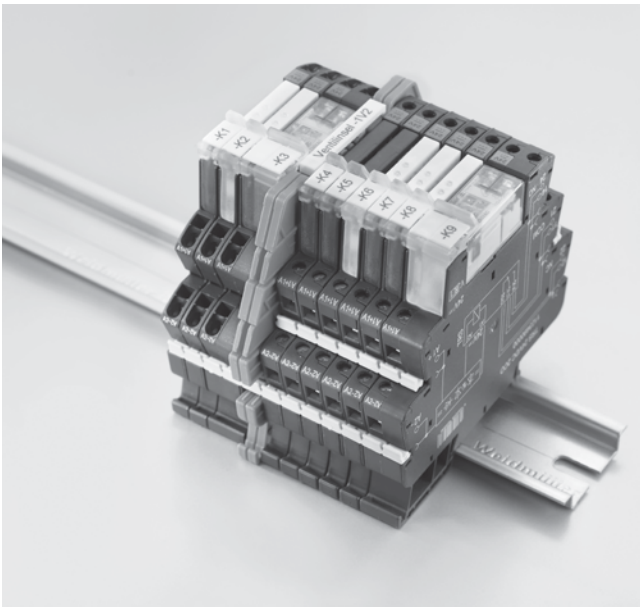


## Datasheet • Electronic TERMSERIES

Relays and Solid-State Relays

**NEW**



Weidmüller's TERMSERIES offers innovative pluggable electromechanical and solid-state relays equipped with one or two changeover contacts housed in a slim 6.4 mm or 12.8 mm design with matching profiles that can be combined as required in the customer's application and reliably switch loads of up to 8A at 250V.

Depending on the application customers can choose between products with a fixed voltage input or Weidmüller's unique multi-voltage input which allows conditioning signals from 24V up to 230V AC/DC with just one module.

A distinctive status display is available through integrated fiber-optic technology that completely illuminates the ejector. The ejector also ensures the safe removal of the switching element.

The versions with single and dual changeover contacts as well as screw clamp and tension clamp terminals have the same profile and can be jumpered with each other with easy to use cross connectors. Well thought out accessories such as isolation plates used to visibly group signals, electrically isolate two modules for up to 400V, or to add labels for enhanced marking options make this product family a well rounded offering.

- Slim design with 6.4 mm or 12.8 mm width
- 1 CO and 2 CO contact versions
- Screw clamp and tension clamp technology
- Input voltages from 5 up to 230V
- Unique multi-voltage input version for 24V-230V AC/DC
- Distinctive fiber-optic illuminated status display
- 5 cross connection levels
- Clear marking
- Pluggable relays and SSRs
- Wide range of accessories
- CE and cULus approved

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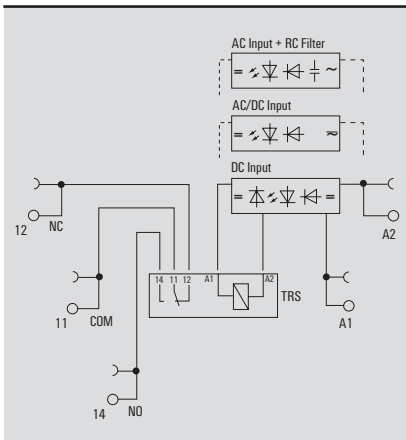
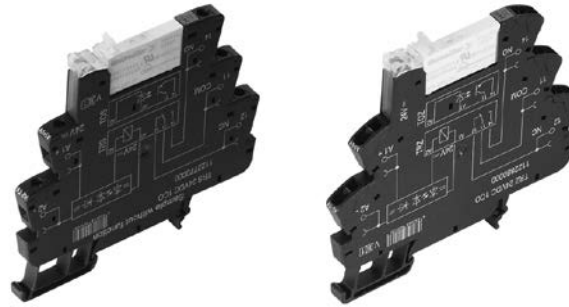
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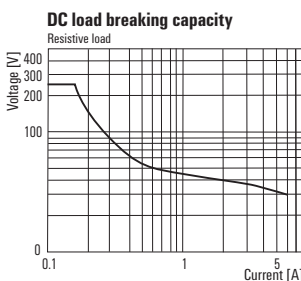
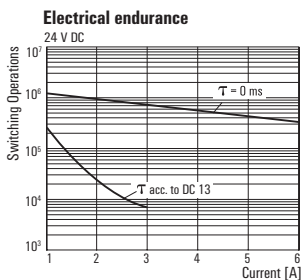
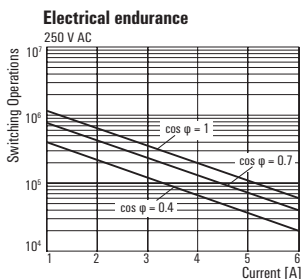
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**1 CO contact  
AC/DC/UC coil**

- Space saving, just 6.4 mm modular width
- AgNi contact with or without gold plating
- Screw and tension clamp connection
- 5 cross connection levels
- Multi-voltage input: 24...230 VUC in one module



