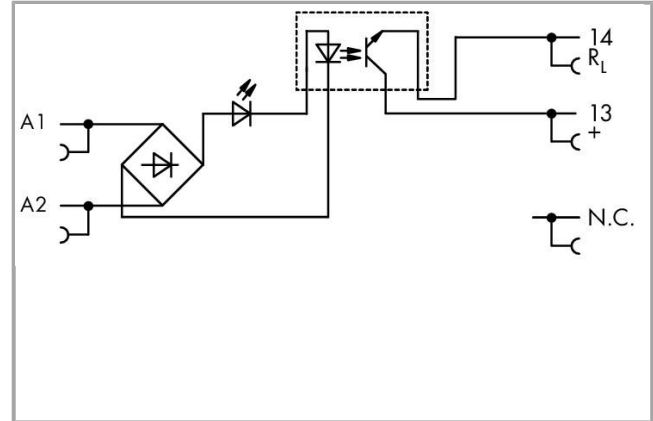
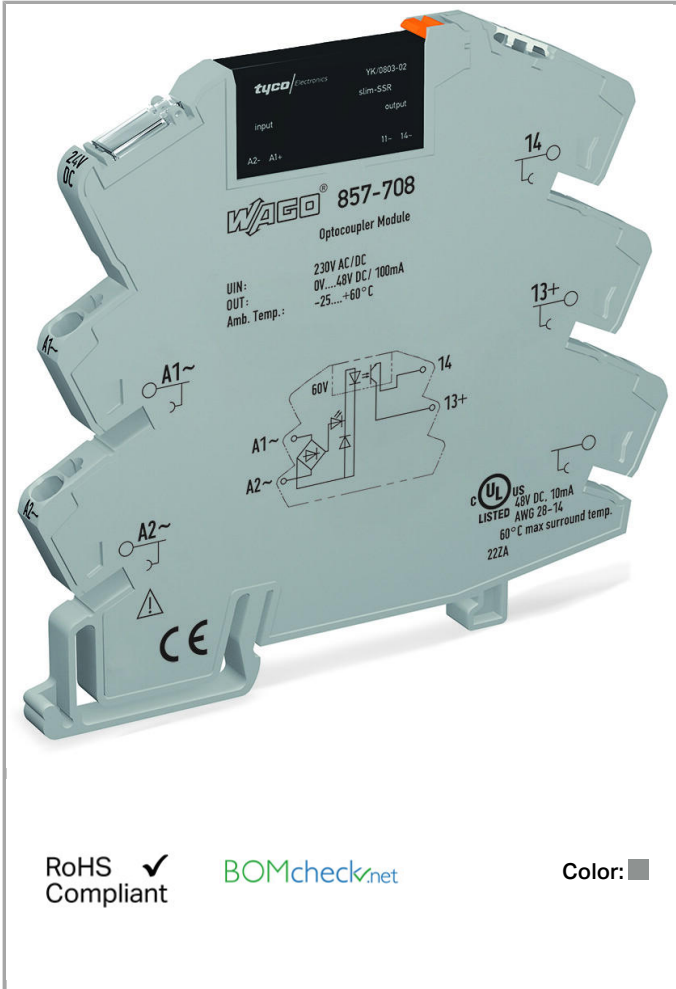


Data sheet | Item number: 857-708

Solid-state relay module; Nominal input voltage: 230 V AC/DC; Output voltage range: 0 ... 48 VDC; Limiting continuous current: 0.1 A; 2-wire connection; Yellow status indicator; Module width: 6 mm



