN 61000-6-3

2-Channel Digital Input Module 60 V DC

For eXTReme environmental conditions; configurable high-side or low-side switching



The digital input module receives control signal from the digital field devices (sensors, etc.). The module is a 2-channel device. Each channel can be used as a high-side or low-side switching input, depending on the external wiring. Field and system levels are electrically isolated.

The module is ideal for operation in harsh environments:

- extended temperature range
- higher dielectric strength and EMC resistance
- greater vibration and shock resistance

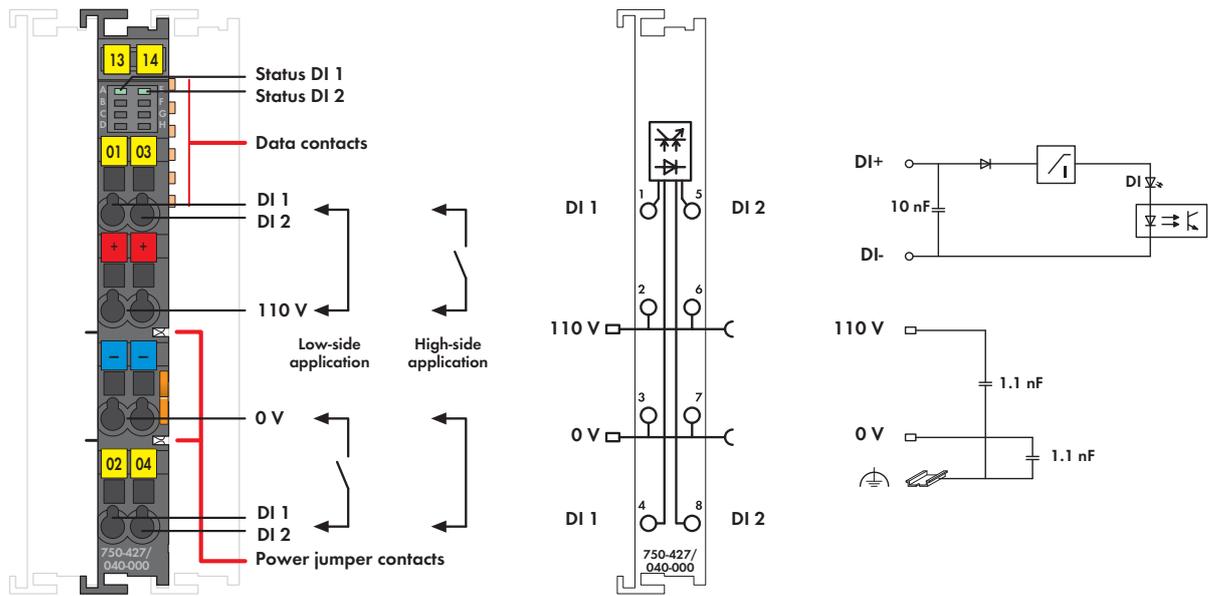
Notice:
An additional supply module must be added for operation with 60VDC!

Description	Item No.	Pack. Unit
2DI 60V DC 3.0ms /XTR	750-429/040-001	1
Accessories		
Miniature WSB Quick marking system		
 plain	248-501	50
with marking	see Full Line Catalog Automation Technology	
Approvals		
Conformity marking	CE	
UL 508	pending	
Technical Data		
Wire connection	CAGE CLAMP®	
Cross sections	0.25 mm ² ... 2.5 mm ² / AWG 24 ... 14	
Strip lengths	8 ... 9 mm / 0.33 in	
Dimensions (mm) W x H x L	12 x 62 x 100	
	Height from upper-edge of DIN 35 rail	
Weight	48 g	
Operating temperature	-40 °C ... +70 °C	
Storage temperature	-40 °C ... +85 °C	
Relative humidity	95 %, short-term condensation acc. to class 3K7 / IEC EN 60721-3-3 (except wind-driven precipitation, water and ice formation)	
Operating altitude	without temperature derating: 0 m ... 2000 m; with temperature derating: 2000 m ... 5000 m (0.5 K/100 m); max.: 5000 m	

Technical Data	
Number of inputs	2
Signal voltage (0)	-7.5 V ... +12 V DC
Signal voltage (1)	+44 V ... +78 V DC
Input current (typ.)	2.9 mA at 60 V DC
Input filter	3.0 ms
Current consumption (internal)	2.5 mA
Voltage via power jumper contacts	60 V DC (-25 % ... +30 %)
Current via power jumper contacts (max.)	10 A
Rated surge voltage	5.0 kV (EN 60870-2-1 / Class VW3); 2.5 kV (UL 508); 2.5 kV (EN 60664-1 / up to 5,000 m above sea level)
Overvoltage category	Nominal voltage 60 V: IV (EN 60664-1 / 5,000 m above sea level)
Degree of pollution	2 (EN 60664-1)
Internal bit width	2 bits
Vibration resistance	acc. to IEC 60068-2-6 (acceleration: 5g), EN 60870-2-2, IEC 60721-3-1, -3, EN 50155, EN 61373
Shock resistance	acc. to IEC 60068-2-27 (15g/11 ms/half-sine/1000 shocks; 25g/6 ms/1000 shocks), EN 50155, EN 61373
EMC immunity of interference	acc. to EN 61000-6-1, -2, EN 61131-2, marine applications, EN 50121-3-2, -4, -5, EN 60255-26, EN 60870-2-1, EN 61850-3, IEC 61000-6-5, IEEE 1613, VDEW: 1994
EMC emission of interference	acc. to EN 61000-6-3, -4, EN 61131-2, EN 60255-26, marine applications, EN 60870-2-1, EN 61850-3, EN 50121-3-2, -4, -5

2-Channel Digital Input Module 110 V DC

For eXTReme environmental conditions; configurable high-side or low-side switching



The digital input module receives control signals from digital field devices (e.g., sensors). The module is a 2-channel device. Each channel can be used as a high-side or low-side switching input, depending on the external wiring. Field and system levels are electrically isolated.

The module is ideal for operation in harsh environments:

- extended temperature range
- higher dielectric strength and EMC resistance
- greater vibration and shock resistance

Notice:

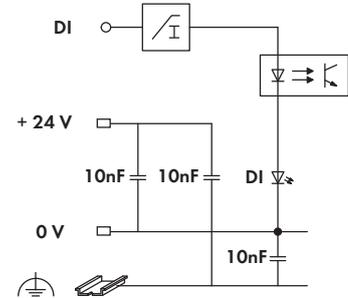
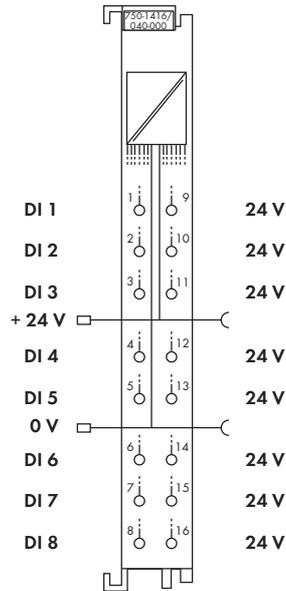
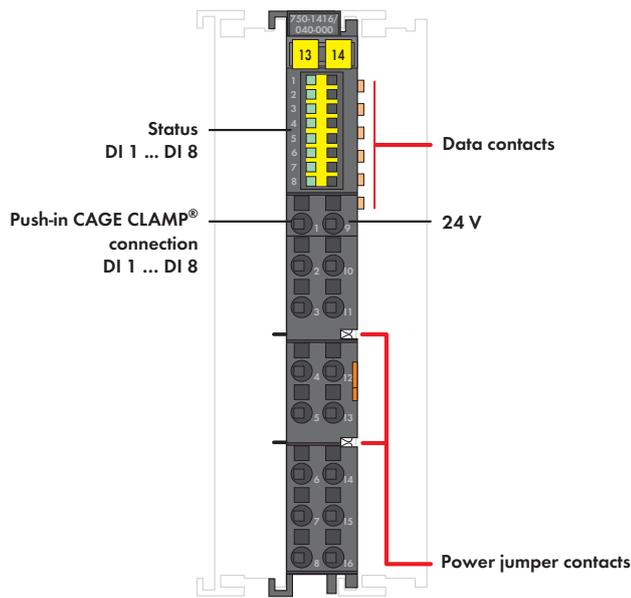
An additional supply module must be added for operation with 110VDC!

Description	Item No.	Pack. Unit
2DI 110V DC 3.0ms /XTR	750-427/040-000	1
Accessories		
Miniature WSB Quick marking system		
 plain	248-501	50
with marking	see Full Line Catalog Automation Technology	
Approvals		
Conformity marking	CE	
UL 508	pending	
Technical Data		
Wire connection	CAGE CLAMP®	
Cross sections	0.25 mm² ... 2.5 mm² / AWG 24 ... 14	
Strip lengths	8 ... 9 mm / 0.33 in	
Dimensions (mm) W x H x L	12 x 62 x 100	
	Height from upper-edge of DIN 35 rail	
Weight	48 g	
Operating temperature	-40 °C ... +70 °C	
Storage temperature	-40 °C ... +85 °C	
Relative humidity	95 %, short-term condensation acc. to class 3K7 / IEC EN 60721-3-3 (except wind-driven precipitation, water and ice formation)	
Operating altitude	without temperature derating: 0 m ... 2000 m; with temperature derating: 2000 m ... 5000 m (0.5 K/100 m); max.: 5000 m	

Technical Data	
Number of inputs	2
Signal voltage (0)	-14 V ... +50 V DC
Signal voltage (1)	+70 V ... +143 V DC
Input current (typ.)	2.5 mA at 110 V DC
Input filter	3.0 ms
Current consumption (internal)	2.5 mA
Voltage via power jumper contacts	110 V DC (-25 % ... +30 %)
Current via power jumper contacts (max.)	10 A
Rated surge voltage	5.0 kV (EN 60870-2-1 / Class VW3); 4.0 kV (UL 508); 4.0 kV (EN 60664-1 / up to 2,000 m above sea level); 2.5 kV (EN 60664-1 / > 2,000 m up to 5,000 m above sea level)
Overvoltage category	Nominal voltage 110 V: IV (EN 60664-1 / up to 2,000 m above sea level); III (EN 60664-1 / > 2,000 m up to 5,000 m above sea level)
Degree of pollution	2 (EN 60664-1)
Internal bit width	2 bits
Vibration resistance	acc. to IEC 60068-2-6 (acceleration: 5g), EN 60870-2-2, IEC 60721-3-1, -3, EN 50155, EN 61373
Shock resistance	acc. to IEC 60068-2-27 (15g/11 ms/half-sine/1000 shocks; 25g/6 ms/1000 shocks), EN 50155, EN 61373
EMC immunity of interference	acc. to EN 61000-6-1, -2, EN 61131-2, marine applications, EN 50121-3-2, -4, -5, EN 60255-26, EN 60870-2-1, EN 61850-3, IEC 61000-6-5, IEEE 1613, VDEW: 1994
EMC emission of interference	acc. to EN 61000-6-3, -4, EN 61131-2, EN 60255-26, marine applications, EN 60870-2-1, EN 61850-3, EN 50121-3-2, -4, -5

8-Channel Digital Input Module 24 V DC

For eXTReme environmental conditions; high-side switching, 2-conductor connection



The 2-conductor digital input module provides 8 channels in a width of just 12mm (0.47in.).

It receives binary control signals from digital field devices (e.g., sensors, encoders, switches or proximity switches).

The module has Push-in CAGE CLAMP® connections enabling direct insertion of solid conductors.

Each input channel has a noise-rejection RC filter with a 0.2ms time constant. A green LED indicates the switched status of each channel.

An optocoupler provides electrical isolation between the bus and the field side. An operating tool with a 2.5mm blade (210-719) is required to open the Push-in CAGE CLAMP® connections.

The module is ideal for operation in harsh environments:

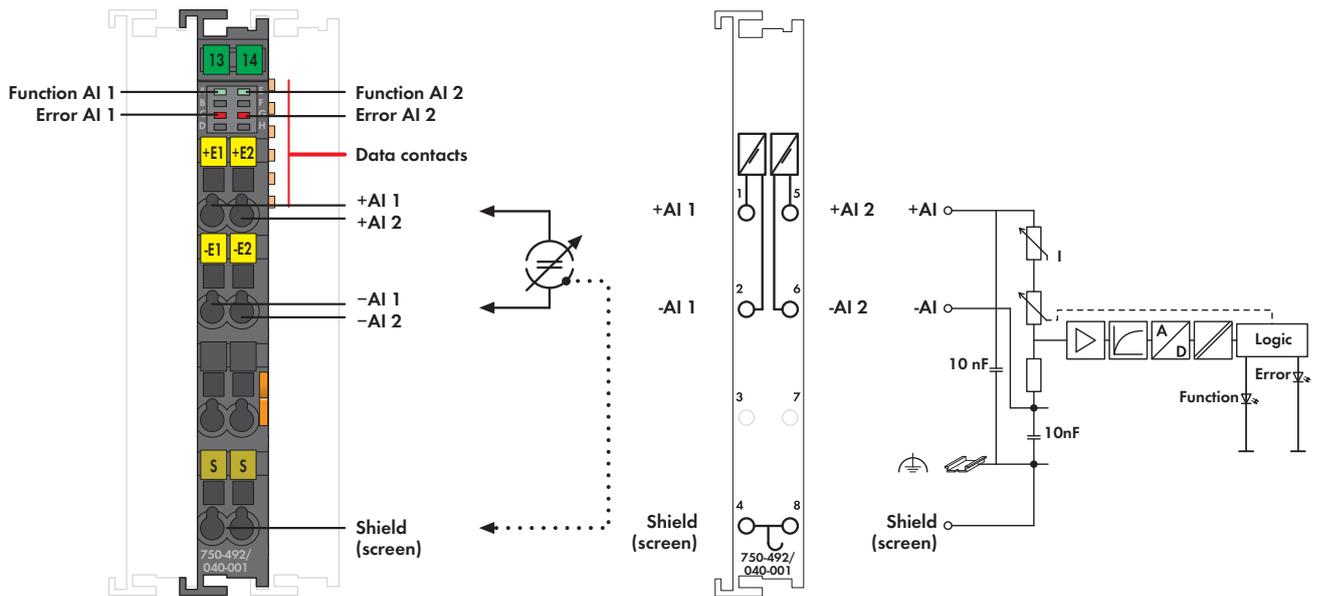
- extended temperature range
- higher dielectric strength and EMC resistance
- greater vibration and shock resistance

Description	Item No.	Pack. Unit
8DI 24V DC 0.2ms, 2-conductor /XTR	750-1416/040-000	
Accessories		
Miniature WSB Quick marking system		
 plain	248-501	50
 with marking	see Full Line Catalog Automation Technology	
Operating tool, with partially insulated shaft, type 1, blade (2.5 x 0.4) mm	210-719	50
Approvals		
Conformity marking	CE	
UL 508	pending	
Technical Data		
Wire connection	Push-in CAGE CLAMP®	
Cross sections	0.25 mm ² ... 1.5 mm ² / AWG 24 ... 16	
Strip lengths	8 ... 9 mm / 0.33 in	
Dimensions (mm) W x H x L	12 x 62 x 100	
	Height from upper-edge of DIN 35 rail	
Weight	48 g	
Operating temperature	-40 °C ... +70 °C	
Storage temperature	-40 °C ... +85 °C	
Relative humidity	95 %, short-term condensation acc. to class 3K7 / IEC EN 60721-3-3 (except wind-driven precipitation, water and ice formation)	
Operating altitude	without temperature derating: 0 m ... 2000 m; with temperature derating: 2000 m ... 5000 m (0.5 K/100 m); max.: 5000 m	

Technical Data	
Number of inputs	8
Input type	High-side switching
Signal voltage (0)	-3 V ... +5 V DC (Type 1/3)
Signal voltage (1)	+11 V ... +30 V DC (Type 3)
Input current (typ.)	+1.6 mA (at 5 V DC)
	+4.3 mA ... +4.6 mA (at 24 V DC)
Input filter	0.2 ms
Current consumption (internal)	6 mA
Current consumption typ. (field side)	2 mA
Voltage via power jumper contacts	24 VDC
	under laboratory conditions +15 °C ... +35 °C
	18 V ... 31.2 V (17.4 V ... 31.2 V) ¹⁾
	for -40 °C ... +55 °C
	18 V ... 28.8 V (17.4 V ... 28.8 V) ¹⁾
	for +55 °C ... +70 °C
	18 V ... 26.4 V (17.4 V ... 26.4 V) ¹⁾
	¹⁾ including residual ripple of 15 %
Current via power jumper contacts (max.)	10 A
Rated surge voltage	1 kV
Overvoltage category	III
Bit width	8 bits
Vibration resistance	acc. to IEC 60068-2-6 (acceleration: 5g), EN 60870-2-2, IEC 60721-3-1, -3, EN 50155, EN 61373
Shock resistance	acc. to IEC 60068-2-27 (15g/11 ms/half-sine/1000 shocks; 25g/6 ms/1000 shocks), EN 50155, EN 61373
EMC immunity of interference	acc. to EN 61000-6-1, -2, EN 61131-2, marine applications, EN 50121-3-2, -4, -5, EN 60255-26, EN 60870-2-1, EN 61850-3, IEC 61000-6-5, IEEE 1613, VDEW: 1994
EMC emission of interference	acc. to EN 61000-6-3, -4, EN 61131-2, EN 60255-26, marine applications, EN 60870-2-1, EN 61850-3, EN 50121-3-2, -4, -5

2-Channel Analog Input Module 4-20 mA

For eXTREme environmental conditions; configurable, isolated differential inputs



The 2-channel analog input module processes differential signals ranging from 4–20 mA. The input signal is transmitted with a resolution of 13 bits. The channels are electrically isolated from one another and from the system level. The system supply powers the module. The shield (screen) is directly connected to the DIN rail.

- Measured value acquisition: time synchronous (both inputs)
- Measuring range overflow/underflow: status byte and LED
- Method of conversion: SAR (Successive Approximation Register)

- Operating mode: continuously sampling (preset)
- Protection: non-linear limiting

The module is ideal for operation in harsh environments:

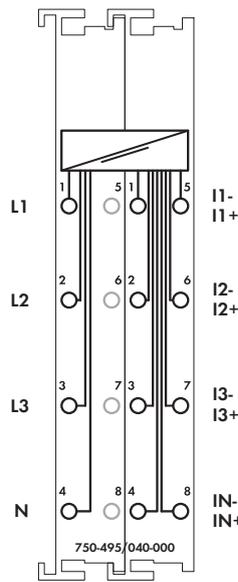
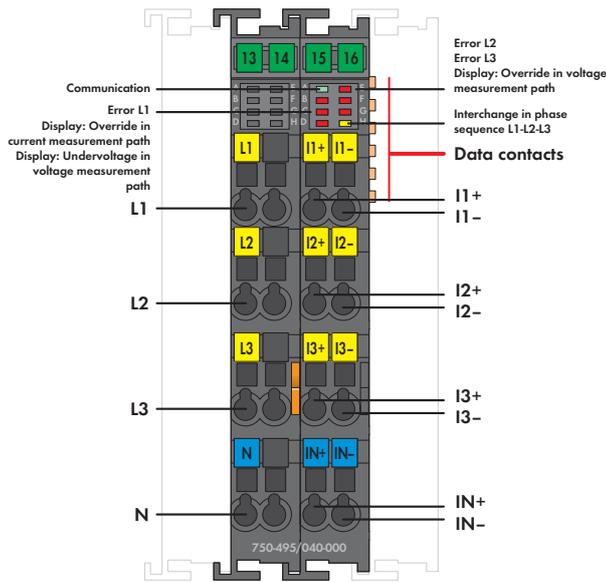
- extended temperature range
- higher dielectric strength and EMC resistance
- greater vibration and shock resistance

Description	Item No.	Pack. Unit
2AI 4-20mA Differential Input NE43 /XTR	750-492/040-001	
Accessories	Item No.	Pack. Unit
Miniature WSB Quick marking system		
 plain	248-501	50
with marking	see Full Line Catalog Automation Technology	
Approvals		
Conformity marking	CE	
UL 508	pending	
Technical Data		
Wire connection	CAGE CLAMP®	
Cross sections	0.25 mm² ... 2.5 mm² / AWG 24 ... 14	
Strip lengths	8 ... 9 mm / 0.33 in	
Dimensions (mm) W x H x L	12 x 62 x 100	
	Height from upper-edge of DIN 35 rail	
Weight	52 g	
Operating temperature	-40 °C ... +70 °C	
Storage temperature	-40 °C ... +85 °C	
Relative humidity	95 %, short-term condensation acc. to class 3K7 / IEC EN 60721-3-3 (except wind-driven precipitation, water and ice formation)	
Operating altitude	without temperature derating: 0 m ... 2000 m; with temperature derating: 2000 m ... 5000 m (0.5 K/100 m); max.: 5000 m	
EMC immunity of interference	acc. to EN 61000-6-1, -2, EN 61131-2, marine applications, EN 50121-3-2, -4, -5, EN 60255-26, EN 60870-2-1, EN 61850-3, IEC 61000-6-5, IEEE 1613, VDEW: 1994	
EMC emission of interference	acc. to EN 61000-6-3, -4, EN 61131-2, EN 60255-26, marine applications, EN 60870-2-1, EN 61850-3, EN 50121-3-2, -4, -5	

Technical Data	
Number of inputs	2, electrically isolated from each other
Signal characteristic	Differential
Current consumption typ. (internal)	80 mA
Signal current	3.8 mA ... 20.5 mA (NE43)
Input filter	low pass first order, $f_G = 5$ kHz
Resolution of the A/D converter	14 bits
Monotonicity without missing codes	yes
Resolution of measured value	13 bits
Value of a LSB (least significant bit)	2.4 μ A
Measuring error	< 0.4 % over whole temperature scale ≤ 0.1 % of upper-range value (non-linearity)
Input resistance	< 270 Ω / 20 mA
Measuring error (25 °C)	< ± 0.1 % of the full scale value
Temperature coefficient	< ± 0.01 % / K of the full scale value
Crosstalk attenuation	≥ 80 dB
Sampling time of repetition	1 ms
Sampling delay (module)	1 ms
Sampling delay (channel/channel)	≤ 1 μ s
Sampling duration	≤ 5 μ s
Current consumption typ. (internal)	80 mA
Voltage via power jumper contacts	24 VDC
	under laboratory conditions +15 °C ... +35 °C 18 V ... 31.2 V (17.4 V ... 31.2 V) ¹⁾
	for -40 °C ... +55 °C 18 V ... 28.8 V (17.4 V ... 28.8 V) ¹⁾
	for +55 °C ... +70 °C 18 V ... 26.4 V (17.4 V ... 26.4 V) ¹⁾
	¹⁾ including residual ripple of 15 %
Rated surge voltage	1 kV
Overvoltage category	III
Bit width	2 x 16 bits data; 2 x 8 bits control/status (optional)
Vibration resistance	acc. to IEC 60068-2-6 (acceleration: 5g), EN 60870-2-2, IEC 60721-3-1, -3, EN 50155, EN 61373
Shock resistance	acc. to IEC 60068-2-27 (15g/11 ms/half-sine/1000 shocks; 25g/6 ms/1000 shocks), EN 50155, EN 61373

3-Phase Power Measurement Module

For eXTReme environmental conditions



The 750-495 3-Phase Power Measurement Module measures electrical data in a three-phase supply network. The voltage is measured via network connection to L1, L2, L3 and N. The current of the three phases is fed to IL1, IL2, IL3 and IN (two clamping points each +,-) via current transformers or via Rogowski coils for the 750-495/000-002 module. The 750-495 Module transmits metrics (e.g., reactive/apparent/effective power, energy consumption, power factor, phase angle, frequency, over-/undervoltage) directly into the process image, without requiring high computing power from the controller. Both comprehensive metrics and harmonic analysis up to the 41st harmonic permit extensive network analysis via the fieldbus.

Metrics allow the operator to optimize the supply to a drive or machine, protecting the system from damage and failure. Insulation failures can be detected and prevented via current measurement performed in the neutral conductor. The 4-quadrant display indicates the type of load (inductive, capacitive) and whether it is an energy consumer or producer.

