

Data sheet | Item number: 787-1664

electronic circuit breaker; 4-channel; 24 VDC input voltage; adjustable 2 ...
10 A; communication capability



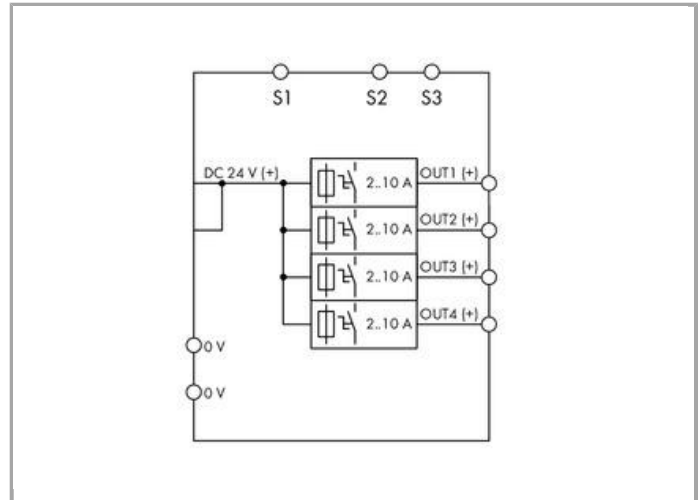
www.wago.com/787-1664



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Item description

Features:

- Space-saving ECB with four 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

Data

Technical Data

Input

Nominal input voltage $U_{i \text{ nom}}$	24 VDC
Input voltage range	18 ... 30 VDC

Output

Total number of channels (module)	4
Nominal output voltage $U_{o \text{ nom}}$	4 x 24 VDC
Output voltage range	18 ... 30 VDC (U_i – voltage drop)
Voltage drop	≤ 200 mV (10 A)
Nominal output current $I_{o \text{ nom}}$	4 x 2 / 3 / 4 / 6 / 8 / 10 A (adjustable for each channel via selector switch)
Factory preset	10 ADC; switched on
Trip time	16 ms ... 100 s (Load-dependent)
Switch-on capacity	> 50000 μ F per channel
Switch-on behavior	Time-delayed channel switching (load-dependent, min. 50 ms / max. 5 s)
Active Current Limitation	no

Signaling and communication

Signaling	4 x LED (green/red/orange) 1 x remote input (S1) 2 x active signal output (S2, S3)
Operation status indicator	LED green (channel OK) LED red (tripped channel)
Remote input	Reactivation of all tripped channels via 15 ... 30 VDC pulse for min. 500 ms. Switching on/off any number of channels via pulse sequence.

Efficiency/Power losses:

Power loss P_v	0.84 W (no load); 10 W (4 x 10 A)
Efficiency	99 %

Fuse protection:

Internal fuse	T 15 A per channel
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Safety and protection:

Insulation voltage (connectors-housing)	0.5 kV DC
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Protection class	III
Degree of protection	IP20 (per EN 60529)
Reverse voltage protection	No
Feedback voltage	≤ 35VDC
Transient protection, primary	Suppressor diode, 33 V
Parallel operation of single channels	Not permitted
Series connection	No
MTBF	> 500,000 h (per IEC 61709)

Connection data

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

Geometrical Data

Width	45 mm / 1.772 inch
Height	90 mm / 3.543 inch
Length from upper-edge of DIN-35 rail	115.5 mm / 4.547 inch

Mechanical data

Type of mounting	DIN-35 rail (EN 60715)
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Material Data

Weight	170 g
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Environmental Requirements

Surrounding air (operating) temperature	-25 ... 70 °C
Surrounding air (storage) temperature	-25 ... 85 °C
Relative humidity	5 ... 96 % (no condensation permissible)
Derating	≥ 50 °C: see instruction manual

Pollution degree	2
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Standards and specifications

Conformity marking	CE
Standards/specifications	UL 508; UL 2367; GL; EN 60950; EN 61000-6-2; EN 61000-6-3

Commercial data

Country of origin	DE
GTIN	4050821502609
Customs Tariff No.	85363010900
Product Group	6 (Interface Electronics)

Approvals / Certificates

Ship Approvals



Logo	Approval	Certificate name
	GL Germanischer Lloyd	61888-14HH

UL-Approvals




Logo	Approval	Certificate name
	UL UL Multiple Listing UL LLC	E363438









Compatible products










tools

	Item no.: 210-720 Operating tool with partially insulated shaft; Type 2, blade (3.5 x 0.5) mm	www.wago.com/210-720
	Item no.: 210-721 Operating tool with partially insulated shaft; Type 3, blade (5.5 x 0.8) mm	www.wago.com/210-721








ferrule

















	Item no.: 216-201 Ferrule; Sleeve for 0.5 mm ² / AWG 22; insulated; electro-tin plated	www.wago.com/216-201
	Item no.: 216-202 Ferrule; Sleeve for 0.75 mm ² / AWG 20; insulated; electro-tin plated	www.wago.com/216-202
	Item no.: 216-203 Ferrule; Sleeve for 1 mm ² / AWG 18; insulated; electro-tin plated	www.wago.com/216-203

