

Data sheet | Item number: 787-1668

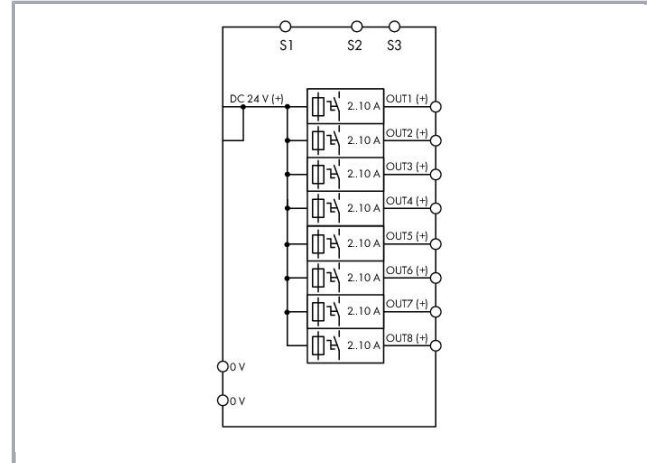
electronic circuit breaker; 8-channel; 24 VDC input voltage; adjustable 2 ...
10 A; communication capability; 10,00 mm²



www.wago.com/787-1668



Similar to illustration



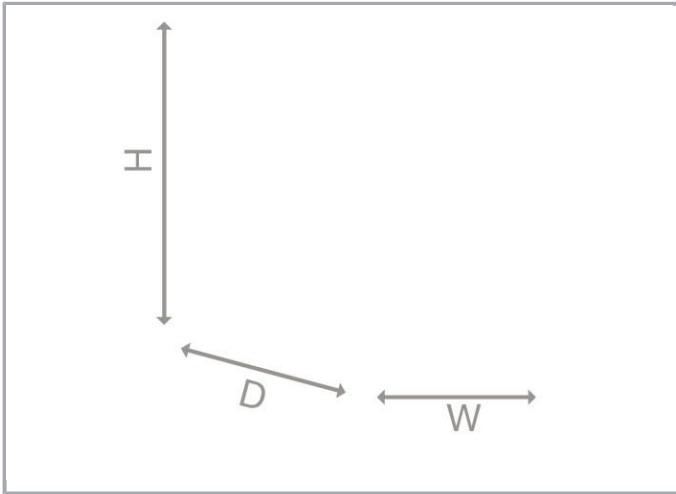
RoHS Compliant

BOMcheck.net

Subject to changes. Please also observe the further product documentation!

WAGO Kontakttechnik GmbH & Co. KG
Hansastr. 27
32423 Minden
Phone: +49571 887-0 | Fax: +49571 887-169
Email: info.de@wago.com | Web: www.wago.com

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We are always happy to take your call at +49 (571) 887-44222.



Item description

Features:

- Space-saving ECB with eight 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 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 $U_{i \text{ nom}}$	DC 24 V
Input voltage range	DC 18 ... 30 V

Output

Total number of channels (module)	8
Nominal output voltage $U_{o \text{ nom}}$	8 x DC 24 V
Output voltage range	DC 18 ... 30 V (U_e – voltage drop)
Voltage drop	≤ 200 mV (Input (+))

Subject to changes. Please also observe the further product documentation!



Nominal output current $I_{o\text{ nom}}$	8 x 2 / 3 / 4 / 6 / 8 / 10 A (adjustable for each channel via selector switch)
Default setting	DC 10 A; switched on
Trip time	16 ms ... 100 s (Load-dependent)
Switch-on capacity	> 50000 μF 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	8 x LED (green/red/orange) 1 x Remote control input (S1) 2 x Active signal output (S2; S3)
Operation status indicator	Green LED (channel OK) Red LED (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_l	$\leq 1,3 \text{ W}$ (No load); $\leq 20 \text{ W}$ (8 x 10 A)
Efficiency (typ.)	99 %

Fuse protection:

Internal fuse	T 15 A per channel
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Safety and protection:

Isolation voltage (connectors – housing)	DC 0,5 kV
Protection class	III
Protection type	IP20 (per EN 60529)
Reverse voltage protection	No
Resistance to reverse feed	$\leq \text{DC } 35 \text{ V}$
Transient suppression (primary)	Suppressor diode (33 V)
Parallel operation of single channels	Not permitted
Series operation	No
MTBF	> 500,000 h (per IEC 61709)