**Applications**



**Technical data**

Output	1 CO	1 CO Au
Max. switching voltage, AC / Continuous current	250 V / 6 A	
Min. switching power	100 mA / 5 V	1 mA / 1 V
Contact material	AgNi	AgNi 5µm Au
Mechanical service life	20 x 10 <sup>6</sup> switching cycles	
Max. switching frequency at rated load	0.1 Hz	
<b>Rated data</b>		
Status indicator	Green LED	
Reverse polarity protection	Yes	
Ambient temperature (operational)	-40 °C...+60 °C	
Storage temperature	-40 °C...+85 °C	
Humidity	5...95 % rel. humidity T <sub>0</sub> = 40 °C, no condensation	
Approvals	CE, GL, cULus	
<b>Insulation coordination (EN 50 178)</b>		
Rated voltage	300 V	
Impulse withstand voltage	6 kV (1.2/50 µs)	
Clearance and creepage distances for control side - load side	≥ 5.5 mm	
Surge voltage category	III	
Pollution severity	2	

Dimensions	Screw connection	Tension clamp connection
Clamping range (nominal / min. / max.)	mm <sup>2</sup> 1.5 / 0.14 / 1.5	1.5 / 0.14 / 1.5
Length x width x height	mm 88 / 6.4 / 90	88 / 6.4 / 90
<b>Notes</b>	Accessories and dimensional drawings: refer to the TERMSERIES Accessories page.	

**Ordering data**

Input	24 V - 230 V UC
Rated control voltage	24...230 V UC ±10 %
Rated current AC	4 mA @ 230 V AC ±10 %, 28 mA @ 24 V AC ±10 %
Rated current DC	22 mA @ 24 V DC ±10 %
Power rating	530 mW @ 24 V DC, 930 mVA @ 230 V AC
AC Response/dropout Volt	11 V / 6 V
DC Response/dropout Volt	11 V / 5 V
AC pickup/dropout current	
DC pickup/dropout current	
<b>Output</b>	
Switch-on delay	< 22 ms
Switch-off delay	< 100 ms

Ordering data	Type	Part No.
Screw connection	TRS 24-230VUC 1CO	<b>1122850000</b>
Tension clamp connection	TRZ 24-230VUC 1CO	<b>1122970000</b>
<b>Notes</b>	Spare relay, Type: RSS113024, <b>Part No.:</b> 406012000	

Ordering data	Type	Part No.
Screw connection	TRS 24-230VUC 1CO AU	<b>1123090000</b>
Hard Gold-plated contact		
Tension clamp connection	TRZ 24-230VUC 1CO AU	<b>1123210000</b>
Hard Gold-plated contact		
<b>Notes</b>	Spare relay, Type: RSS112024, <b>Part No.:</b> 4061590000	

## 1 CO contact AC/DC/UC coil

### Ordering data

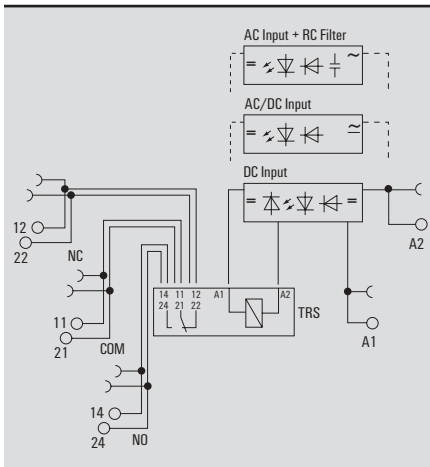
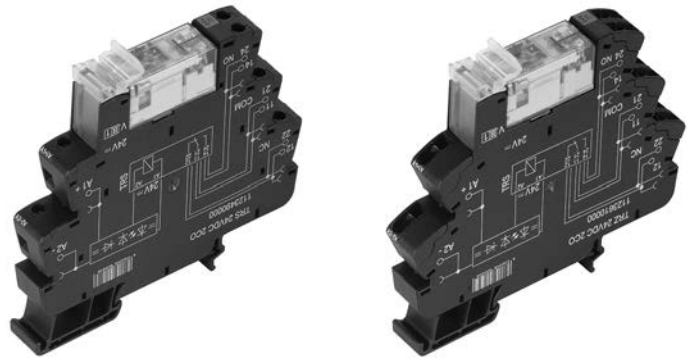
Input data		5 V DC	12 V DC	24 V DC	24 V UC	48 V UC
Rated control voltage		5 V DC $\pm 20\%$	5 V DC $\pm 20\%$	24 V DC $\pm 20\%$	24 V UC $\pm 10\%$	48 V UC $\pm 10\%$
Rated current AC					10.1 mA	8 mA
Rated current DC		35.8 mA	35.8 mA	10 mA	6.4 mA	7 mA
Power rating		200 mW	200 mW	240 mW	270 mVA / 154 mW	240 mVA / 192 mW
AC Response/dropout Volt					16.6 V / 5 V	29 V / 10 V
DC Response/dropout Volt		3.3 V / 1 V	3.3 V / 1 V	16.6 V / 5 V	16.6 V / 5 V	29 V / 10 V
AC pickup/dropout current					4 mA / 1 mA	4 mA // 1.3 mA
DC pickup/dropout current		21.6 mA / 8 mA	21.6 mA / 8 mA	7 mA / 2 mA	4 mA / 1.2 mA	4 mA / 1.2 mA
Free-wheel diode		Yes	Yes	Yes	No	No
Output						
Switch-on delay		< 7 ms	< 7 ms	< 6 ms	< 4 ms	< 8 ms
Switch-off delay		< 4 ms	< 8 ms	< 7 ms	< 1.2 ms	< 4 ms
Ordering data						
Screw connection	Type	TRS 5VDC 1CO	TRS 12VDC 1CO	TRS 24VDC 1CO	TRS 24VUC 1CO	TRS 48VUC 1CO
	Part No.	<b>1122740000</b>	<b>1122750000</b>	<b>1122770000</b>	<b>1122780000</b>	<b>1122790000</b>
Tension clamp connection	Type	TRZ 5VDC 1CO	TRZ 12VDC 1CO	TRZ 24VDC 1CO	TRZ 24VUC 1CO	TRZ 48VUC 1CO
	Part No.	<b>1122860000</b>	<b>1122870000</b>	<b>1122880000</b>	<b>1122890000</b>	<b>1122900000</b>
Notes		Spare relay Type: RSS113005 Part No.: <b>4061580000</b>	Spare relay Type: RSS113012 Part No.: <b>4061610000</b>	Spare relay Type: RSS113024 Part No.: <b>4060120000</b>	Spare relay Type: RSS113024 Part No.: <b>4060120000</b>	Spare relay Type: RSS113024 Part No.: <b>4060120000</b>
Ordering data						
Screw connection	Type	TRS 5VDC 1CO AU	TRS 12VDC 1CO AU	TRS 24VDC 1CO AU	TRS 24VUC 1CO AU	TRS 48VUC 1CO AU
Hard Gold-plated contact	Part No.	<b>1122980000</b>	<b>1122990000</b>	<b>1123000000</b>	<b>1123010000</b>	<b>1123020000</b>
Tension clamp connection	Type	TRZ 5VDC 1CO AU	TRZ 12VDC 1CO AU	TRZ 24VDC 1CO AU	TRZ 24VUC 1CO AU	TRZ 48VUC 1CO AU
Hard Gold-plated contact	Part No.	<b>1123100000</b>	<b>1123110000</b>	<b>1123120000</b>	<b>1123130000</b>	<b>1123140000</b>
Notes		Spare relay Type: RSS112005 Part No.: <b>1174540000</b>	Spare relay Type: RSS112012 Part No.: <b>1220670000</b>	Spare relay Type: RSS112024 Part No.: <b>4061590000</b>	Spare relay Type: RSS112024 Part No.: <b>4061590000</b>	Spare relay Type: RSS112024 Part No.: <b>4061590000</b>