	Item no.: 216-204 Ferrule; Sleeve for 1.5 mm ² / AWG 16; insulated; electro-tin plated	www.wago.com/216-204
	Item no.: 216-205 Ferrule; Sleeve for 2.08 mm ² / AWG 14; insulated; electro-tin plated	www.wago.com/216-205
	Item no.: 216-206 Ferrule; Sleeve for 2.5 mm ² / AWG 14; insulated; electro-tin plated	www.wago.com/216-206
	Item no.: 216-207 Ferrule; Sleeve for 4 mm ² / AWG 12; insulated; electro-tin plated	www.wago.com/216-207
	Item no.: 216-208 Ferrule; Sleeve for 6 mm ² / AWG 10; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90	www.wago.com/216-208
	Item no.: 216-221 Ferrule; Sleeve for 0.5 mm ² / AWG 22; insulated; electro-tin plated	www.wago.com/216-221
	Item no.: 216-222 Ferrule; Sleeve for 0.75 mm ² / AWG 20; insulated; electro-tin plated	www.wago.com/216-222
	Item no.: 216-223 Ferrule; Sleeve for 1 mm ² / AWG 18; insulated; electro-tin plated	www.wago.com/216-223
	Item no.: 216-224 Ferrule; Sleeve for 1.5 mm ² / AWG 16; insulated; electro-tin plated	www.wago.com/216-224
	Item no.: 216-241 Ferrule; Sleeve for 0.5 mm ² / AWG 22; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90	www.wago.com/216-241
	Item no.: 216-242 Ferrule; Sleeve for 0.75 mm ² / AWG 20; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90	www.wago.com/216-242
	Item no.: 216-243 Ferrule; Sleeve for 1 mm ² / AWG 18; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90	www.wago.com/216-243
	Item no.: 216-244 Ferrule; Sleeve for 1.5 mm ² / AWG 16; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90	www.wago.com/216-244
	Item no.: 216-246 Ferrule; Sleeve for 2.5 mm ² / AWG 14; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90	www.wago.com/216-246
	Item no.: 216-262 Ferrule; Sleeve for 0.75 mm ² / AWG 20; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90	www.wago.com/216-262
	Item no.: 216-263 Ferrule; Sleeve for 1 mm ² / AWG 18; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90	www.wago.com/216-263
	Item no.: 216-264 Ferrule; Sleeve for 1.5 mm ² / AWG 16; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90	www.wago.com/216-264
	Item no.: 216-266 Ferrule; Sleeve for 2.5 mm ² / AWG 14; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90	www.wago.com/216-266
	Item no.: 216-267	

	Ferrule; Sleeve for 4 mm ² / AWG 12; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90	www.wago.com/216-267
	Item no.: 216-284 Ferrule; Sleeve for 1.5 mm ² / AWG 16; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90	www.wago.com/216-284
	Item no.: 216-286 Ferrule; Sleeve for 2.5 mm ² / AWG 14; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90	www.wago.com/216-286
	Item no.: 216-287 Ferrule; Sleeve for 4 mm ² / AWG 12; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90	www.wago.com/216-287
	Item no.: 216-288 Ferrule; Sleeve for 6 mm ² / AWG 10; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90	www.wago.com/216-288
	Item no.: 216-301 Ferrule; Sleeve for 0.25 mm ² / AWG 24; insulated; electro-tin plated	www.wago.com/216-301
	Item no.: 216-302 Ferrule; Sleeve for 0.34 mm ² / AWG 24; insulated; electro-tin plated	www.wago.com/216-302
	Item no.: 216-321 Ferrule; Sleeve for 0.25 mm ² / AWG 24; insulated; electro-tin plated	www.wago.com/216-321
	Item no.: 216-322 Ferrule; Sleeve for 0.34 mm ² / AWG 24; insulated; electro-tin plated	www.wago.com/216-322

