



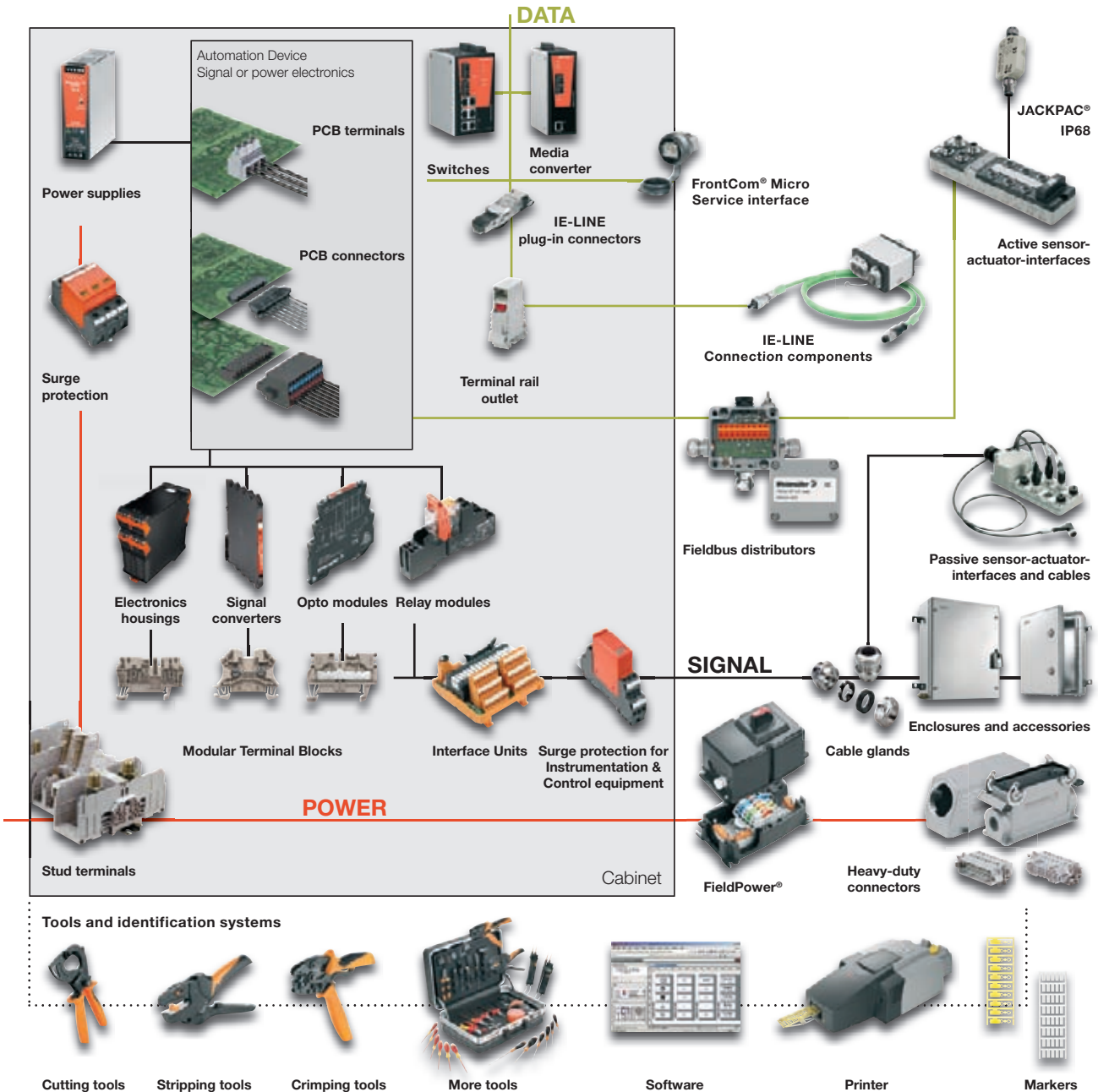
# Electronics Relays and Optos

Catalogue

# Product Portfolio

Weidmüller is a leading international provider of solutions for electrical connectivity, transmission and conditioning of power, signal and data in industrial environments. The company with headquarters in Detmold/Germany develops, produces and sells products in the field of electrical connectivity and electronics all over the world.