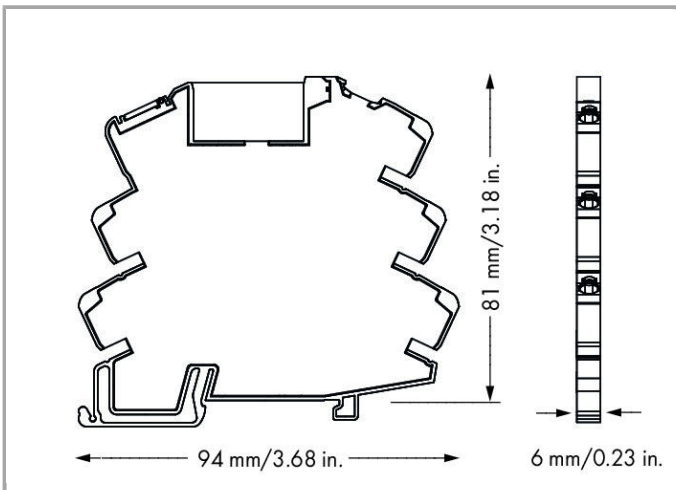
857-708



RoHS Compliant ✓

BOMcheck.net

Color: ■



## Item description

### Note:

Optocouplers and solid state relays are designed for use in signal processing networks, which are not supplied by the low-voltage power supply networks.

## Data

### Technical Data

#### Control circuit

Nominal input voltage $U_N$	AC/DC 230 V
Input voltage range (low level)	AC/DC 0 ... 30 V
Input voltage range (high level)	AC/DC 200 ... 253 V
Nominal input current at $U_N$	3.25 mA

#### Load circuit:

Circuit type	2-conductor termination
Limiting continuous current	0.1 A
Output voltage range	DC 0 ... 48 V
Max. voltage drop at output	$\leq$ DC 1 V
Min. switching current	50 $\mu$ A
Turn-on time	$\leq$ 4.5 ms
Drop-out time	$\leq$ 10 ms
Switching frequency	$\leq$ 20 Hz

#### Signaling

Status indication	LED yellow
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#### Safety and protection:

Dielectric strength, control/load circuit (AC, 1 min)	3.75 kVrms
Protection class	IP20

#### Connection data

Connection technology	Push-in CAGE CLAMP®
Solid conductor	0.34 ... 2.5 mm <sup>2</sup> / 22 ... 14 AWG
Fine-stranded conductor	0.34 ... 2.5 mm <sup>2</sup> / 22 ... 14 AWG
Strip length	9 ... 10 mm / 0.35 ... 0.39 inch

## Geometrical Data

Width	6 mm / 0.236 inch
Height from upper-edge of DIN-35 rail	81 mm / 3.189 inch
Depth	94 mm / 3.701 inch

## Mechanical data

Type of mounting	DIN-35 rail
------------------	-------------

## Material Data

Color	gray
Fire load	0 MJ
Weight	30.7 g

## Environmental Requirements

Surrounding air (operating) temperature at $U_N$	-20 ... 60 °C
Surrounding air (storage) temperature	-40 ... 70 °C
Processing temperature	-25 ... +50 °C

## Standards and specifications

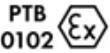

Standards/specifications	EN 61000-6-2; EN 61000-6-3; EN 61373; EN 61010-2-201; UL 508
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## Commercial data


Product Group	6 (Interface Electronics)
Country of origin	DE
GTIN	4045454835514
Customs Tariff No.	85365005000

## Approvals / Certificates

### Ex-Approvals












Logo	Approval	Additional Approval Text	Certificate name
	ATEX DEKRA EXAM GmbH	EN 60079-0	BVS_14_ATEX_E_091_X
	IECEX DEKRA EXAM GmbH	IEC 60079-0	IECEX_BVS_14.0079_X
















### UL-Approvals
















Logo	Approval	Additional Approval Text	Certificate name
	UL UL International Netherlands B.V. (ORDINARY LOCATIONS)	UL 508	E175199 Sec.4
