Marking accessories

	Item no.: 2009-110 Marking strips; on reel; not stretchable; plain; snap-on type	www.wago.com/2009-110
	Item no.: 2009-115 WMB-Inline; for smartPRINTER; on reel; stretchable 5 - 5.2 mm; plain; snap-on type	www.wago.com/2009-115
	Item no.: 2009-115/000-002 WMB-Inline; for smartPRINTER; on reel; stretchable 5 - 5.2 mm; plain; snap-on type	www.wago.com/2009-115/000-002
	Item no.: 2009-115/000-006 WMB-Inline; for smartPRINTER; on reel; stretchable 5 - 5.2 mm; plain; snap-on type	www.wago.com/2009-115/000-006
	Item no.: 2009-115/000-007 WMB-Inline; for smartPRINTER; on reel; stretchable 5 - 5.2 mm; plain; snap-on type	www.wago.com/2009-115/000-007
	Item no.: 2009-115/000-012 WMB-Inline; for smartPRINTER; on reel; stretchable 5 - 5.2 mm; plain; snap-on type	www.wago.com/2009-115/000-012
	Item no.: 2009-115/000-017 WMB-Inline; for smartPRINTER; on reel; stretchable 5 - 5.2 mm; plain; snap-on type	www.wago.com/2009-115/000-017

	<p>Item no.: 2009-115/000-023 WMB-Inline; for smartPRINTER; on reel; stretchable 5 - 5.2 mm; plain; snap-on type</p>	www.wago.com/2009-115/000-023
	<p>Item no.: 2009-115/000-024 WMB-Inline; for smartPRINTER; on reel; stretchable 5 - 5.2 mm; plain; snap-on type</p>	www.wago.com/2009-115/000-024
	<p>Item no.: 2009-135 WMB-Inline; for smartPRINTER; on reel; stretchable 5 - 5.2 mm; plain; snap-on type</p>	www.wago.com/2009-135
	<p>Item no.: 2009-145 Mini-WSB Inline; for smartPRINTER; on reel; stretchable 5 - 5.2 mm; plain; snap-on type</p>	www.wago.com/2009-145
	<p>Item no.: 2009-145/000-002 Mini-WSB Inline; for smartPRINTER; on reel; stretchable 5 - 5.2 mm; plain; snap-on type</p>	www.wago.com/2009-145/000-002
	<p>Item no.: 2009-145/000-005 Mini-WSB Inline; for smartPRINTER; on reel; stretchable 5 - 5.2 mm; plain; snap-on type</p>	www.wago.com/2009-145/000-005
	<p>Item no.: 2009-145/000-006 Mini-WSB Inline; for smartPRINTER; on reel; stretchable 5 - 5.2 mm; plain; snap-on type</p>	www.wago.com/2009-145/000-006
	<p>Item no.: 2009-145/000-007 Mini-WSB Inline; for smartPRINTER; on reel; stretchable 5 - 5.2 mm; plain; snap-on type</p>	www.wago.com/2009-145/000-007
	<p>Item no.: 2009-145/000-012 Mini-WSB Inline; for smartPRINTER; on reel; stretchable 5 - 5.2 mm; plain; snap-on type</p>	www.wago.com/2009-145/000-012
	<p>Item no.: 2009-145/000-023 Mini-WSB Inline; for smartPRINTER; on reel; stretchable 5 - 5.2 mm; plain; snap-on type</p>	www.wago.com/2009-145/000-023
	<p>Item no.: 2009-145/000-024 Mini-WSB Inline; on reel; stretchable 5 - 5.2 mm; plain; snap-on type</p>	www.wago.com/2009-145/000-024
	<p>Item no.: 210-831 Marking strips; on reel; 2.3 mm wide; plain; Self-adhesive</p>	www.wago.com/210-831
	<p>Item no.: 210-832 Marking strips; on reel; 3 mm wide; plain; Self-adhesive</p>	www.wago.com/210-832
	<p>Item no.: 248-501 Miniature WSB Quick marking system; plain; Marker width 5 mm; 10 strips with 10 markers per card</p>	www.wago.com/248-501
	<p>Item no.: 248-501/000-002 Mini-WSB marking card; as card; not stretchable; plain; snap-on type</p>	www.wago.com/248-501/000-002
	<p>Item no.: 248-501/000-005 Mini-WSB marking card; as card; plain; snap-on type</p>	www.wago.com/248-501/000-005



Item no.: 248-501/000-006
Mini-WSB marking card; as card; not stretchable; plain; snap-on type

www.wago.com/248-501/000-006



Item no.: 248-501/000-007
Mini-WSB marking card; as card; not stretchable; plain; snap-on type

www.wago.com/248-501/000-007



Item no.: 248-501/000-012
Mini-WSB marking card; as card; not stretchable; plain; snap-on type

www.wago.com/248-501/000-012



Item no.: 248-501/000-017
Mini-WSB marking card; as card; not stretchable; plain; snap-on type

www.wago.com/248-501/000-017



Item no.: 248-501/000-023
Mini-WSB marking card; as card; not stretchable; plain; snap-on type

www.wago.com/248-501/000-023



Item no.: 793-501
WMB marking card; as card; not stretchable; plain; snap-on type