The module is ideal for operation in harsh environments:

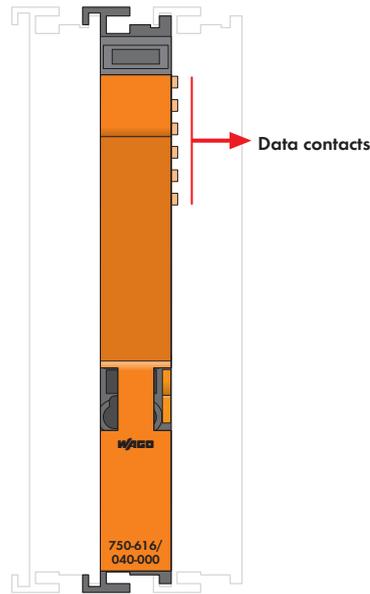
- extended temperature range
- higher dielectric strength and EMC resistance
- greater vibration and shock resistance

Description	Item No.	Pack. Unit
3-Phase Power Measurement Module (690V/1A)/XTR	750-495/040-000	1
3-Phase Power Measurement Module (690V/5A)/XTR	750-495/040-001	1
3-Phase Power Measurement Module (690V/RC)	750-495/040-002	1
Rogowski Coils/XTR		
Approvals		
Conformity marking	CE	
Technical Data		
Wire connection	CAGE CLAMP®	
Cross sections	0.25 mm² ... 2.5 mm² / AWG 24 ... 14	
Strip lengths	8 ... 9 mm / 0.33 in	
Dimensions (mm) W x H x L	24 x 62 x 100; Height from upper-edge of DIN 35 rail	
Weight	91 g	
Operating temperature	-40 °C ... +70 °C	
Storage temperature	-40 °C ... +85 °C	
Relative humidity	95 %, short-term condensation acc. to class 3K7 / IEC EN 60721-3-3 (except wind-driven precipitation, water and ice formation)	
Operating altitude	without temperature derating: 0 m ... 2000 m; with temperature derating: 2000 m ... 5000 m (0.5 K/100 m); max.: 5000 m	
Vibration resistance	acc. to IEC 60068-2-6 (acceleration: 5g), EN 60870-2-2, IEC 60721-3-1, -3, EN 50155, EN 61373	
Shock resistance	acc. to IEC 60068-2-27 (15g/11 ms/half-sine/1000 shocks; 25g/6 ms/1000 shocks), EN 50155, EN 61373	
EMC immunity of interference	acc. to EN 61000-6-1, -2, EN 61131-2, marine applications, EN 50121-3-2, -4, -5, EN 60255-26, EN 60870-2-1, EN 61850-3, IEC 61000-6-5, IEEE 1613, VDEW: 1994	
EMC emission of interference	acc. to EN 61000-6-3, -4, EN 61131-2, EN 60255-26, marine applications, EN 60870-2-1, EN 61850-3, EN 50121-3-2, -4, -5	

Technical Data	
Number of measurement inputs	7 (3 voltage measurement inputs, 4 differential current measurement inputs)
Rated voltage	V _{UN} = 400 V AC; V _{UL} = 690 V AC
Input resistance voltage path (typ.)	1429 kΩ
Measuring current (max.)	1 A (750-495/040-000) 5 A (750-495/040-001) Rogowski Coils RT500/RT2000 (750-495/040-002)
Input resistance current path (typ.)	22 mΩ (750-495/040-000) 5 mΩ (750-495/040-001) 44 kΩ (750-495/040-002)
Resolution	24 bits
Frequency range, power supply frequency	45 Hz ... 65 Hz
Frequency range, harmonics analysis	0 Hz ... 3300 Hz
Max. operating frequency	15.9 kHz
Signal form	any periodic signals (taking the maximum frequency into account)
Measuring error for current and voltage	Max. 0.5 % (of the upper range value)
Measuring procedure	True RMS measurement
Measuring cycle time	Adjustable for arithmetic mean value, Min_Max_Values
Measured values	Line-to-line voltage, power output, energy, power factors, mains frequency, harmonic analysis (up to the 41st harmonic), THD
Power supply	via system voltage internal bus (5 V)
Current consumption (internal)	100 mA
Rated surge voltage	5.0 kV (EN 60870-2-1 / Class VW3); 6.0 kV (UL 508); 6.0 kV (EN 60664-1 / up to 4,000 m above sea level); 4.0 kV (EN 60664-1 / > 4,000 m up to 5,000 m above sea level)
Overvoltage category	Nominal voltage 400 V/690 V in a 3-phase system: III (EN 60664-1 / up to 4,000 m above sea level); II (EN 60664-1 / > 4,000 m up to 5,000 m above sea level)
Degree of pollution	2 (EN 60664-1)
Bit width	2 x 128 bits data; 2 x 64 bits control/status

Separation Module

For eXTReme environmental conditions



The separation module visually divides a fieldbus node into sections.

Separation module 750-616/040-000 has no power jumper contacts.

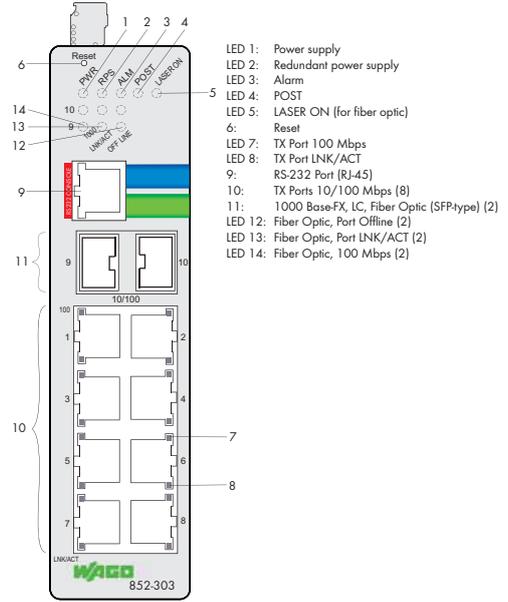
The module is ideal for operation in harsh environments:

- extended temperature range
- higher dielectric strength and EMC resistance
- greater vibration and shock resistance

Description	Item No.	Pack. Unit
Separation Module/XTR	750-616/040-000	1
Accessories		
Miniature WSB Quick marking system		
	plain	248-501 50
	with marking	see Full Line Catalog Automation Technology
Approvals		
Conformity marking	CE	
UL 508	pending	

Technical Data	
Dimensions (mm) W x H x L	12 x 62 x 100
Weight	35 g
Operating temperature	-40 °C ... +70 °C
Storage temperature	-40 °C ... +85 °C
Relative humidity	95 %, short-term condensation acc. to class 3K7 / IEC EN 60721-3-3 (except wind-driven precipitation, water and ice formation)
Operating altitude	without temperature derating: 0 m ... 2000 m; with temperature derating: 2000 m ... 5000 m (0.5 K/100 m); max.: 5000 m
Vibration resistance	acc. to IEC 60068-2-6 (acceleration: 5g), EN 60870-2-2, IEC 60721-3-1, -3, EN 50155, EN 61373
Shock resistance	acc. to IEC 60068-2-27 (15g/11 ms/half-sine/1000 shocks; 25g/6 ms/1000 shocks), EN 50155, EN 61373
EMC immunity of interference	acc. to EN 61000-6-1, -2, EN 61131-2, marine applications, EN 50121-3-2, -4, -5, EN 60255-26, EN 60870-2-1, EN 61850-3, IEC 61000-6-5, IEEE 1613, VDEW: 1994
EMC emission of interference	acc. to EN 61000-6-3, -4, EN 61131-2, EN 60255-26, marine applications, EN 60870-2-1, EN 61850-3, EN 50121-3-2, -4, -5

8-Port 100Base-TX + 2-Slot 1000Base-SX/LX Industrial Managed Switch



The 852-303 Industrial Managed Switch is an 8-port 10/100Base-TX and 2-port SFP 100Base-FX (optional SFP modules) configurable ETHERNET switch. The switch has a rugged housing, redundant power supply and function monitoring with a relay. These functions, along with extensive ETHERNET switch options, make it ideal for a wide range of applications.

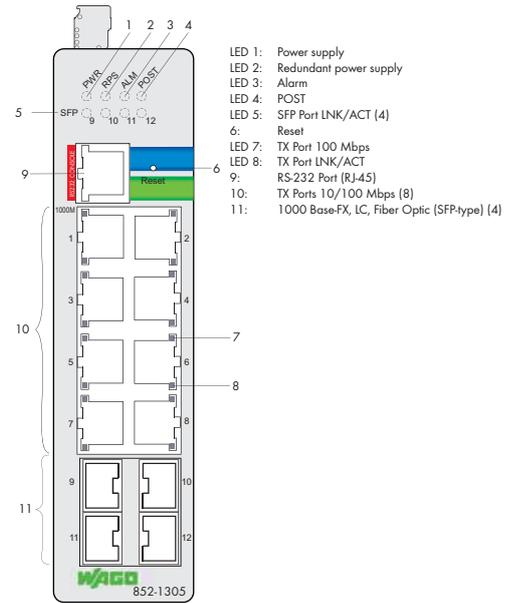
Features:

- Web-based/SNMP management
- Redundant DC power supply
- Wide supply voltage range: 12–60 VDC
- DIP switches to set alarm functions

- Full compliance with IEEE802.3, 802.3u, 802.3z, 802.3x, 802.3ad, 802.3ab, 802.1d, 802.1q, 802.1p, 802.1w, 802.1x standards
- Xpress Ring (redundant ring, recovery < 50 ms)
- Non-blocking, store-and-forward switching, rapid spanning tree protocol (RSTP)
- Autonegotiation at all 10/100Base-TX ports
- Auto-MDI/MDIX (crossover) at all 10/100Base-TX ports
- VLAN (802.1q) VID
- IGMP snooping for multicast filtering
- Port configuration, status, statistics
- Port trunking
- SNMP v1/v2 and RMON

Description	Item No.	Pack. Unit
8/2-Port 100Base-TX/1000Base-SX/LX Industrial Managed Switch	852-303	1
Accessories		
SFP Module 2: 1310nm, 100Base-FX Multi-mode LC, 2 km	852-201/107-002	
SFP Module 30: 1310nm, 100Base-FX Single-mode LC, 30 km	852-201/107-030	
SFP Module 2 T: 1310nm, 100Base-FX, Multi-mode, LC, 2 km, (Operating temperature -40 °C ... +70 °C)	852-201/040-002	
Approvals		
Conformity marking	CE	
Shipbuilding	DNV	
Technical Data		
Operating temperature	-40°C ... +70°C	
	DNV: -25°C ... +70°C	
Storage temperature	-40 °C ... +80 °C	
Relative air humidity (no condensation)	95 %	
Dimensions (mm) W x H x L	50 x 120 x 162	
	Height from upper-edge of DIN 35 rail	
Weight	910 g	
Vibration resistance	acc. to IEC 60068-2-6	
Shock resistance	acc. to IEC 60068-2-27	
Degree of protection	IP30	
EMC immunity of interference	acc. to EN 61000-6-2	
EMC emission of interference	acc. to EN 61000-6-4	

Technical Data	
Ports	8 x 10/100Base-TX (RJ-45); 2 x SFP 1000Base-SX/LX, fiber optic; 1 x RS-232 (RJ-45)
Standards	IEEE 802.3u 100Base-TX/FX; IEEE 802.3ad Link Aggregation; IEEE 802.3 10Base-T; IEEE 802.1d Spanning Tree Protocol; IEEE 802.3x Flow Control; IEEE 802.1p CoS Prioritization; IEEE 802.1q VLAN Tagging; IEEE 802.3ab LLDP; IEEE 802.3w Rapid Spanning Tree Protocol; IEEE 802.3z 1000Base-SX/LX; IEEE 802.1x Port Authentication
MAC table	Up to 16,000 addresses
VLANs	Port- and tag-based (64 VIDs)
Jumbo frame size	10240 bytes
Wavelength (optical fibers)	Depends on SFP module
Maximum length	10/100Base-TX: 100 m; Fiber optic: up to 30 km; RS-232: 15 m
Supply voltage	12 ... 60 VDC (line length < 3 m)
Energy consumption max.	12 W



The 852-1305 Industrial Managed Switch is an 8-port 10/100/1000Base-T and 4-port SFP-1000Base-SX/LX (optional SFP modules) configurable ETHERNET switch. The switch has a rugged housing, redundant power supply and function monitoring with a relay. These functions, along with extensive ETHERNET switch options, make it ideal for a wide range of applications.

Features:

- Web-based/SNMP management
- Redundant DC power supply
- Wide supply voltage range: 12 - 60 VDC
- DIP switches to set alarm functions

- Full compliance with IEEE802.3, 802.3u, 802.3z, 802.3x, 802.3ad, 802.3ab, 802.1d, 802.1q, 802.1p, 802.1w, 802.1x standards
- Xpress Ring (redundant ring, recovery < 50 ms)
- Non-blocking, store-and-forward switching, rapid spanning tree protocol (RSTP)
- Autonegotiation at all 10/100/1000Base-T ports
- Auto-MDI/MDIX (crossover) at all 10/100/1000Base-T ports
- VLAN (802.1q) VID
- IGMP snooping for multicast filtering
- Port configuration, status, statistics
- Port trunking
- SNMP v1/v2 and RMON

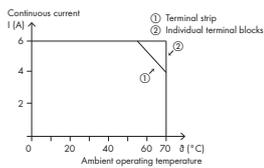
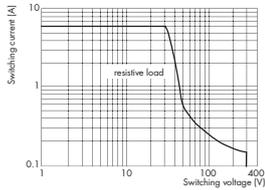
Description	Item No.	Pack. Unit
8/4-Port 1000Base-T/1000Base-SX/LX Industrial Managed Switch	852-1305	1
Accessories		
SFP Module : 850 nm, 1000Base-SX Multi-mode, LC, DDM, -40 ... +85 °C, 0.55 km	852-1200	
SFP Module: 1310 nm, 1000Base-LX, Single-mode, LC, DDM, -40 °C ... +85 °C, 10 km	852-1210	
SFP Module: 1550 nm, 1000Base-ZX, Single-mode, LC, DDM, -40 °C ... +85 °C, 80 km	852-1280	
Approvals		
Conformity marking	CE	
Shipbuilding	DNV	
Technical Data		
Operating temperature	-40°C ... +70°C DNV: -25°C ... +70°C	
Storage temperature	-40 °C ... +80 °C	
Relative air humidity (no condensation)	95 %	
Dimensions (mm) W x H x L	50 x 120 x 162 Height from upper-edge of DIN 35 rail	
Weight	910 g	
Vibration resistance	acc. to IEC 60068-2-6	
Shock resistance	acc. to IEC 60068-2-27	
Degree of protection	IP30	
EMC immunity of interference	acc. to EN 61000-6-2	
EMC emission of interference	acc. to EN 61000-6-4	

Technical Data	
Ports	8 x 10/100/1000Base-T (RJ-45); 4 x SFP 1000Base-SX/LX, fiber optic; 1 x RS-232 (RJ-45)
Standards	IEEE 802.3u 100Base-TX/FX; IEEE 802.3ad Link Aggregation; IEEE 802.3 10Base-T; IEEE 802.1d Spanning Tree Protocol; IEEE 802.3x Flow Control; IEEE 802.1p CoS Prioritization; IEEE 802.1q VLAN Tagging; IEEE 802.3ab LLDP; IEEE 802.3ab 1000Base-T; IEEE 802.3w Rapid Spanning Tree Protocol; IEEE 802.3z 1000Base-SX/LX; IEEE 802.1x Port Authentication
MAC table	Up to 16,000 addresses
VLANs	Port- and tag-based (64 VIDs)
Jumbo frame size	10240 bytes
Wavelength (optical fibers)	Depends on SFP module
Maximum length	10/100/1000Base-T: 100 m; Fiber optic: up to 30 km; RS-232: 15 m
Supply voltage	12 ... 60 VDC (line length < 3 m)
Energy consumption max.	18 W

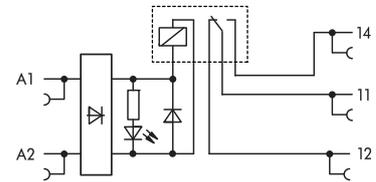
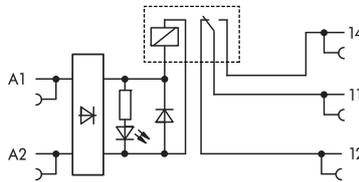
1 Relay Sockets with Miniature Switching Relays

**Relay with 1 changeover contact (1u)
for normal switching power
Nominal input voltage V_N
24 V ... 230 V AC/DC**

**Relay with 1 changeover contact (1u)
(gold contacts)
for normal switching power
Nominal input voltage V_N
24 V ... 230 V AC/DC**

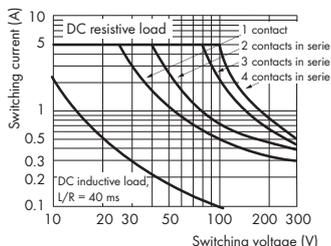


* To prevent the gold layer from being damaged, 30 VDC switching voltages and 50 mA currents shall not be exceeded. Higher switching power eventually evaporates the gold layer. The resulting deposits in the housing may reduce the service life.

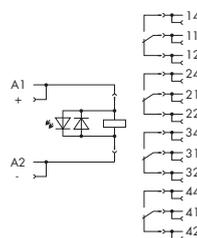


Description	V_N	Item No.	Pack. Unit	V_N	Item No.	Pack. Unit
Relay socket with miniature switching relay, for DIN-rail	24 V ... 230 V AC/	857-359	25 (1)	24 V ... 230 V AC/	857-369	25 (1)
Technical Data						
For accessories, see Full Line Catalog Interface Electronic 2015						
Coil:				For accessories, see Full Line Catalog Interface Electronic 2015		
Input voltage range	V_N -30 % ... +10 %			V_N -30 % ... +10 %		
Nominal input current I_N	3.5 mA at 230 VAC; 20 mA at 24 VDC			3.5 mA at 230 VAC; 20 mA at 24 VDC		
Contacts:						
Contact material	AgNi			AgNi + Au		
Max. continuous current	6 A			6 A*		
Max. switching voltage	250 VAC			250 V AC*		
Max. switching power (resistive)	1500 VA AC; DC see load limit curve			1500 VA AC; DC see load limit curve		
Recommended minimum load	10 VDC / 10 mA, 24 VDC / 1 mA			1 VDC / 1 mA / 1 mW		
Max. switching load with load/without load	6 min ⁻¹ / 60 min ⁻¹			6 min ⁻¹ / 60 min ⁻¹		
Pull-in/drop-out/bounce time typ.	15 ms / 50 ms / 5 ms			15 ms / 50 ms / 5 ms		
Mechanical life	5 x 10 ⁶ switching operations			5 x 10 ⁶ switching operations		
Mechanical life at max. load (resistance)	5 x 10 ⁴ switching operations			5 x 10 ⁴ switching operations		
General specifications:						
Nominal voltage to EN 60664-1	250 V / 4 kV / 2			250 V / 4 kV / 2		
Dielectric strength, contact-coil (AC, 1 min)	4 kV _{rms}			4 kV _{rms}		
Dielectric strength open contact (AC, 1 min)	1 kV _{rms}			1 kV _{rms}		
Ambient operating temperature at V_N	-40 °C ... +70 °C			-40 °C ... +70 °C		
Processing temperature	-25 °C ... +50 °C			-25 °C ... +50 °C		
Storage temperature	-40 °C ... +70 °C			-40 °C ... +70 °C		
Dimensions (mm) W x H x L	6 x 81 x 94			6 x 81 x 94		
Wire connection	Height from upper-edge of DIN-rail Push-in CAGE CLAMP®			Height from upper-edge of DIN-rail Push-in CAGE CLAMP®		
Cross sections	0.34 ... 2.5 mm ² / 22 ... 14 AWG			0.34 ... 2.5 mm ² / 22 ... 14 AWG		
Strip lengths	9 ... 10 mm / 0.35 ... 0.39 in			9 ... 10 mm / 0.35 ... 0.39 in		
Standards/specifications	EN 60664-1; EN 61810-1; UL 508** ** (pending)			EN 60664-1; EN 61810-1; UL 508** ** (pending)		

	Socket with industrial relay Coil voltage: 12 VDC 4 changeover contacts	
--	--	--



DC load limit curve



Description	V _N	I _N	Item No.	Pack. Unit
Socket with industrial relay, for DIN-rail	12 VDC	7.5 mA	858-303	8 (1)

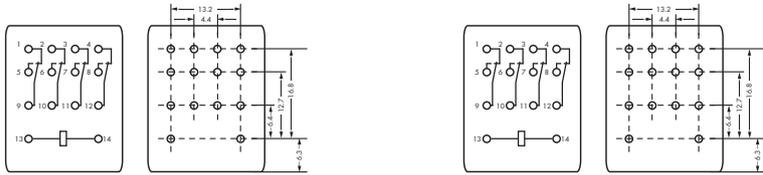
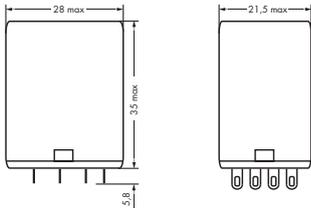
Technical Data

For accessories, see Full Line Catalog Interface Electronic 2015

Coil:				
Input voltage range		V _N -20 % ... +10 %		
Contacts:				
Contact material		AgCe		
Max. continuous current		5 A		
Max. make current		15 A (4 s)		
Max. switching voltage		250 VAC		
Max. switching power (resistive)		1250 VA AC, DC see load limit curve		
Recommended minimum load		12 V AC/DC / 100 mA		
Pull-in/drop-out/bounce time typ.		25 ms / 25 ms / 4 ms		
Mechanical life		20 x 10 ⁶ switching operations		
General specifications:				
Nominal voltage to EN 60664-1		250 V / 2.5 kV / 2		
Dielectric strength, contact-coil (AC, 1 min)		1.5 kV _{rms}		
Dielectric strength open contact (AC, 1 min)		1 kV _{rms}		
Dielectric strength contact-contact (AC, 1 min)		1.5 kV _{rms}		
Ambient operating temperature at V _N		-25 °C ... +70 °C		
Storage temperature		-40 °C ... +80 °C		
Dimensions (mm) W x H x L		31 x 73 x 97		
Wire connection		Height from upper-edge of DIN-rail Push-in CAGE CLAMP®		
Cross sections		2 x 0.34 ... 2 x 1.5 mm ² / 1 x 2.5 mm ² / 2 x 22 ... 2 x 16 AWG		
Strip lengths		9 ... 10 mm / 0.35 ... 0.39 in		
Standards/specifications		EN 60664-1; EN 61810-1		

Pluggable industrial relays, 4 changeover contacts, with integrated LED and recovery diode and manual operation, Nominal input voltage V_N 120 VAC

Pluggable industrial relays, 4 changeover contacts, with integrated LED and recovery diode and manual operation, Nominal input voltage V_N 12 V, 48 V AC



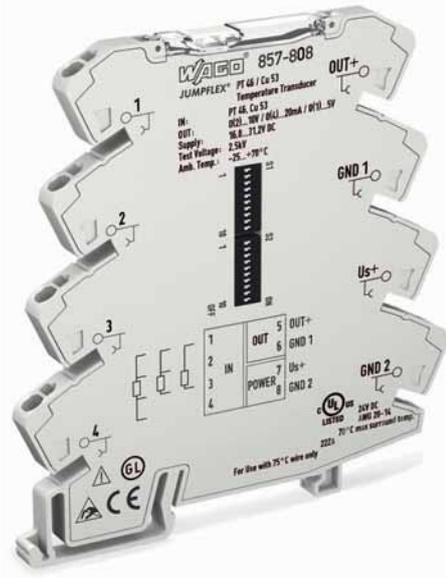
Description	V_N	I_N	Item No.	Pack. Unit	V_N	I_N	Item No.	Pack. Unit
Pluggable industrial relay	120 VAC	10 mA	858-158	40 (1)	12 VDC	7.5 mA	858-164	40 (1)
					48 VDC	18.5 mA	858-161	40 (1)

Technical Data

Coil:	V_N	I_N	Item No.	Pack. Unit	V_N	I_N	Item No.	Pack. Unit
Input voltage range		$V_N -20\% \dots +10\%$				$V_N -20\% \dots +10\%$		
Contacts:								
Contact material		AgCe				AgCe		
Max. continuous current		5 A				5 A		
Max. switching voltage		250 VAC				250 VAC		
Max. switching power (resistive)		1250 VA AC				1250 VA AC		
Recommended minimum load		12 V AC/DC / 100 mA				12 V AC/DC / 100 mA		
Pull-in/drop-out/bounce time typ.		25 ms / 25 ms / 4 ms				25 ms / 25 ms / 4 ms		
Mechanical life		20×10^6 switching operations				20×10^6 switching operations		
General specifications:								
Nominal voltage to EN 60664-1		250 V / 2.5 kV / 2				250 V / 2.5 kV / 2		
Dielectric strength, contact-coil (AC, 1 min)		1.5 kV _{rms}				1.5 kV _{rms}		
Dielectric strength open contact (AC, 1 min)		1 kV _{rms}				1 kV _{rms}		
Dielectric strength contact-contact (AC, 1 min)		1.5 kV _{rms}				1.5 kV _{rms}		
Ambient operating temperature at V_N		-25 °C ... +70 °C				-25 °C ... +70 °C		
Storage temperature		-40 °C ... +70 °C				-40 °C ... +70 °C		
Dimensions (mm) W x H x L		21.5 x 35 x 28				21.5 x 35 x 28		

JUMPFLEX® Signal Conditioner

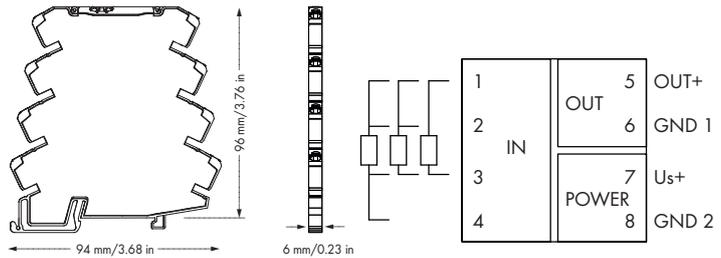
Temperature Signal Conditioner for Pt46 and Cu53



Configuration via:



DIP switch



Short description:

The Temperature Signal Conditioner records Pt46 and Cu53 sensors converting the temperature signal into a standard analog signal on the output side.

