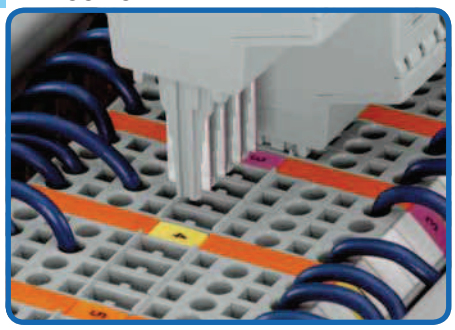
INTERFACE ELECTRONIC . . .

Plugging



Coding ensures correct polarity.

Testing



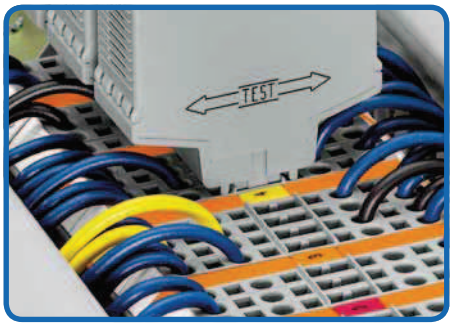
Function testing via touch-proof test slots

Function modules on carrier terminal blocks



Pluggable electronic modules on 2- or 4-conductor carrier terminal blocks

Clamping units

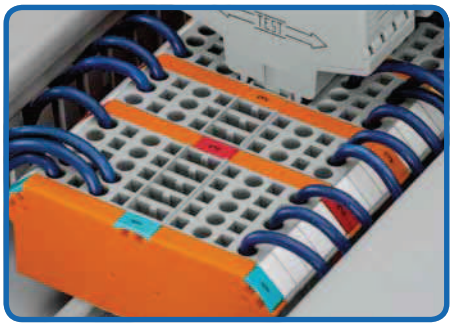


4-conductor carrier terminal blocks – Two clamping units per side enable parallel feeding of voltage supply to multiple units.

Pluggable function modules on carrier terminal blocks

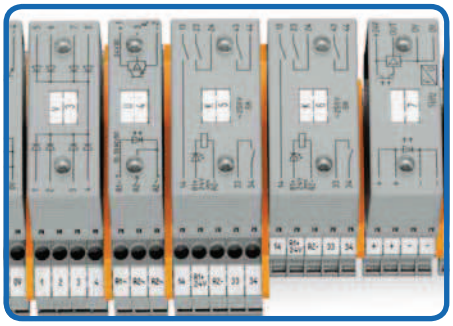


Marking



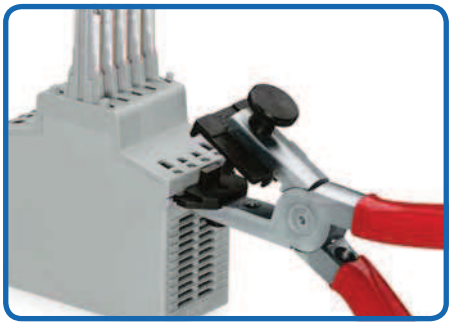
Marking plate, for group or block marking

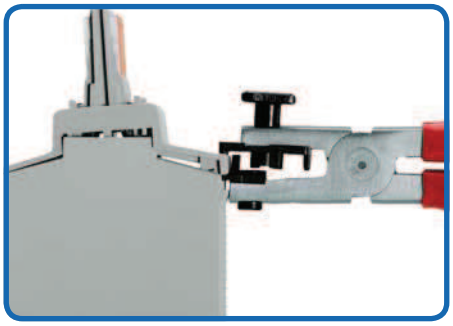
System circuits



Printed system circuits for quick function recognition

Service





Pliers for removing function module housing covers (see page 171)



CAGE CLAMP® clamps the following copper conductors:

solid

Strip length, see packaging or instructions.