## Compatible products
















### Marking accessories

	<b>Item no.: 2009-110</b> Marking strips; on reel; not stretchable; plain; snap-on type		2009-110
	<b>Item no.: 2009-115</b> WMB-Inline; for Smart Printer; on reel; stretchable 5 - 5.2 mm; plain; snap-on type		2009-115
	<b>Item no.: 2009-115/000-002</b> WMB-Inline; for Smart Printer; on reel; stretchable 5 - 5.2 mm; plain; snap-on type	/000-002	2009-115
	<b>Item no.: 2009-115/000-006</b> WMB-Inline; for smartPRINTER; on reel; stretchable 5 - 5.2 mm; plain; snap-on type	/000-006	2009-115
	<b>Item no.: 2009-115/000-007</b> WMB-Inline; for Smart Printer; on reel; stretchable 5 - 5.2 mm; plain; snap-on type	/000-007	2009-115
	<b>Item no.: 2009-115/000-012</b> WMB-Inline; for smartPRINTER; on reel; stretchable 5 - 5.2 mm; plain; snap-on type	/000-012	2009-115
	<b>Item no.: 2009-115/000-017</b> WMB-Inline; for Smart Printer; on reel; stretchable 5 - 5.2 mm; plain; snap-on type	/000-017	2009-115
	<b>Item no.: 2009-115/000-023</b> WMB-Inline; for Smart Printer; on reel; stretchable 5 - 5.2 mm; plain; snap-on type	/000-023	2009-115
	<b>Item no.: 2009-115/000-024</b> WMB-Inline; for smartPRINTER; on reel; stretchable 5 - 5.2 mm; plain; snap-on type	/000-024	2009-115
	<b>Item no.: 209-128</b> Adaptor		209-128
	<b>Item no.: 209-183</b> Marker card		209-183

















	<b>Item no.: 210-110</b> Fiber-tip pen	210-110
	<b>Item no.: 793-501</b> WMB marking card; as card; not stretchable; plain; snap-on type	793-501
	<b>Item no.: 793-501/000-002</b> WMB marking card; as card; not stretchable; plain; snap-on type	793-501 /000-002
	<b>Item no.: 793-501/000-005</b> WMB marking card; as card; not stretchable; plain; snap-on type	793-501 /000-005
	<b>Item no.: 793-501/000-006</b> WMB marking card; as card; not stretchable; plain; snap-on type	793-501 /000-006
	<b>Item no.: 793-501/000-007</b> WMB marking card; as card; not stretchable; plain; snap-on type	793-501 /000-007
	<b>Item no.: 793-501/000-012</b> WMB marking card; as card; not stretchable; plain; snap-on type	793-501 /000-012
	<b>Item no.: 793-501/000-017</b> WMB marking card; as card; not stretchable; plain; snap-on type	793-501 /000-017
	<b>Item no.: 793-501/000-023</b> WMB marking card; as card; not stretchable; plain; snap-on type	793-501 /000-023
	<b>Item no.: 793-501/000-024</b> WMB marking card; as card; not stretchable; plain; snap-on type	793-501 /000-024
	<b>Item no.: 793-502</b> WMB marking card; as card; MARKED; 1 ... 10 (10x); not stretchable; Horizontal marking; snap-on type	793-502
	<b>Item no.: 793-502/000-002</b> WMB marking card; as card; MARKED; 1 ... 10 (10x); not stretchable; Horizontal marking; snap-on type	793-502 /000-002
	<b>Item no.: 793-502/000-005</b> WMB marking card; as card; MARKED; 1 ... 10 (10x); not stretchable; Horizontal marking; snap-on type	793-502 /000-005
	<b>Item no.: 793-502/000-006</b> WMB marking card; as card; MARKED; 1 ... 10 (10x); not stretchable; Horizontal marking; snap-on type	793-502 /000-006
	<b>Item no.: 793-502/000-007</b> WMB marking card; as card; MARKED; 1 ... 10 (10x); not stretchable; Horizontal marking; snap-on type	793-502 /000-007
