Features:

- 2-, 3-, and 4-wire connection technology
- Switching between measuring ranges is calibrated
- Detection: sensor wire break/short circuit
- Detection: measuring range underflow/overflow
- Clipping (analog standard signal limitation to upper range values)
- Safe 3-way isolation with 2.5 kV test voltage acc. to EN 61140

Technical Data	
Configuration:	
Configuration	DIP switch
Input:	
Input signal	Pt46 and Cu53 sensors
Sensor types	Pt46, Cu53
Sensor connection	2-wire, 3-wire, 4-wire (switchable)
Temperature range	Pt46: -200 ... +300 °C
	Cu53: 0 ... +180 °C
Sensor supply current	< 0.5 mA
Output:	
Output signal	0 ... 10 mA, 2 ... 10 mA, 0 ... 20 mA, 4 ... 20 mA, 0 ... 5 V, 1 ... 5 V, 0 ... 10 V, 2 ... 10 V
Load impedance	≤ 600 Ω (Out = mA) ≥ 2 kΩ (Out = V)
Step response	180 ms (360 ms at 3-wire)
General specifications:	
Nominal supply voltage V_S	24 VDC
Supply voltage range	$V_S -30\% \dots +30\%$
Current consumption at 24 VDC	≤ 40 mA
Min. measuring span	50 K
Transmission error	≤ 0.1 % at max. measuring span
Transmission error of set measuring span	((10 K / set measuring span [K]) + 0.1) %
Temperature coefficient	≤ 0.02 % /K

Description	Item No.	Pack. Unit
JUMPFLEX® Signal Conditioner, for DIN-rail	857-808	1
Temperature Signal Conditioner for Pt46 and Cu53		
Technical Data		
Environmental requirements:		
Ambient operating temperature	-25 °C ... +70 °C	
Storage temperature	-40 °C ... +85 °C	
Safety and protection:		
Test voltage (input/output/supply)	2.5 kV AC, 50 Hz, 1 min.	
Connection and mounting type:		
Wire connection	Push-in CAGE CLAMP®	
Cross sections	solid: 0.08 ... 2.5 mm ² / 28 ... 14 AWG fine-stranded: 0.34 ... 2.5 mm ² / 22 ... 14 AWG	
Strip lengths	9 ... 10 mm / 0.35 ... 0.39 in	
Dimensions and weight:		
Dimensions (mm) W x H x L	6 x 96 x 94	
	Height from upper-edge of DIN-rail	
Weight	26.7 g	
Standards and approvals:		
Conformity marking	CE	
UL 508		
ANSI/ISA 12.12.01	Class I, Div. 2, Grp. ABCD, T4	
Shipbuilding	GL, PRS	
EMC immunity of interference	EN 61000-6-2	
EMC emission of interference	EN 61000-6-4	
Accessories:		
	For accessories, see Full Line Catalog	
	Interface Electronic 2015	

DIP Switch Adjustability

● = ON

857-808

DIP Switch S1

Wire connection		Sensor type			Output signal			9	10	Measuring range underflow	Measuring range overflow	Wire break	Short circuit
1	2	3	4	5	6	7	8						
	2-wire			Pt46						Lower limit of output range - 5 % *	Upper limit of output range + 2,5 % *	Upper limit of output range + 5 % *	Lower limit of output range - 12,5 % *
●	3-wire	●		Cu53	●								
	4-wire					●				Lower limit of output range	Upper limit of output range + 2,5 %	Upper limit of output range + 5 %	Lower limit of output range
						●	●						
							●		●	Lower limit of output range	Upper limit of output range	Upper limit of output range + 5 %	Upper limit of output range + 5 %
						●	●		●				
						●	●		●	Lower limit of output range	Upper limit of output range	Lower limit of output range	Lower limit of output range
						●	●		●				

* acc. to NAMUR NE 43

DIP Switch S2

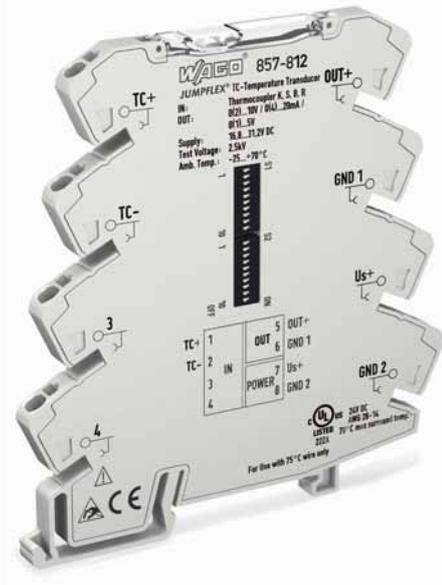
Start temperature						End temperature																								
1	2	3	4	°C	°F	5	6	7	8	9	10	°C	°F	5	6	7	8	9	10	°C	°F	5	6	7	8	9	10	°C	°F	
				0	32							100	212						●		75	167						●	210	410
●				-200	-328	●						0	32	●					●		80	176	●					●	220	428
	●			-175	-283		●					5	41		●				●		85	185		●				●	230	446
●	●			-150	-238	●	●					10	50	●	●				●		90	194	●	●			●	240	464	
		●		-125	-193			●				15	59			●			●		95	203			●		●	250	482	
●	●			-100	-148	●	●					20	68	●	●				●		100	212	●	●			●	260	500	
	●	●		-90	-130		●	●				25	77		●	●			●		110	230		●	●		●	270	518	
●	●	●		-80	-112	●	●	●				30	86	●	●	●			●		120	248	●	●	●		●	280	536	
			●	-70	-94				●			35	95				●	●			130	266				●	●	290	554	
●	●		●	-60	-76	●		●				40	104	●			●	●			140	284	●			●	●	300	572	
	●		●	-50	-58		●	●	●			45	113		●			●	●		150	302								
●	●		●	-40	-40	●	●		●			50	122	●	●			●	●		160	320								
		●	●	-30	-22			●	●			55	131			●	●		●		170	338								
●		●	●	-20	-4	●	●	●				60	140	●		●	●	●			180	356								
	●	●	●	-10	14		●	●	●			65	149		●	●	●	●			190	374								
●	●	●	●	0	32	●	●	●	●			70	158	●	●	●	●	●			200	392								

Default Settings

All DIP switches are in „OFF“ position for delivery.	
Sensor connection	2-wire
Sensor type	Pt46
Start temperature	0 °C
End temperature	100 °C
Output signal	0 ... 20 mA
Measuring range underflow	0 mA
Measuring range overflow	20.5 mA
Wire break	21 mA
Short circuit	0 mA

JUMPFLEX® Signal Conditioner

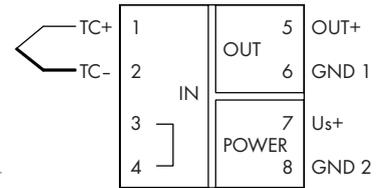
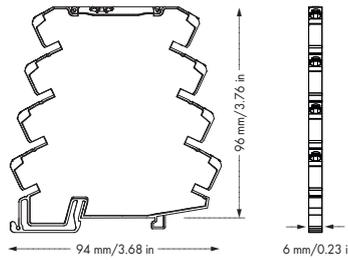
Temperature Signal Conditioner for Thermocouples of Types K, S, B and R



Configuration via:



DIP switch



Short description:

The Thermocouple Temperature Signal Conditioner is suitable for the connection of type K, S, B and R thermocouples. On the output side, the thermocouple temperature signal conditioner converts the temperature signal into an analog standard signal.

Features:

- For thermocouples of type K, S, B and R
- Cold junction compensation (on/off)
- Switching between measuring ranges is calibrated
- Detection: sensor wire break
- Detection: measuring range underflow/overflow
- Clipping (analog standard signal limitation to upper range values)
- Safe 3-way isolation with 2.5 kV test voltage acc. to EN 61140

Technical Data	
Configuration:	
Configuration	DIP switch
Input:	
Input signal	Thermocouples
Sensor types	Thermocouples of types K, S, B, R
Temperature range	Type K: 0 ... +1200 °C Type S: 0 ... +1600 °C Type B: +600 ... +1800 °C Type R: 0 ... +1600 °C
Output:	
Output signal	0 ... 10 mA, 2 ... 10 mA, 0 ... 20 mA, 4 ... 20 mA, 0... 5 V, 1 ... 5 V, 0 ... 10 V, 2 ... 10 V
Load impedance	≤ 600 Ω (Out = mA) ≥ 2 kΩ (Out = V)
Cold junction compensation	on / off (default: on)
Cold junction error	3 K (typ. 2 K)
Step response	60 ms without cold junction compensation/ 120 ms with cold junction compensation
General specifications:	
Nominal supply voltage V_S	24 VDC
Supply voltage range	V_S -30 % ... +30 %
Current consumption at 24 VDC	≤ 40 mA
Transmission error	≤ 0.1 % at max. measuring span
Transmission error of set measuring span	(150 K / set measuring span [K]) %
Temperature coefficient	≤ 0.04 % /K

Description	Item No.	Pack. Unit
JUMPFLEX® Signal Conditioner, for DIN-rail	857-812	1
Temperature Signal Conditioner for Thermocouples of Types K, S, B, R		
Technical Data		
Environmental requirements:		
Ambient operating temperature	-25 °C ... +70 °C	
Storage temperature	-40 °C ... +85 °C	
Safety and protection:		
Test voltage (input/output/supply)	2.5 kV AC, 50 Hz, 1 min.	
Connection and mounting type:		
Wire connection	Push-in CAGE CLAMP®	
Cross sections	solid: 0.08 ... 2.5 mm ² / 28 ... 14 AWG fine-stranded: 0.34 ... 2.5 mm ² / 22 ... 14 AWG	
Strip lengths	9 ... 10 mm / 0.35 ... 0.39 in	
Dimensions and weight:		
Dimensions (mm) W x H x L	6 x 96 x 94	
Weight	Height from upper-edge of DIN-rail 45 g	
Standards and approvals:		
Conformity marking	CE	
UL 508		
EMC immunity of interference	EN 61000-6-2	
EMC emission of interference	EN 61000-6-4	
Accessories:	For accessories, see Full Line Catalog	
	Interface Electronic 2015	

DIP Switch Adjustability

● = ON

857-812

DIP Switch S1

Cold junction compensation		Sensor type		Output signal						Measuring range underflow	Measuring range overflow	Wire break
1		2	3	4	5	6	7	8				
	on			K			0 ... 20 mA			Lower limit of output range - 5 % *	Upper limit of output range + 2,5 % *	Upper limit of output range + 5 % *
●	off	●		S	●		4 ... 20 mA					
			●	B		●	0 ... 10 mA	●	Lower limit of output range	Upper limit of output range + 2,5 %	Upper limit of output range + 5 %	
		●	●	R	●	●	2 ... 10 mA					
						●	0 ... 10 V	●	Lower limit of output range	Upper limit of output range	Upper limit of output range + 5 %	
					●	●	2 ... 10 V					
						●	0 ... 5 V	● ●	Lower limit of output range	Upper limit of output range	Lower limit of output range	
					●	●	1 ... 5 V					

DIP Switch S1 (9) n.c.

* acc. to NAMUR NE 43

DIP Switch S1+S2

Start temperature					End temperature														
S1	S2				°C	S2					°C	S2					°C		
	1	2	3	4		5	6	7	8	9		10	5	6	7	8		9	10
					0						1000	●		●		●			1000
●					50	●					0		●	●		●			1050
	●				100		●				50	●	●	●		●			1100
●	●				150	●	●				100				●	●			1150
		●			200			●			150	●			●	●			1200
●		●			250	●		●			200		●		●	●			1250
	●	●			300		●	●			250	●	●		●	●			1300
●	●	●			350	●	●	●			300			●	●	●			1350
			●		400				●		350	●		●	●	●			1400
●			●		450	●			●		400		●	●	●	●			1450
	●		●		500		●		●		450	●	●	●	●	●			1500
●	●		●		550	●	●		●		500							●	1550
		●	●		600			●	●		550	●						●	1600
●		●	●		650	●		●	●		600		●					●	1650
	●	●	●		700		●	●	●		650	●	●					●	1700
●	●	●	●		750	●	●	●	●		700			●				●	1750
			●		800					●	750	●		●				●	1800
●			●		850	●				●	800								
	●		●		900		●			●	850								
●	●		●		950	●	●			●	900								
		●	●		1000			●		●	950								

Default Settings

All DIP switches are in „OFF“ position for delivery.	
Cold junction compensation	on
Thermocouple	Type K
Start temperature	0 °C
End temperature	1000 °C
Output signal	0 ... 20 mA
Measuring range underflow	0 mA
Measuring range overflow	20.5 mA
Wire break	21 mA

Plug-In Current Transformers

with CAGE CLAMP® connector

Plug-In Current Transformers
Secondary rated current: 1 A

Plug-In Current Transformers
Secondary rated current: 5 A

Short description:

The 855 Series Plug-In Current Transformers are inductive, single-conductor current transformers. Based on the principle of measurement, current transformers of this type are for use in AC networks exclusively.

Features:

- Screwless CAGE CLAMP® connection technology
- Several mounting options available
- Vibration- and shock-resistant
- High mechanical retention forces
- High current-carrying capacity
- Continuous overload of 120 % the nominal primary current
- Low-voltage current transformer for max. operating voltages up to 1.2 kV
- Can be used in 690 V power networks
- UL (Recognized Components)



Description	I_{pr}	I_{sr}	S_r	G	Item No.	Pack. Unit	I_{pr}	I_{sr}	S_r	G	Item No.	Pack. Unit
Plug-in current transformer	600 A	1 A	5 VA	1	855-401/600-501	1	250 A	5 A	5 VA	1	855-405/250-501	1
	1500 A	1 A	5 VA	1	855-601/1500-501	1	1500 A	5 A	5 VA	1	855-605/1500-501	1
	2000 A	1 A	10 VA	1	855-801/2000-1001	1	2000 A	5 A	10 VA	1	855-805/2000-1001	1
	2500 A	1 A	10 VA	1	855-1001/2500-1001	1	2500 A	5 A	10 VA	1	855-1005/2500-1001	1
I_{pr} = Primary rated current I_{sr} = Secondary rated current S_r = Rated power G = Accuracy class												

Technical Data

Input:		
Rated continuous thermal current I_{cth}	$1.2 \times I_N$	$1.2 \times I_N$
Rated short-time thermal current I_{th}	$60 \times I_N$ (max. 100 kA), 1 s	$60 \times I_N$ (max. 100 kA), 1 s
Max. operating voltage V_m	1.2 kV	1.2 kV
Rated frequency	50 Hz ... 60 Hz	50 Hz ... 60 Hz
Overcurrent limiting factor	FS5 or FS10 (type-dependent, see type plate inscription)	FS5 or FS10 (type-dependent, see type plate inscription)
Environmental requirements:		
Ambient operating temperature	-5 °C ... +50 °C	-5 °C ... +50 °C
Storage temperature	-25 °C ... +70 °C	-25 °C ... +70 °C
Max. operating altitude	1000 m	1000 m
Safety and protection:		
Test voltage	6 kV _{rms} AC / 50 Hz / 1 min	6 kV _{rms} AC / 50 Hz / 1 min
Insulation class	E	E
Connection:		
Connection technology	CAGE CLAMP®	CAGE CLAMP®
Cross sections	0.08 mm ² ... 4 mm ² / 28 ... 12 AWG	0.08 mm ² ... 4 mm ² / 28 ... 12 AWG
Strip lengths	9 ... 10 mm / 0.35 ... 0.39 in	9 ... 10 mm / 0.35 ... 0.39 in
Standards and approvals:		
Conformity marking	CE	CE
Standards/specifications	EN 61869-1; EN 61869-2	EN 61869-1; EN 61869-2
UL (Recognized Components)	E356480	E356480

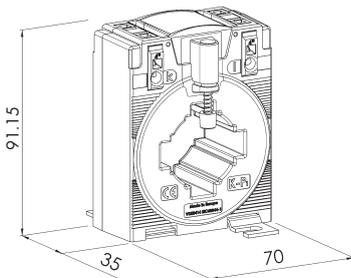
Accessories

	Item No.	Pack. Unit
Carrier rail adapter for plug-in current transformers (for 855-3xx/xxx-xxxx and 855-4xx/xxx-xxxx)	855-9900	1
Quick-mount kit	855-9910	1
Operating tool, with partially insulated shaft, type 2, blade (3.5 x 0.5) mm	210-720	1
Connector assembly for current transformer	2007-8873	1

855 Series

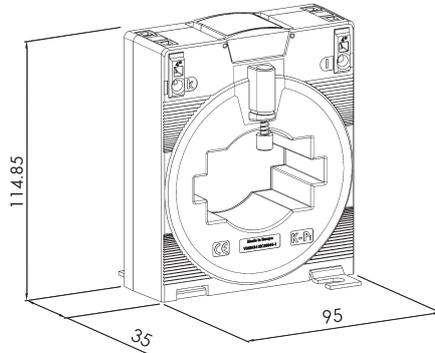
Dimensions:

Item No.
855-4xx/xxxx-xxxx



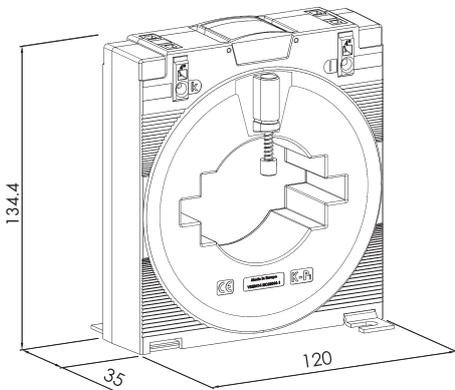
Carrier rail 1: 40 x 10 mm
Carrier rail 2: 30 x 15 mm
Round cable: 32 mm

Item No.
855-6xx/xxxx-xxxx



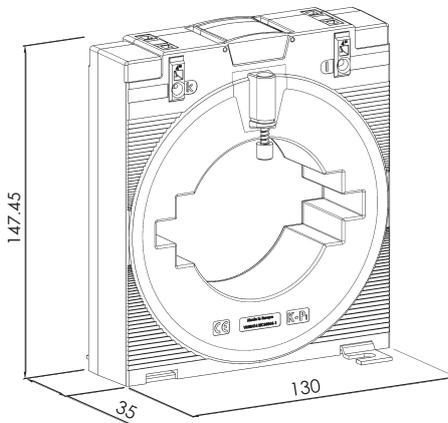
Rail 1: 63 x 10 mm
Rail 2: 50 x 30 mm
Round cable: 44 mm

Item No.
855-8xx/xxxx-xxxx



Rail 1: 80 x 10 mm
Rail 2: 60 x 30 mm
Round cable: 55 mm

Item No.
855-10xx/xxxx-xxxx



Rail 1: 100 x 10 mm
Rail 2: 80 x 30 mm
Round cable: 70 mm

Simple termination! Quick and easy mounting!



Note:

* The carrier rail adapter is only suitable for 855-3xx/xxxx-xxxx and 855-4xx/xxxx-xxxx transformers.

4 Plug-In Current Transformer, 855 Series

with the **picoMAX[®]** pluggable connector

Primary rated current: 32 A
Secondary rated current: 320 mA

Short description:

The **picoMAX[®]** Plug-In Current Transformer with a low-power output is specifically tailored to WAGO's 750 Series 3-Phase Power Measurement Modules.

Features:

- All-new, low-power output design with **picoMAX[®]**
- Assembly via side latches
- Can be mounted directly on an ECB

Notes:

- The 855-1700/032-000 Plug-In Current Transformer is exclusive to the WAGO-I/O-SYSTEM and shall only be used with WAGO's 750 Series 3-Phase Power Measurement Modules.
- WAGO recommends the following conductor cross section and length: 1.5 mm² (14 AWG) and maximum 3.0 m at the output

* Measurement range: 0.8–32 A in combination with

750-493/-494/-495 3-Phase Power Measurement Modules.

** Testing adheres to EN 61869-2 with a conversion ratio of 16 A/0.16 A (accuracy class: 0.5) and an extended primary current of 200 %.



Description	I _{pr}	I _{sr}	S _r	G	Item No.	Pack. Unit
Plug-in current transformer	32 A	0.32 A	0.01 VA	0.5	855-1700/032-000	15 (1)
I _{pr} = Primary rated current *						
I _{sr} = Secondary rated current						
S _r = Rated power						
G = Accuracy class **						
Technical Data						
Input:						
Rated short-time thermal current I _{th}	2 kA / 0.1 s					
Rated surge current I _{dyn}	2.5 x I _{th}					
Rated insulation level U _m	0.72/3/- kV					
Rated frequency f _R	50 Hz ... 60 Hz					
Output:						
Load impedance	0.1 Ω					
Environmental requirements:						
Ambient operating temperature	-10 °C ... +55 °C					
Storage temperature	-20 °C ... +70 °C					
Relative humidity	5 % ... 85 % (non-condensing)					
Max. operating altitude	2000 m					
Dimensions and weight:						
Dimensions (mm) W x H x L	19.1 x 34 x 23					
Weight	11 g					
Safety and protection:						
Degree of protection	IP20					
Insulation class	E (120 °C)					
Housing material	PA 6.6					
Connection:						
Feedthrough for measurement conductor	Ø 5.0 mm					
Wire connection	Push-in CAGE CLAMP [®] (picoMAX[®] 3.5, 2091-1122)					
Cross sections	0.2 ... 1.5 mm ² / 24 ... 14 AWG					
Strip lengths	8 ... 9 mm / 0.31 ... 0.35 in					
Standards and approvals:						
Standards/specifications	EN 61869-2; EN 61010-1					
Accessories	Item No.					Pack. Unit
Operating tool, with partially insulated shaft, type 1, blade (2.5 x 0.4) mm	210-719					50 (1)
3-Phase Power Measurement Module (1 A)	750-493					1
3-Phase Power Measurement Module (480V/1A)	750-494					1
3-Phase Power Measurement Module (690V/1A)	750-495					1
Compact terminal blocks for current transformers at www.wago.com						

855 Series

Installation



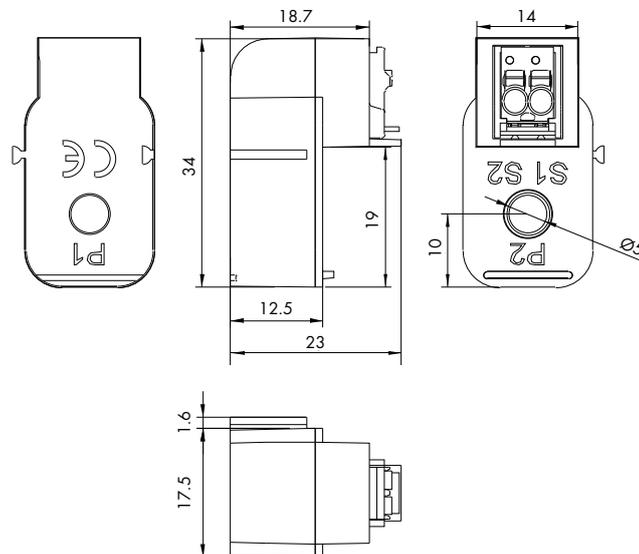
Mounting



Application



Dimensions



**Short description:**

The 855 Series Voltage Taps easily and safely tap the measurement voltage. This allows a fuse-protected measurement voltage to be tapped from an insulated conductor with just one turn – no tools required.

Features:

- Safely tap the measurement voltage with just one turn
- Tool-free assembly
- Safe mounting
- 855-8001 and 855-8003 Voltage Taps, including 5 x 25 mm 2 A fuse
- For insulated conductors up to 16 mm² (6 AWG)

Technical Data**General specifications:**

Nominal voltage	400 V
Max. permissible continuous current	2 A
Max. voltage drop at output	< 500 mV AC
Test voltage	3 kV, 50 Hz, 1 min
Degree of pollution	2
Rated surge voltage	6 kV
Overvoltage category	III
Output short circuit protection	6 kA at 400 V/50 Hz

Environmental requirements:

Ambient operating temperature	-5 °C ... +55 °C
Storage temperature	-20 °C ... +70 °C
Relative humidity	5 % ... 85 % (non-condensing)
Max. operating altitude	2000 m

Technical Data**Safety and protection:**

Degree of protection	IP20
----------------------	------

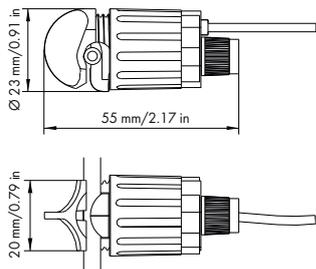
Connection and mounting type:

Assembly	on insulated round conductor, IDC connection
Type of cable, cable length	Secondary side: flexible, 0.5 m long, 1.0 mm ² (17 AWG) cross section, with ferrule

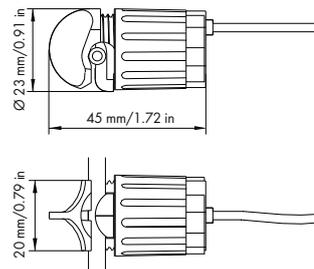
Standards and approvals:

Conformity marking	CE
Standards/specifications	EN 60998-1:2004; EN 60998-2-3:2004; EN 60947-7-3:2009; EN 60721-3-3:1996; EN 50581:2012

855-8001

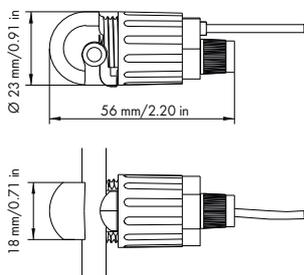


855-8002

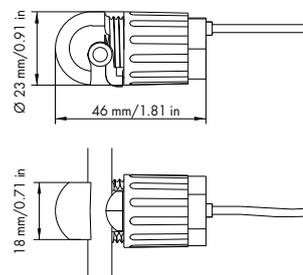


Conductor Sizes	Feedthrough for Measurement	Fuse	Color	Dimensions (W x H x D)	Weight	Item No.	Pack. Unit
solid/fine-stranded:							
2.5 ... 6 mm ² (14 ... 10 AWG)	Ø 3 mm ... 5 mm	2 A, 450 V, F, 70 kA, 5 x 25	black	23 x 59 x 23 mm	28 g	855-8001	1
		-	blue	23 x 50 x 23 mm	20 g	855-8002	1

855-8003



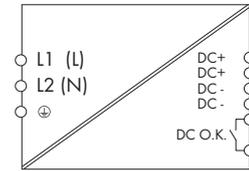
855-8004



Conductor Sizes	Feedthrough for Measurement	Fuse	Color	Dimensions (W x H x D)	Weight	Item No.	Pack. Unit
solid/fine-stranded:							
10 ... 16 mm ² (8 ... 6 AWG)	Ø 5 mm ... 7 mm	2 A, 450 V, F, 70 kA, 5 x 25	black	23 x 59 x 23 mm	29 g	855-8003	1
		-	blue	23 x 50 x 23 mm	21 g	855-8004	1

5 Switched-Mode Power Supply, 1-/2-Phase

EPSON® CLASSIC Power



- Primary switch mode power supply unit with TopBoost, enabling secondary-side protection via electronic circuit breakers
- Suitable for protection class I equipment
- Natural convection cooling when horizontally mounted
- Enclosed for use in switchgear cabinets
- DC OK contact
- Suitable for both parallel and series operation
- Electrically isolated output voltage (SELV) acc. to EN 60950-1/UL 60950-1

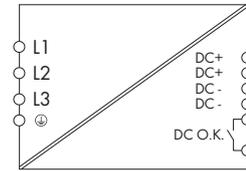
Description	Item No.	Pack. Unit
Switched-mode power supply, 24 VDC/ 5 A	787-1628	1