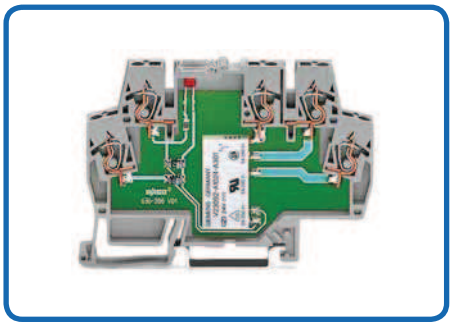


stranded



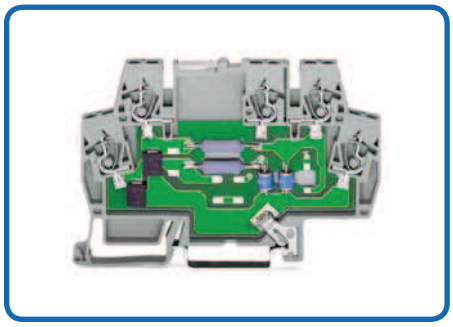
fine-stranded, also with tinned single strands

859 Series



Relay and optocoupler modules

Overvoltage protection

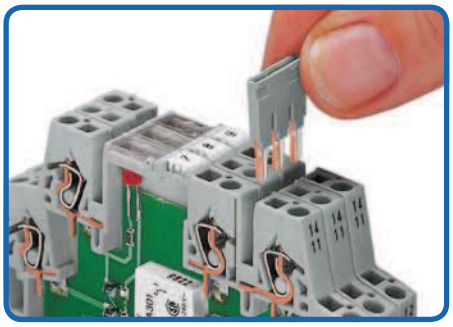


Rail-mounted terminal blocks with overvoltage protection

Interface Modules



Commoning

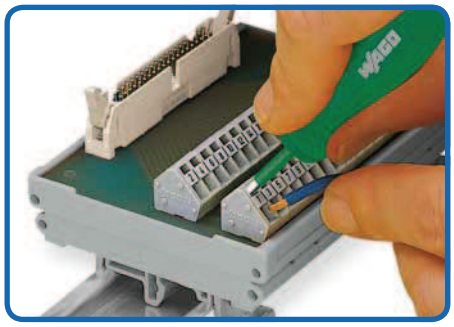


Commoning using a 3-way push-in type jumper bar.
2-way to 10-way jumper bars are also available.



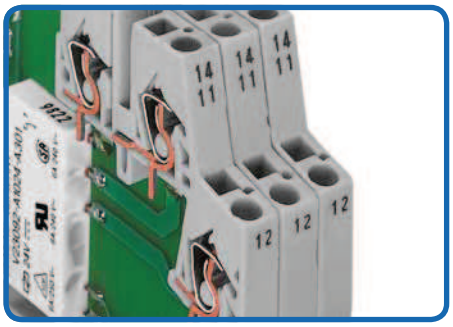
Rail-Mounted Terminal Blocks with Overvoltage Protection

CAGE CLAMP® connection

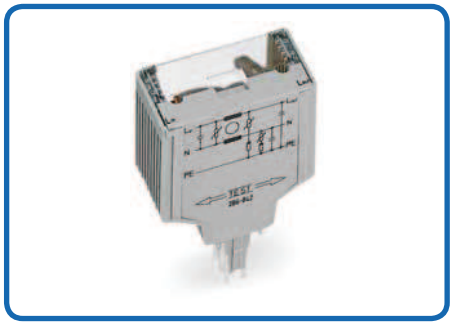


"Front-entry" conductor termination

Marking

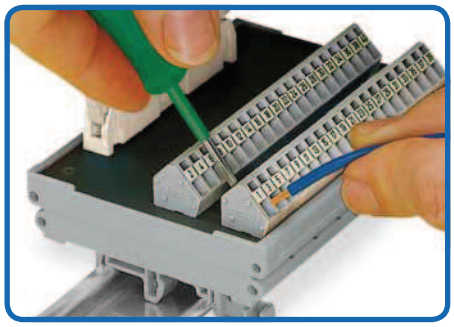


Each clamping unit is marked individually.