	<b>Item no.: 793-502/000-012</b> WMB marking card; as card; MARKED; 1 ... 10 (10x); not stretchable; Horizontal marking; snap-on type	793-502 /000-012
	<b>Item no.: 793-502/000-017</b> WMB marking card; as card; MARKED; 1 ... 10 (10x); not stretchable; Horizontal marking; snap-on type	793-502 /000-017
	<b>Item no.: 793-502/000-023</b> WMB marking card; as card; MARKED; 1 ... 10 (10x); not stretchable; Horizontal marking; snap-on type	793-502 /000-023
	<b>Item no.: 793-502/000-024</b> WMB marking card; as card; MARKED; 1 ... 10 (10x); not stretchable; Horizontal marking; snap-on type	793-502 /000-024
	<b>Item no.: 793-503</b> WMB marking card; as card; MARKED; 11 ... 20 (10x); not stretchable; Horizontal marking; snap-on type	793-503
	<b>Item no.: 793-503/000-002</b> WMB marking card; as card; MARKED; 11 ... 20 (10x); not stretchable; Horizontal marking; snap-on type	793-503 /000-002
	<b>Item no.: 793-503/000-005</b> WMB marking card; as card; MARKED; 11 ... 20 (10x); not stretchable; Horizontal marking; snap-on type	793-503 /000-005
	<b>Item no.: 793-503/000-006</b> WMB marking card; as card; MARKED; 11 ... 20 (10x); not stretchable; Horizontal marking; snap-on type	793-503 /000-006
	<b>Item no.: 793-503/000-007</b> WMB marking card; as card; MARKED; 11 ... 20 (10x); not stretchable; Horizontal marking; snap-on type	793-503 /000-007
	<b>Item no.: 793-503/000-012</b> WMB marking card; as card; MARKED; 11 ... 20 (10x); not stretchable; Horizontal marking; snap-on type	793-503 /000-012
	<b>Item no.: 793-503/000-017</b> WMB marking card; as card; MARKED; 11 ... 20 (10x); not stretchable; Horizontal marking; snap-on type	793-503 /000-017
	<b>Item no.: 793-503/000-023</b> WMB marking card; as card; MARKED; 11 ... 20 (10x); not stretchable; Horizontal marking; snap-on type	793-503 /000-023
	<b>Item no.: 793-503/000-024</b> WMB marking card; as card; MARKED; 11 ... 20 (10x); not stretchable; Horizontal marking; snap-on type	793-503 /000-024
	<b>Item no.: 793-504</b> WMB marking card; as card; MARKED; 21 ... 30 (10x); not stretchable; Horizontal marking; snap-on type	793-504
	<b>Item no.: 793-504/000-002</b> WMB marking card; as card; MARKED; 21 ... 30 (10x); not stretchable; Horizontal marking; snap-on type	793-504 /000-002