[www.power-signal-data.com](http://www.power-signal-data.com)



## All the catalogues at a glance

Catalog	Description	Order No.
Catalog 1	Modular Terminal Blocks	5661400000
Catalog 2	PCB Terminals, PCB Connectors and Housings for Electronics	1250030000
Catalog 3	RockStar® – Heavy Duty Connectors	5664240000
Catalog 4.1	Electronics – Analogue Signal Conditioning	1203510000
Catalog 4.2	Electronics – Relays and Optos	1282330000
Catalog 4.3	Electronics – Power Supplies	1158070000
Catalog 4.4	Electronics – Surge protection	1271290000

Catalog	Description	Order No.
Catalog 4.5	Electronics – Interface units and PLC solutions	1252080000
Catalog 5	Enclosures and Cable Glands	5661920000
Catalog 6	Tools	1161520000
Catalog 7	Identification systems	1125590000
Catalog 8	Sensor Actuator Interface	1235620000
Catalog 9	Industrial Ethernet	1274570000
Product information	FieldPower® – decentralised power distribution	1229860000

**Electronics – Relays and Optos**

Relay modules and opto modules in 6 mm width

**A**

Industrial relay modules and opto modules

**B**

Power electronics

**C**

Timer

**D**

JACKPAC® (IP67) / Functional components

**E**

**Appendix**

Weidmüller Solutions & Service

**V**

Technical appendix/glossary

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Index Type / Index Order No., Addresses worldwide

**X**

# Electronics – Relay modules and opto modules

## TERMOPTO

Page A.6



- Isolation of potentials in terminal format
- With PUSH IN technology
- Compact, enclosed design

## MICROOPTO

Page A.16



- Compact semiconductor switch in terminal format
- High power for loads up to 10 A
- Electrically isolates high-speed signals
- International approvals

## MICROSERIES relay module

Page A.26



- All-purpose, pluggable relay coupler
- Interface module for the system cabling between the controller and the machinery
- International approvals, with Cl.1 Div.2

## MICROSERIES opto module

Page A.33



- All-purpose, pluggable optocoupler
- Interface module for the system cabling between the controller and the machinery
- International approvals

## MCZ-SERIES relay module

Page A.42



- Low profile with tension clamp connection
- TRAK version developed for the rail industry
- Large temperature range of -40 °C to +70 °C

## MCZ-SERIES opto module

Page A.48



- Low profile with tension clamp connection
- Universal interface between controller and sensor/actuator
- TRAK version developed for the rail industry

## DK-SERIES relay modules and opto modules

Page A.53



- Mini-coupler with slim shape
- Wide range of uses in the automation and process industries

## RIDERSERIES relay module

Page B.6



- Modularly designed product line
- Pluggable variants with 1 to 4 CO contacts
- Innovative relay base with PUSH IN connection

## PLUGSERIES relay module

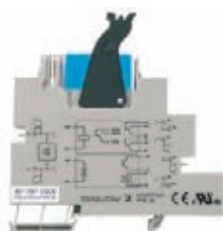
Page B.52



- Pluggable relay coupler
- Multi-purpose retaining clip for high-profile and low-profile relays
- Screw or tension clamp connection
- Base made from WEMID

### PLUGSERIES opto modules

Page B.57



- Interchangeable solid-state relay
- Screw or tension clamp connection
- Base made from WEMID

### RS-Series relay modules and opto modules

Page B.62



- Extra rugged version
- RSM multi-interfaces with up to 16 relays
- Wide range of uses in the automation industry