Technical Data	
Input:	
Nominal input voltage $V_{i, nom}$	1 x (2 x) AC 200 ... 500 VAC
Input voltage range	180 ... 550 VAC; 254 ... 780 VDC
Input voltage derating	-0.5 % (< 200 VAC)
Frequency	44 Hz ... 66 Hz; 0 Hz
Input current I_i	1.25 A (200 VAC); 0.67 A (500 VAC)
Power factor	≥ 0.52
Inrush current	< 30 A, NTC
Mains failure hold-up time	126 ms (500 VAC); 15 ms (200 VAC)
Output:	
Nominal output voltage $V_{o, nom}$	24 VDC (SELV)
Output voltage range	23 V ... 28.5 VDC adjustable
Factory preset	24 VDC
Output current I_o	5 A at 24 VDC
Adjustment accuracy	< 1 %
Residual ripple	30 mV (peak-to-peak) typ.
Current limitation	1.1 x I_o typ.
Overload behavior	Constant current
Operational indication	Green LED (V_o)
Signaling	DC OK contact; Make contact (max. 30 V / 1 A)
Efficiency/Power losses:	
Efficiency	89 % typ.
Power loss P_V	0.94 W (no load); 16.36 W (230 VAC, nominal load) 14.55 W (400 VAC, nominal load) 18.2 W (200 VAC / 24 VDC, 5 A)
Max. power loss P_V	18.2 W (200 VAC / 24 VDC, 5 A)
Fuse protection:	
Internal fuse	T 3.15 A / 250 V
External fuse	Circuit breakers 6 A, 10 A, 16 A, characteristic: B or C An external DC fuse is required for the DC input voltage

Technical Data	
Environmental requirements:	
Ambient operating temperature	-25 °C ... +70 °C; Device start at -40 °C type-tested
Storage temperature	-25 °C ... +85 °C
Relative humidity	5 % ... 96 % (no condensation permissible)
Derating	-2.5 %/K (> 55 °C)
Safety and protection:	
Test voltage PRI-SEC	4.2 kV DC
Protection class	Prepared for class I equipment
Degree of protection	IP20 (acc. to EN 60529)
Overvoltage protection	Varistor (input side); internal protective circuit, < 40 VDC (output side in case of an error)
Short circuit protection	Yes
No-load proof	Yes
Feedback voltage	Max. 35 VDC
Parallel operation	Yes
Series connection	Yes
Connection and mounting type:	
Wire connection	Input/Output/Signaling: WAGO 721 Series
Cross sections	Input/Output/Signaling: 0.08 ... 2.5 mm ² / 28 ... 12 AWG
Strip lengths	Input/Output/Signaling: 8 ... 9 mm / 0.31 ... 0.35 in
Mounting type	DIN-rail-mount (EN 60715)
Dimensions and weight:	
Dimensions (mm) W x H x L	42 x 127 x 137 Length from upper-edge of DIN-rail
Weight	600 g
Standards and specifications:	
Standards/specifications	EN 60950-1, EN 61204-3, UL 60950-1, UL 508, GL* (*pending)

Switched-Mode Power Supply, 3-Phase

EPSITRON® CLASSIC Power



- Primary switch mode power supply unit with TopBoost, enabling secondary-side protection via electronic circuit breakers
- Suitable for protection class I equipment
- Natural convection cooling when horizontally mounted
- Enclosed for use in switchgear cabinets
- DC OK contact
- Suitable for both parallel and series operation
- Electrically isolated output voltage (SELV) acc. to EN 60950-1/UL 60950-1

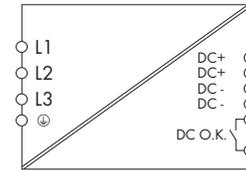
Technical Data	
Input:	
Nominal input voltage $V_{i, \text{nom}}$	3 x (2 x) AC 400 ... 500 VAC
Input voltage range	320 V ... 575 VAC; 450 V ... 800 VDC
Frequency	47 Hz ... 63 Hz; 0 Hz
Input current I_i	3 x 0.73 A (400 VAC); 3 x 0.66 A (500 VAC)
Inrush current	< 30 A, NTC
Mains failure hold-up time	50 ms (500 VAC); 21 ms (400 VAC)
Output:	
Nominal output voltage $V_{o, \text{nom}}$	24 VDC (SELV)
Output voltage range	23 V ... 28.5 VDC adjustable
Factory preset	24 VDC
Output current I_o	10 A at 24 VDC
Adjustment accuracy	< 1 %
Residual ripple	50 mV (peak-to-peak) typ.
Current limitation	1.1 x I_o typ.
Overload behavior	Constant current
Operational indication	Green LED (V_o)
Signaling	DC OK contact; Make contact (max. 30 V / 1 A)
Efficiency/Power losses:	
Efficiency	90 % typ.
Power loss P_V	2.1 W (no load); 27.9 W (400 VAC, nominal load)
Max. power loss P_V	28.3 W (500 VAC / 24 VDC, 10 A)
Fuse protection:	
Internal fuse	No fuse
External fuse	3 x circuit breakers 10 A, 16 A, B or C characteristic; or motor circuit breakers An external DC fuse required for DC input voltage

Description	Item No.	Pack. Unit
Switched-mode power supply, 24 VDC/ 10 A	787-1640	1

Technical Data	
Environmental requirements:	
Ambient operating temperature	-25 °C ... +70 °C; Device start at -40 °C type-tested
Storage temperature	-25 °C ... +85 °C
Relative humidity	5 % ... 96 % (no condensation permissible)
Derating	-2.5 %/K (> 55 °C)
Safety and protection:	
Test voltage PRI-SEC	4.2 kV DC
Protection class	Prepared for class I equipment
Degree of protection	IP20 (acc. to EN 60529)
Overvoltage protection	Varistor (input side); internal protective circuit, < 41 VDC (output side in case of an error)
Short circuit protection	Yes
No-load proof	Yes
Feedback voltage	Max. 35 VDC
Parallel operation	Yes
Series connection	Yes
Connection and mounting type:	
Wire connection	Input/Output/Signaling: WAGO 721 Series
Cross sections	Input/Output/Signaling: 0.08 ... 2.5 mm ² / 28 ... 12 AWG
Strip lengths	Input/Output/Signaling: 8 ... 9 mm / 0.31 ... 0.35 in
Mounting type	DIN-rail-mount (EN 60715)
Dimensions and weight:	
Dimensions (mm) W x H x L	55 x 127 x 171
Weight	Length from upper-edge of DIN-rail 1000 g
Standards and specifications:	
Standards/specifications	EN 60950-1, EN 61204-3, UL 60950-1, UL 508, GL* (* pending)

Switched-Mode Power Supply, 3-Phase

EPSITRON® CLASSIC Power



- Primary switch mode power supply unit with TopBoost, enabling secondary-side protection via electronic circuit breakers
- Suitable for protection class I equipment
- Natural convection cooling when horizontally mounted
- Enclosed for use in switchgear cabinets
- DC OK contact
- Suitable for both parallel and series operation
- Electrically isolated output voltage (SELV) acc. to EN 60950-1/UL 60950-1

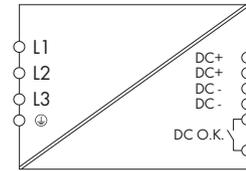
Description	Item No.	Pack. Unit
Switched-mode power supply, 24 VDC/ 20 A	787-1642	1

Technical Data	
Input:	
Nominal input voltage $V_{i,nom}$	3 x (2 x) AC 400 ... 500 VAC
Input voltage range	320 V ... 575 VAC; 450 V ... 800 VDC
Frequency	47 Hz ... 63 Hz; 0 Hz
Input current I_i	3 x 1.21 A (400 VAC); 3 x 1.03 A (500 VAC)
Inrush current	< 30 A, NTC
Mains failure hold-up time	25 ms (500 VAC); 15 ms (400 VAC)
Output:	
Nominal output voltage $V_{o,nom}$	24 VDC (SELV)
Output voltage range	23 V ... 28.5 VDC adjustable
Factory preset	24 VDC
Output current I_o	< 20 A at 24 VDC
Adjustment accuracy	< 1 %
Residual ripple	15 mV (peak-to-peak) typ.
Current limitation	1.1 x I_o typ.
Overload behavior	Constant current
Operational indication	Green LED (V_o)
Signaling	DC OK contact; Make contact (max. 30 V / 1 A)
Efficiency/Power losses:	
Efficiency	92 % typ.
Power loss P_V	5.8 W (no load); 42.8 W (400 VAC, nominal load)
Max. power loss P_V	47.6 W (500 VAC / 24 VDC, 20 A)
Fuse protection:	
Internal fuse	No fuse
External fuse	3 x circuit breakers 10 A, 16 A, B or C characteristic; or motor circuit breakers An external DC fuse required for DC input voltage

Technical Data	
Environmental requirements:	
Ambient operating temperature	-25 °C ... +70 °C; Device start at -40 °C type-tested
Storage temperature	-25 °C ... +85 °C
Relative humidity	5 % ... 96 % (no condensation permissible)
Derating	-2.5 %/K (> 55 °C)
Safety and protection:	
Test voltage PRI-SEC	4.2 kV DC
Protection class	Prepared for class I equipment
Degree of protection	IP20 (acc. to EN 60529)
Overvoltage protection	Varistor (input side); internal protective circuit, < 40 VDC (output side in case of an error)
Short circuit protection	Yes
No-load proof	Yes
Feedback voltage	Max. 35 VDC
Parallel operation	Yes
Series connection	Yes
Connection and mounting type:	
Wire connection	Input/Signaling: WAGO 721 Series Output: WAGO 831 Series
Cross sections	Input/Signaling: 0.08 ... 2.5 mm ² / 28 ... 12 AWG Output: 0.5 ... 10 mm ² / 20 ... 8 AWG
Strip lengths	Input/Signaling: 8 ... 9 mm / 0.31 ... 0.35 in Output: 13 ... 15 mm / 0.51 ... 0.59 in
Mounting type	DIN-rail-mount (EN 60715)
Dimensions and weight:	
Dimensions (mm) W x H x L	80 x 127 x 180 Length from upper-edge of DIN-rail
Weight	1500 g
Standards and specifications:	
Standards/specifications	EN 60950-1, EN 61204-3, UL 60950-1, UL 508, GL* (*pending)

Switched-Mode Power Supply, 3-Phase

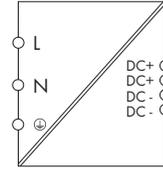
EPSITRON® CLASSIC Power



- Primary switch mode power supply unit with TopBoost, enabling secondary-side protection via electronic circuit breakers
- Suitable for protection class I equipment
- Natural convection cooling when horizontally mounted
- Enclosed for use in switchgear cabinets
- DC OK contact
- Suitable for both parallel and series operation
- Electrically isolated output voltage (SELV) acc. to EN 60950-1/UL 60950-1

Technical Data	
Input:	
Nominal input voltage $V_{i, \text{nom}}$	3 x (2 x) AC 400 ... 500 VAC
Input voltage range	320 V ... 575 VAC; 450 V ... 800 VDC
Frequency	47 Hz ... 63 Hz; 0 Hz
Input current I_i	3 x 2.15 A (400 VAC); 3 x 1.82 A (500 VAC)
Inrush current	< 30 A, NTC
Mains failure hold-up time	25 ms (500 VAC); 15 ms (400 VAC)
Output:	
Nominal output voltage $V_{o, \text{nom}}$	24 VDC (SELV)
Output voltage range	23 V ... 28.5 VDC adjustable
Factory preset	24 VDC
Output current I_o	40 A at 24 VDC
Adjustment accuracy	< 1 %
Residual ripple	30 mV (peak-to-peak) typ.
Current limitation	1.1 x I_o typ.
Overload behavior	Constant current
Operational indication	Green LED (V_o)
Signaling	DC OK contact; Make contact (max. 30 V / 1 A)
Efficiency/Power losses:	
Efficiency	92 % typ.
Power loss P_V	4.2 W (no load); 83.9 W (400 VAC, nominal load)
Max. power loss P_V	83.9 W (500 VAC / 24 VDC, 40 A)
Fuse protection:	
Internal fuse	No fuse
External fuse	3 x circuit breakers 10 A, 16 A, B or C characteristic; or motor circuit breakers An external DC fuse required for DC input voltage

Description	Item No.	Pack. Unit
Switched-mode power supply, 24 VDC/ 40 A	787-1644	1
Technical Data		
Environmental requirements:		
Ambient operating temperature	-25 °C ... +70 °C;	
	Device start at -40 °C type-tested	
Storage temperature	-25 °C ... +85 °C	
Relative humidity	5 % ... 96 % (no condensation permissible)	
Derating	-2.5 %/K (> 55 °C)	
Safety and protection:		
Test voltage PRI-SEC	4.2 kV DC	
Protection class	Prepared for class I equipment	
Degree of protection	IP20 (acc. to EN 60529)	
Overvoltage protection	Varistor (input side); internal protective circuit, < 40 VDC (output side in case of an error)	
Short circuit protection	Yes	
No-load proof	Yes	
Feedback voltage	Max. 35 VDC	
Parallel operation	Yes	
Series connection	Yes	
Connection and mounting type:		
Wire connection	Input/Signaling: WAGO 721 Series Output: WAGO 831 Series	
Cross sections	Input/Signaling: 0.08 ... 2.5 mm ² / 28 ... 12 AWG Output: 0.5 ... 10 mm ² / 20 ... 8 AWG	
Strip lengths	Input/Signaling: 8 ... 9 mm / 0.31 ... 0.35 in Output: 13 ... 15 mm / 0.51 ... 0.59 in	
Mounting type	DIN-rail-mount (EN 60715)	
Dimensions and weight:		
Dimensions (mm) W x H x L	126 x 127 x 198	
	Length from upper-edge of DIN-rail	
Weight	2800 g	
Standards and specifications:		
Standards/specifications	EN 60950-1, EN 61204-3, UL 60950-1, UL 508, GL* (* pending)	



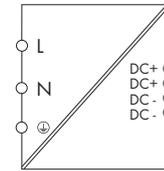
- Primary switch mode power supply unit
- Protection class I
- Natural convection cooling when horizontally mounted
- Enclosed for use in switchgear cabinets
- Parallel operation, series connection possible
- Electrically isolated output voltage (SELV) acc. to EN 60950-1/UL 60950-1
- DIN-35 rail mountable in different positions
- Installation width (as delivered): 30 mm
- Direct installation on mounting plate via cable grip

Technical Data	
Input:	
Nominal input voltage $V_{i\text{nom}}$	(100) 110 V ... 240 V AC
Input voltage range	85 V ... 264 V AC; 130 V ... 373 V DC
Frequency	47 Hz ... 63 Hz
Input current I_i	0.3 A typ. at 230 VAC; 0.6 A typ. at 115 VAC
Discharge current	< 3.5 mA
Inrush current	< 18 A
Mains failure hold-up time	> 10 ms at 230 VAC
Output:	
Nominal output voltage $V_{o\text{nom}}$	24 VDC (SELV)
Output voltage range	22 ... 26 VDC adjustable
Factory preset	24 VDC
Output current I_o	1.25 A at 24 VDC and 110 ... 240 VAC 1 A at 24 VDC and 100 ... 240 VAC
Adjustment accuracy	< 1 %
Residual ripple	< 200 mV (peak-to-peak) up to 20 MHz
Overload behavior	Constant power (in overload range: $1.05 \cdot 1.4 \times I_o$); shutdown and automatic restart in the event of a short circuit
Operational indication	Green LED (24 V DC OK)
Efficiency/Power losses:	
Efficiency	> 80 % (at 230 VAC and 1.25 ADC)
Fuse protection:	
Internal fuse	F 1 A / 250 V
External fuse	Circuit breakers B6, B10; An external DC fuse is required for the DC input voltage

Description	Item No.	Pack. Unit
Switched-mode power supply, 24 VDC / 1.25 A	787-1702	1
Technical Data		
Environmental requirements:		
Ambient operating temperature	-20 °C ... +60 °C	
Storage temperature	-25 °C ... +75 °C	
Relative humidity	10 % ... 95 % (no condensation)	
Derating	-3 % / K (> 45 °C)	
Oversvoltage category	II	
Degree of pollution	2 (acc. to EN 50178)	
Climatic category	3K3 (acc. to EN 60721)	
Safety and protection:		
Test voltage	PRI-SEC/PRI-GND/SEC-GND 3 kV AC kV / 1.5 kV AC kV / 0.5 kV AC	
Protection class	I	
Degree of protection	IP20 (acc. to EN 60529)	
Oversvoltage protection	Via varistor at primary circuit	
Short circuit protection	Yes	
No-load proof	Yes	
Feedback voltage	28 VDC	
Parallel operation	Yes	
Series connection	Yes	
MTBF	> 100000 h (acc. to MIL-HDBK-217)	
Connection and mounting type:		
Wire connection	CAGE CLAMP® (WAGO 231 Series)	
Cross sections	0.08 ... 2.5 mm ² / 28 ... 12 AWG (12 AWG: THHN, THWN)	
Strip lengths	6 ... 7 mm / 0.24 ... 0.28 in	
Mounting type	DIN-rail-mount (EN 60715)	
Dimensions and weight:		
Dimensions (mm) W x H x L	99 x 90 x 30	
Weight	Length from upper-edge of DIN-rail ca. 250 g	
Standards and specifications:		
Standards/specifications	EN 60950, EN 61204-3, EN 60335, UL 60950*, UL 508*, (*pending)	

Switched-Mode Power Supply, 1-Phase

EPSITRON® ECO Power



- Primary switch mode power supply unit
- Protection class I
- Natural convection cooling when horizontally mounted
- Enclosed for use in switchgear cabinets
- Parallel operation, series connection possible
- Electrically isolated output voltage (SELV) acc. to EN 60950-1/UL 60950-1
- DIN-35 rail mountable in different positions
- Installation width (as delivered): 40 mm
- Direct installation on mounting plate via cable grip

Technical Data

Input:

Nominal input voltage $V_{i,nom}$	(100) 110 V ... 240 V AC
Input voltage range	85 V ... 264 V AC; 130 V ... 373 V DC
Frequency	47 Hz ... 63 Hz
Input current I_i	0.6 A typ. at 230 VAC; 1.2 A typ. at 115 VAC
Discharge current	< 3.5 mA
Inrush current	< 18 A
Mains failure hold-up time	> 10 ms at 230 VAC

Output:

Nominal output voltage $V_{o,nom}$	24 VDC (SELV)
Output voltage range	22 ... 26 VDC adjustable
Factory preset	24 VDC
Output current I_o	2.5 A at 24 VDC and 110 ... 240 VAC 2 A at 24 VDC and 100 ... 240 VAC
Adjustment accuracy	< 1 %
Residual ripple	< 200 mV (peak-to-peak) up to 20 MHz
Overload behavior	Constant power (in overload range: $1.05 \cdot 1.4 \times I_o$); shutdown and automatic restart in the event of a short circuit

Operational indication Green LED (24 V DC OK)

Efficiency/Power losses:

Efficiency > 81 % (at 230 VAC and 2.5 ADC)

Fuse protection:

Internal fuse	F 2 A / 250 V
External fuse	Circuit breakers B6, B10; An external DC fuse is required for the DC input voltage

Description	Item No.	Pack. Unit
Switched-mode power supply, 24 VDC / 2.5 A	787-1712	1

Technical Data

Environmental requirements:

Ambient operating temperature	-20 °C ... +60 °C
Storage temperature	-25 °C ... +75 °C
Relative humidity	10 % ... 95 % (no condensation)
Derating	-3 % / K (> 45 °C)
Oversvoltage category	II
Degree of pollution	2 (acc. to EN 50178)
Climatic category	3K3 (acc. to EN 60721)

Safety and protection:

Test voltage	
PRI-SEC/PRI-GND/SEC-GND	3 kV AC kV / 1.5 kV AC kV / 0.5 kV AC
Protection class	I
Degree of protection	IP20 (acc. to EN 60529)
Oversvoltage protection	Via varistor at primary circuit
Short circuit protection	Yes
No-load proof	Yes
Feedback voltage	28 VDC
Parallel operation	Yes
Series connection	Yes
MTBF	> 100000 h (acc. to MIL-HDBK-217)

Connection and mounting type:

Wire connection	CAGE CLAMP® (WAGO 231 Series)
Cross sections	0.08 ... 2.5 mm ² / 28 ... 12 AWG (12 AWG: THHN, THWN)
Strip lengths	6 ... 7 mm / 0.24 ... 0.28 in
Mounting type	DIN-rail-mount (EN 60715)

Dimensions and weight:

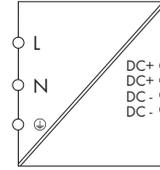
Dimensions (mm) W x H x L	99 x 90 x 40
Weight	Length from upper-edge of DIN-rail ca. 300 g

Standards and specifications:

Standards/specifications	EN 60950, EN 61204-3, EN 60335, UL 60950*, UL 508*, (* pending)
--------------------------	---

Switched-Mode Power Supply, 1-Phase

EPSITRON® ECO Power



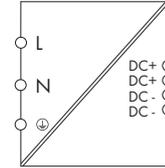
- Primary switch mode power supply unit
- Protection class I
- Natural convection cooling when horizontally mounted
- Enclosed for use in switchgear cabinets
- Parallel operation, series connection possible
- Electrically isolated output voltage (SELV) acc. to EN 60950-1/UL 60950-1
- DIN-35 rail mountable in different positions
- Installation width (as delivered): 60 mm
- Direct installation on mounting plate via cable grip

Technical Data	
Input:	
Nominal input voltage $V_{i, nom}$	(100) 110 V ... 240 V AC
Input voltage range	85 V ... 264 V AC; 130 V ... 373 V DC
Frequency	47 Hz ... 63 Hz
Input current I_i	1.0 A typ. at 230 VAC; 2.0 A typ. at 115 VAC
Discharge current	< 3.5 mA
Inrush current	< 18 A
Mains failure hold-up time	> 10 ms at 230 VAC
Output:	
Nominal output voltage $V_{o, nom}$	24 VDC (SELV)
Output voltage range	22 ... 26 VDC adjustable
Factory preset	24 VDC
Output current I_o	5 A at 24 VDC and 110 ... 240 VAC 4 A at 24 VDC and 100 ... 240 VAC
Adjustment accuracy	< 1 %
Residual ripple	< 200 mV (peak-to-peak) up to 20 MHz
Overload behavior	Constant power (in overload range: $1.05 \cdot 1.4 \times I_o$); shutdown and automatic restart in the event of a short circuit
Operational indication	Green LED (24 V DC OK)
Efficiency/Power losses:	
Efficiency	> 84 % (at 230 VAC and 5 ADC)
Fuse protection:	
Internal fuse	F 3.15 A / 250 V
External fuse	Circuit breakers B6, B10; An external DC fuse is required for the DC input voltage

Description	Item No.	Pack. Unit
Switched-mode power supply, 24 VDC / 5 A	787-1722	1
Technical Data		
Environmental requirements:		
Ambient operating temperature	-20 °C ... +60 °C	
Storage temperature	-25 °C ... +75 °C	
Relative humidity	10 % ... 95 % (no condensation)	
Derating	-3 % / K (> 45 °C)	
Oversvoltage category	II	
Degree of pollution	2 (acc. to EN 50178)	
Climatic category	3K3 (acc. to EN 60721)	
Safety and protection:		
Test voltage	PRI-SEC/PRI-GND/SEC-GND 3 kV AC kV / 1.5 kV AC kV / 0.5 kV AC	
Protection class	I	
Degree of protection	IP20 (acc. to EN 60529)	
Oversvoltage protection	Via varistor at primary circuit	
Short circuit protection	Yes	
No-load proof	Yes	
Feedback voltage	28 VDC	
Parallel operation	Yes	
Series connection	Yes	
MTBF	> 100000 h (acc. to MIL-HDBK-217)	
Connection and mounting type:		
Wire connection	CAGE CLAMP® (WAGO 231 Series)	
Cross sections	0.08 ... 2.5 mm ² / 28 ... 12 AWG (12 AWG: THHN, THWN)	
Strip lengths	6 ... 7 mm / 0.24 ... 0.28 in	
Mounting type	DIN-rail-mount (EN 60715)	
Dimensions and weight:		
Dimensions (mm) W x H x L	99 x 130 x 60	
Weight	Length from upper-edge of DIN-rail ca. 520 g	
Standards and specifications:		
Standards/specifications	EN 60950, EN 61204-3, EN 60335, UL 60950*, UL 508*, (*pending)	

Switched-Mode Power Supply, 1-Phase

EPSITRON® ECO Power



- Primary switch mode power supply unit
- Protection class I
- Natural convection cooling when horizontally mounted
- Enclosed for use in switchgear cabinets
- Parallel operation, series connection possible
- Electrically isolated output voltage (SELV) acc. to EN 60950-1/UL 60950-1
- DIN-35 rail mountable in different positions
- Installation width (as delivered): 70 mm
- Direct installation on mounting plate via cable grip

Technical Data

Input:

Nominal input voltage $V_{i, \text{nom}}$	(100) 110 V ... 240 V AC
Input voltage range	85 V ... 264 V AC; 130 V ... 373 V DC
Frequency	47 Hz ... 63 Hz
Input current I_i	2.0 A typ. at 230 VAC; 4.0 A typ. at 115 VAC
Discharge current	< 3.5 mA
Inrush current	< 18 A
Mains failure hold-up time	> 10 ms at 230 VAC

Output:

Nominal output voltage $V_{o, \text{nom}}$	24 VDC (SELV)
Output voltage range	22 ... 26 VDC adjustable
Factory preset	24 VDC
Output current I_o	10 A at 24 VDC and 110 ... 240 VAC 8 A at 24 VDC and 100 ... 240 VAC
Adjustment accuracy	< 1 %
Residual ripple	< 200 mV (peak-to-peak) up to 20 MHz
Overload behavior	Constant power (in overload range: $1.05 \cdot 1.4 \times I_o$); shutdown and automatic restart in the event of a short circuit

Operational indication

Green LED (24 V DC OK)

Efficiency/Power losses:

Efficiency > 84 % (at 230 VAC and 10 ADC)

Fuse protection:

Internal fuse	F 5 A / 250 V
External fuse	Circuit breakers B6, B10; An external DC fuse is required for the DC input voltage

Description	Item No.	Pack. Unit
Switched-mode power supply, 24 VDC / 10 A	787-1732	1

Technical Data

Environmental requirements:

Ambient operating temperature	-20 °C ... +60 °C
Storage temperature	-25 °C ... +75 °C
Relative humidity	10 % ... 95 % (no condensation)
Derating	-3 % / K (> 45 °C)
Overvoltage category	II
Degree of pollution	2 (acc. to EN 50178)
Climatic category	3K3 (acc. to EN 60721)

Safety and protection:

Test voltage	PRI-SEC/PRI-GND/SEC-GND	3 kV AC kV / 1.5 kV AC kV / 0.5 kV AC
Protection class		I
Degree of protection		IP20 (acc. to EN 60529)
Overvoltage protection		Via varistor at primary circuit
Short circuit protection		Yes
No-load proof		Yes
Feedback voltage		28 VDC
Parallel operation		Yes
Series connection		Yes
MTBF		> 100000 h (acc. to MIL-HDBK-217)

Connection and mounting type:

Wire connection	CAGE CLAMP® (WAGO 231 Series)
Cross sections	0.08 ... 2.5 mm ² / 28 ... 12 AWG (12 AWG: THHN, THWN)
Strip lengths	6 ... 7 mm / 0.24 ... 0.28 in
Mounting type	DIN-rail-mount (EN 60715)

Dimensions and weight:

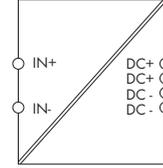
Dimensions (mm) W x H x L	99 x 165 x 70
Weight	Length from upper-edge of DIN-rail ca. 840 g

Standards and specifications:

Standards/specifications	EN 60950, EN 61204-3, EN 60335, UL 60950*, UL 508*, (* pending)
--------------------------	---



Similar to pictured device



- Primary switch mode power supply unit
- Protection class II
- Natural convection cooling when horizontally mounted
- Stepped profile, ideal for distribution boards or distribution boxes
- Suitable for both parallel and series operation
- Electrically isolated output voltage (SELV) acc. to EN 60950-1/UL 60950-1

Technical Data	
Input:	
Nominal input voltage $V_{i, nom}$	72 VDC
Input voltage range	40 ... 90 VDC
Frequency	0 Hz
Input current I_i	0.79 A at 72 VDC
Inrush current	< 30 A, NTC
Mains failure hold-up time	> 8 ms at 72 V DC
Output:	
Nominal output voltage $V_{o, nom}$	24 VDC, SELV
Factory preset	24 VDC
Output current I_o	2.0 A at 24 VDC
	max. 1.6 A in any mounting position
Adjustment accuracy	< 2 %
Residual ripple	< 100 mV (peak-to-peak) up to 20 MHz
Current limitation	1.1 x I_o typ.
Overload behavior	Constant current
Operational indication	Green LED (V_o)
Efficiency/Power losses:	
Efficiency	84 % typ.
Power loss P_v	2.0 W (72 VDC/no load), 9.0 W (72 VDC/nominal load)
Max. power loss P_v	10,5 W typ. (40 VDC / 24 VDC, 2 A)
Fuse protection:	
Internal fuse	4 AT (125 V DC)
External fuse	6 A, 10 A power circuit breakers, B, C characteristics

Description	Item No.	Pack. Unit
DC/DC Converter, 72 VDC / 24 VDC; 2.0 A	787-1014/072-000	1
Technical Data		
Environmental requirements:		
Ambient operating temperature	-40 °C ... +70 °C	
Storage temperature	-40 °C ... +85 °C	
Relative humidity	5 % ... 96 % (coated PCB)	
Derating	-1.5 %/K (> 55 °C)	
Degree of pollution	2 (acc. to EN 50178)	
Climatic category	3K3 (acc. to EN 60721)	
Shock and vibration	Category 1, class B (acc. to EN 61373:2010)	
Safety and protection:		
Enclosure	Plastic, light gray, Flammability class V0 acc. to UL94	
Test voltage PRI-SEC	4.2 kV DC	
Protection class	II	
Degree of protection	IP20 acc. to EN 60529	
Overvoltage protection	Varistor (input side); internal protective circuit, < 40 VDC (output side in case of an error)	
Short circuit protection	Yes	
No-load proof	Yes	
Feedback voltage	Max. 35 VDC	
Parallel operation	Yes	
Series connection	Yes	
MTBF	> 500000 h	
Fire load	7 MJ	
Connection and mounting type:		
Wire connection	Input/Output: WAGO 740 Series	
Cross sections	Input/Output: 0.08 ... 2.5 mm ² / 28 ... 12 AWG	
Strip lengths	Input/Output: 6 ... 7 mm / 0.24 ... 0.28 in	
Mounting type	DIN-rail-mount (EN 60715)	
Dimensions and weight:		
Dimensions (mm) W x H x L	72 x 89 x 59	
Weight	Length: 55 mm, from upper-edge of DIN- 250 g	
Standards and specifications:		
Standards/specifications	EN 60950, EN 61204-3, EN 50121*, EN 50125*, UL 60950*, UL 508*, GL* (*pending)	



DC O.K.	1		5	n.c.
GND	2		6	n.c.
Vout+	3		7	Vin+
GND	4	OUT	8	GND

- DC/DC Converter in a compact 6 mm housing
- 787-28xx DC/DC Converters supply devices with 5, 10, 12 or 24 VDC from a power supply with 24 or 48 VDC, with an output power up to 12 W
- Output voltage monitoring via DC OK contact
- Can be commoned with 857 and 2857 Series devices
- Comprehensive range of approvals for multiple applications

Technical Data	
Input:	
Nominal input voltage $V_{i,nom}$	24 VDC
Input voltage range	10 V ... 30 V DC
Input current I_i	< 0.15 A
Inrush current	< 0.3 A (1 ms, at nominal input voltage)
Output:	
Nominal output voltage $V_{o,nom}$	5 VDC ($\pm 3\%$)
Output current I_o	0.5 A
Adjustment accuracy	< 5 %
Load regulation	< 1 %
Residual ripple	< 20 mV (peak-to-peak)
Overload behavior	No damage for 1 minute
Operational indication	Green LED (V_o), Red LED (overload)
Efficiency/Power losses:	
Efficiency	> 82.5 % (at nominal input voltage and nominal load)
Power loss P_V	< 0.15 W (no load), < 0.6 W (nominal load)
Fuse protection:	
Internal fuse	No fuse

Description	Item No.	Pack. Unit
DC/DC converter, 24 VDC / 5 VDC; 0.5 A	787-2801	-
Technical Data		
Environmental requirements:		
Ambient operating temperature	-25 °C ... +70 °C	
Storage temperature	-40 °C ... +85 °C	
Relative humidity	< 95 % (no condensation permissible)	
Derating	No derating	
Degree of pollution	2 (acc. to EN 50178)	
Climatic category	3K3 (per EN 60721, except for low air pressure)	
Safety and protection:		
Protection class	III	
Reverse voltage protection	Yes	
Degree of protection	IP20 (acc. to EN 60529)	
Short circuit protection	Yes (1 minute)	
No-load proof	Yes	
Parallel operation	No	
Series connection	No	
MTBF	> 1000000 h	
Connection and mounting type:		
Wire connection	Push-in CAGE CLAMP® (WAGO 857 Series)	
Cross sections	Solid: 0.08 ... 2.5 mm ² / 28 ... 14 AWG Fine-stranded: 0.34 ... 2.5 mm ² / 22 ... 14 AWG	
Strip lengths	9 ... 10 mm / 0.35 ... 0.39 in	
Mounting type	DIN-rail-mount (EN 60715)	
Dimensions and weight:		
Dimensions (mm) W x H x L	6 x 96 x 94 Height from upper-edge of DIN-rail	
Weight	38 g	
Standards and specifications:		
Standards/specifications	CE; EN 61000-6-2, EN 61000-6-3, EN 60950-1, UL 60950*, UL 508*, ANSI/ISA 12.12.01*, ATEX*, IEC Ex*, GL* *(pending)	

DC/DC Converter

EPSITRON®



DC O.K.	1		5	n.c.
GND	2		6	n.c.
Vout+	3	OUT	7	Vin+
GND	4	IN	8	GND

- DC/DC Converter in a compact 6 mm housing
- 787-28xx DC/DC Converters supply devices with 5, 10, 12 or 24 VDC from a power supply with 24 or 48 VDC, with an output power up to 12 W
- Output voltage monitoring via DC OK contact
- Can be commoned with 857 and 2857 Series devices
- Comprehensive range of approvals for multiple applications

Technical Data	
Input:	
Nominal input voltage $V_{i, nom}$	24 VDC
Input voltage range	15 V ... 30 V DC
Input current I_i	< 0.25 A
Inrush current	< 0.3 A (1 ms, at nominal input voltage)
Output:	
Nominal output voltage $V_{o, nom}$	10 VDC ($\pm 2\%$)
Output current I_o	0.5 A
Adjustment accuracy	< 2 %
Load regulation	< 1 %
Residual ripple	< 20 mV (peak-to-peak)
Overload behavior	No damage for 1 minute
Operational indication	Green LED (V_o), Red LED (overload)
Efficiency/Power losses:	
Efficiency	> 89 % (at nominal input voltage and nominal load)
Power loss P_V	< 0.2 W (no load), < 0.65 W (nominal load)
Fuse protection:	
Internal fuse	No fuse

Description	Item No.	Pack. Unit
DC/DC converter, 24 VDC / 10 VDC; 0.5 A	787-2802	-
Technical Data		
Environmental requirements:		
Ambient operating temperature	-25 °C ... +70 °C	
Storage temperature	-40 °C ... +85 °C	
Relative humidity	< 95 % (no condensation permissible)	
Derating	No derating	
Degree of pollution	2 (acc. to EN 50178)	
Climatic category	3K3 (per EN 60721, except for low air pressure)	
Safety and protection:		
Protection class	III	
Reverse voltage protection	Yes	
Degree of protection	IP20 (acc. to EN 60529)	
Short circuit protection	Yes (1 minute)	
No-load proof	Yes	
Parallel operation	No	
Series connection	No	
MTBF	> 1000000 h	
Connection and mounting type:		
Wire connection	Push-in CAGE CLAMP® (WAGO 857 Series)	
Cross sections	Solid: 0.08 ... 2.5 mm ² / 28 ... 14 AWG Fine-stranded: 0.34 ... 2.5 mm ² / 22 ... 14 AWG	
Strip lengths	9 ... 10 mm / 0.35 ... 0.39 in	
Mounting type	DIN-rail-mount (EN 60715)	
Dimensions and weight:		
Dimensions (mm) W x H x L	6 x 96 x 94 Height from upper-edge of DIN-rail	
Weight	38 g	
Standards and specifications:		
Standards/specifications	CE; EN 61000-6-2, EN 61000-6-3, EN 60950-1, UL 60950*, UL 508*, ANSI/ISA 12.12.01*, ATEX*, IEC Ex*, GL* *(pending)	



DC O.K.	1		5	n.c.
GND	2		6	n.c.
Vout+	3	OUT	7	Vin+
GND	4	IN	8	GND

- DC/DC Converter in a compact 6 mm housing
- 787-28xx DC/DC Converters supply devices with 5, 10, 12 or 24 VDC from a power supply with 24 or 48 VDC, with an output power up to 12 W
- Output voltage monitoring via DC OK contact
- Can be commoned with 857 and 2857 Series devices
- Comprehensive range of approvals for multiple applications

Technical Data	
Input:	
Nominal input voltage $V_{i, \text{nom}}$	24 VDC
Input voltage range	15 V ... 30 V DC
Input current I_i	< 0.3 A
Inrush current	< 0.3 A (1 ms, at nominal input voltage)
Output:	
Nominal output voltage $V_{o, \text{nom}}$	12 VDC ($\pm 2\%$)
Output current I_o	0.5 A
Adjustment accuracy	< 2 %
Load regulation	< 1 %
Residual ripple	< 20 mV (peak-to-peak)
Overload behavior	No damage for 1 minute
Operational indication	Green LED (V_o), Red LED (overload)
Efficiency/Power losses:	
Efficiency	> 90 % (at nominal input voltage and nominal load)
Power loss P_V	< 0.21 W (no load), < 0.7 W (nominal load)
Fuse protection:	
Internal fuse	No fuse

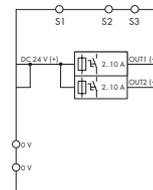
Description	Item No.	Pack. Unit
DC/DC converter, 24 VDC / 12 VDC; 0.5 A	787-2805	-
Technical Data		
Environmental requirements:		
Ambient operating temperature	-25 °C ... +70 °C	
Storage temperature	-40 °C ... +85 °C	
Relative humidity	< 95 % (no condensation permissible)	
Derating	No derating	
Degree of pollution	2 (acc. to EN 50178)	
Climatic category	3K3 (per EN 60721, except for low air pressure)	
Safety and protection:		
Protection class	III	
Reverse voltage protection	Yes	
Degree of protection	IP20 (acc. to EN 60529)	
Short circuit protection	Yes (1 minute)	
No-load proof	Yes	
Parallel operation	No	
Series connection	No	
MTBF	> 1000000 h	
Connection and mounting type:		
Wire connection	Push-in CAGE CLAMP® (WAGO 857 Series)	
Cross sections	Solid: 0.08 ... 2.5 mm ² / 28 ... 14 AWG Fine-stranded: 0.34 ... 2.5 mm ² / 22 ... 14 AWG	
Strip lengths	9 ... 10 mm / 0.35 ... 0.39 in	
Mounting type	DIN-rail-mount (EN 60715)	
Dimensions and weight:		
Dimensions (mm) W x H x L	6 x 96 x 94 Height from upper-edge of DIN-rail	
Weight	38 g	
Standards and specifications:		
Standards/specifications	CE; EN 61000-6-2, EN 61000-6-3, EN 60950-1, UL 60950*, UL 508*, ANSI/ISA 12.12.01*, ATEX*, IEC Ex*, GL* *(pending)	

Electronic Circuit Breaker

EPSITRON®



Similar to pictured device



- Space-saving electronic circuit breaker with 2 channels
- 2- 10 A nominal current, adjustable for each channel via sealable selector switch; factory preset: 2 A, switched off
- Switch-on capacity > 50000 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 and switched off message (common group signal S3)
- Status message for each channel via pulse sequence
- Remote input resets tripped channels or switches on/off any number of channels via pulse sequence

Technical Data

Input:

Nominal input voltage $V_{i, nom}$	24 VDC
Input voltage range	18 ... 30 VDC

Output:

Nominal output voltage $V_{o, nom}$	2 x 24 VDC
Nominal current	Max. 2 x 10 ADC (2, 3, 4, 6, 8, 10 A adjustable for each channel via selector switch)
Factory preset	2 ADC, switched off
Voltage drop	200 mV at 10 A
Trip time	Load-dependent (16 ms ... 100 s)
Switch-on capacity	> 50,000 µF per channel
Switch-on behavior	Time-delayed channel switching (load-dependent, min. 50 ms / max. 5 s)
Active current limitation	No
Operational indication	Green LED (OK channel), Red LED (tripped channel)
Signaling	2 x LED (green/red/orange)
Remote input	Resetting of tripped channel via 15 ... 30 VDC pulse for at least 500 ms. Switching on/off any number of channels via pulse sequence

Efficiency/Power losses:

Efficiency	99 % typ.
Power loss P_V	0.84 W (no load) / 5.5 W (at 2 x 10 A)

Fuse protection:

Internal fuse	15 AT per channel
---------------	-------------------

Description	Item No.	Pack. Unit
Electronic circuit breaker, 24 VDC / 2 x 10 A	787-1662/000-004	1

Technical Data

Environmental requirements:

Ambient operating temperature	-25 °C ... +70 °C
Storage temperature	-25 °C ... +85 °C
Relative humidity	5 % ... 96 % (no condensation permissible)
Derating	No derating
Degree of pollution	2 (acc. to EN 50178)

Safety and protection:

Test voltage	500 VDC (connectors to housing)
Protection class	III
Reverse voltage protection	No
Degree of protection	IP20 (acc. to EN 60529)
Overvoltage protection	Via 33 V suppressor diode at input
Feedback voltage	Max. 35 VDC
Series connection of several devices	Not permitted
Parallel operation of single channels	Not permitted

Connection and mounting type:

Wire connection	Input (+): WAGO 831 Series Input (-), output, signaling: WAGO 721 Series
Cross sections	Input (+): 0.5 ... 10 mm ² / 20 ... 8 AWG Input (-), output, signaling: 0.08 ... 2.5 mm ² / 28 ... 12 AWG
Strip lengths	Input (+): 13 ... 15 mm / 0.51 ... 0.59 in Input (-), output, signaling: 8 ... 9 mm / 0.31 ... 0.35 in
Mounting type	DIN-rail-mount (EN 60715)

Dimensions and weight:

Dimensions (mm) W x H x L	45 x 90 x 115.5 Length from upper-edge of DIN-rail
Weight	170 g

Standards and specifications:

Standards/specifications	UL 508, UL 2367, GL, EN 60950, EN 61000-6-2, EN 61000-6-3
--------------------------	---

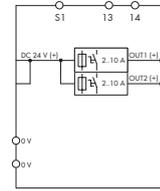
Electronic Circuit Breaker

EPSITRON®



Similar to pictured device

- Space-saving electronic circuit breaker with 2 channels
- 2-10 A nominal current, adjustable for each channel via sealable selector switch
- Switch-on capacity > 50000 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 and switched off message (common group signal) via isolated contact, ports 13/14
- Remote input resets all tripped channels



Technical Data	
Input:	
Nominal input voltage $V_{i, nom}$	24 VDC
Input voltage range	18 ... 30 VDC
Output:	
Nominal output voltage $V_{o, nom}$	2 x 24 VDC
Nominal current	Max. 2 x 10 ADC (2, 3, 4, 6, 8, 10 A adjustable for each channel via selector switch)
Factory preset	2 ADC, switched off
Voltage drop	200 mV at 10 A
Trip time	Load-dependent (16 ms ... 100 s)
Switch-on capacity	> 50,000 µF per channel
Switch-on behavior	Time-delayed channel switching (load-dependent, min. 50 ms / max. 5 s)
Active current limitation	No
Operational indication	Green LED (OK channel), Red LED (tripped channel)
Signaling	2 x LED (green/red/orange)
Remote input	Resetting of tripped channel via 15 ... 30 VDC pulse for at least 500 ms.
Efficiency/Power losses:	
Efficiency	99 % typ.
Power loss P_V	0.84 W (no load) / 5.5 W (at 2 x 10 A)
Fuse protection:	
Internal fuse	15 AT per channel

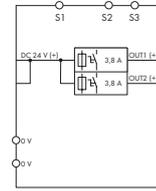
Description	Item No.	Pack. Unit
Electronic circuit breaker, 24 VDC / 2 x 10 A	787-1662/000-054	1
Technical Data		
Environmental requirements:		
Ambient operating temperature	-25 °C ... +70 °C	
Storage temperature	-25 °C ... +85 °C	
Relative humidity	5 % ... 96 % (no condensation permissible)	
Derating	No derating	
Degree of pollution	2 (acc. to EN 50178)	
Safety and protection:		
Test voltage	500 VDC (connectors to housing)	
Protection class	III	
Reverse voltage protection	No	
Degree of protection	IP20 (acc. to EN 60529)	
Overvoltage protection	Via 33 V suppressor diode at input	
Feedback voltage	Max. 35 VDC	
Series connection of several devices	Not permitted	
Parallel operation of single channels	Not permitted	
Connection and mounting type:		
Wire connection	Input (+): WAGO 831 Series Input (-), output, signaling: WAGO 721 Series	
Cross sections	Input (+): 0.5 ... 10 mm ² / 20 ... 8 AWG Input (-), output, signaling: 0.08 ... 2.5 mm ² / 28 ... 12 AWG	
Strip lengths	Input (+): 13 ... 15 mm / 0.51 ... 0.59 in Input (-), output, signaling: 8 ... 9 mm / 0.31 ... 0.35 in	
Mounting type	DIN-rail-mount (EN 60715)	
Dimensions and weight:		
Dimensions (mm) W x H x L	45 x 90 x 115.5 Length from upper-edge of DIN-rail	
Weight	170 g	
Standards and specifications:		
Standards/specifications	UL 508*, UL 2367*, GL*, EN 60950, EN 61000-6-2, EN 61000-6-3 (* pending)	

Electronic Circuit Breaker with Active Current Limitation

EPSITRON®



Similar to pictured device



- Space-saving electronic circuit breaker with 2 channels
- Nominal current is fixed at 3.8 A for each channel
- Each output complies with NEC Class 2
- Active current limitation
- Switch-on capacity > 65000 μ F 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 (group signal)
- Status message for each channel via pulse sequence
- Remote input resets tripped channels or switches on/off any number of channels via pulse sequence

Technical Data

Input:

Nominal input voltage $V_{i, nom}$	24 VDC
Input voltage range	20 ... 28.8 VDC

Output:

Nominal output voltage $V_{o, nom}$	2 x 24 VDC
Nominal current	2 x 3.8 ADC NEC Class 2 (at 20 ... 24 V DC); 2 x 3.2 ADC NEC Class 2 (at 28 VDC) fixed nominal current
Voltage drop	125 mV at 3.8 A
Trip time	Load-dependent (16 ms ... 5 s)
Switch-on capacity	> 65,000 μ F per channel
Switch-on behavior	Time-delayed channel switching (load-dependent, min. 50 ms / max. 5 s)
Active current limitation	Yes
Operational indication	Green LED (OK channel), Red LED (tripped channel)
Signaling	2 x LED (green/red/orange)
Remote input	Resetting of tripped channel via 15 ... 30 VDC pulse for at least 500 ms. Switching on/off any number of channels via pulse sequence

Efficiency/Power losses:

Efficiency	99 % typ.
Power loss P_V	0.65 W (no load) / 1.6 W (at 2 x 3.8 A)

Fuse protection:

Internal fuse	No fuse
---------------	---------

Description	Item No.	Pack. Unit
Electronic circuit breaker, 24 VDC / 2 x 3.8 A	787-1662/004-1000	1

Technical Data

Environmental requirements:

Ambient operating temperature	-25 °C ... +70 °C
Storage temperature	-25 °C ... +85 °C
Relative humidity	5 % ... 96 % (no condensation permissible)
Derating	No derating
Degree of pollution	2 (acc. to EN 50178)

Safety and protection:

Test voltage	500 VDC (connectors to housing)
Protection class	III
Reverse voltage protection	No
Degree of protection	IP20 (acc. to EN 60529)
Overvoltage protection	Via 33 V suppressor diode at input
Feedback voltage	Max. 28.8 VDC
Series connection of several devices	Not permitted
Parallel operation of single channels	Not permitted

Connection and mounting type:

Wire connection	Input (+): WAGO 831 Series Input (-), output, signaling: WAGO 721 Series
Cross sections	Input (+): 0.5 ... 10 mm ² / 20 ... 8 AWG Input (-), output, signaling: 0.08 ... 2.5 mm ² / 28 ... 12 AWG
Strip lengths	Input (+): 13 ... 15 mm / 0.51 ... 0.59 in Input (-), output, signaling: 8 ... 9 mm / 0.31 ... 0.35 in
Mounting type	DIN-rail-mount (EN 60715)

Dimensions and weight:

Dimensions (mm) W x H x L	45 x 90 x 115.5 Length from upper-edge of DIN-rail
Weight	170 g

Standards and specifications:

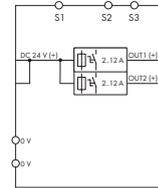
Standards/specifications	UL 508, UL 2367, GL*, EN 60950, EN 61000-6-2, EN 61000-6-3 (*pending)
--------------------------	--

Electronic Circuit Breaker with Active Current Limitation

EPSITRON®



Similar to pictured device



- Space-saving electronic circuit breaker with 2 channels
- 2-12 A nominal current, adjustable for each channel via sealable selector switch
- Active current limitation
- Switch-on capacity > 65000 μ F 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 (group signal)
- Status message for each channel via pulse sequence
- Remote input resets tripped channels or switches on/off any number of channels via pulse sequence

Technical Data	
Input:	
Nominal input voltage $V_{i, nom}$	24 VDC
Input voltage range	18 ... 30 VDC
Output:	
Nominal output voltage $V_{o, nom}$	2 x 24 VDC
Nominal current	Max. 2 x 12 ADC (2, 4, 6, 8, 10, 12 A adjustable for each channel via selector switch)
Voltage drop	210 mV at 12 A
Trip time	Load-dependent (16 ms ... 5 s)
Switch-on capacity	> 65,000 μ F per channel
Switch-on behavior	Time-delayed channel switching (load-dependent, min. 50 ms / max. 5 s)
Active current limitation	Yes
Operational indication	Green LED (OK channel), Red LED (tripped channel)
Signaling	2 x LED (green/red/orange)
Remote input	Resetting of tripped channel via 15 ... 30 VDC pulse for at least 500 ms. Switching on/off any number of channels via pulse sequence
Efficiency/Power losses:	
Efficiency	99 % typ.
Power loss P_v	0.55 W (no load) / 5.6 W (at 2 x 12 A)
Fuse protection:	
Internal fuse	15 AT per channel

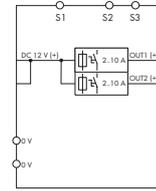
Description	Item No.	Pack. Unit
Electronic circuit breaker, 24 VDC / 2 x 12 A	787-1662/212-1000	1
Technical Data		
Environmental requirements:		
Ambient operating temperature	-25 °C ... +70 °C	
Storage temperature	-25 °C ... +85 °C	
Relative humidity	5 % ... 96 % (no condensation permissible)	
Derating	No derating	
Degree of pollution	2 (acc. to EN 50178)	
Safety and protection:		
Test voltage	500 VDC (connectors to housing)	
Protection class	III	
Reverse voltage protection	No	
Degree of protection	IP20 (acc. to EN 60529)	
Overvoltage protection	Via 33 V suppressor diode at input	
Feedback voltage	Max. 35 VDC	
Series connection of several devices	Not permitted	
Parallel operation of single channels	Not permitted	
Connection and mounting type:		
Wire connection	Input (+): WAGO 831 Series Input (-), output, signaling: WAGO 721 Series	
Cross sections	Input (+): 0.5 ... 10 mm ² / 20 ... 8 AWG Input (-), output, signaling: 0.08 ... 2.5 mm ² / 28 ... 12 AWG	
Strip lengths	Input (+): 13 ... 15 mm / 0.51 ... 0.59 in Input (-), output, signaling: 8 ... 9 mm / 0.31 ... 0.35 in	
Mounting type	DIN-rail-mount (EN 60715)	
Dimensions and weight:		
Dimensions (mm) W x H x L	45 x 90 x 115.5 Length from upper-edge of DIN-rail	
Weight	170 g	
Standards and specifications:		
Standards/specifications	UL 508, UL 2367, GL*, EN 60950, EN 61000-6-2, EN 61000-6-3 (* pending)	