### Ordering data

Input data		60 V UC	120 V UC	230 V UC	120 V AC RC	230 V AC RC
Rated control voltage		60 V UC $\pm 10\%$	120 V UC $\pm 10\%$	230 V UC $\pm 10\%$	120 V AC $\pm 10\%$	230 V AC $\pm 10\%$
Rated current AC		6.1 mA	4 mA	3.5 mA	7 mA	10.1 mA
Rated current DC		3.3 mA	3.5 mA	2.9 mA		
Power rating		360 mW	0.48 VA, 420 mW	0.8 VA, 700 mW	0.84 VA	2.3 VA
AC Response/dropout Volt		35 V / 11 V	79 V / 60 V	159 V / 100 V	79 V / 60 V	145 V / 90 V
DC Response/dropout Volt		40 V / 10 V		159 V / 99 V		
AC pickup/dropout current			4 mA / 2.5 mA	2.2 mA / 1.3 mA	4 mA / 2.5 mA	9.13 mA / 4.78 mA
DC pickup/dropout current				1.7 mA / 0.7 mA		
Free-wheel diode		No	No	No	No	No
Output						
Switch-on delay		< 6 ms	< 8 ms	< 22 ms	< 5.3 ms	< 22 ms
Switch-off delay		< 6.5 ms	< 7 ms	< 30 ms	< 4 ms	< 30 ms
Ordering data						
Screw connection	Type	TRS 60VUC 1CO	TRS 120VUC 1CO	TRS 230VUC 1CO	TRS 120VAC RC 1CO	TRS 230VAC RC 1CO
	Part No.	<b>1122800000</b>	<b>1122810000</b>	<b>1122820000</b>	<b>1122830000</b>	<b>1122840000</b>
Tension clamp connection	Type	TRZ 60VUC 1CO	TRZ 120VUC 1CO	TRZ 230VUC 1CO	TRZ 120VAC RC 1CO	TRZ 230VAC RC 1CO
	Part No.	<b>1122910000</b>	<b>1122920000</b>	<b>1122930000</b>	<b>1122940000</b>	<b>1122950000</b>
Notes		Spare relay Type: RSS113060 Part No.: <b>4061630000</b>	Spare relay Type: RSS113060 Part No.: <b>4061630000</b>	Spare relay Type: RSS113060 Part No.: <b>4061630000</b>	Spare relay Type: RSS113060 Part No.: <b>4061630000</b>	Spare relay Type: RSS113060 Part No.: <b>4061630000</b>
Ordering data						
Screw connection	Type	TRS 60VUC 1CO AU	TRS 120VUC 1CO AU	TRS 230VUC 1CO AU	TRS 120VAC RC 1CO AU	TRS 230VAC RC 1CO AU
Hard Gold-plated contact	Part No.	<b>1123030000</b>	<b>1123040000</b>	<b>1123050000</b>	<b>1123070000</b>	<b>1123080000</b>
Tension clamp connection	Type	TRZ 60VUC 1CO AU	TRZ 120VUC 1CO AU	TRZ 230VUC 1CO AU	TRZ 120VAC RC 1CO AU	TRZ 230VAC RC 1CO AU
Hard Gold-plated contact	Part No.	<b>1123150000</b>	<b>1123170000</b>	<b>1123180000</b>	<b>1123190000</b>	<b>1123200000</b>
Notes		Spare relay Type: RSS112060 Part No.: <b>4061600000</b>	Spare relay Type: RSS112060 Part No.: <b>4061600000</b>	Spare relay Type: RSS112060 Part No.: <b>4061600000</b>	Spare relay Type: RSS112060 Part No.: <b>4061600000</b>	Spare relay Type: RSS112060 Part No.: <b>4061600000</b>