### PSSR single-phase Power Solid-State Relays

Page C.4



- Load circuit: 12...275 V AC / 20 A at 55 °C
- No-voltage switch
- Ready to use

### PSSR 3-phase Power Solid-State Relays

Page C.6



- Load circuit: 24...520 V AC / 20 A
- With integrated quick-action switch
- Ready to use

### BT-SERIES timer

Page D.4



- Time range: 0.10 s...120 h
- Screw or tension clamp connection
- International approvals

### Timer with 6 mm width

Page D.8



- Components for lengthening short pulses for the PLC
- Low input power
- DKZ Series with adjustable switch-off delay

### JACKPAC®

Page E.3



- For use with decentralized wiring designs
- Integrates basic signal processing functionality
- IP67 protection

### Functional components

Page E.9



- Switch and button components
- Fuse components
- Rectifier circuit




# Selection table for relay modules

Using the selection table, you can find the article number quickly and easily. Proceed as follows:




- 1.) Select the output configuration (contact type, number of contacts, contact material) for your required product.
  - 2.) Select the input voltage.
  - 3.) If the search results in multiple product article numbers, then you should also specify a product series or a connection system.
- If your search comes up with no results, then you may be in need of a customized solution from the RIDERSERIES product line. Almost any desired relay module can be put together from the large variety of input and output configurations. We would be glad to help you develop the proper solution for your requirements.

Detailed technical specifications may be found in the corresponding catalogue pages.


## Preferred types

① Output									③ Connection	④ SERIES
										
Type of contact	NC	NO	CO							
Number of contacts	1	1	1		2		3	4		
Contact material	AgNi	AgNi / RhRu	AgNi / AgSnO	AgSnO +5uAu	AgNi	AgNi + 5uAu	AgNi	AgNi		
② Voltage/ Input/ DC										
5VTTL	1167660000	1167760000							Screw	RS 30
5 V DC		8019610000							Screw	DK
			8556080000						Screw	MICRO
			8556150000						Tension clamp	
12 V DC		8171100000							Screw	DK
	1129521001	1129421001	1129660000						Screw	RS 30
			8556070000						Screw	MICRO
			8556140000						Tension clamp	
			8536471001		8536501001				Screw	PLUG
		8536571001		8536591001				Tension clamp		
24 V DC		8008170000	8181980000						Screw	DK
	1100911001	1101611001	1181511001						Screw	RS 30
			1128361001						Screw	RS 31
					9406121001				Screw	RS 32
			8365980000	8442960000					Tension clamp	MCZ
		8660920000	8533640000	8596060000					Screw	MICRO
		8660910000	8533660000	8596080000					Tension clamp	
			8530621001		8530631001	8561760000			Tension clamp	PLUG
			8530691001		8530701001	8552440000			Tension clamp	
			8881580000		8881610000				Screw	RIDER - RCI KIT
			8897190000		8897230000				PUSH IN	
					8920940000		8920980000	8921030000	Screw	RIDER - RCM KIT
					8921080000			8921120000	PUSH IN	
48 V DC		1101811001	1100410000					Screw	RS 30	
60 V DC			8470380000					Tension clamp	MCZ	
			8556060000					Screw	MICRO	
			8556130000					Tension clamp		
110 V/ 115 V DC			8467470000					Tension clamp	MCZ	
	1155221001	1155111001						Screw	RS 30	
Input UC										
24 V UC		8016610000	9454910000						Screw	DK
		1101711001	1100360000						Screw	RS 30
					9406221001				Screw	RS 32
			8390590000						Tension clamp	MCZ
			8556050000						Screw	MICRO
		8556120000						Tension clamp		
48 V UC			8556040000					Screw	MICRO	
			8556110000					Tension clamp		
60 V UC			8556060000					Screw	MICRO	
			8556130000					Tension clamp		
115 V/ 120 V UC					9406621001			Screw	RS 32	
			8556030000	8652030000				Screw	MICRO	
			8556100000	8652040000				Tension clamp		
230 V UC					9406721001			Screw	RS 32	
			8825990000					Screw	MICRO	
			8825980000					Tension clamp		