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Connection data

Connection type (1)	Input (+)
Connection technology	Push-in CAGE CLAMP®
WAGO Connector	WAGO 831 Series
Solid conductor	0,5 ... 10 mm ² / 20 ... 8 AWG
Fine-stranded conductor	0,5 ... 10 mm ² / 20 ... 8 AWG
Strip length	13 ... 15 mm / 0.51 ... 0.59 inch
Connection type 2	Input (-); Output; Signaling
Connection technology	CAGE CLAMP®
WAGO Connector 2	WAGO 721 Series
Solid conductor 2	0,08 ... 2,5 mm ² / 28 ... 12 AWG
Fine-stranded conductor 2	0,08 ... 2,5 mm ² / 28 ... 12 AWG
Strip length 2	8 ... 9 mm / 0.31 ... 0.35 inch

Geometrical Data

Width	42 mm / 1.654 inch
Height	127 mm / 5 inch
Depth from upper edge of DIN-rail	142,5 mm / 5.61 inch

Mechanical data

Mounting type	DIN-35 rail (EN 60715)
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Material Data

Weight	440 g
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Environmental Requirements

Surrounding air temperature (operation)	-25 ... 70 °C
Surrounding air temperature (storage)	-25 ... 85 °C
Relative humidity	5 ... 96 % (no condensation permissible)
Derating	≥ 50 °C: see instruction manual
Pollution degree	2

Standards and specifications

Conformity marking	CE
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Subject to changes. Please also observe the further product documentation!

Standards/specifications


EN 60950; EN 61000-6-2; EN 61000-6-3; UL 508; UL 2367; DNV GL

Commercial data



Product Group	6 (Interface Electronics)
Packaging type	BOX
Country of origin	DE
GTIN	4050821502593
Customs tariff number	85363010900

Approvals / Certificates

Ship Approvals

Logo	Approval	Additional Approval Text	Certificate name
	DNV GL Det Norske Veritas, Germanischer Lloyd	-	TAA0000281

UL-Approvals

Logo	Approval	Additional Approval Text	Certificate name
	UL Underwriters Laboratories Inc.	UL 2367	E363438
	UL Underwriters Laboratories Inc.	UL 508	E255817

Counterpart

Compatible products

ferrule



Item no.: 216-201

Ferrule; Sleeve for 0.5 mm² / 20 AWG; insulated; electro-tin plated; whitewww.wago.com/216-201

Subject to changes. Please also observe the further product documentation!

WAGO Kontakttechnik GmbH & Co. KG

Hansastr. 27


















32423 Minden

Phone: +49571 887-0 | Fax: +49571 887-169















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	Item no.: 216-202 Ferrule; Sleeve for 0.75 mm ² / 18 AWG; insulated; electro-tin plated; gray	www.wago.com/216-202
	Item no.: 216-203 Ferrule; Sleeve for 1 mm ² / AWG 18; insulated; electro-tin plated; red	www.wago.com/216-203
	Item no.: 216-204 Ferrule; Sleeve for 1.5 mm ² / AWG 16; insulated; electro-tin plated; black	www.wago.com/216-204
	Item no.: 216-205 Ferrule; Sleeve for 2.08 mm ² / AWG 14; insulated; electro-tin plated; yellow	www.wago.com/216-205
	Item no.: 216-206 Ferrule; Sleeve for 2.5 mm ² / AWG 14; insulated; electro-tin plated; blue	www.wago.com/216-206
	Item no.: 216-207 Ferrule; Sleeve for 4 mm ² / AWG 12; insulated; electro-tin plated; gray	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; yellow	www.wago.com/216-208
	Item no.: 216-221 Ferrule; Sleeve for 0.5 mm ² / 20 AWG; insulated; electro-tin plated; white	www.wago.com/216-221
	Item no.: 216-222 Ferrule; Sleeve for 0.75 mm ² / 18 AWG; insulated; electro-tin plated; gray	www.wago.com/216-222
	Item no.: 216-223 Ferrule; Sleeve for 1 mm ² / AWG 18; insulated; electro-tin plated; red	www.wago.com/216-223
	Item no.: 216-224 Ferrule; Sleeve for 1.5 mm ² / AWG 16; insulated; electro-tin plated; black	www.wago.com/216-224
	Item no.: 216-241 Ferrule; Sleeve for 0.5 mm ² / 20 AWG; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; white	www.wago.com/216-241
	Item no.: 216-242 Ferrule; Sleeve for 0.75 mm ² / 18 AWG; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; gray	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; red	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; black	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; blue	www.wago.com/216-246
	Item no.: 216-262 Ferrule; Sleeve for 0.75 mm ² / 18 AWG; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; gray	www.wago.com/216-262















Subject to changes. Please also observe the further product documentation!