Electronic Circuit Breaker

EPSITRON®



Similar to pictured device



- Space-saving electronic circuit breaker with 4 channels
- 2 - 10 A nominal current, adjustable for each channel via sealable selector switch
- Switch-on capacity > 50000 μ F 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 (group signal)
- Status message for each channel via pulse sequence
- Remote input resets tripped channels or switches on/off any number of channels via pulse sequence

Technical Data

Input:

Nominal input voltage $V_{i, nom}$	12 VDC
Input voltage range	10 ... 16 VDC

Output:

Nominal output voltage $V_{o, nom}$	2 x DC 12 V
Nominal current	Max. 2 x 10 ADC (2, 3, 4, 6, 8, 10 A adjustable for each channel via selector switch)

Voltage drop	200 mV at 10 A
Trip time	Load-dependent (16 ms ... 100 s)
Switch-on capacity	> 50,000 μ F per channel
Switch-on behavior	Time-delayed channel switching (load-dependent, min. 50 ms / max. 5 s)

Active current limitation	No
Operational indication	Green LED (OK channel), Red LED (tripped channel)
Signaling	2 x LED (green/red/orange)
Remote input	Resetting of tripped channel via 9 ... 30 VDC pulse for at least 500 ms. Switching on/off any number of channels via pulse sequence

Efficiency/Power losses:

Efficiency	99 % typ.
Power loss P_V	0.53 W (no load) / 5.3 W (at 2 x 10 A)

Fuse protection:

Internal fuse	15 AT per channel
---------------	-------------------

Description	Item No.	Pack. Unit
Electronic circuit breaker, 12 VDC / 2 x 10 A	787-1662/000-100	1

Technical Data

Environmental requirements:

Ambient operating temperature	-25 °C ... +70 °C
Storage temperature	-25 °C ... +85 °C
Relative humidity	5 % ... 96 % (no condensation permissible)
Derating	No derating
Degree of pollution	2 (acc. to EN 50178)

Safety and protection:

Test voltage	500 VDC (connectors to housing)
Protection class	III
Reverse voltage protection	No
Degree of protection	IP20 (acc. to EN 60529)
Overvoltage protection	Via 33 V suppressor diode at input
Feedback voltage	Max. 35 VDC
Series connection of several devices	Not permitted
Parallel operation of single channels	Not permitted

Connection and mounting type:

Wire connection	Input (+): WAGO 831 Series Input (-), output, signaling: WAGO 721 Series
-----------------	--

Cross sections	Input (+): 0.5 ... 10 mm ² / 20 ... 8 AWG Input (-), output, signaling: 0.08 ... 2.5 mm ² / 28 ... 12 AWG
----------------	--

Strip lengths	Input (+): 13 ... 15 mm / 0.51 ... 0.59 in Input (-), output, signaling: 8 ... 9 mm / 0.31 ... 0.35 in
---------------	---

Mounting type	DIN-rail-mount (EN 60715)
---------------	---------------------------

Dimensions and weight:

Dimensions (mm) W x H x L	45 x 90 x 115.5 Length from upper-edge of DIN-rail
Weight	170 g

Standards and specifications:

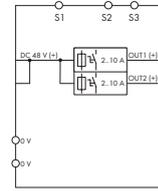
Standards/specifications	UL 508*, UL 2367*, GL, EN 60950, EN 61000-6-2, EN 61000-6-3 (*pending)
--------------------------	--

Electronic Circuit Breaker

EPSITRON®



Similar to pictured device



- Space-saving electronic circuit breaker with 2 channels
- 2-10 A nominal current, adjustable for each channel via sealable selector switch
- Switch-on capacity > 23000 μ F 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 (group signal)
- Status message for each channel via pulse sequence
- Remote input resets tripped channels or switches on/off any number of channels via pulse sequence

Technical Data	
Input:	
Nominal input voltage $V_{i, \text{nom}}$	48 VDC
Input voltage range	32 ... 58 VDC
Output:	
Nominal output voltage $V_{o, \text{nom}}$	2 x 48 VDC
Nominal current	Max. 2 x 10 ADC (2, 3, 4, 6, 8, 10 A adjustable for each channel via selector switch)
Voltage drop	175 mV at 10 A
Trip time	Load-dependent (16 ms ... 100 s)
Switch-on capacity	> 23,000 μ F per channel at 48 VDC, 2.5 mm ² conductor cross section and 2.5 m cable length
Switch-on behavior	Time-delayed channel switching (load-dependent, min. 50 ms / max. 5 s)
Active current limitation	No
Operational indication	Green LED (OK channel), Red LED (tripped channel)
Signaling	2 x LED (green/red/orange)
Remote input	Resetting of tripped channel via 15 ... 58 VDC pulse for at least 500 ms. Switching on/off any number of channels via pulse sequence
Efficiency/Power losses:	
Efficiency	99 % typ.
Power loss P_V	0.84 W (no load) / 4.5 W (at 2 x 10 A)
Fuse protection:	
Internal fuse	15 AT per channel

Description	Item No.	Pack. Unit
Electronic circuit breaker, 48 VDC / 2 x 10 A	787-1662/000-200	1

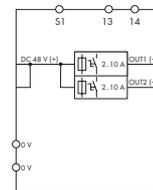
Technical Data	
Environmental requirements:	
Ambient operating temperature	-25 °C ... +70 °C
Storage temperature	-25 °C ... +85 °C
Relative humidity	5 % ... 96 % (no condensation permissible)
Derating	No derating
Degree of pollution	2 (acc. to EN 50178)
Safety and protection:	
Test voltage	500 VDC (connectors to housing)
Protection class	III
Reverse voltage protection	No
Degree of protection	IP20 (acc. to EN 60529)
Overvoltage protection	Via 68 V suppressor diode at input
Feedback voltage	Max. 58 VDC
Series connection of several devices	Not permitted
Parallel operation of single channels	Not permitted
Connection and mounting type:	
Wire connection	Input (+): WAGO 831 Series Input (-), output, signaling: WAGO 721 Series
Cross sections	Input (+): 0.5 ... 10 mm ² / 20 ... 8 AWG Input (-), output, signaling: 0.08 ... 2.5 mm ² / 28 ... 12 AWG
Strip lengths	Input (+): 13 ... 15 mm / 0.51 ... 0.59 in Input (-), output, signaling: 8 ... 9 mm / 0.31 ... 0.35 in
Mounting type	DIN-rail-mount (EN 60715)
Dimensions and weight:	
Dimensions (mm) W x H x L	45 x 90 x 115.5 Length from upper-edge of DIN-rail
Weight	170 g
Standards and specifications:	
Standards/specifications	UL 508*, UL 2367*, GL*, EN 60950, EN 61000-6-2, EN 61000-6-3 (* pending)

Electronic Circuit Breaker

EPSITRON®



Similar to pictured device



- Space-saving electronic circuit breaker with 2 channels
- 2 - 10 A nominal current, adjustable for each channel via sealable selector switch
- Switch-on capacity > 23000 μ F 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) via isolated contact (13/14)
- Remote input resets all tripped channels

Technical Data	
Input:	
Nominal input voltage $V_{i, nom}$	48 VDC
Input voltage range	32 ... 58 VDC
Output:	
Nominal output voltage $V_{o, nom}$	2 x 48 VDC
Nominal current	Max. 2 x 10 ADC (2, 3, 4, 6, 8, 10 A adjustable for each channel via selector switch)
Voltage drop	175 mV at 10 A
Trip time	Load-dependent (16 ms ... 100 s)
Switch-on capacity	> 23,000 μ F per channel at 48 VDC, 2.5 mm ² conductor cross section and 2.5 m cable length
Switch-on behavior	Time-delayed channel switching (load-dependent, min. 50 ms / max. 5 s)
Active current limitation	No
Operational indication	Green LED (OK channel), Red LED (tripped channel)
Signaling	2 x LED (green/red/orange)
Remote input	Resetting of tripped channel via 15 ... 58 VDC pulse for at least 500 ms.
Efficiency/Power losses:	
Efficiency	99 % typ.
Power loss P_V	0.84 W (no load) / 4.5 W (at 2 x 10 A)
Fuse protection:	
Internal fuse	15 AT per channel

Description	Item No.	Pack. Unit
Electronic circuit breaker, 48 VDC / 2 x 10 A	787-1662/000-250	1
Technical Data		
Environmental requirements:		
Ambient operating temperature	-25 °C ... +70 °C	
Storage temperature	-25 °C ... +85 °C	
Relative humidity	5 % ... 96 % (no condensation permissible)	
Derating	No derating	
Degree of pollution	2 (acc. to EN 50178)	
Safety and protection:		
Test voltage	500 VDC (connectors to housing)	
Protection class	III	
Reverse voltage protection	No	
Degree of protection	IP20 (acc. to EN 60529)	
Overvoltage protection	Via 68 V suppressor diode at input	
Feedback voltage	Max. 58 VDC	
Series connection of several devices	Not permitted	
Parallel operation of single channels	Not permitted	
Connection and mounting type:		
Wire connection	Input (+): WAGO 831 Series Input (-), output, signaling: WAGO 721 Series	
Cross sections	Input (+): 0.5 ... 10 mm ² / 20 ... 8 AWG Input (-), output, signaling: 0.08 ... 2.5 mm ² / 28 ... 12 AWG	
Strip lengths	Input (+): 13 ... 15 mm / 0.51 ... 0.59 in Input (-), output, signaling: 8 ... 9 mm / 0.31 ... 0.35 in	
Mounting type	DIN-rail-mount (EN 60715)	
Dimensions and weight:		
Dimensions (mm) W x H x L	45 x 90 x 115.5 Length from upper-edge of DIN-rail	
Weight	170 g	
Standards and specifications:		
Standards/specifications	UL 508*, UL 2367*, GL*, EN 60950, EN 61000-6-2, EN 61000-6-3 (*pending)	

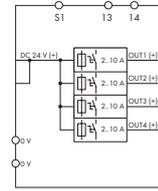
Electronic Circuit Breaker

EPSITRON®



Similar to pictured device

- Space-saving electronic circuit breaker with 4 channels
- 2–10 A nominal current, adjustable for each channel via sealable selector switch; factory preset: 2 A, switched off
- Switch-on capacity > 50000 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 and switched off message (common group signal) via isolated contact, ports 13/14
- Remote input resets all tripped channels



Technical Data	
Input:	
Nominal input voltage $V_{i, \text{nom}}$	24 VDC
Input voltage range	18 ... 30 VDC
Output:	
Nominal output voltage $V_{o, \text{nom}}$	4 x 24 VDC
Nominal current	Max. 4 x 10 ADC (2, 3, 4, 6, 8, 10 A adjustable for each channel via selector switch)
Factory preset	2 ADC, switched off
Voltage drop	200 mV at 10 A
Trip time	Load-dependent (16 ms ... 100 s)
Switch-on capacity	> 50,000 µF per channel
Switch-on behavior	Time-delayed channel switching (load-dependent, min. 50 ms / max. 5 s)
Active current limitation	No
Operational indication	Green LED (OK channel), Red LED (tripped channel)
Signaling	4 x LED (green/red/orange)
Remote input	Resetting of tripped channel via 15 ... 30 VDC pulse for at least 500 ms.
Efficiency/Power losses:	
Efficiency	99 % typ.
Power loss P_V	0.84 W (no load) / 10 W (at 4 x 10 A)
Fuse protection:	
Internal fuse	15 AT per channel

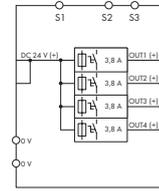
Description	Item No.	Pack. Unit
Electronic circuit breaker, 24 VDC / 4 x 10 A	787-1664/000-054	1
Technical Data		
Environmental requirements:		
Ambient operating temperature	-25 °C ... +70 °C	
Storage temperature	-25 °C ... +85 °C	
Relative humidity	5 % ... 96 % (no condensation permissible)	
Derating	≥ +50 °C: see instruction manual	
Degree of pollution	2 (acc. to EN 50178)	
Safety and protection:		
Test voltage	500 VDC (connectors to housing)	
Protection class	III	
Reverse voltage protection	No	
Degree of protection	IP20 (acc. to EN 60529)	
Overvoltage protection	Via 33 V suppressor diode at input	
Feedback voltage	Max. 35 VDC	
Series connection of several devices	Not permitted	
Parallel operation of single channels	Not permitted	
Connection and mounting type:		
Wire connection	Input (+): WAGO 831 Series Input (-), output, signaling: WAGO 721 Series	
Cross sections	Input (+): 0.5 ... 10 mm ² / 20 ... 8 AWG Input (-), output, signaling: 0.08 ... 2.5 mm ² / 28 ... 12 AWG	
Strip lengths	Input (+): 13 ... 15 mm / 0.51 ... 0.59 in Input (-), output, signaling: 8 ... 9 mm / 0.31 ... 0.35 in	
Mounting type	DIN-rail-mount (EN 60715)	
Dimensions and weight:		
Dimensions (mm) W x H x L	45 x 90 x 115.5 Length from upper-edge of DIN-rail	
Weight	170 g	
Standards and specifications:		
Standards/specifications	UL 508*, UL 2367*, GL*, EN 60950, EN 61000-6-2, EN 61000-6-3 (* pending)	

Electronic Circuit Breaker with Active Current Limitation

EPSITRON®



Similar to pictured device



- Space-saving electronic circuit breaker with 4 channels
- Nominal current is fixed at 3.8 A for each channel
- Each output complies with NEC Class 2
- Active current limitation
- Switch-on capacity > 65000 μ F 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 (group signal)
- Status message for each channel via pulse sequence
- Remote input resets tripped channels or switches on/off any number of channels via pulse sequence

Technical Data

Input:

Nominal input voltage $V_{i, nom}$	24 VDC
Input voltage range	20 ... 28.8 VDC

Output:

Nominal output voltage $V_{o, nom}$	4 x 24 VDC
Nominal current	4 x 3.8 ADC NEC Class 21 (at 20 ... 24 V DC); 4 x 3.2 ADC NEC Class 2 (at 28 VDC) fixed nominal current
Voltage drop	150 mV at 3.8 A
Trip time	Load-dependent (16 ms ... 5 s)
Switch-on capacity	> 65,000 μ F per channel
Switch-on behavior	Time-delayed channel switching (load-dependent, min. 50 ms / max. 5 s)
Active current limitation	Yes
Operational indication	Green LED (OK channel), Red LED (tripped channel)
Signaling	4 x LED (green/red/orange)
Remote input	Resetting of tripped channel via 15 ... 30 VDC pulse for at least 500 ms. Switching on/off any number of channels via pulse sequence

Efficiency/Power losses:

Efficiency	99 % typ.
Power loss P_V	0.82 W (no load) / 3.1 W (at 4 x 3.8 A)

Fuse protection:

Internal fuse	No fuse
---------------	---------

Description

Electronic circuit breaker,
24 VDC / 4 x 3.8 A

Item No.

787-1664/004-1000

Pack. Unit

1

Technical Data

Environmental requirements:

Ambient operating temperature	-25 °C ... +70 °C
Storage temperature	-25 °C ... +85 °C
Relative humidity	5 % ... 96 % (no condensation permissible)
Derating	No derating
Degree of pollution	2 (acc. to EN 50178)

Safety and protection:

Test voltage	500 VDC (connectors to housing)
Protection class	III
Reverse voltage protection	No
Degree of protection	IP20 (acc. to EN 60529)
Overvoltage protection	Via 33 V suppressor diode at input
Feedback voltage	Max. 28.8 VDC
Series connection of several devices	Not permitted
Parallel operation of single channels	Not permitted

Connection and mounting type:

Wire connection	Input (+): WAGO 831 Series Input (-), output, signaling: WAGO 721 Series
Cross sections	Input (+): 0.5 ... 10 mm ² / 20 ... 8 AWG Input (-), output, signaling: 0.08 ... 2.5 mm ² / 28 ... 12 AWG
Strip lengths	Input (+): 13 ... 15 mm / 0.51 ... 0.59 in Input (-), output, signaling: 8 ... 9 mm / 0.31 ... 0.35 in
Mounting type	DIN-rail-mount (EN 60715)

Dimensions and weight:

Dimensions (mm) W x H x L	45 x 90 x 115.5 Length from upper-edge of DIN-rail
Weight	170 g

Standards and specifications:

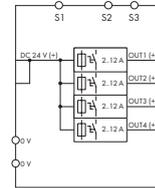
Standards/specifications	UL 508, UL 2367, GL*, EN 60950, EN 61000-6-2, EN 61000-6-3 (*pending)
--------------------------	--

Electronic Circuit Breaker with Active Current Limitation

EPSITRON®



Similar to pictured device



- Space-saving electronic circuit breaker with 4 channels
- 2-12 A nominal current, adjustable for each channel via sealable selector switch
- Active current limitation
- Switch-on capacity > 50000 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 (group signal)
- Status message for each channel via pulse sequence
- Remote input resets tripped channels or switches on/off any number of channels via pulse sequence

Technical Data	
Input:	
Nominal input voltage $V_{i, nom}$	24 VDC
Input voltage range	18 ... 30 VDC
Output:	
Nominal output voltage $V_{o, nom}$	4 x 24 VDC
Nominal current	Max. 4 x 12 ADC (2, 4, 6, 8, 10, 12 A adjustable for each channel via selector switch)
Voltage drop	240 mV at 12 A
Trip time	Load-dependent (16 ms ... 5 s)
Switch-on capacity	> 50,000 µF per channel at 24 VDC, 2.5 mm ² conductor cross section and 2.5 m cable length
Switch-on behavior	Time-delayed channel switching (load-dependent, min. 50 ms / max. 5 s)
Active current limitation	Yes
Operational indication	Green LED (OK channel), Red LED (tripped channel)
Signaling	4 x LED (green/red/orange)
Remote input	Resetting of tripped channel via 15 ... 30 VDC pulse for at least 500 ms. Switching on/off any number of channels via pulse sequence
Efficiency/Power losses:	
Efficiency	99 % typ.
Power loss P_V	0.77 W (no load) / 12.3 W (at 4 x 12 A)
Fuse protection:	
Internal fuse	15 AT per channel

Description	Item No.	Pack. Unit
Electronic circuit breaker, 24 VDC / 4 x 12 A	787-1664/212-1000	1
Technical Data		
Environmental requirements:		
Ambient operating temperature	-25 °C ... +70 °C	
Storage temperature	-25 °C ... +85 °C	
Relative humidity	5 % ... 96 % (no condensation permissible)	
Derating	No derating	
Degree of pollution	2 (acc. to EN 50178)	
Safety and protection:		
Test voltage	500 VDC (connectors to housing)	
Protection class	III	
Reverse voltage protection	No	
Degree of protection	IP20 (acc. to EN 60529)	
Overvoltage protection	Via 33 V suppressor diode at input	
Feedback voltage	Max. 35 VDC	
Series connection of several devices	Not permitted	
Parallel operation of single channels	Not permitted	
Connection and mounting type:		
Wire connection	Input (+): WAGO 831 Series Input (-), output, signaling: WAGO 721 Series	
Cross sections	Input (+): 0.5 ... 10 mm ² / 20 ... 8 AWG Input (-), output, signaling: 0.08 ... 2.5 mm ² / 28 ... 12 AWG	
Strip lengths	Input (+): 13 ... 15 mm / 0.51 ... 0.59 in Input (-), output, signaling: 8 ... 9 mm / 0.31 ... 0.35 in	
Mounting type	DIN-rail-mount (EN 60715)	
Dimensions and weight:		
Dimensions (mm) W x H x L	45 x 90 x 115.5 Length from upper-edge of DIN-rail	
Weight	170 g	
Standards and specifications:		
Standards/specifications	UL 508, UL 2367, GL*, EN 60950, EN 61000-6-2, EN 61000-6-3 (* pending)	

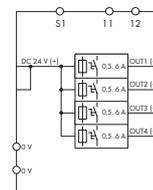
Electronic Circuit Breaker with Active Current Limitation

EPSITRON®



Similar to pictured device

- Space-saving electronic circuit breaker with 4 channels
- 0.5–6 A nominal current, adjustable for each channel via sealable selector switch, factory preset: 0.5 A, switched off
- Active current limitation
- Switch-on capacity > 58000 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 and switched off message (common group signal) via isolated contact, ports 11/12
- Remote input resets all tripped channels



Technical Data	
Input:	
Nominal input voltage $V_{i, nom}$	24 VDC
Input voltage range	18 ... 30 VDC
Output:	
Nominal output voltage $V_{o, nom}$	4 x 24 VDC
Nominal current	Max. 4 x 6 ADC (0.5, 1, 2, 3, 4, 6 A adjustable for each channel via selector switch)
Factory preset	0.5 ADC, switched off
Voltage drop	145 mV at 6 A
Trip time	Load-dependent (16 ms ... 100 s)
Switch-on capacity	> 58,000 µF per channel
Switch-on behavior	Time-delayed channel switching (load-dependent, min. 50 ms / max. 5 s)
Active current limitation	Yes
Operational indication	Green LED (OK channel), Red LED (tripped channel)
Signaling	4 x LED (green/red/orange)
Remote input	Resetting of tripped channel via 15 ... 30 VDC pulse for at least 500 ms.
Efficiency/Power losses:	
Efficiency	99 % typ.
Power loss P_V	0.77 W (no load) / 4.3 W (at 4 x 6 A)
Fuse protection:	
Internal fuse	15 AT per channel

Description	Item No.	Pack. Unit
Electronic circuit breaker, 24 VDC / 4 x 6 A	787-1664/006-1054	1
Technical Data		
Environmental requirements:		
Ambient operating temperature	-25 °C ... +70 °C	
Storage temperature	-25 °C ... +85 °C	
Relative humidity	5 % ... 96 % (no condensation permissible)	
Derating	No derating	
Degree of pollution	2 (acc. to EN 50178)	
Safety and protection:		
Test voltage	500 VDC (connectors to housing)	
Protection class	III	
Reverse voltage protection	No	
Degree of protection	IP20 (acc. to EN 60529)	
Overvoltage protection	Via 33 V suppressor diode at input	
Feedback voltage	Max. 35 VDC	
Series connection of several devices	Not permitted	
Parallel operation of single channels	Not permitted	
Connection and mounting type:		
Wire connection	Input (+): WAGO 831 Series Input (-), output, signaling: WAGO 721 Series	
Cross sections	Input (+): 0.5 ... 10 mm ² / 20 ... 8 AWG Input (-), output, signaling: 0.08 ... 2.5 mm ² / 28 ... 12 AWG	
Strip lengths	Input (+): 13 ... 15 mm / 0.51 ... 0.59 in Input (-), output, signaling: 8 ... 9 mm / 0.31 ... 0.35 in	
Mounting type	DIN-rail-mount (EN 60715)	
Dimensions and weight:		
Dimensions (mm) W x H x L	45 x x 115.5 Length from upper-edge of DIN-rail	
Weight	170 g	
Standards and specifications:		
Standards/specifications	UL 508, UL 2367, GL*, EN 60950, EN 61000-6-2, EN 61000-6-3 (*pending)	

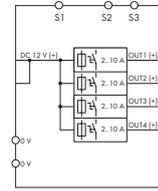
Electronic Circuit Breaker

EPSITRON®



Similar to pictured device

- Space-saving electronic circuit breaker with 4 channels
- 2-10 A nominal current, adjustable for each channel via sealable selector switch
- Switch-on capacity > 50000 μ F 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 (group signal)
- Status message for each channel via pulse sequence
- Remote input resets tripped channels or switches on/off any number of channels via pulse sequence



Description	Item No.	Pack. Unit
Electronic circuit breaker, 12 VDC / 4 x 10 A	787-1664/000-100	1

Technical Data	
Input:	
Nominal input voltage $V_{i, nom}$	12 VDC
Input voltage range	10 ... 16 VDC
Output:	
Nominal output voltage $V_{o, nom}$	4 x 12 VDC
Nominal current	Max. 4 x 10 ADC (2, 3, 4, 6, 8, 10 A adjustable for each channel via selector switch)
Voltage drop	200 mV at 10 A
Trip time	Load-dependent (16 ms ... 100 s)
Switch-on capacity	> 50,000 μ F per channel
Switch-on behavior	Time-delayed channel switching (load-dependent, min. 50 ms / max. 5 s)
Active current limitation	No
Operational indication	Green LED (OK channel), Red LED (tripped channel)
Signaling	4 x LED (green/red/orange)
Remote input	Resetting of tripped channel via 9 ... 30 VDC pulse for at least 500 ms. Switching on/off any number of channels via pulse sequence
Efficiency/Power losses:	
Efficiency	99 % typ.
Power loss P_V	0.53 W (no load) / 10 W (at 4 x 10 A)
Fuse protection:	
Internal fuse	15 AT per channel

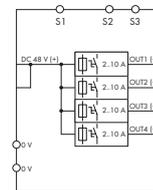
Technical Data	
Environmental requirements:	
Ambient operating temperature	-25 °C ... +70 °C
Storage temperature	-25 °C ... +85 °C
Relative humidity	5 % ... 96 % (no condensation permissible)
Derating	$\geq +50$ °C: see instruction manual
Degree of pollution	2 (acc. to EN 50178)
Safety and protection:	
Test voltage	500 VDC (connectors to housing)
Protection class	III
Reverse voltage protection	No
Degree of protection	IP20 (acc. to EN 60529)
Overvoltage protection	Via 33 V suppressor diode at input
Feedback voltage	Max. 35 VDC
Series connection of several devices	Not permitted
Parallel operation of single channels	Not permitted
Connection and mounting type:	
Wire connection	Input (+): WAGO 831 Series Input (-), output, signaling: WAGO 721 Series
Cross sections	Input (+): 0.5 ... 10 mm ² / 20 ... 8 AWG Input (-), output, signaling: 0.08 ... 2.5 mm ² / 28 ... 12 AWG
Strip lengths	Input (+): 13 ... 15 mm / 0.51 ... 0.59 in Input (-), output, signaling: 8 ... 9 mm / 0.31 ... 0.35 in
Mounting type	DIN-rail-mount (EN 60715)
Dimensions and weight:	
Dimensions (mm) W x H x L	45 x 90 x 115.5 Length from upper-edge of DIN-rail
Weight	170 g
Standards and specifications:	
Standards/specifications	UL 508*, UL 2367*, GL*, EN 60950, EN 61000-6-2, EN 61000-6-3 (* pending)