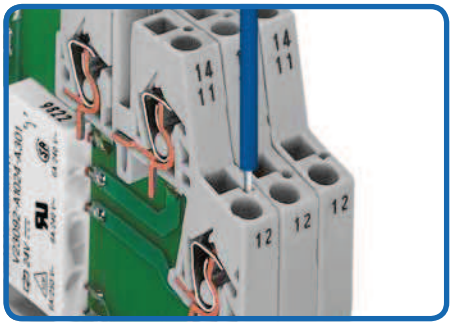
Pluggable surge suppression modules

CAGE CLAMP® connection

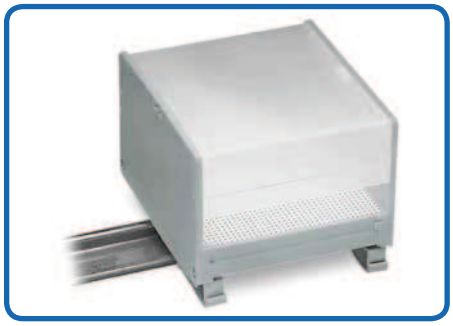


"Side-entry" conductor termination

Testing

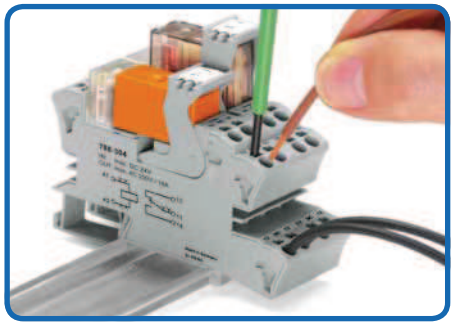


Testing with test pin.



For mounting carriers and empty component plug housings, see page 170.

CAGE CLAMP®S connection



Push-in termination of solid conductors or fine-stranded conductors with ultrasonically bonded conductor ends or ferrules.



fine-stranded,
tip-bonded



fine-stranded with
ferrule ❶
(gastight crimped)

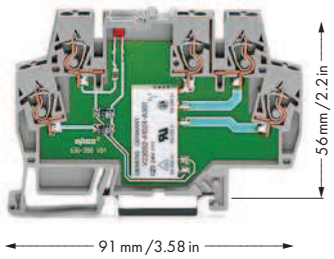


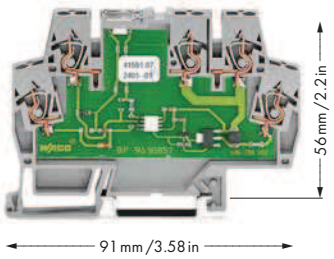
fine-stranded,
with pin terminal
(gastight crimped)

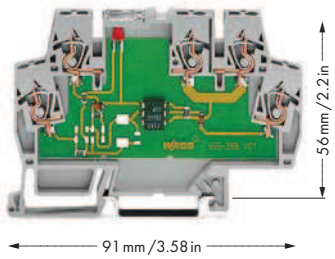
❶ When using ferrules, the max. conductor cross section which can be accommodated is one size smaller than max. rating of terminal block.

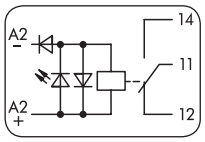
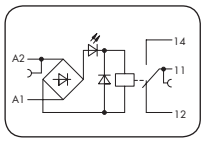
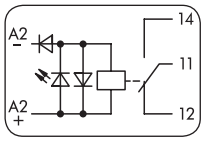
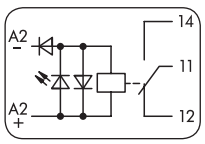
Rail-Mounted Terminal Blocks with Miniature Switching Relay and Optocoupler
859 Series

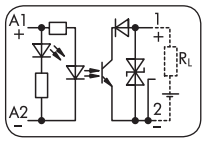
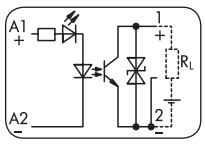
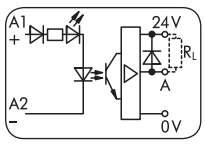
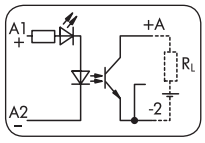
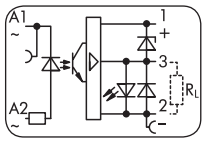
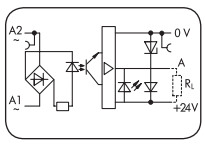
Relays with 1 changeover contact (1 u)	Optocouplers	Optocouplers
0.08 - 2.5 mm² AWG 28 - 14	0.08 - 2.5 mm² AWG 28 - 14	0.08 - 2.5 mm² AWG 28 - 14
Terminal block width: 6 mm	Terminal block width: 6 mm	Terminal block width: 6 mm
5 - 6 mm / 0.22 in	5 - 6 mm / 0.22 in	5 - 6 mm / 0.22 in