www.wago.com/793-501



Item no.: 793-501/000-002
WMB marking card; as card; not stretchable; plain; snap-on type

www.wago.com/793-501/000-002



Item no.: 793-501/000-005
WMB marking card; as card; not stretchable; plain; snap-on type

www.wago.com/793-501/000-005



Item no.: 793-501/000-006
WMB marking card; as card; not stretchable; plain; snap-on type

www.wago.com/793-501/000-006



Item no.: 793-501/000-007
WMB marking card; as card; not stretchable; plain; snap-on type

www.wago.com/793-501/000-007



Item no.: 793-501/000-012
WMB marking card; as card; not stretchable; plain; snap-on type

www.wago.com/793-501/000-012



Item no.: 793-501/000-017
WMB marking card; as card; not stretchable; plain; snap-on type

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Item no.: 793-501/000-023
WMB marking card; as card; not stretchable; plain; snap-on type

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Item no.: 793-501/000-024
WMB marking card; as card; not stretchable; plain; snap-on type

www.wago.com/793-501/000-024



Item no.: 793-5501
WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type www.wago.com/793-5501



Item no.: 793-5501/000-002

WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type

www.wago.com/793-5501

/000-002



Item no.: 793-5501/000-005

WMB marking card; as card; stretchable 5 - 5.2 mm; plain; snap-on type

www.wago.com/793-5501

/000-005



Item no.: 793-5501/000-006

WMB marking card; as card; stretchable 5 - 5.2 mm; plain; snap-on type

www.wago.com/793-5501

/000-006



Item no.: 793-5501/000-007

WMB marking card; as card; stretchable 5 - 5.2 mm; plain; snap-on type

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/000-007



Item no.: 793-5501/000-012

WMB marking card; as card; stretchable 5 - 5.2 mm; plain; snap-on type

www.wago.com/793-5501

/000-012



Item no.: 793-5501/000-014

WMB marking card; as card; stretchable 5 - 5.2 mm; plain; snap-on type

www.wago.com/793-5501

/000-014



Item no.: 793-5501/000-017

WMB marking card; as card; stretchable 5 - 5.2 mm; plain; snap-on type

www.wago.com/793-5501

/000-017



Item no.: 793-5501/000-023

WMB marking card; as card; stretchable 5 - 5.2 mm; plain; snap-on type

www.wago.com/793-5501

/000-023



Item no.: 793-5501/000-024

WMB marking card; as card; stretchable 5 - 5.2 mm; plain; snap-on type

www.wago.com/793-5501

/000-024

Downloads

Documentation

Manual

EPSITRON [®] Electronic Circuit Breaker 24 VDC / 4 x 2...10 A	Mar 21, 2014	1.3 MB	Download
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Bid Text

787-1664 Stromversorgung EPSITRON	Jan 14, 2016	DOC 34.3 kB	Download
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Instruction Leaflet

EPSITRON Electronic Circuit Breaker Electronic Circuit Breaker, 24 VDC / 4 x 10 A	Jul 5, 2016	PDF 991.9 kB	Download
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Additional Information

Disposal; Electrical and electronic equipment, Packaging	Oct 15, 2018	265.8 kB	Download
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Application Notes

Application Note CoDeSys 2.3

S7 Function Blocks for 787 Series	2.0.0	ZIP	Download
S7 function blocks for the 787 Series (Epsitron, electronic circuit breakers and 3-phase power supplies).	Nov 26, 2015	11.0 MB	

S7 Function Blocks for 787 Series (EPSITRON, Electronic Circuit Breakers with CRC and 3-Phase Power Supplies)	1.0.0	ZIP	Download
S7 function blocks for the 787 Series (Epsitron, electronic circuit breakers and 3-phase power supplies).	Feb 14, 2017	13.4 MB	

Libraries

CoDeSys 3.x Library

Libraries for CODESYS V3.x	Jun 28, 2018	ZIP	Download
WAGO libraries based on CODESYS V3.x control systems		1.2 MB	
<ul style="list-style-type: none"> ■ - WAGOAppFuse 			
"CODESYS Control Win V3" is used as a test instance in version 3.5.11.10.			

Library

Connection of 787 Series power supplies	2.0	ZIP	Download
The WagoLib787_02.lib library makes function blocks and visualization objects available which can be used to display information from the WAGO 787 Series power supply modules.	Feb 22, 2018	348.4 kB	

Connection of 787 Series power supplies	1.2.0	ZIP	Download
The WagoLib787_01.lib library makes function blocks and visualization objects available which can be used to display information from the WAGO 787 Series power supply modules.	Aug 20, 2014	562.7 kB	

smartDATA

CAD data

3D Download 787-1664	URL	Download
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Subject to changes.

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