Electronic Circuit Breaker

EPSITRON®



Similar to pictured device



- Space-saving electronic circuit breaker with 4 channels
- 2 - 10 A nominal current, adjustable for each channel via sealable selector switch
- Switch-on capacity > 23000 μ F 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 (group signal)
- Status message for each channel via pulse sequence
- Remote input resets tripped channels or switches on/off any number of channels via pulse sequence

Technical Data

Input:

Nominal input voltage $V_{i, nom}$	48 VDC
Input voltage range	32 ... 58 VDC

Output:

Nominal output voltage $V_{o, nom}$	4 x 48 VDC
Nominal current	Max. 4 x 10 ADC (2, 3, 4, 6, 8, 10 A adjustable for each channel via selector switch)
Voltage drop	175 mV at 10 A
Trip time	Load-dependent (16 ms ... 100 s)
Switch-on capacity	> 23,000 μ F per channel at 48 VDC, 2.5 mm ² conductor cross section and 2.5 m cable length
Switch-on behavior	Time-delayed channel switching (load-dependent, min. 50 ms / max. 5 s)
Active current limitation	No
Operational indication	Green LED (OK channel), Red LED (tripped channel)
Signaling	4 x LED (green/red/orange)
Remote input	Resetting of tripped channel via 15 ... 58 VDC pulse for at least 500 ms. Switching on/off any number of channels via pulse sequence

Efficiency/Power losses:

Efficiency	99 % typ.
Power loss P_V	0.84 W (no load) / 8 W (at 4 x 10 A)

Fuse protection:

Internal fuse	15 AT per channel
---------------	-------------------

Description	Item No.	Pack. Unit
Electronic circuit breaker, 48 VDC / 4 x 10 A	787-1664/000-200	1

Technical Data

Environmental requirements:

Ambient operating temperature	-25 °C ... +70 °C
Storage temperature	-25 °C ... +85 °C
Relative humidity	5 % ... 96 % (no condensation permissible)
Derating	$\geq +50$ °C: see instruction manual
Degree of pollution	2 (acc. to EN 50178)

Safety and protection:

Test voltage	500 VDC (connectors to housing)
Protection class	III
Reverse voltage protection	No
Degree of protection	IP20 (acc. to EN 60529)
Overvoltage protection	Via 68 V suppressor diode at input
Feedback voltage	Max. 58 VDC
Series connection of several devices	Not permitted
Parallel operation of single channels	Not permitted

Connection and mounting type:

Wire connection	Input (+): WAGO 831 Series Input (-), output, signaling: WAGO 721 Series
Cross sections	Input (+): 0.5 ... 10 mm ² / 20 ... 8 AWG Input (-), output, signaling: 0.08 ... 2.5 mm ² / 28 ... 12 AWG
Strip lengths	Input (+): 13 ... 15 mm / 0.51 ... 0.59 in Input (-), output, signaling: 8 ... 9 mm / 0.31 ... 0.35 in
Mounting type	DIN-rail-mount (EN 60715)

Dimensions and weight:

Dimensions (mm) W x H x L	45 x 90 x 115.5 Length from upper-edge of DIN-rail
Weight	170 g

Standards and specifications:

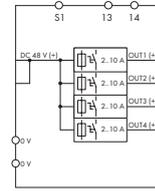
Standards/specifications	UL 508*, UL 2367*, GL*, EN 60950, EN 61000-6-2, EN 61000-6-3 (*pending)
--------------------------	--

Electronic Circuit Breaker

EPSITRON®



Similar to pictured device



- Space-saving electronic circuit breaker with 4 channels
- 2-10 A nominal current, 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) via isolated contact (13/14)
- Remote input S1 resets all tripped channels

Technical Data	
Input:	
Nominal input voltage $V_{i,nom}$	48 VDC
Input voltage range	32 ... 58 VDC
Output:	
Nominal output voltage $V_{o,nom}$	4 x 48 VDC
Nominal current	Max. 4 x 10 ADC (2, 3, 4, 6, 8, 10 A adjustable for each channel via selector switch)
Voltage drop	175 mV at 10 A
Trip time	Load-dependent (16 ms ... 100 s)
Switch-on capacity	> 23,000 µF per channel at 48 VDC, 2.5 mm ² conductor cross section and 2.5 m cable length
Switch-on behavior	Time-delayed channel switching (load-dependent, min. 50 ms / max. 5 s)
Active current limitation	No
Operational indication	Green LED (OK channel), Red LED (tripped channel)
Signaling	4 x LED (green/red/orange)
Remote input	Resetting of tripped channel via 15 ... 58 VDC pulse for at least 500 ms.
Efficiency/Power losses:	
Efficiency	99 % typ.
Power loss P_v	0.84 W (no load) / 8 W (at 4 x 10 A)
Fuse protection:	
Internal fuse	15 AT per channel

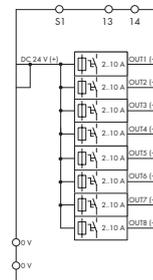
Description	Item No.	Pack. Unit
Electronic circuit breaker, 48 VDC / 4 x 10 A	787-1664/000-250	1
Technical Data		
Environmental requirements:		
Ambient operating temperature	-25 °C ... +70 °C	
Storage temperature	-25 °C ... +85 °C	
Relative humidity	5 % ... 96 % (no condensation permissible)	
Derating	≥ +50 °C: see instruction manual	
Degree of pollution	2 (acc. to EN 50178)	
Safety and protection:		
Test voltage	500 VDC (connectors to housing)	
Protection class	III	
Reverse voltage protection	No	
Degree of protection	IP20 (acc. to EN 60529)	
Overvoltage protection	Via 68 V suppressor diode at input	
Feedback voltage	Max. 58 VDC	
Series connection of several devices	Not permitted	
Parallel operation of single channels	Not permitted	
Connection and mounting type:		
Wire connection	Input (+): WAGO 831 Series Input (-), output, signaling: WAGO 721 Series	
Cross sections	Input (+): 0.5 ... 10 mm ² / 20 ... 8 AWG Input (-), output, signaling: 0.08 ... 2.5 mm ² / 28 ... 12 AWG	
Strip lengths	Input (+): 13 ... 15 mm / 0.51 ... 0.59 in Input (-), output, signaling: 8 ... 9 mm / 0.31 ... 0.35 in	
Mounting type	DIN-rail-mount (EN 60715)	
Dimensions and weight:		
Dimensions (mm) W x H x L	45 x 90 x 115.5 Length from upper-edge of DIN-rail	
Weight	170 g	
Standards and specifications:		
Standards/specifications	UL 508*, UL 2367*, GL*, EN 60950, EN 61000-6-2, EN 61000-6-3 (* pending)	

Electronic Circuit Breaker

EPSITRON®



Similar to pictured device



- Space-saving electronic circuit breaker with 8 channels
- 2-10 A nominal current, adjustable for each channel via sealable selector switch; factory preset: 2 A, switched off
- Switch-on capacity > 50000 μ F per channel
- One illuminated, three-colored button per channel simplifies switching (on/off), resetting and on-site diagnostics
- Time-delayed switching of channels
- Tripped and switched off message (common group signal) via isolated contact, ports 13/14
- Remote input resets all tripped channels

Technical Data

Input:

Nominal input voltage $V_{i, nom}$	24 VDC
Input voltage range	18 ... 30 VDC

Output:

Nominal output voltage $V_{o, nom}$	8 x 24 VDC
Nominal current	Max. 10 ADC per channel, max. 70 ADC in total (2, 3, 4, 6, 8, 10 A adjustable for each channel via selector switch)
Factory preset	2 ADC, switched off
Voltage drop	200 mV at 10 A
Trip time	Load-dependent (16 ms ... 100 s)
Switch-on capacity	> 50,000 μ F per channel
Switch-on behavior	Time-delayed channel switching (load-dependent, min. 50 ms / max. 5 s)
Active current limitation	No
Operational indication	Green LED (OK channel), Red LED (tripped channel)
Signaling	8 x LED (green/red/orange)
Remote input	Resetting of tripped channel via 15 ... 30 VDC pulse for at least 500 ms.

Efficiency/Power losses:

Efficiency	99 % typ.
Power loss P_V	1.32 W (no load) / 20 W (at 8 x 10 A)

Fuse protection:

Internal fuse	15 AT per channel
---------------	-------------------

Description

Electronic circuit breaker,
24 VDC / 8 x 10 A

Item No.

787-1668/000-054

Pack. Unit

1

Technical Data

Environmental requirements:

Ambient operating temperature	-25 °C ... +70 °C
Storage temperature	-25 °C ... +85 °C
Relative humidity	5 % ... 96 % (no condensation permissible)
Derating	$\geq +50$ °C: see instruction manual
Degree of pollution	2 (acc. to EN 50178)

Safety and protection:

Test voltage	500 VDC (connectors to housing)
Protection class	III
Reverse voltage protection	No
Degree of protection	IP20 (acc. to EN 60529)
Overvoltage protection	Via 33 V suppressor diode at input
Feedback voltage	Max. 35 VDC
Series connection of several devices	Not permitted
Parallel operation of single channels	Not permitted

Connection and mounting type:

Wire connection	Input (+): WAGO 831 Series Input (-), output, signaling: WAGO 721 Series
Cross sections	Input (+): 0.5 ... 10 mm ² / 20 ... 8 AWG Input (-), output, signaling: 0.08 ... 2.5 mm ² / 28 ... 12 AWG
Strip lengths	Input (+): 13 ... 15 mm / 0.51 ... 0.59 in Input (-), output, signaling: 8 ... 9 mm / 0.31 ... 0.35 in
Mounting type	DIN-rail-mount (EN 60715)

Dimensions and weight:

Dimensions (mm) W x H x L	42 x 127 x 142.5
	Length from upper-edge of DIN-rail
Weight	440 g

Standards and specifications:

Standards/specifications	UL 508*, UL 2367*, GL*, EN 60950, EN 61000-6-2, EN 61000-6-3 (*pending)
--------------------------	--

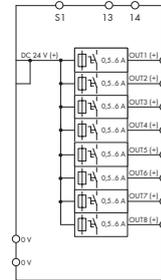
Electronic Circuit Breaker

EPSITRON®



Similar to pictured device

- Space-saving electronic circuit breaker with 8 channels
- 0.5–6 A nominal current, adjustable for each channel via sealable selector switch; factory preset: 0.5 A, switched off
- 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
- Tripped and switched off message (common group signal) via isolated contact, ports 13/14
- Remote input resets all tripped channels



Technical Data	
Input:	
Nominal input voltage $V_{i, \text{nom}}$	24 VDC
Input voltage range	18 ... 30 VDC
Output:	
Nominal output voltage $V_{o, \text{nom}}$	8 x 24 VDC
Nominal current	Max. 8 x 6 ADC (0.5, 1, 2, 3, 4, 6 A adjustable for each channel via selector switch)
Factory preset	0.5 ADC, switched off
Voltage drop	120 mV at 6 A
Trip time	Load-dependent (16 ms ... 100 s)
Switch-on capacity	> 50,000 µF per channel
Switch-on behavior	Time-delayed channel switching (load-dependent, min. 50 ms / max. 5 s)
Active current limitation	No
Operational indication	Green LED (OK channel), Red LED (tripped channel)
Signaling	8 x LED (green/red/orange)
Remote input	Resetting of tripped channel via 15 ... 30 VDC pulse for at least 500 ms.
Efficiency/Power losses:	
Efficiency	99 % typ.
Power loss P_V	0.84 W (no load) / 8 W (at 8 x 6 A)
Fuse protection:	
Internal fuse	15 AT per channel

Description	Item No.	Pack. Unit
Electronic circuit breaker, 24 VDC / 8 x 6 A	787-1668/106-054	1

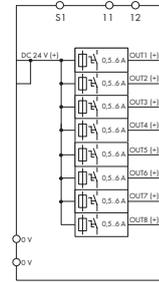
Technical Data	
Environmental requirements:	
Ambient operating temperature	-25 °C ... +70 °C
Storage temperature	-25 °C ... +85 °C
Relative humidity	5 % ... 96 % (no condensation permissible)
Derating	No derating
Degree of pollution	2 (acc. to EN 50178)
Safety and protection:	
Test voltage	500 VDC (connectors to housing)
Protection class	III
Reverse voltage protection	No
Degree of protection	IP20 (acc. to EN 60529)
Overvoltage protection	Via 33 V suppressor diode at input
Feedback voltage	Max. 35 VDC
Series connection of several devices	Not permitted
Parallel operation of single channels	Not permitted
Connection and mounting type:	
Wire connection	Input (+): WAGO 831 Series Input (-), output, signaling: WAGO 721 Series
Cross sections	Input (+): 0.5 ... 10 mm ² / 20 ... 8 AWG Input (-), output, signaling: 0.08 ... 2.5 mm ² / 28 ... 12 AWG
Strip lengths	Input (+): 13 ... 15 mm / 0.51 ... 0.59 in Input (-), output, signaling: 8 ... 9 mm / 0.31 ... 0.35 in
Mounting type	DIN-rail-mount (EN 60715)
Dimensions and weight:	
Dimensions (mm) W x H x L	42 x 127 x 142.5 Length from upper-edge of DIN-rail
Weight	440 g
Standards and specifications:	
Standards/specifications	UL 508*, UL 2367*, GL*, EN 60950, EN 61000-6-2, EN 61000-6-3 (* pending)

Electronic Circuit Breaker with Active Current Limitation

EPSITRON®



Similar to pictured device



- Space-saving electronic circuit breaker with 8 channels
- 0.5–6 A nominal current, adjustable for each channel via sealable selector switch, factory preset: 0.5 A, switched off
- Active current limitation
- Switch-on capacity > 58000 μ F per channel
- One illuminated, three-colored button per channel simplifies switching (on/off), resetting and on-site diagnostics
- Time-delayed switching of channels
- Tripped and switched off message (common group signal) via isolated contact, ports 11/12
- Remote input resets all tripped channels

Technical Data

Input:

Nominal input voltage $V_{i, nom}$	24 VDC
Input voltage range	18 ... 30 VDC

Output:

Nominal output voltage $V_{o, nom}$	8 x 24 VDC
Nominal current	Max. 8 x 6 ADC (0.5, 1, 2, 3, 4, 6 A adjustable for each channel via selector switch)
Factory preset	0.5 ADC, switched off
Voltage drop	155 mV at 6 A
Trip time	Load-dependent (16 ms ... 100 s)
Switch-on capacity	> 58,000 μ F per channel
Switch-on behavior	Time-delayed channel switching (load-dependent, min. 50 ms / max. 5 s)
Active current limitation	Yes
Operational indication	Green LED (OK channel), Red LED (tripped channel)
Signaling	8 x LED (green/red/orange)
Remote input	Resetting of tripped channel via 15 ... 30 VDC pulse for at least 500 ms.

Efficiency/Power losses:

Efficiency	99 % typ.
Power loss P_V	1.15 W (no load) / 8.6 W (at 8 x 6 A)

Fuse protection:

Internal fuse	15 AT per channel
---------------	-------------------

Description

Electronic circuit breaker,
24 VDC / 8 x 6 A

Item No.

787-1668/006-1054

Pack. Unit

1

Technical Data

Environmental requirements:

Ambient operating temperature	-25 °C ... +70 °C
Storage temperature	-25 °C ... +85 °C
Relative humidity	5 % ... 96 % (no condensation permissible)
Derating	No derating
Degree of pollution	2 (acc. to EN 50178)

Safety and protection:

Test voltage	500 VDC (connectors to housing)
Protection class	III
Reverse voltage protection	No
Degree of protection	IP20 (acc. to EN 60529)
Overvoltage protection	Via 33 V suppressor diode at input
Feedback voltage	Max. 35 VDC
Series connection of several devices	Not permitted
Parallel operation of single channels	Not permitted

Connection and mounting type:

Wire connection	Input (+): WAGO 831 Series Input (-), output, signaling: WAGO 721 Series
Cross sections	Input (+): 0.5 ... 10 mm ² / 20 ... 8 AWG Input (-), output, signaling: 0.08 ... 2.5 mm ² / 28 ... 12 AWG
Strip lengths	Input (+): 13 ... 15 mm / 0.51 ... 0.59 in Input (-), output, signaling: 8 ... 9 mm / 0.31 ... 0.35 in
Mounting type	DIN-rail-mount (EN 60715)

Dimensions and weight:

Dimensions (mm) W x H x L	42 x 127 x 142.5 Length from upper-edge of DIN-rail
Weight	440 g

Standards and specifications:

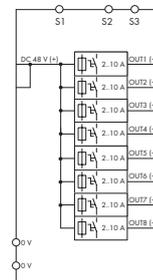
Standards/specifications	UL 508*, UL 2367*, GL*, EN 60950, EN 61000-6-2, EN 61000-6-3 (*pending)
--------------------------	--

Electronic Circuit Breaker

EPSITRON®



Similar to pictured device



- Space-saving electronic circuit breaker with 8 channels
- 2-10 A nominal current, adjustable for each channel via sealable selector switch
- Switch-on capacity > 23000 μ F 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 (group signal)
- Status message for each channel via pulse sequence
- Remote input resets tripped channels or switches on/off any number of channels via pulse sequence

Technical Data

Input:

Nominal input voltage $V_{i, \text{nom}}$	48 VDC
Input voltage range	32 ... 58 VDC

Output:

Nominal output voltage $V_{o, \text{nom}}$	8 x 48 VDC
Nominal current	Max. 10 ADC per channel, max. 70 ADC in total (2, 3, 4, 6, 8, 10 A adjustable for each channel via selector switch)
Voltage drop	200 mV at 10 A
Trip time	Load-dependent (16 ms ... 100 s)
Switch-on capacity	> 23,000 μ F per channel at 48 VDC, 2.5 mm ² conductor cross section and 2.5 m cable length
Switch-on behavior	Time-delayed channel switching (load-dependent, min. 50 ms / max. 5 s)
Active current limitation	No
Operational indication	Green LED (OK channel), Red LED (tripped channel)
Signaling	8 x LED (green/red/orange)
Remote input	Resetting of tripped channel via 15 ... 58 VDC pulse for at least 500 ms. Switching on/off any number of channels via pulse sequence

Efficiency/Power losses:

Efficiency	99 % typ.
Power loss P_V	1.3 W (no load) / 20 W (at 8 x 10 A)

Fuse protection:

Internal fuse	15 AT per channel
---------------	-------------------

Description

Electronic circuit breaker,
48 VDC / 8 x 10 A

Item No.

787-1668/000-200

Pack. Unit

1

Technical Data

Environmental requirements:

Ambient operating temperature	-25 °C ... +70 °C
Storage temperature	-25 °C ... +85 °C
Relative humidity	5 % ... 96 % (no condensation permissible)
Derating	$\geq +50$ °C: see instruction manual
Degree of pollution	2 (acc. to EN 50178)

Safety and protection:

Test voltage	500 VDC (connectors to housing)
Protection class	III
Reverse voltage protection	No
Degree of protection	IP20 (acc. to EN 60529)
Overvoltage protection	Via 68 V suppressor diode at input
Feedback voltage	Max. 58 VDC
Series connection of several devices	Not permitted
Parallel operation of single channels	Not permitted

Connection and mounting type:

Wire connection	Input (+): WAGO 831 Series Input (-), output, signaling: WAGO 721 Series
Cross sections	Input (+): 0.5 ... 10 mm ² / 20 ... 8 AWG Input (-), output, signaling: 0.08 ... 2.5 mm ² / 28 ... 12 AWG
Strip lengths	Input (+): 13 ... 15 mm / 0.51 ... 0.59 in Input (-), output, signaling: 8 ... 9 mm / 0.31 ... 0.35 in
Mounting type	DIN-rail-mount (EN 60715)

Dimensions and weight:

Dimensions (mm) W x H x L	42 x 127 x 142.5
	Length from upper-edge of DIN-rail
Weight	440 g

Standards and specifications:

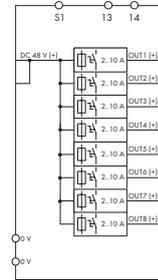
Standards/specifications	UL 508*, UL 2367*, GL*, EN 60950, EN 61000-6-2, EN 61000-6-3 (*pending)
--------------------------	--

Electronic Circuit Breaker

EPSITRON®



Similar to pictured device



- Space-saving electronic circuit breaker with 8 channels
- 2-10 A nominal current, 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) via isolated contact (13/14)
- Remote input resets all tripped channels

Technical Data	
Input:	
Nominal input voltage $V_{i, nom}$	48 VDC
Input voltage range	32 ... 58 VDC
Output:	
Nominal output voltage $V_{o, nom}$	8 x 48 VDC
Nominal current	Max. 10 ADC per channel, max. 70 ADC in total (2, 3, 4, 6, 8, 10 A adjustable for each channel via selector switch)
Voltage drop	200 mV at 10 A
Trip time	Load-dependent (16 ms ... 100 s)
Switch-on capacity	> 23,000 µF per channel at 48 VDC, 2.5 mm ² conductor cross section and 2.5 m cable length
Switch-on behavior	Time-delayed channel switching (load-dependent, min. 50 ms / max. 5 s)
Active current limitation	No
Operational indication	Green LED (OK channel), Red LED (tripped channel)
Signaling	8 x LED (green/red/orange)
Remote input	Resetting of tripped channel via 15 ... 58 VDC pulse for at least 500 ms.
Efficiency/Power losses:	
Efficiency	99 % typ.
Power loss P_V	1.3 W (no load) / 20 W (at 8 x 10 A)
Fuse protection:	
Internal fuse	15 AT per channel

Description	Item No.	Pack. Unit
Electronic circuit breaker, 48 VDC / 8 x 10 A	787-1668/000-250	1
Technical Data		
Environmental requirements:		
Ambient operating temperature	-25 °C ... +70 °C	
Storage temperature	-25 °C ... +85 °C	
Relative humidity	5 % ... 96 % (no condensation permissible)	
Derating	≥ +50 °C: see instruction manual	
Degree of pollution	2 (acc. to EN 50178)	
Safety and protection:		
Test voltage	500 VDC (connectors to housing)	
Protection class	III	
Reverse voltage protection	No	
Degree of protection	IP20 (acc. to EN 60529)	
Overvoltage protection	Via 68 V suppressor diode at input	
Feedback voltage	Max. 58 VDC	
Series connection of several devices	Not permitted	
Parallel operation of single channels	Not permitted	
Connection and mounting type:		
Wire connection	Input (+): WAGO 831 Series Input (-), output, signaling: WAGO 721 Series	
Cross sections	Input (+): 0.5 ... 10 mm ² / 20 ... 8 AWG Input (-), output, signaling: 0.08 ... 2.5 mm ² / 28 ... 12 AWG	
Strip lengths	Input (+): 13 ... 15 mm / 0.51 ... 0.59 in Input (-), output, signaling: 8 ... 9 mm / 0.31 ... 0.35 in	
Mounting type	DIN-rail-mount (EN 60715)	
Dimensions and weight:		
Dimensions (mm) W x H x L	42 x 127 x 142.5 Length from upper-edge of DIN-rail	
Weight	440 g	
Standards and specifications:		
Standards/specifications	UL 508*, UL 2367*, GL*, EN 60950, EN 61000-6-2, EN 61000-6-3 (* pending)	

Shielded RJ-45 Cat. 6 Interface Module
Mounting adapter for DIN-rail

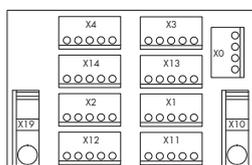
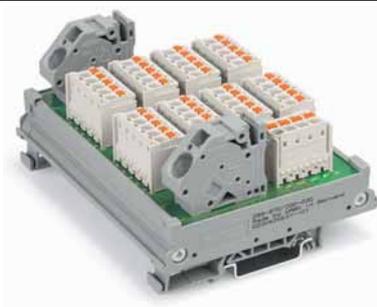


Description	Item No.	Pack. Unit
RJ-45 Cat. 6 Interface Module	289-195	1
Technical Data		
RJ-45 base module:		
Connecting cable	Min. Cat. 6	
Connector	1 x RJ-45/SC-RJ shielded	
Contact material	CuSn	
Contact plating	> 0.76 µm Au over > 1.2 µm Ni	
Contact resistance typ.	< 50 mΩ (at 20 °C)	
Min. mating cycles	750	
No. of poles	8	
Wire connection	IDC	
IDC surface treatment	CuSn, tin-plated,	
Cross sections	Solid: 0.2 ... 0.32 mm ² / 24 ... 22 AWG Fine-stranded: 0.2 ... 0.32 mm ² / 26/7 ... 22/7 AWG	
Strip lengths	0.8 ... 1.6 mm / 0.03 ... 0.06 in	
Shield contact	Large area, via shield latch	
Mounting adapter:		
Housing color	Gray	
Shielding	Bronze (CuSn ₂), tin coating	
Contact resistance	≤ 20mΩ	
Contact resistance	≤ 5 mΩ	
General specifications:		
Dimensions (mm) W x H x L	26.8 x 64.4 x 81.4 Height from upper-edge of DIN 35 rail	
Degree of protection	IP20	
Ambient operating temperature	-10 °C ... +60 °C	
Storage temperature	-40 °C ... +70 °C	
Relative humidity	< 95 % (no condensation)	
Standards/specifications	ISO/IEC 11801: 2011-06; IEC 60603-7; EN 50173-1: May 2011	

8 DIN-Rail-Mount Potential Multiplication Module

**DIN-rail-mount potential multiplication module,
4 potentials with each 24 VDC
with 5 connection points of 24 V
and 5 connection points of 0 V**

- May be used with electronic circuit breakers for 24 and 0 VDC power distribution as a substitute for DIN-rail-mount terminal blocks
- Pre-wiring and electrical isolation of current paths via pluggable *picoMAX*® Female Headers
- Optional coding pins (2092-1610) protect against any inadvertent mixing of female headers
- Optional gripping plates with sliding connector release (2092-1601/002-000 or 2092-1602/002-000) provide conductor strain relief
- Optional 0 V power supply commoning to adjacent modules via 745-682 Comb-Style Jumper Bar