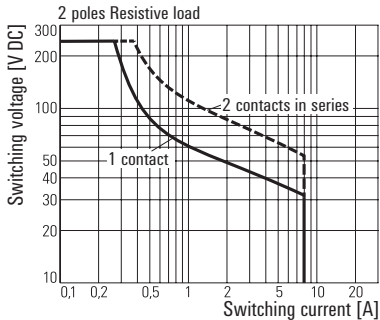
**2 CO contact  
AC/DC/UC coil**

- Space saving, just 12.8 mm modular width
- AgNi contact with or without gold plating
- Screw and tension clamp connection
- 5 cross connection levels
- Multi-voltage input: 24...230 VUC in one module

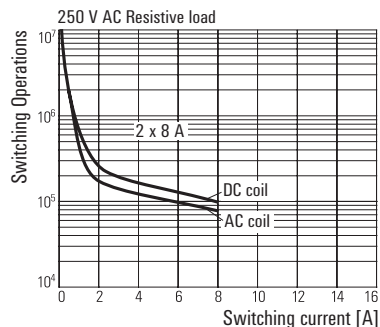


**Applications**

**DC load breaking capacity**



**Electrical endurance**



**Technical data**

Output	1 CO	1 CO Au
Max. switching voltage, AC / Continuous current	250 V / 8 A	
Min. switching power	10 V / 10 mA	1 V / 1 mA
Contact material	AgNi	AgNi 5µm Au
Mechanical service life	30 x 10 <sup>6</sup> switching cycles	
Max. switching frequency at rated load	0.1 Hz	
<b>Rated data</b>		
Status indicator	Green LED	
Reverse polarity protection	Yes	
Ambient temperature (operational)	-40 °C...+60 °C	
Storage temperature	-40 °C...+85 °C	
Humidity	5...95 % rel. humidity T <sub>0</sub> = 40 °C, no condensation	
Approvals	CE, GL, cULus	
<b>Insulation coordination (EN 50 178)</b>		
Rated voltage	300 V	
Impulse withstand voltage	6 kV (1.2/50 µs)	
Clearance and creepage distances for control side - load side	≥ 5.5 mm	
Surge voltage category	III	
Pollution severity	2	

Dimensions	Screw connection	Tension clamp connection
Clamping range (nominal / min. / max.)	mm <sup>2</sup> 1.5 / 0.14 / 1.5	1.5 / 0.14 / 1.5
Length x width x height	mm 88 / 12.8 / 90	88 / 12.8 / 90
<b>Notes</b>	Accessories and dimensional drawings: refer to the TERMSERIES Accessories page.	

**Ordering data**

Input	24 V - 230 V UC
Rated control voltage	24...230 V UC ±10 %
Rated current AC	6 mA @ 230 V AC
Rated current DC	45 mA @ 24 V DC
Power rating	530 mW @ 24 V DC, 930 mVA @ 230 V AC
AC Response/dropout Volt	16.6 V / 5 V
DC Response/dropout Volt	16.6 V / 5 V
AC pickup/dropout current	
DC pickup/dropout current	
<b>Output</b>	
Switch-on delay	< 22 ms
Switch-off delay	< 100 ms

Ordering data	Type	Part No.
Screw connection	TRS 24-230VUC 2CO	1123580000
Tension clamp connection	TRZ 24-230VUC 2CO	1123700000
<b>Notes</b>	Spare relay, Type: RCL424024, Part No.: 4058570000	

Ordering data	Type	Part No.
Screw connection	TRS 24-230VUC 2CO AU	1123820000
Hard Gold-plated contact		
Tension clamp connection	TRZ 24-230VUC 2CO AU	1123940000
Hard Gold-plated contact		
<b>Notes</b>	Spare relay, Type: RCL425024, Part No.: 4058580000	