Preferred types

① Output								③ Connection	③ SERIES	
Type of contact										
Number of contacts	1	1	1		2		3			4
Contact material	AgNi	AgNi / RhRu	AgNi / AgSnO	AgSnO + 5uAu	AgNi	AgNi + 5uAu	AgNi	AgNi		
② Voltage/Input								③ Connection	③ SERIES	
24 V AC			8536530000		8536560000			Screw	PLUG	
			8536651001		8536681001			Tension clamp		
			8881590000		8881620000			Screw	RIDER - RCI KIT	
			8897200000		8897240000			PUSH IN		
					8920950000		8920990000	8921040000	Screw	RIDER - RCM KIT
				8921090000			8921130000	PUSH IN		
115 V/ 120 V AC		1102111001	1100760000					Screw	RS 30	
			1150461001					Screw	RS 31	
			8897060000		8897080000			Screw	RIDER - RCI KIT	
			8897210000		8897250000			PUSH IN		
					8920960000		8921010000	8921060000	Screw	RIDER - RCM KIT
					8921100000			8921140000	PUSH IN	
				8420880000					Tension clamp	MCZ
		8825970000							Screw	MICRO
		8825960000		8652040000					Tension clamp	
			8530641001		8530661001	8595960000			Screw	PLUG
		8530710000		8530720000	8575940000			Tension clamp		
230 V AC		1102211001	1100860000					Screw	RS 30	
			1128461001					Screw	RS 31	
			8237710000					Tension clamp	MCZ	
			8556020000	8596050000					Screw	MICRO
			8556090000	8596070000					Tension clamp	
			8530671001		8530681001	8595990000			Screw	PLUG
			8530731001		8530741001	8575950000			Tension clamp	
			8881600000		8881630000				Screw	RIDER - RCI KIT
			8897220000		8897260000				PUSH IN	
					8920970000		8921020000	8921060000	Screw	RIDER - RCM KIT
				8921110000			8921150000	PUSH IN		

RSM multi-interface in a compact design (with screw connections)

① Output			
Contact			
Poles	4*1	8*1	16*1
Contact material	AgNi	AgNi	AgNi
② Voltage/Input			
24 V DC	1113361001	1113561001	1113761001
24 V UC	1173461001	1173561001	1173661001
115 V UC	1114561001	1114661001	1114761001
230 V AC	1114861001	1114961001	1115061001

MCZ TRAK relay modules adapted to rail industry requirements (with tension-clamp connections)

① Output			
Contact			
Poles	1	1	
Contact material	AgSnO	AgSnO	AgSnO + 5uAu
② Voltage/Input			
24 V DC	8499550000	8713890000	8790520000
36 V DC	8582130000	8713900000	8790510000
48-110 V DC	8574070000	8713910000	8790500000

# Selection table for opto modules

Using the selection table, you can find the article number quickly and easily. Proceed as follows:

- 1.) Configure the load side for your desired product.
  - 2.) Select the control voltage.
  - 3.) If the search results in multiple product article numbers, then you should also specify a product series or a connection system.
- We would be glad to help you develop the proper solution for your requirements.  
Detailed technical specifications may be found in the corresponding catalogue pages.