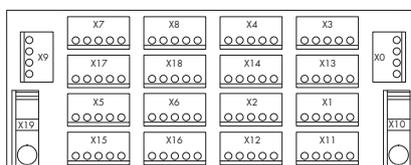
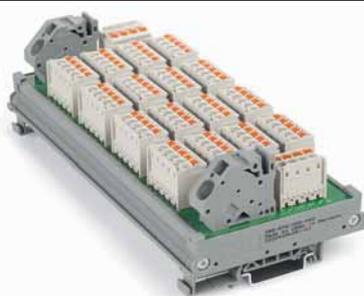


Description	Item No.	Pack. Unit
Potential multiplication module	288-870/000-030	1

Technical Data		
Max. operating voltage per potential	24 VDC	
Number of potentials	4	
Max. total current per potential	10 A	
Max. total current 0 V	40 A	
Max. current per connection	10 A	
Ambient operating temperature	-25 °C ... +70 °C (no condensation)	
Storage temperature	-40 °C ... +85 °C	
Dimensions, incl. mounting carrier and combination feet (mm) W x H x L	85 x 49 x 100	
Wire connection	Height from upper-edge of DIN-rail	
	Power supply 0 V: CAGE CLAMP® (WAGO 745 Series) Power supply 24 V, connection points: Push-in CAGE CLAMP® (<i>picoMAX</i> ® 5.0, WAGO 2092 Series)	
Cross sections	Power supply 0 V:	
	0.2 ... 16 mm² / 24 ... 6 AWG: Power supply 24 V, connection points:	
Strip lengths	0.2 ... 2.5 mm² / 24 ... 12 AWG (12 AWG: THHN, THWN)	
	Power supply 0 V: 12 ... 13 mm / 0.47 ... 0.51 in Power supply 24 V, connection points:	
Mounting direction	9 ... 10 mm / 0.35 ... 0.39 in	
	Power supply 0 V: 45° Power supply 24 V, connection points: vertical	
Mounting type	DIN-rail-mount (EN 60715)	
Accessories:		
Coding key carrier	2092-1610	
Gripping plate with sliding connector release, 3- to 4-pole	2092-1601/002-000	
Gripping plate with sliding connector release, 5- to 8-pole	2092-1602/002-000	
Comb-style jumper bar; 2-way	745-682	

**DIN-rail-mount potential multiplication module,
8 potentials with each 24 VDC
with 5 connection points of 24 V
and 5 connection points of 0 V**

- May be used with electronic circuit breakers for 24 and 0 VDC power distribution as a substitute for DIN-rail-mount terminal blocks
- Pre-wiring and electrical isolation of current paths via pluggable *picoMAX*[®] Female Headers
- Optional coding pins (2092-1610) protect against any inadvertent mixing of female headers
- Optional gripping plates with sliding connector release (2092-1601/002-000 or 2092-1602/002-000) provide conductor strain relief
- Optional 0 V power supply commoning to adjacent modules via 745-682 Comb-Style Jumper Bar (Derating with jumper bar:
-1 A/K > 60 °C ambient operating temperature)



Description	Item No.	Pack. Unit
Potential multiplication module	288-870/000-040	1
Technical Data		
Max. operating voltage per potential	24 VDC	
Number of potentials	8	
Max. total current per potential	10 A	
Max. total current 0 V	76 A	
Max. current per connection	10 A	
Ambient operating temperature	-25 °C ... +70 °C (no condensation)	
Storage temperature	-40 °C ... +85 °C	
Dimensions, incl. mounting carrier and combination feet (mm) W x H x L	85 x 49 x 154	
Wire connection	Height from upper-edge of DIN-rail	
	Power supply 0 V: CAGE CLAMP [®] (WAGO 745 Series) Power supply 24 V, connection points: Push-in CAGE CLAMP [®] (picoMAX [®] 5.0, WAGO 2092 Series)	
Cross sections	Power supply 0 V:	
	0.2 ... 16 mm ² / 24 ... 6 AWG: Power supply 24 V, connection points:	
Strip lengths	0.2 ... 2.5 mm ² / 24 ... 12 AWG (12 AWG: THHN, THWN)	
	Power supply 0 V: 12 ... 13 mm / 0.47 ... 0.51 in Power supply 24 V, connection points:	
Mounting direction	9 ... 10 mm / 0.35 ... 0.39 in Power supply 0 V: 45°	
Mounting type	Power supply 24 V, connection points: vertical DIN-rail-mount (EN 60715)	
Accessories:		
Coding key carrier	2092-1610	
Gripping plate with sliding connector release, 3- to 4-pole	2092-1601/002-000	
Gripping plate with sliding connector release, 5- to 8-pole	2092-1602/002-000	
Comb-style jumper bar; 2-way	745-682	

Item Number Index

Item No.	Page	Item No.	Page	Item No.	Page	Item No.	Page
248 Series		787 Series		857 Series			
248-501	8	787-1014/072-000	54	857-359	32		
		787-1628	46	857-369	32		
258 Series		787-1640	47	857-808	36		
258-5009	82	787-1642	48	857-812	38		
258-5010	82	787-1644	49				
		787-1662/000-004	58	858 Series			
288 Series		787-1662/000-054	59	858-158	34		
288-870/000-030	80	787-1662/000-100	62	858-161	34		
288-870/000-040	81	787-1662/000-200	63	858-164	34		
		787-1662/000-250	64				
		787-1662/004-1000	60	858-303	33		
		787-1662/212-1000	61				
289 Series		787-1664/000-054	65	859 Series			
289-195	78	787-1664/000-100	69	859-797	35		
		787-1664/000-200	70				
		787-1664/000-250	71	2009 Series			
		787-1664/004-1000	66	2009-515	82		
		787-1664/006-1054	68	2009-615	82		
		787-1664/212-1000	67				
750 Series		787-1668/000-054	72				
750-427/040-000	25	787-1668/000-200	76				
750-429/040-001	24	787-1668/000-250	77				
750-455/020-000	20	787-1668/006-1054	74				
750-458	23	787-1668/106-054	73				
750-492/040-001	27	787-1702	50				
750-495/040-000	28	787-1712	51				
750-495/040-001	28	787-1722	52				
750-495/040-002	28	787-1732	53				
750-496	21	787-2801	55				
750-497	22	787-2802	56				
		787-2805	57				
750-616/040-000	29						
750-1416/040-000	26	852 Series					
750-8100	18	852-201/040-002	30				
750-8101	16	852-201/107-002	30				
750-8101/025-000	16	852-201/107-030	30				
750-8102	14						
750-8102/025-000	14	852-303	30				
750-8202/040-000	12	852-1200	31				
750-8202/040-001	12	852-1210	31				
750-8206/040-000	10	852-1280	31				
750-8206/040-001	10	852-1305	31				
750-8207	8						
750-8207/025-000	8	855 Series					
750-8207/025-001	8	855-401/600-501	40				
758 Series		855-405/250-501	40				
758-879/000-001	8	855-601/1500-501	40				
758-879/000-3102	14	855-605/1500-501	40				
758-961	8	855-801/2000-1001	40				
758-962	8	855-805/2000-1001	40				
758-963	8	855-1001/2500-1001	40				
758-965	8	855-1005/2500-1001	40				
		855-1700/032-000	42				
759 Series		855-8001	45				
759-333	8	855-8002	45				
		855-8003	45				
		855-8004	45				
		855-9900	40				
		855-9910	40				
762 Series							
762-3000	6						
762-3001	6						
762-3002	7						
762-3003	7						

Algeria
please contact WAGO France

Argentina
Bruno Schillig S.A.
Arenales 4030, B1604CFD
Florida, PBA
Phone +54 11 4730 1100
Fax +54 11 4761 7244
wago@schillig.com.ar

Australia
WAGO Pty. Ltd.
2-4 Overseas Drive
Noble Park, Victoria, 3174
Tel. +61 03 8791 6300
Fax +61 03 9701 0177
sales@wago.com.au

NHP ELECTRICAL ENGINEERING PRODUCTS PTY LTD
43-67 River Street
Richmond, Victoria, 3121, P.O. Box 199
Phone +61 3 9429 2999
Fax +61 3 9429 1075
export@wago.com

Austria
WAGO Kontakttechnik Ges.m.b.H.
Campus 21, Europaring F15 602
2345 Brunn am Gebirge
Phone +43 1 6150780
Fax +43 1 6150775
info.at@wago.com

Azerbaijan
AZ Technics LTD
Zulfu V. Alizade
Y.Safarov str.33 , AZ1025,
Baku
Republic of Azerbaijan
Tel. +994 12 4968335
Fax +994 12 4968334
info@AZtechnics.az

Bangladesh
please contact WAGO India

Belarus
OOO FEK
pr+ Pushkina 29-B
220015 Minsk
Phone +375 17 2102189
Fax +375 17 2102189
wago@fek.by

UE ATAVA
ul. Denisovskaya, 47, office 1
220006 Minsk
Phone +375 17 2054015
Fax +375 17 2851759

Belgium
WAGO Belux nv
Excelsiorlaan 11
1930 Zaventem
Tel. +32 2 717 9090
Fax +32 2 717 9099
info-be@wago.com

Bolivia
ISOTEK S.R.L.
Zona Casco Viejo
Calle Isso #578, B/San Roque
Santa Cruz
Tel. +591 721 000 27

Bosnia and Herzegovina
please contact WAGO Bulgaria

Brazil
WAGO Eletroeletrônicos Ltda
Rua Américo Simões 1470
São Roque da Chave
Itupeva SP Brasil 13295-000
Phone +55 11 4591 0199
Fax +55 11 4591 0190
info.br@wago.com

Bulgaria
WAGO Kontakttechnik GmbH & Co. KG/
Representative Office Sofia
Business Center Serdika
2E Akad. Ivan Geshov Blvd.
Building 1, Floor 4, Office 417
1330 Sofia
Tel. +359 2 489 46 09
Fax +359 2 928 28 50
info-BG@wago.com

Canada
please contact WAGO USA

Chile
Desimat Chile
Av Puerto Vespuccio 9670
Pudahuel Santiago
Phone +56 2 7470152
Fax +56 2 7470153
ventaschile@desimat.cl

China
WAGO ELECTRONIC (TIANJIN) Co. LTD
No.5, Quan Hui Road
Wuqing Development Area
Tianjin 301700
Phone +86 22 59617688
Fax +86 22 59617668
info-cn@wago.com

Columbia
T.H.L. Ltda.
Cra. 49 B # 91-33
Bogotá
Phone +57 1 621 85 50
Fax +57 1 621 60 28
ventas-thl@thltda.com

Croatia
M.B.A. d.o.o.
Frana Supila 5
51211 Matulji
Tel. +385 51 275-736
Fax +385 51 275-066
mba@ri.hinet.hr

MICROSTAR d.o.o.
Siget 18 b
10020 Zagreb
Tel. +385 1 3647 849
Fax +385 1 3636 662
wago@microstar.hr

Czech Republic
WAGO Elektro spol. s r. o.
Rozvodova 1116/36
143 00 Praha 4 - Modřany
Phone +420 261 090 143
Fax +420 261 090 144
info.cz@wago.com
wago-cz@wago.com

Denmark
WAGO Danmark A/S
Filial of WAGO Kontakttechnik GmbH & Co. KG
Lejrvej 17
3500 Værløse
Tel. +45 44 357 777
info.dk@wago.com

Ecuador
ECUAINSETEC CIA LTDA
El Zurriago E9-32 y el Vengador
Quito
Tel. +593 2 2 26 91 48
Fax +593 2 2 46 18 33
g.gastro@ecuainsetec.com.ec

Egypt
IBN Engineering Instrumentation & Control
71 a El Shaheed Ahmed Hamdi St.
King Faisal, Giza
Phone +20 2 7214350
Fax +20 2 7221709
sales@ibnengineering.com

Estonia
Elfarko OÜ
Laki 14 - 502
10621 Tallinn
Phone +372 651 7731
Fax +372 651 7786
andres@elfarko.ee

Finland
WAGO Finland Oy
Vellamonkatu 30 B
00550 Helsinki
Tel. +358 9 7744 060
Fax +358 9 7744 0660
tilaus@wago.fi

France
WAGO CONTACT SAS
Paris Nord 2
83 Rue des Chardonnerets
B.P. 55065 - Tremblay en France
95947 - ROISSY CDG CEDEX
Phone +33 1 48172590
Fax +33 1 48632520
info-fr@wago.com

Germany
WAGO Kontakttechnik GmbH & Co. KG
Postfach 28 80, 32385 Minden
Hansastraße 27
32429 Minden
Phone +49 571 887-0
Fax +49 571 887-169
info@wago.com

WAGO Kontakttechnik GmbH & Co. KG
Waldstraße 1
99706 Sondershausen
Phone +49 3632 659-0
Fax +49 3632 659-100
info@wago.com

Great Britain
WAGO Limited
Triton Park, Swift Valley Industrial Estate
RUGBY
Warwickshire, CV21 1SG
Phone +44 1788 568008
Fax +44 1788 568050
uksales@wago.com

Greece
PANAGIOTIS SP. DIMOULAS - BIOMAT
DIMOULAS AUTOMATIONS
Kritis Str. 26
10439 Athen
Tel. +30 210 883 3337
Fax +30 210 883 4436
wago.info@dimoulas.com.gr

Honduras
CILASAS S.A. de C.V.
Barrio Los Andes
7 Calle entre 14 y 15 Ave. N.O.
P.O. Box. 1061
San Pedro Sula
Tel. +504 25571146/7
Fax +504 25571149

Hong Kong
National Concord Eng., Ltd.
Unit A-B, 5/F.
Southeast Industrial Building
611-619, Castle Peak Road
Tsuen Wan, N.T.
Phone +852 24292611
Fax +852 24292164
sales@nce.com.hk

Hungary
WAGO Hungária KFT
Ipari Park, Győr u. 2
2040 Budapest
Phone +36 23 502-170
Fax +36 23 502-166
info.hu@wago.com

Iceland
S. Gudjonsson ehf.
Audbrekku 9-11
202 Kópavogur
Phone +354 520-4500
Fax +354 520-4501
export@wago.com

India
WAGO Private Limited
C-27, Sector-58, Phase-III
Noida-201 301
Gautam Budh Nagar (U.P.)
Tel. +91 120 438 8700
Fax +91 120 438 8799
info.india@wago.com

Indonesia
please contact WAGO Singapore

Iraq
please contact WAGO Middle East

Ireland
Drives & Controls
Unit F4, Riverview Business Park
Nangor Road
Dublin 12
Phone +353 1 4604474
Fax +353 1 4604507
wago@drivesandcontrols.ie

Israel
Comtel Israel Electronic Solutions Ltd.
Bet Hapaamon
20 Hataas Street
P.O. Box 66
44425 Kefar-Saba
Phone +972 9 76 77 240
Fax +972 9 76 77 243
sales@comtel.co.il

Italy
WAGO ELETTRONICA SRL a Socio Unico
Via Parini 1
40033 Casalecchio di Reno (BO)
Tel. +39 051 6132112
Fax +39 051 6272174
info-ita@wago.com

Japan
WAGO Co. of JAPAN Ltd.
Kinshicho Prime Tower
5-7, Kameido, Koto-Ku
Tokyo 136-0071
Tel. +81 3 5627 2059
Fax +81 3 5627 2055
info-jp@wago.com

Jordan
please contact WAGO Middle East

Kazakhstan
TOO INTANT
232/2, Ryskulov avenue
050061 Almaty
Tel. +7 727 356 52 91/92/93
Fax +7 727 327 14 92/93
ee@intant.net
ees_sm1@intant.net

TOO Technik-Trade
ul. i. A. Protosanova, 81
070004 Ust-Kamenogorsk
Tel. +7 7232 254 084
Fax +7 7232 253 251
info@technik.kz

Korea
WAGO Korea Co., Ltd.
Room 205 Anyang Mega Valley
268, Hagui-ro, Dongan-gu
Anyang-si, Gyeonggi-do
14056, South Korea
Tel. +82 3142 19500
info.korea@wago.com

Kosovo
please contact WAGO Bulgaria

Latvia
INSTABALT LATVIA SIA
Vestienas iela 6
Riga, LV-1035
Phone +371 790 1188
Fax +371 790 1180
info@instabalt.lv

Lebanon
Gemayel Trading & Contracting
Antonins Project
P.O. BOX 70-1096
Antelias
Lebanon
Tel. +961 4 521 029
Fax +961 4 521 029
info@uae.com

Lithuania
INSTABALT LIT UAB
Savanoriu 187
Vilnius, 2053
Phone +370 52 322 295
Fax +370 52 322 247
info@instabalt.lt

Luxembourg
please contact WAGO Belgium

Macedonia

please contact WAGO Bulgaria

Kompjuner Inzenering
Vladimir Komarov 1A-3/9
1000 Skopje
Republic of Macedonia
Tel. +389 2 521 12 00
Tel. +389 2 246 11 08

Malaysia

WAGO Representative Office Malaysia
No 806, Block A4, Leisure Commerce Square,
No 9, Jalan PJS 8/9, 46150 Petaling Jaya,
Selangor Darul Ehsan, Malaysia
Tel. +60 3 7877 1776
Fax +60 3 7877 2776
kian.guan.tan@wago.com

HPH Materials (M) Sdn Bhd
No. 4, Jalan Nilam 1/6
Suban Hi-Tech Industrial Park
40000 Shah Alam
Selangor, D.E. Malaysia
Tel. +60 3 5638 2213
Fax +60 3 5638 8213
info@hphmaterials.com

Mexico

WAGO SA de CV
Av. Del Marques 38 Bodega 3
P. I. Bernardo Quintana
76240 El Marques, Querétaro
Phone +52 442 221 5946
Fax +52 442 221 5063
Toll-Free: 001-800-309-5975
info.mx@wago.com

Moldova

Electroservice Slavinschi T.T.
str. Bolgarskaia 9, office 6
2001 Kishinev
Phone +373 22 274427
Fax +373 22 224481
es@es.mldnet.com

Morocco

Automatisme & Connection Maroc
23, Rue Boured
2ème étage, appt4
Roche Noire
20300 Casablanca
Tel. +212 522 24 21 72/73
Fax +212 522 24 21 75

Nepal

please contact WAGO India

Netherlands

WAGO Nederland B.V.
Laan van de Ram 19
7234 BW APELDOORN
Tel. +31 55 36 83 500
Fax +31 55 36 83 599
info-nl@wago.com

New Zealand

please contact WAGO Australia

Nigeria

GIL Automations Ltd.
Daily Times Complex
2 Lateef Jakande Rd., Agidingbi
100271 Ikeja, Lagos State
Tel. +234 17132672335
sales@gilautomation.com

Norway

WAGO Norge NUF
Jerikoveien 20
1067 Oslo
Phone +47 22 30 94 50
Fax +47 22 30 94 51
info.no@wago.com

Oman

please contact WAGO Middle East

Pakistan

FuziLogix Automation & Control
Suit No. 14, 5th Floor, Shan Arcade
New Garden Town, Lahore
Pakistan
Phone +92 42 594 1503 - 4
Fax +92 42 585 1431
info@fuzilogix.com

Peru

Manufacturas Eléctricas S.A.
Av. O.R. Benavides 1215
15000 Lima
Tel. +51 1 6196200
Fax +51 1 6196247

Philippines

please contact WAGO Singapore

Poland

WAGO ELWAG sp. z o. o.
ul. Piękna 58 a
50-506 Wrocław
Phone +48 71 3602970
Fax +48 71 3602999
wago.elwag@wago.com

Portugal

MORGADO & CA. LDA - SEDE
Estrada Exterior da
Circunvalação 3558/3560
Apartado 1057
4435 Rio Tinto
Phone +351 22 9770600
Fax +351 22 9770699
geral@morgadocl.pt

Qatar

please contact WAGO Middle East

Romania

WAGO Kontakttechnik GmbH & Co. KG/
Representative Office Bukarest
Str. Nicolae G. Caramfil Nr. 26
Bl. 1D, Et. 3, Ap. 7, Sect. 1, OP 52
014144-Bucuresti
Tel. +40(0)31 421 85 68
info-RO@wago.com

VDR & Servicii srl
Str. Valeriu Braniste, nr. 60, ap.1, sector 3
Romania
Tel. +40 21 3225074/76
Fax +40 21 3225075
office@componente-automatizari.ro

Russia

OOO WAGO Contact Rus
Dmitrovskoe shosse, 157,
bldg. 12/5
127411 Moscow
Russia
Phone +7 495 663-3305
Fax +7 495 663-3308
info.ru@wago.com

OOO Decima
Projesd 4922, d. 4, str. 1
124460 Moscow / Selenograd
Tel. +7 495 988 4858
Fax +7 495 988 4858

ITC Electronics: Moscow
Radio str. 24
105005 Moscow
Tel. +7 495 775 1845
Fax +7 495 775 1848
moscow@itc-electronics.com

WAGO Branch office
Ekaterinburg
Tel. +7 343 216 3426

WAGO Branch office
Novosibirsk
Tel. +7 383 217 9244

WAGO Branch office
St. Petersburg
Tel. +7 812 312 1918

Saudi Arabia

Saudi Electronic Trading Company (SETRA)
P.O. Box 60712
11555-Riyadh
Tel. +966 1 2062277
Fax +966 1 2062277
khaled.wafai@setra.com.sa

Serbia

please contact WAGO Bulgaria

Avalon Partners doo
Patrijarha Dimitrija 24
11000 Beograd
Tel. +381 11 2685311
Fax +381 11 2685311
office@avalon.rs

Sigma doo

Balzakova 3
21000 Novi Sad
Tel. +381 21 468431
Fax +381 21 6361785
office@sigmadoo.co.rs

Singapore

WAGO Electronic Pte Ltd
No. 10 Upper Aljunied Link #04-04
Singapore 367904
Tel: +65 62866776
Fax +65 62842425
info-sing@wago.com

Slovakia

Proelektro spol. s r.o.
Na barine 22
841 03 Bratislava - Lamač
Tel. +421 2 4569 2503
info@wago.sk

Slovenia

IC elektronika d.o.o.
Vodovodna cesta 100
1000 Ljubljana
Tel. +386 1568 0126
Fax +386 1568 9107
info@ic-elect.si

GENERA d.o.o.

Prevalje 10
1236 Irzin
Tel. +386 14393050
Fax +386 14393090
genera@genera.si

South Africa

Shorrock Automation (Pty) Ltd
Postnet Suite # 219
Private Bag X 8, Elardus Park
0047 PRETORIA
Tel. +27 12 4500300
Fax +27 12 4500322
sales@shorrock.co.za

Spain

DICOMAT S.L.
Avda. de la Industria, 36
Apartado Correos, 1.178
28108 - Alcobendas (Madrid)
Phone +34 91 6621362
Fax +34 91 6610089
info@dicomat.com

Sri Lanka

please contact WAGO India

Sweden

WAGO Sverige AB
Tyskland Filial
Box 11127, 161 11 BROMMA
Besöksadress: Adolfsbergsv. 31
Tel. +46 858410680
Fax +46 858410699
info.se@wago.com

Switzerland

WAGO CONTACT SA
Rte. de l'Industrie 19
Case Postale 168
1564 Domdidier
Phone +41 26 676 75 00
Fax +41 26 676 75 01
info.switzerland@wago.com

Syria

Zahabi Co.
8/5 Shouhadaa St., P.O. Box 8262
Aleppo
Phone +963 21 21 22 235 / 6
Fax +963 21 21 24 768
info.uae@wago.com

Taiwan R.O.C.

WAGO Contact, Ltd.
5F., No.168, Jiankang Rd
Zhonghe City
Taipai County 23585, Taiwan
Phone +886 2 22250123
Fax +886 2 22251511
info.taiwan@wago.com

Thailand

WAGO Representative Office Thailand
4th Floor, KS Building
213/6-8 Rachada-Phisek Road
Dingdaeng, Bangkok 10400
Tel. +66 2 6935611
Fax +66 2 6935612
warongkon.khankham@wago.com

US Power Distribution Co., Ltd.
4th Floor, KS Building
213/6-8 Rachada-Phisek Road
Dingdaeng, Bangkok 10400
Tel. +66 2 2763040
Fax +66 2 2763049
uspowers2014@gmail.com

Tunisia

please contact WAGO France

Turkey

WAGO Elektronik Sanayi ve Ticaret Ltd. Şti.
Yüksek Dudullu Mahallesi Bayraktar Bulvarı
Cad. Hattat Sok. No. 10
34775 Ümraniye - İstanbul
Tel. +90 216 472 1133
Fax +90 216 472 9910
info.tr@wago.com

Ukraine

NPP Logicon
Predslavinskaya street, 39, office 303
03150 Kiev
Tel. +380 44 5228019
Fax +380 44 2611803
info@logicon.ua

OOO Micropribor

ul. Kotelnikova, 4
03115 Kiev
Tel. +380 44 5369386
Fax +380 44 5369387
sales@micropribor.kiev.ua

United Arab Emirates (UAE)

WAGO Middle East (FZC)
SAIF Zone, Q4-282
P.O. Box: 120665
Sharjah, UAE
Phone +971 6 5579920
Fax +971 6 5579921
info.uae@wago.com

Uruguay

Fivisa Electricidad
Avda. Uruguay 1274
11100 Montevideo
Tel. +59 829 020 808
Fax +59 829 021 230
info@fivisa.com.uy

USA

WAGO CORPORATION
N120 W19129 Freistadt Road
Germantown, WI 53022
Tel. +1 262 255 6222
Fax +1 262 255 3232
Toll-Free: 1-800 DIN Rail (346-7245)
info.us@wago.com

Venezuela

PETROBORNAS, C.A.
C.C. PLAZA AEROPUERTO - PISO 1 - LOCAL P1 - B - 03
(8015) UNARE - PUERTO ORDAZ - ESTADO BOLÍVAR
REPÚBLICA BOLIVARIANA DE VENEZUELA
Tel. +58 286 951 3382
Fax +58 286 951 3382
info@petrobornas.com

Vietnam

please contact WAGO Germany (Minden)

Version: 10/2015
Current addresses at www.wago.com

WAGO Kontakttechnik GmbH & Co. KG
Postfach 2880 · D - 32385 Minden
Hansastraße 27 · D - 32423 Minden
Germany
Phone: +49 571 887 - 0
Fax: +49 571 887 - 169
E-Mail: info@wago.com
Online: www.wago.com

**WE
INNOVATE!**