## 2 CO contact AC/DC/UC coil

### Ordering data

Input data		5 V DC	12 V DC	24 V DC	24 V UC	48 V UC
Rated control voltage		5 V DC $\pm 20\%$	12 V DC $\pm 20\%$	24 V DC $\pm 20\%$	24 V UC $\pm 10\%$	48 V UC $\pm 10\%$
Rated current AC					16 mA	9 mA
Rated current DC		80 mA	33.3 mA	16 mA	14 mA	7 mA
Power rating		400 mW	420 mW	384 mW	390 mVA / 350 mW	340 mW / 0.4 VA
AC Response/dropout Volt					16 V / 9 V	29 V / 11 V
DC Response/dropout Volt		3.2 V / 1.6 V	8.5 V / 3 V	16.6 V / 3.5 V	18 V / 8 V	33 V / 12 V
AC pickup/dropout current					11 mA / 4 mA	6.3 mA / 4.3 mA
DC pickup/dropout current		21.6 mA / 8 mA	21 mA / 5 mA	10 mA / 2 mA	10 mA / 2 mA	5 mA / 2 mA
Free-wheel diode		Yes	Yes	Yes	No	No
Output						
Switch-on delay		< 7 ms	< 7 ms	< 8 ms	< 4 ms	< 8 ms
Switch-off delay		< 4 ms	< 8 ms	< 10 ms	< 1.2 ms	< 4 ms
Ordering data						
Screw connection	Type	TRS 5VDC 2CO	TRS 12VDC 2CO	TRS 24VDC 2CO	TRS 24VUC 2CO	TRS 48VUC 2CO
	Part No.	<b>1123470000</b>	<b>1123480000</b>	<b>1123490000</b>	<b>1123500000</b>	<b>1123510000</b>
Tension clamp connection	Type	TRZ 5VDC 2CO	TRZ 12VDC 2CO	TRZ 24VDC 2CO	TRZ 24VUC 2CO	TRZ 48VUC 2CO
	Part No.	<b>1123590000</b>	<b>1123600000</b>	<b>1123610000</b>	<b>1123620000</b>	<b>1123630000</b>
Notes		Spare relay Type: RCL424005 Part No.: <b>8693790000</b>	Spare relay Type: RCL424012 Part No.: <b>4058560000</b>	Spare relay Type: RCL424024 Part No.: <b>4058570000</b>	Spare relay Type: RCL424024 Part No.: <b>4058570000</b>	Spare relay Type: RCL424048 Part No.: <b>4058750000</b>
Ordering data						
Screw connection	Type	TRS 5VDC 2CO AU	TRS 12VDC 2CO AU	TRS 24VDC 2CO AU	TRS 24VUC 2CO AU	TRS 48VUC 2CO AU
Hard Gold-plated contact	Part No.	<b>1123710000</b>	<b>1123720000</b>	<b>1123730000</b>	<b>1123740000</b>	<b>1123750000</b>
Tension clamp connection	Type	TRZ 5VDC 2CO AU	TRZ 12VDC 2CO AU	TRZ 24VDC 2CO AU	TRZ 24VUC 2CO AU	TRZ 48VUC 2CO AU
Hard Gold-plated contact	Part No.	<b>1123830000</b>	<b>1123840000</b>	<b>1123850000</b>	<b>1123870000</b>	<b>1123880000</b>
Notes		Spare relay Type: RCL425005 Part No.: <b>1174490000</b>	Spare relay Type: RCL425012 Part No.: <b>4074580000</b>	Spare relay Type: RCL425024 Part No.: <b>4058580000</b>	Spare relay Type: RCL425024 Part No.: <b>4058580000</b>	Spare relay Type: RCL425048 Part No.: <b>1201230000</b>

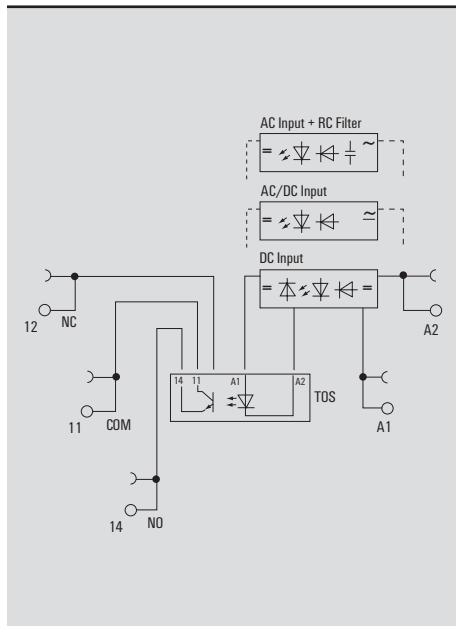
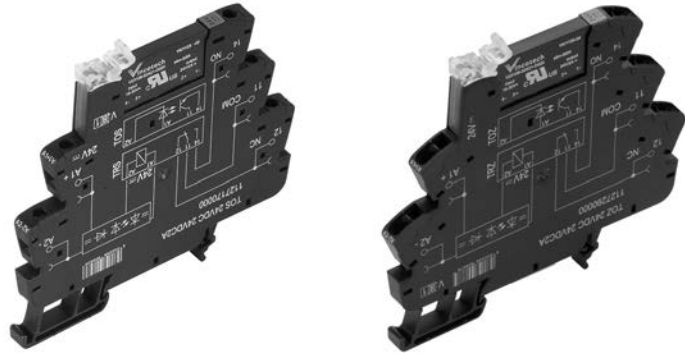
### Ordering data