## Preferred types

① Load side								③ Connection	④ SERIES
Voltage type	DC				AC				
Switching voltage	5...48 V		24 V	5 V TTL	24...240 V				
Switching current	< 100 mA	<= 500 mA	<= 2 A	<= 5 A	<=100 mA	<=1 A	<=4 A		
② Control side									
Voltage / AC									
24 V AC	8950820000	8951020000			8951220000			Screw	TERMOPTO
	8950860000	8951060000			8951260000			PUSH IN	
48...60 V AC	8950830000	8951030000			8951230000			Screw	TERMOPTO
	8950870000	8951070000			8951270000			PUSH IN	
120 V AC	8950840000	8951040000			8951240000			Screw	TERMOPTO
	8950880000	8951080000			8951280000			PUSH IN	
120 V AC RC	1180290000							Screw	TERMOPTO
	1188830000							PUSH IN	
230 V AC	8950850000	8951050000			8951250000			Screw	TERMOPTO
	8950890000	8951090000			8951290000			PUSH IN	
	8421380000							Tension clamp	MCZ
	8607710000		8607720000			8651990000		Screw	MICRO
230 V AC RC	8607750000		8607760000			8651970000		Tension clamp	
	1189270000							Screw	TERMOPTO
	1189260000							PUSH IN	
DC									
5V TTL	8398940000							Tension clamp	MCZ
	8937920000							Screw	MICROOPTO
	100 kHz								
5 V DC	8018630000							Screw	DK
	8950700000	8950900000			8951100000			Screw	TERMOPTO
	8950760000	8950960000			8951160000			PUSH IN	
	8633020000		8633000000					Screw	MICRO
8633010000		8632990000					Tension clamp		
12 V DC	8184030000							Screw	DK
	10 kHz								
	8950710000	8950910000			8951110000			Screw	TERMOPTO
	8950770000	8950970000			8951170000			PUSH IN	
				8937930000			Screw	MICROOPTO	
				100 kHz					
24 V DC	8028300000	8019590000	8181990000					Screw	DK
	8937990000				8937930000			Screw	MICROOPTO
	100 kHz				100 kHz				
	8950720000	8950920000	1275100000		8951120000			Screw	TERMOPTO
	8950780000	8950980000	1254880000		8951180000			PUSH IN	
					8324610000			Tension clamp	MCZ
	8607340000		8607350000			8652010000		Screw	MICRO
	8607360000		8607370000			8652020000		Tension clamp	
			8610900000			8610910000	Screw	PLUG	
			8610970000			8610980000	Tension clamp		
48...60 V DC	8950730000	8950930000			8951130000			Screw	TERMOPTO
	8950790000	8950990000			8951190000			PUSH IN	
110 V DC	8950740000	8950940000			8951140000			Screw	TERMOPTO
	8950800000	8951000000			8951200000			PUSH IN	
220 V DC	8950750000	8950950000			8951150000			Screw	TERMOPTO
	8950810000	8951010000			8951210000			PUSH IN	
UC									
24 V UC	8008150000		8228630000					Screw	DK
	8365940000		8287730000					Tension clamp	MCZ
48 V UC	8025910000						Screw	DKO	
115 V/ 120 V UC	8077860000							Screw	DKO
	8421060000							Tension clamp	MCZ
	8607690000		8607700000			8651930000		Screw	MICRO
	8607730000		8607740000			8651950000		Tension clamp	
230 V UC	8008160000						Screw	DKO	



**MICROOPTO components specially customized for industrial applications (with screw connections)**

① Load side				
Voltage type	DC			
Switching voltage	5...48 V DC	8...30 V DC	5...33 V DC	12...300 V DC
Switching current	0.5 A	2 A	10 A	1 A
② Control side/Voltage				
24 V DC	8937980000	8937970000	8937940000	8937830000
Remark	Electronic CO contact 1 kHz switching frequency	Short-circuit-proof Thermal overload fuse 3-wire actuator connection	Short-circuit-proof Alarm contact	Power boost

**PSSR high-performance semiconductor for single-phase or three-phase AC currents (with screw connections)**

① Load side		
Voltage type	AC	
Switching voltage	Single-phase 12...275 V AC	Three-phase 24...275 V AC
Switching current	20 A	20 A
② Control side/Voltage		
3...32 V DC	8952110000	
8...30 V DC / 10...30 V AC		8952130000
110...240 V DC / 150...240 V AC	8952120000	
90...240 V AC/DC		8952140000