	<b>Item no.: 793-504/000-005</b> WMB marking card; as card; MARKED; 21 ... 30 (10x); not stretchable; Horizontal marking; snap-on type / 000-005	793-504
	<b>Item no.: 793-504/000-006</b> WMB marking card; as card; MARKED; 21 ... 30 (10x); not stretchable; Horizontal marking; snap-on type / 000-006	793-504
	<b>Item no.: 793-504/000-012</b> WMB marking card; as card; MARKED; 21 ... 30 (10x); not stretchable; Horizontal marking; snap-on type / 000-012	793-504
	<b>Item no.: 793-504/000-017</b> WMB marking card; as card; MARKED; 21 ... 30 (10x); not stretchable; Horizontal marking; snap-on type / 000-017	793-504
	<b>Item no.: 793-504/000-023</b> WMB marking card; as card; MARKED; 21 ... 30 (10x); not stretchable; Horizontal marking; snap-on type / 000-023	793-504
	<b>Item no.: 793-505</b> WMB marking card; as card; MARKED; 31 ... 40 (10x); not stretchable; Horizontal marking; snap-on type	793-505
	<b>Item no.: 793-505/000-005</b> WMB marking card; as card; MARKED; 31 ... 40 (10x); not stretchable; Horizontal marking; snap-on type / 000-005	793-505
	<b>Item no.: 793-505/000-006</b> WMB marking card; as card; MARKED; 31 ... 40 (10x); not stretchable; Horizontal marking; snap-on type / 000-006	793-505
	<b>Item no.: 793-505/000-007</b> WMB marking card; as card; MARKED; 31 ... 40 (10x); not stretchable; Horizontal marking; snap-on type / 000-007	793-505
	<b>Item no.: 793-505/000-012</b> WMB marking card; as card; MARKED; 31 ... 40 (10x); not stretchable; Horizontal marking; snap-on type / 000-012	793-505
	<b>Item no.: 793-506</b> WMB marking card; as card; MARKED; 41 ... 50 (10x); not stretchable; Horizontal marking; snap-on type	793-506
	<b>Item no.: 793-506/000-005</b> WMB marking card; as card; MARKED; 41 ... 50 (10x); not stretchable; Horizontal marking; snap-on type / 000-005	793-506
	<b>Item no.: 793-506/000-006</b> WMB marking card; as card; MARKED; 41 ... 50 (10x); not stretchable; Horizontal marking; snap-on type / 000-006	793-506
	<b>Item no.: 793-506/000-012</b> WMB marking card; as card; MARKED; 41 ... 50 (10x); not stretchable; Horizontal marking; snap-on type / 000-012	793-506
	<b>Item no.: 793-506/000-017</b> WMB marking card; as card; MARKED; 41 ... 50 (10x); not stretchable; Horizontal marking; snap-on type / 000-017	793-506
	<b>Item no.: 793-5501</b>	

	WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type		793-5501
	<b>Item no.: 793-5501/000-002</b> WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type	/000-002	793-5501
	<b>Item no.: 793-5501/000-005</b> WMB marking card; as card; stretchable 5 - 5.2 mm; plain; snap-on type	/000-005	793-5501
	<b>Item no.: 793-5501/000-006</b> WMB marking card; as card; stretchable 5 - 5.2 mm; plain; snap-on type	/000-006	793-5501
	<b>Item no.: 793-5501/000-007</b> WMB marking card; as card; stretchable 5 - 5.2 mm; plain; snap-on type	/000-007	793-5501
	<b>Item no.: 793-5501/000-012</b> WMB marking card; as card; stretchable 5 - 5.2 mm; plain; snap-on type	/000-012	793-5501
	<b>Item no.: 793-5501/000-014</b> WMB marking card; as card; stretchable 5 - 5.2 mm; plain; snap-on type	/000-014	793-5501
	<b>Item no.: 793-5501/000-017</b> WMB marking card; as card; stretchable 5 - 5.2 mm; plain; snap-on type	/000-017	793-5501
	<b>Item no.: 793-5501/000-023</b> WMB marking card; as card; stretchable 5 - 5.2 mm; plain; snap-on type	/000-023	793-5501
	<b>Item no.: 793-5501/000-024</b> WMB marking card; as card; stretchable 5 - 5.2 mm; plain; snap-on type	/000-024	793-5501
	<b>Item no.: 793-566</b> WMB marking card; as card; MARKED; 1 ... 50 (2x); not stretchable; Horizontal marking; snap-on type		793-566
	<b>Item no.: 793-566/000-002</b> WMB marking card; as card; MARKED; 1 ... 50 (2x); not stretchable; Horizontal marking; snap-on type	/000-002	793-566
	<b>Item no.: 793-566/000-005</b> WMB marking card; as card; MARKED; 1 ... 50 (2x); not stretchable; Horizontal marking; snap-on type	/000-005	793-566
	<b>Item no.: 793-566/000-006</b> WMB marking card; as card; MARKED; 1 ... 50 (2x); not stretchable; Horizontal marking; snap-on type	/000-006	793-566
	<b>Item no.: 793-566/000-007</b> WMB marking card; as card; MARKED; 1 ... 50 (2x); not stretchable; Horizontal marking; snap-on type	/000-007	793-566