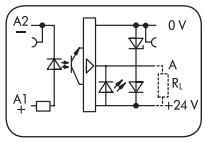
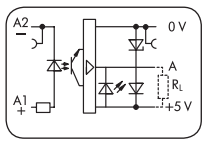
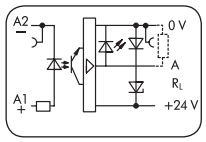
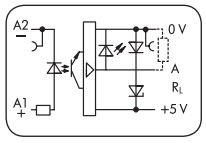
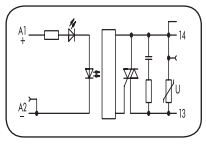






	Item No.	Pack. Unit
	**859-302**	1
	5 VDC	
	859-303	1
	12 VDC	
	859-304	1
	24 VDC	
	859-305	1
	48 VDC	
	859-306	1
	60 VDC	
	859-307	1
	110 VDC	
	859-308	1
	220 VDC	
	**859-353**	1
	12 V AC/DC	
	859-354	1
	24 V AC/DC	
	859-355	1
	48 V AC/DC	
	859-357	1
	115 VAC	
	859-358	1
	230 VAC	
	**Contacts 5 µm Au gold plated**	
	859-314	1
	24 VDC	
	859-317	1
	115 VDC	
	859-360	1
	115 VAC	
	859-359	1
	230 VAC	
	**Defined turn-on/turn-off threshold**	
	859-367	1
	115 VAC	
	859-368	1
	230 VAC	

	Item No.	Pack. Unit
	**859-795**	1
	Input: 5 VDC	
	Output: 24 VDC/100 mA	
	Optocoupler with an extended output voltage and operating temperature range for use in railway traffic	
	859-793	1
	Input: 5 VDC	
	Output: 60 VDC/100 mA	
	**859-796**	1
	Input: 24 VDC	
	Output: 24 VDC/100 mA	
	Optocoupler with an extended output voltage and operating temperature range for use in railway traffic	
	859-791	1
	Input: 24 VDC	
	Output: 60 VDC/100 mA	
	**859-720**	1
	Input: 24 VDC	
	Output: 24 VDC/3 A	
	negative switching	
	**859-730**	1
	Input: 24 VDC	
	Output: 24 VDC/3 A	
	859-740	1
	Input: 24 VDC	
	Output: 3 – 30 VDC/3 A	
	**859-772**	1
	Input: 230 VAC	
	Output: 24 VDC/0.5 A	
	positive switching	
	**859-712**	1
	Input: 230 VAC	
	Output: 24 VDC/0.5 A	
	negative switching	

	Item No.	Pack. Unit
	**859-702**	1
	Input: 5 VDC	
	Output: 24 VDC/0.5 A	
	25 kHz	
	negative switching	
	859-708	1
	Input: 24 VDC	
	Output: 24 VDC/0.5 A	
	25 kHz	
	negative switching	
	**859-706**	1
	Input: 24 VDC	
	Output: 5 VDC/0.5 A	
	25 kHz	
	negative switching	
	**859-752**	1
	Input: 5 VDC	
	Output: 24 VDC/0.5 A	
	10 kHz	
	positive switching	
	859-758	1
	Input: 24 VDC	
	Output: 24 VDC/0.5 A	
	10 kHz	
	positive switching	
	**859-756**	1
	Input: 24 VDC	
	Output: 5 VDC/0.5 A	
	10 kHz	
	positive switching	
	**859-902**	1
	Input: 5 VDC	
	Output: 230 VAC/0.5 A	

For technical explanations and abbreviations, see technical section.