Input data		60 V UC	120 V UC	230 V UC	120 V AC RC	230 V AC RC
Rated control voltage		60 V UC $\pm 10\%$	120 V UC $\pm 10\%$	230 V UC $\pm 5\%$	120 V AC $\pm 10\%$	230 V AC $\pm 5\%$
Rated current AC		8 mA	3.5 mA	4 mA	6.1 mA	10.1 mA
Rated current DC		6.1 mA	3.5 mA	4 mA		
Power rating		480 mVA / 360 mW	420 mVA / 420 mW	920 mVA / 920 mW	0.73 VA	2.3 VA
AC Response/dropout Volt		36 V / 13 V	64 V / 26 V	112 / 43 V	65 V / 23 V	112 V / 45 V
DC Response/dropout Volt		40 / 14 V	69 V / 22 V	129 V / 36 V		
AC pickup/dropout current		5 mA / 2.5 mA	2 mA / 1 mA	2 mA / 1 mA	3.6 mA / 1.3 mA	5 mA / 2.5 mA
DC pickup/dropout current		4 mA / 1.2 mA	2 mA / 1 mA	2 mA / 1 mA		
Free-wheel diode		No	No	No	No	No
Output						
Switch-on delay		< 6 ms	< 8 ms	< 14 ms	< 5 ms	< 14 ms
Switch-off delay		< 7 ms	< 7 ms	< 22 ms	< 4 ms	< 12 ms
Ordering data						
Screw connection	Type	TRS 60 VUC 2CO	TRS 120VUC 2CO	TRS 230VUC 2CO	TRS 120VAC RC 2CO	TRS 230VAC RC 2CO
	Part No.	<b>1123520000</b>	<b>1123530000</b>	<b>1123540000</b>	<b>1123550000</b>	<b>1123570000</b>
Tension clamp connection	Type	TRZ 60VUC 2CO	TRZ 120VUC 2CO	TRZ 230VUC 2CO	TRZ 120VAC RC 2CO	TRZ 230VAC RC 2CO
	Part No.	<b>1123640000</b>	<b>1123650000</b>	<b>1123670000</b>	<b>1123680000</b>	<b>1123690000</b>
Notes		Spare relay Type: RCL424060 Part No.: <b>4058760000</b>	Spare relay Type: RCL424110 Part No.: <b>4058590000</b>	Spare relay Type: RCL424110 Part No.: <b>4058590000</b>	Spare relay Type: RCL424110 Part No.: <b>4058590000</b>	Spare relay Type: RCL424110 Part No.: <b>4058590000</b>
Ordering data						
Screw connection	Type	TRS 60 VUC 2CO AU	TRS 120VUC 2CO AU	TRS 230VUC 2CO AU	TRS 120VAC RC 2CO AU	TRS 230VAC RC 2CO AU
Hard Gold-plated contact	Part No.	<b>1123770000</b>	<b>1123780000</b>	<b>1123790000</b>	<b>1123800000</b>	<b>1123810000</b>
Tension clamp connection	Type	TRZ 60VUC 2CO AU	TRZ 120VUC 2CO AU	TRZ 230VUC 2CO AU	TRZ 120VAC RC 2CO AU	TRZ 230VAC RC 2CO AU
Hard Gold-plated contact	Part No.	<b>1123890000</b>	<b>1123900000</b>	<b>1123910000</b>	<b>1123920000</b>	<b>1123930000</b>
Notes		Spare relay Type: RC425060 Part No.: <b>1201260000</b>	Spare relay Type: RCL425110 Part No.: <b>8828370000</b>	Spare relay Type: RCL425110 Part No.: <b>8828370000</b>	Spare relay Type: RCL425110 Part No.: <b>8828370000</b>	Spare relay Type: RCL425110 Part No.: <b>8828370000</b>

**Solid-state relays,  
3 - 48 V DC / 100 mA**

**Output versions**

- Space saving, just 6.4 mm modular width
- 5 cross-connection levels
- Screw and tension clamp connection
- Multi-voltage input: 24...230 VUC in one module



**Technical data**

Load side	
Solid-state type	Bipolar transistor
Nominal switching voltage / current	3 V...48 V DC / 100 mA
Voltage drop at max. load	≤ 1 V
Short-circuit-proof / Protective circuit, load side	No / Integrated free-wheel diode
Continuous current	100 mA
General data	
Ambient temperature (operational)	-40 °C...+60 °C
Storage temperature	-40 °C...+85 °C
Humidity	5...95 % rel. humidity T <sub>h</sub> = 40 °C, no condensation
Approvals	CE, GL, cULus
Insulation coordination (EN 50 178)	
Rated voltage	300 V
Rated impulse withstand voltage	6 kV (1.2/50 μs)
Clearance and creepage distances for control side - load side	≥ 5.5 mm
Surge voltage category	III
Pollution severity	2

Dimensions	Screw connection	Tension clamp connection
Clamping range (nominal / min. / max.)	mm <sup>2</sup> 1.5 / 0.14 / 1.5	1.5 / 0.14 / 1.5
Length x width x height	mm 88 / 6.4 / 90	88 / 6.4 / 90
<b>Notes</b>	Accessories and dimensional drawings: refer to the TERMSERIES Accessories page.	

**Ordering data**

Control side	
<b>24 V - 230 V UC</b>	
Rated control voltage	24...230 V UC ±10 %
Nominal control current	22 mA @ 24 V DC, 4 mA @ 230 V AC
Power rating	530 mW @ 24 V DC, 930 mVA @ 230 V AC
Cut-in (switch-on) voltage	≥ 9.6 V AC, ≥ 9.6 V DC
Dropout voltage	≤ 7.5 V AC, ≤ 6 V DC
Input frequency	3 Hz
Status indicator	Green LED
Protective circuit	Rectifier
Load side	
Switch-on delay	< 22 ms
Switch-off delay	< 100 ms

Ordering data	Type	Part No.
Screw connection	TOS 24-230VUC 48VDC 0.1A	<b>1127020000</b>
Tension clamp connection	TOZ 24-230VUC 48VDC 0.1A	<b>1127130000</b>
<b>Notes</b>	Spare solid-state relay, Type: SSS 24 V/24 V 0.1A DC, <b>Part No.: 4061180000</b>	