	<p>Item no.: 216-263 Ferrule; Sleeve for 1 mm² / AWG 18; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; red</p>	www.wago.com/216-263
	<p>Item no.: 216-264 Ferrule; Sleeve for 1.5 mm² / AWG 16; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; black</p>	www.wago.com/216-264
	<p>Item no.: 216-266 Ferrule; Sleeve for 2.5 mm² / AWG 14; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; blue</p>	www.wago.com/216-266
	<p>Item no.: 216-267 Ferrule; Sleeve for 4 mm² / AWG 12; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; gray</p>	www.wago.com/216-267
	<p>Item no.: 216-284 Ferrule; Sleeve for 1.5 mm² / AWG 16; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; black</p>	www.wago.com/216-284
	<p>Item no.: 216-286 Ferrule; Sleeve for 2.5 mm² / AWG 14; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; blue</p>	www.wago.com/216-286
	<p>Item no.: 216-287 Ferrule; Sleeve for 4 mm² / AWG 12; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; gray</p>	www.wago.com/216-287
	<p>Item no.: 216-288 Ferrule; Sleeve for 6 mm² / AWG 10; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; yellow</p>	www.wago.com/216-288
	<p>Item no.: 216-301 Ferrule; Sleeve for 0.25 mm² / AWG 24; insulated; electro-tin plated; yellow</p>	www.wago.com/216-301
	<p>Item no.: 216-302 Ferrule; Sleeve for 0.34 mm² / 22 AWG; insulated; electro-tin plated; green</p>	www.wago.com/216-302
	<p>Item no.: 216-321 Ferrule; Sleeve for 0.25 mm² / AWG 24; insulated; electro-tin plated; yellow</p>	www.wago.com/216-321
	<p>Item no.: 216-322 Ferrule; Sleeve for 0.34 mm² / 22 AWG; insulated; electro-tin plated; green</p>	www.wago.com/216-322
Marking accessories		
	<p>Item no.: 2009-110 Marking strips; on reel; not stretchable; plain; snap-on type; white</p>	www.wago.com/2009-110
	<p>Item no.: 2009-115 WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; white</p>	www.wago.com/2009-115
	<p>Item no.: 2009-115/000-002 WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; yellow</p>	www.wago.com/2009-115/000-002
	<p>Item no.: 2009-115/000-006 WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; blue</p>	www.wago.com/2009-115/000-006

Subject to changes. Please also observe the further product documentation!

	Item no.: 2009-115/000-007 WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; gray	www.wago.com/2009-115/000-007
	Item no.: 2009-115/000-012 WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; orange	www.wago.com/2009-115/000-012
	Item no.: 2009-115/000-017 WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; light green	www.wago.com/2009-115/000-017
	Item no.: 2009-115/000-023 WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; green	www.wago.com/2009-115/000-023
	Item no.: 2009-115/000-024 WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; violet	www.wago.com/2009-115/000-024
	Item no.: 2009-135 WMB-Inline; for Smart Printer; on reel; stretchable 5 - 5.2 mm; plain; snap-on type; white	www.wago.com/2009-135
	Item no.: 2009-145 Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; white	www.wago.com/2009-145
	Item no.: 2009-145/000-002 Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; yellow	www.wago.com/2009-145/000-002
	Item no.: 2009-145/000-005 Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; red	www.wago.com/2009-145/000-005
	Item no.: 2009-145/000-006 Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; blue	www.wago.com/2009-145/000-006
	Item no.: 2009-145/000-007 Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; gray	www.wago.com/2009-145/000-007
	Item no.: 2009-145/000-012 Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; orange	www.wago.com/2009-145/000-012
	Item no.: 2009-145/000-023 Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; green	www.wago.com/2009-145/000-023
	Item no.: 2009-145/000-024 Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; violet	www.wago.com/2009-145/000-024

Subject to changes. Please also observe the further product documentation!

	Item no.: 210-831 Marking strips; on reel; 2.3 mm wide; plain; Self-adhesive; white	www.wago.com/210-831
	Item no.: 210-832 Marking strips; on reel; 3 mm wide; plain; Self-adhesive; white	www.wago.com/210-832
	Item no.: 248-501 Miniature WSB Quick marking system; plain; Marker width 5 mm; 10 strips with 10 markers per card	www.wago.com/248-501
	Item no.: 248-501/000-002 Mini-WSB marking card; as card; not stretchable; plain; snap-on type; yellow	www.wago.com/248-501/000-002
	Item no.: 248-501/000-005 Mini-WSB marking card; as card; not stretchable; plain; snap-on type; red	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; blue	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; gray	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; orange	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; light green	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; green	www.wago.com/248-501/000-023
	Item no.: 793-501 WMB marking card; as card; not stretchable; plain; snap-on type; white	www.wago.com/793-501
	Item no.: 793-501/000-002 WMB marking card; as card; not stretchable; plain; snap-on type; yellow	www.wago.com/793-501/000-002
	Item no.: 793-501/000-005 WMB marking card; as card; not stretchable; plain; snap-on type; red	www.wago.com/793-501/000-005
	Item no.: 793-501/000-006 WMB marking card; as card; not stretchable; plain; snap-on type; blue	www.wago.com/793-501/000-006