Rail-mounted terminal blocks with overvoltage protection
792 Series

Overvoltage protection for information technology systems

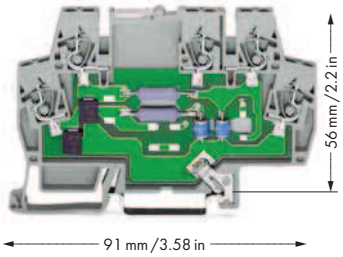
0.08 – 2.5 mm² **AWG 28 – 14**

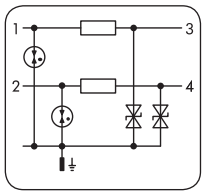
Terminal block width: 6 mm

5 – 6 mm / 0.22 in

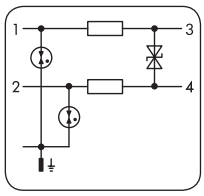
Accessories for:
- Relay and optocoupler modules
- Rail-mounted terminal blocks with overvoltage protection

Accessories for:
- Relay and optocoupler modules
- Rail-mounted terminal blocks with overvoltage protection

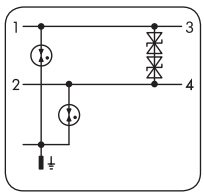




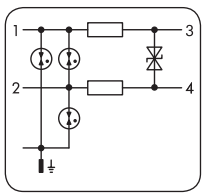
792-800 1
24 VDC, ME24,
for 2 single lines (line/protected ground), unbalanced interfaces as well as RS-485 and RS-422 interfaces



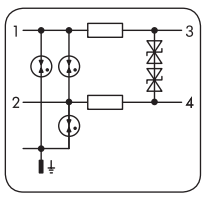
792-801 1
24 VDC, MD24,
for balanced interfaces (line/line) with electrical isolation (telecommunications)



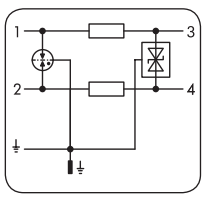
792-802 1
24 VDC, SD24,
for supply lines (power supply units)



792-803 1
24 VDC, MDEX24,
for intrinsically safe circuits, blue terminal block



792-804 1
48 VDC, MD48LON,
for network applications



792-805 1
5 VDC, MDHF5,
for network applications



End and intermediate plate,
1 mm thick
gray **859-525** 100 (4x25)



Push-in type jumper bars,
light gray, insulated, I_N 18 A
2-way **859-402** 200 (8x25)
3-way **859-403** 200 (8x25)
4-way **859-404** 200 (8x25)
5-way **859-405** 200 (8x25)
:
10-way **859-410** 100 (4x25)

Item no. suffix for colored push-in type jumper bars:
yellow **. . ./000-029**
blue **. . ./000-006**



Test pin, 1 mm Ø,
with solder connection for test cable
859-500 1



Marking pen,
for permanent marking
210-110 1



Miniature WSB Quick marking cards,
10 strips with 10 markers each, white with black printing

Marking:			
plain		**248-501**	5
1 ... 10	(10x)	**248-502**	5
11 ... 20	(10x)	**248-503**	5
21 ... 30	(10x)	**248-504**	5
31 ... 40	(10x)	**248-505**	5
41 ... 50	(10x)	**248-506**	5
1 ... 50	(2x)	**248-566**	5
K 1 ... K 10	(10x)	**248-450**	5
K 11 ... K 20	(10x)	**248-451**	5
K 100	(10x)	**248-452**	5
U 1 ... U 10	(10x)	**248-453**	5
U 11 ... U 20	(10x)	**248-454**	5
U 100	(10x)	**248-455**	5



Screwless end stop,
6 mm wide
249-116 100 (4x25)
10 mm wide
249-117 50 (2x25)



Adjustable height group marker carriers,
for 249-116 and 249-117 end stops

for 1 marker card
❶ **249-119** 50 (2x25)

for 2 WSB Quick markers or 1 x continuous marking strip
❷ **249-118** 100 (4x25)



Operating tool with partially insulated shaft, type 2,
(3.5 x 0.5) mm blade
210-720 1