## Solid-state relays, 3 - 48 V DC / 100 mA Output versions

### Ordering data

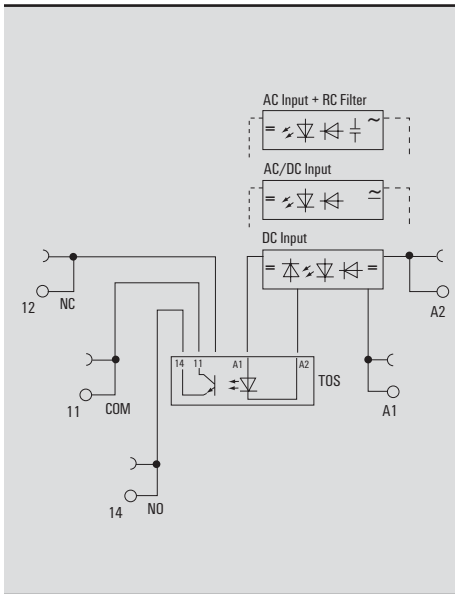
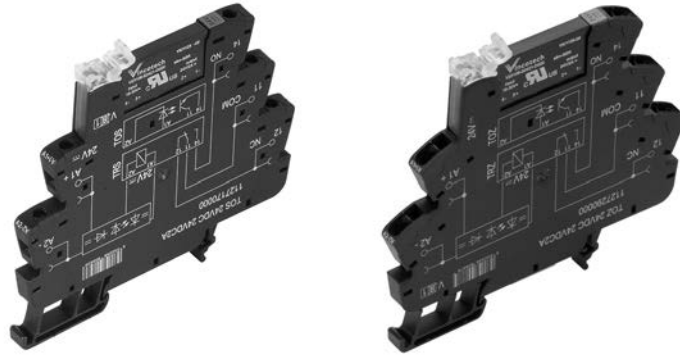
<b>Control side</b>		<b>5 V DC</b>	<b>12 V DC</b>	<b>24 V DC</b>	<b>24 V UC</b>	<b>48 V UC</b>
Rated control voltage		5 V DC $\pm 20\%$	12 V DC $\pm 20\%$	24 V DC $\pm 20\%$	24 V UC $\pm 10\%$	48 V UC $\pm 10\%$
Nominal control current		7 mA DC ( $\pm 20\%$ )	9.6 mA DC ( $\pm 20\%$ )	10 mA DC $\pm 20\%$	10 mA AC $\pm 20\%$ , 6 mA DC ( $\pm 20\%$ )	8 mA AC ( $\pm 20\%$ ), 7 mA DC ( $\pm 20\%$ )
Power rating		35 mW	112 mW	240 mW	154 mW	290 mVA / 192 mW
Cut-in (switch-on) voltage		$\geq 3$ V DC	$\geq 4$ V DC	$\geq 15$ V DC	$\geq 14.4$ V AC, $\geq 11.2$ V DC	$\geq 28$ V AC, $\geq 28$ V DC
Dropout voltage		$\leq 1.7$ V DC	$\leq 6$ V DC	$\leq 15$ V DC	$\leq 15.7$ V AC, $\leq 15.7$ V DC	$\leq 24$ V AC, $\leq 24$ V DC
Input frequency		10 Hz	10 Hz	300 Hz	DC: 100 Hz / AC: 3 Hz	DC: 100 Hz / AC: 3 Hz
Status indicator		Green LED	Green LED	Green LED	Green LED	Green LED
Protective circuit		Reverse polarity protection, Integrated free-wheel diode	Reverse polarity protection, Integrated free-wheel diode	Reverse polarity protection, Integrated free-wheel diode	Rectifier	Rectifier
<b>Load side</b>						
Switch-on delay		< 6.5 ms	< 6.5 ms	< 35 $\mu$ s	< 55 $\mu$ s	< 55 $\mu$ s
Switch-off delay		< 10 ms	< 10 ms	< 355 $\mu$ s	< 4 ms	< 4 ms
<b>Ordering data</b>						
Screw connection	<b>Type</b>	TOS 5VDC 48VDC0,1A	TOS 12VDC 48VDC0,1A	TOS 24VDC 48VDC0,1A	TOS 24VUC 48VDC0,1A	TOS 48VUC 48VDC0,1A
	<b>Part No.</b>	<b>1126920000</b>	<b>1126930000</b>	<b>1126940000</b>	<b>1126950000</b>	<b>1126960000</b>
Tension clamp connection	<b>Type</b>	TOZ 5VDC 48VDC0,1A	TOZ 12VDC 48VDC0,1A	TOZ 24VDC 48VDC0,1A	TOZ 24VUC 48VDC0,1A	TOZ 48VUC 48VDC0,1A
	<b>Part No.</b>	<b>1127030000</b>	<b>1127040000</b>	<b>1127050000</b>	<b>1127060000</b>	<b>1127070000</b>
<b>Notes</b>		Spare solid-state relay Type: SSS 5 V/24 V 0.1A DC <b>Part No.: 4064320000</b>	Spare solid-state relay Type: SSS 5 V/24 V 0.1A DC <b>Part No.: 4064320000</b>	Spare solid-state relay Type: SSS 24 V/24 V 0.1A DC <b>Part No.: 4061180000</b>	Spare solid-state relay Type: SSS 24 V/24 V 0.1A DC <b>Part No.: 4061180000</b>	Spare solid-state relay Type: SSS 24 V/24 V 0.1A DC <b>Part No.: 4061180000</b>