	<b>Item no.: 793-566/000-012</b> WMB marking card; as card; MARKED; 1 ... 50 (2x); not stretchable; Horizontal marking; snap-on type	/000-012	793-566
	<b>Item no.: 793-566/000-017</b> WMB marking card; as card; MARKED; 1 ... 50 (2x); not stretchable; Horizontal marking; snap-on type	/000-017	793-566
	<b>Item no.: 793-566/000-023</b> WMB marking card; as card; MARKED; 1 ... 50 (2x); not stretchable; Horizontal marking; snap-on type	/000-023	793-566
	<b>Item no.: 793-566/000-024</b> WMB marking card; as card; MARKED; 1 ... 50 (2x); not stretchable; Horizontal marking; snap-on type	/000-024	793-566
<b>General accessories</b>			
	<b>Item no.: 209-184</b> Protection cover		209-184
	<b>Item no.: 249-105</b> Group marker carrier		249-105
	<b>Item no.: 857-165</b> Basic solid-state relay; Nominal input voltage: 60 VDC; Output voltage range: 0 ... 48 VDC		857-165
<b>Jumper</b>			
	<b>Item no.: 281-482</b> Comb-style jumper bar; insulated; 2-way; IN = IN terminal block		281-482
	<b>Item no.: 859-402</b> Push-in type jumper bar; 2-way; Nominal current 18 A; insulated		859-402
	<b>Item no.: 859-402/000-005</b> Push-in type jumper bar; 2-way; Nominal current 18 A; insulated	/000-005	859-402
	<b>Item no.: 859-402/000-006</b> Push-in type jumper bar; 2-way; Nominal current 18 A; insulated	/000-006	859-402
	<b>Item no.: 859-402/000-029</b> Push-in type jumper bar; 2-way; Nominal current 18 A; insulated	/000-029	859-402
	<b>Item no.: 859-403</b> Push-in type jumper bar; 3-way; Nominal current 18 A; insulated		859-403
	<b>Item no.: 859-403/000-005</b> Push-in type jumper bar; 3-way; Nominal current 18 A; insulated	/000-005	859-403
	<b>Item no.: 859-403/000-006</b> Push-in type jumper bar; 3-way; Nominal current 18 A; insulated	/000-006	859-403
	<b>Item no.: 859-403/000-029</b> Push-in type jumper bar; 3-way; Nominal current 18 A; insulated	/000-029	859-403

	<b>Item no.: 859-404</b> Push-in type jumper bar; 4-way; Nominal current 18 A; insulated	859-404
	<b>Item no.: 859-404/000-005</b> Push-in type jumper bar; 4-way; Nominal current 18 A; insulated	859-404 /000-005
	<b>Item no.: 859-404/000-006</b> Push-in type jumper bar; 4-way; Nominal current 18 A; insulated	859-404 /000-006
	<b>Item no.: 859-404/000-029</b> Push-in type jumper bar; 4-way; Nominal current 18 A; insulated	859-404 /000-029
	<b>Item no.: 859-405</b> Push-in type jumper bar; 5-way; Nominal current 18 A; insulated	859-405
	<b>Item no.: 859-405/000-005</b> Push-in type jumper bar; 5-way; Nominal current 18 A; insulated	859-405 /000-005
	<b>Item no.: 859-405/000-006</b> Push-in type jumper bar; 5-way; Nominal current 18 A; insulated	859-405 /000-006
	<b>Item no.: 859-405/000-029</b> Push-in type jumper bar; 5-way; Nominal current 18 A; insulated	859-405 /000-029
	<b>Item no.: 859-406</b> Push-in type jumper bar; 6-way; Nominal current 18 A; insulated	859-406
	<b>Item no.: 859-406/000-005</b> Push-in type jumper bar; 6-way; Nominal current 18 A; insulated	859-406 /000-005
	<b>Item no.: 859-406/000-006</b> Push-in type jumper bar; 6-way; Nominal current 18 A; insulated	859-406 /000-006
	<b>Item no.: 859-406/000-029</b> Push-in type jumper bar; 6-way; Nominal current 18 A; insulated	859-406 /000-029
	<b>Item no.: 859-407</b> Push-in type jumper bar; 7-way; Nominal current 18 A; insulated	859-407
	<b>Item no.: 859-407/000-005</b> Push-in type jumper bar; 7-way; Nominal current 18 A; insulated	859-407 /000-005
	<b>Item no.: 859-407/000-006</b> Push-in type jumper bar; 7-way; Nominal current 18 A; insulated	859-407 /000-006
	<b>Item no.: 859-407/000-029</b> Push-in type jumper bar; 7-way; Nominal current 18 A; insulated	859-407 /000-029