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Item no.: 793-501/000-007

WMB marking card; as card; not stretchable; plain; snap-on type; gray

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



Item no.: 793-501/000-012

WMB marking card; as card; not stretchable; plain; snap-on type; orange

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



Item no.: 793-501/000-017

WMB marking card; as card; not stretchable; plain; snap-on type; light green

www.wago.com/793-501/000-017



Item no.: 793-501/000-023

WMB marking card; as card; not stretchable; plain; snap-on type; green

www.wago.com/793-501/000-023



Item no.: 793-501/000-024

WMB marking card; as card; not stretchable; plain; snap-on type; violet

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; white

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; yellow

www.wago.com/793-5501/000-002



Item no.: 793-5501/000-005

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

www.wago.com/793-5501/000-005



Item no.: 793-5501/000-006

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

www.wago.com/793-5501/000-006



Item no.: 793-5501/000-007

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

www.wago.com/793-5501/000-007



Item no.: 793-5501/000-012

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

www.wago.com/793-5501/000-012



Item no.: 793-5501/000-014

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

www.wago.com/793-5501/000-014



Item no.: 793-5501/000-017

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

www.wago.com/793-5501/000-017

Item no.: 793-5501/000-023

Subject to changes. Please also observe the further product documentation!



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

www.wago.com/793-5501/000-023



Item no.: 793-5501/000-024

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

www.wago.com/793-5501/000-024

tools



Item no.: 210-720

Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft

www.wago.com/210-720



Item no.: 210-721

Operating tool; Blade: 5.5 x 0.8 mm; with a partially insulated shaft

www.wago.com/210-721



Item no.: 210-769

SCREWDRIVER; green

www.wago.com/210-769

Downloads

Documentation

Manual

Electronic Circuit Breaker 24 VDC / 8 x 2...10 A	V 1.1.0	pdf 1.4 MB	Download
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Bid Text

787-1668 GAEB docx - Datei	Jul 3, 2019	docx 20.9 kB	Download
787-1668 GAEB X81 - Datei	Jul 3, 2019	xml 7.3 kB	Download

Instruction Leaflet

EPSITRON-Elektronische Schutzschalter Elektronische Absicherung, DC 24 V / 8x10 A		pdf 419.6 kB	Download
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Application Notes

Application note SIEMENS

S7 und TIA Bausteine für die Serie 787 (a500370)	2.0.0	zip	Download
S7 und TIA Bausteine für die Serie 787 (Epsitron, elektronische Schutzschalter und 3 Phasen Netzgeräte).	Nov 17, 2015	11.0 MB	

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WAGO Kontakttechnik GmbH & Co. KG
Hansastr. 27
32423 Minden
Phone: +49571 887-0 | Fax: +49571 887-169
Email: info.de@wago.com | Web: www.wago.com

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Libraries

CoDeSys 3.x Library

Libraries for CODESYS V3.x	Jun 3, 2020	ZIP	Download
WAGO libraries based on CODESYS V3.x control systems		55.9 MB	
<ul style="list-style-type: none"> ■ WagoAppASi ■ WagoAppCanLayer2 ■ WagoAppCom ■ WagoAppDALI ■ WagoAppDCDriveController ■ WagoAppDigitalImpulseInterface ■ WagoAppEnOcean ■ WagoAppFuse ■ WagoAppHART ■ WagoAppIOLink ■ WagoAppPowerMeasurement ■ WagoAppRTC ■ WagoAppSolenoid ■ WagoAppStepper ■ WagoAppVibrationMonitoring 			

"CODESYS Control Win V3" is used as a test instance in version 3.5.14.30.

Library

Anbindung Stromversorgungen Serie 787	V1.0.0	zip	Download
Die Bibliothek "WagoLib787_02.lib" stellt Funktionsbausteine und Visualisierungen zur Verfügung, mit deren Hilfe die Informationen der WAGO Stromversorgungsmodule der Serie 787 angezeigt werden können.	Aug 28, 2017	348.4 kB	
Anbindung Stromversorgungen Serie 787	V1.3.0	zip	Download
Die Bibliothek "WagoLib787_01.lib" stellt Funktionsbausteine und Visualisierungen zur Verfügung, mit deren Hilfe die Informationen der WAGO Stromversorgungsmodule der Serie 787 angezeigt werden können.	May 14, 2014	562.7 kB	

CAD/CAE-Data

CAD data

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WAGO Kontakttechnik GmbH & Co. KG
 Hansastr. 27
 32423 Minden
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2D/3D Models 787-1668

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CAE data

EPLAN Data Portal 787-1668

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Installation Notes

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