**Item no.: 859-408**  
Push-in type jumper bar; 8-way; Nominal current 18 A; insulated

859-408



**Item no.: 859-408/000-005**  
Push-in type jumper bar; 8-way; Nominal current 18 A; insulated

/000-005

859-408



**Item no.: 859-408/000-006**  
Push-in type jumper bar; 8-way; Nominal current 18 A; insulated

/000-006

859-408



**Item no.: 859-408/000-029**  
Push-in type jumper bar; 8-way; Nominal current 18 A; insulated

/000-029

859-408



**Item no.: 859-409**  
Push-in type jumper bar; 9-way; Nominal current 18 A; insulated

859-409



**Item no.: 859-409/000-005**  
Push-in type jumper bar; 9-way; Nominal current 18 A; insulated

/000-005

859-409



**Item no.: 859-409/000-006**  
Push-in type jumper bar; 9-way; Nominal current 18 A; insulated

/000-006

859-409



**Item no.: 859-409/000-029**  
Push-in type jumper bar; 9-way; Nominal current 18 A; insulated

/000-029

859-409



**Item no.: 859-410**  
Push-in type jumper bar; 10-way; Nominal current 18 A; insulated

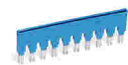
859-410



**Item no.: 859-410/000-005**  
Push-in type jumper bar; 10-way; Nominal current 18 A; insulated

/000-005

859-410



**Item no.: 859-410/000-006**  
Push-in type jumper bar; 10-way; Nominal current 18 A; insulated

/000-006

859-410



**Item no.: 859-410/000-029**  
Push-in type jumper bar; 10-way; Nominal current 18 A; insulated

/000-029

859-410

#### ferrule



**Item no.: 216-241**  
Ferrule; Sleeve for 0.5 mm<sup>2</sup> / 20 AWG; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90

216-241



**Item no.: 216-242**  
Ferrule; Sleeve for 0.75 mm<sup>2</sup> / 18 AWG; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90

216-242



**Item no.: 216-243**  
Ferrule; Sleeve for 1 mm<sup>2</sup> / AWG 18; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90

216-243

**Item no.: 216-244**

Ferrule; Sleeve for 1.5 mm<sup>2</sup> / AWG 16; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90

216-244

**tools****Item no.: 210-720**

Operating tool with partially insulated shaft; Type 2, blade (3.5 x 0.5) mm

210-720

**Downloads****Documentation****Bid Text**

857-708 Solid-State-Relais	Jan 28, 2016	doc 26.6 kB	Download
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**Instruction Leaflet**

Sockets with Optocoupler Input nominal voltage AC/DC 230 V, switching current 0.1 A		pdf 2.4 MB	Download
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**Additional Information**

Disposal; Electrical and electronic equipment, Packaging	V 1.0.0	pdf 265.8 kB	Download
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**CAD/CAE - Smart Data****CAD data**

3D Download 857-708		URL	Download
Step file 857-07xx Series	1.0 Jun 30, 2011	STP 299.3 kB	Download

Subject to changes.