### Ordering data

<b>Control side</b>		<b>60 V UC</b>	<b>120 V UC</b>	<b>230 V UC</b>	<b>120 V AC RC</b>	<b>230 V AC RC</b>
Rated control voltage		60 V UC $\pm 10\%$	120 V UC $\pm 10\%$	230 V UC $\pm 10\%$	120 V AC $\pm 10\%$	230 V AC $\pm 10\%$
Nominal control current		5 mA AC ( $\pm 20\%$ ), 3 mA DC ( $\pm 20\%$ )	5 mA AC ( $\pm 30\%$ ), 3 mA DC ( $\pm 30\%$ )	3.5 mA AC ( $\pm 30\%$ ), 3 mA DC ( $\pm 30\%$ )	7 mA AC ( $\pm 20\%$ )	9 mA AC
Power rating		< 300 mW	0.48 VA	0.8 VA / 660 mW	0.84 VA	2.1 VA
Cut-in (switch-on) voltage		$\geq 28$ V AC, $\geq 28$ V DC	$\geq 65$ V AC, $\geq 63$ V DC	$\geq 130$ V AC, $\geq 107$ V DC	$\geq 65$ V AC	$\geq 103$ V AC
Dropout voltage		$\leq 24$ V AC, $\leq 31.2$ V DC	$\leq 78$ V AC, $\leq 89$ V DC	$\leq 126$ V AC, $\leq 153$ V DC	$\leq 71.5$ V AC	$\leq 109$ V AC
Input frequency		DC: 10 Hz / AC: 3 Hz	3 Hz	3 Hz	3 Hz	3 Hz
Status indicator		Green LED	Green LED	Green LED	Green LED	Green LED
Protective circuit		Rectifier	Rectifier	Rectifier	RC element	RC element
<b>Load side</b>						
Switch-on delay		< 6.5 ms	< 6.5 ms	< 7 ms	< 6.5 ms	< 7 ms
Switch-off delay		< 10 ms	< 10 ms	< 10 ms	< 10 ms	< 10 ms
<b>Ordering data</b>						
Screw connection	<b>Type</b>	TOS 60VUC 48VDC0,1A	TOS 120VUC 48VDC0,1A	TOS 230VUC 48VDC0,1A	TOS 120VAC RC 48VDC0,1A	TOS 230VAC RC 48VDC0,1A
	<b>Part No.</b>	<b>1126970000</b>	<b>1126980000</b>	<b>1126990000</b>	<b>1127000000</b>	<b>1127010000</b>
Tension clamp connection	<b>Type</b>	TOZ 60VUC 48VDC0,1A	TOZ 120VUC 48VDC0,1A	TOZ 230VUC 48VDC0,1A	TOZ 120VAC RC 48VDC0,1A	TOZ 230VAC RC 48VDC0,1A
	<b>Part No.</b>	<b>1127080000</b>	<b>1127090000</b>	<b>1127100000</b>	<b>1127110000</b>	<b>1127120000</b>
<b>Notes</b>		Spare solid-state relay Type: SSS 60 V/24 V 0.1A DC <b>Part No.: 4061230000</b>	Spare solid-state relay Type: SSS 60 V/24 V 0.1A DC <b>Part No.: 4061230000</b>	Spare solid-state relay Type: SSS 60 V/24 V 0.1A DC <b>Part No.: 4061230000</b>	Spare solid-state relay Type: SSS 60 V/24 V 0.1A DC <b>Part No.: 4061230000</b>	Spare solid-state relay Type: SSS 60 V/24 V 0.1A DC <b>Part No.: 4061230000</b>

**Solid-state relays,  
3 - 33 V DC / 2 A**  
**Output versions**

- Space saving, just 6.4 mm modular width
- 5 cross-connection levels
- Screw and tension clamp connection
- Multi-voltage input: 24...230 VUC in one module



**Technical data**

<b>Load side</b>		
Solid-state type	POWER MOS-FET	
Nominal switching voltage / current	3 V...33 V DC / 2 A	
Voltage drop at max. load	≤ 120 mV	
Short-circuit-proof / Protective circuit, load side	No / Integrated free-wheel diode	
Continuous current	2 A	
<b>General data</b>		
Ambient temperature (operational)	-40 °C...+60 °C	
Storage temperature	-40 °C...+85 °C	
Humidity	5...95 % rel. humidity T <sub>0</sub> = 40 °C, no condensation	
Approvals	CE, GL, cULus	
<b>Insulation coordination (EN 50 178)</b>		
Rated voltage	300 V	
Rated impulse withstand voltage	6 kV (1.2/50 μs)	
Clearance and creepage distances for control side - load side	≥ 5.5 mm	
Surge voltage category	III	
Pollution severity	2	
<b>Dimensions</b>		
	<b>Screw connection</b>	<b>Tension clamp connection</b>
Clamping range (nominal / min. / max.)	mm <sup>2</sup> 1.5 / 0.14 / 1.5	1.5 / 0.14 / 1.5
Length x width x height	mm 88 / 6.4 / 90	88 / 6.4 / 90
<b>Notes</b>		
Accessories and dimensional drawings: refer to the TERMSERIES Accessories page.		

**Ordering data**

<b>Control side</b>		<b>24 V - 230 V UC</b>
Rated control voltage	24...230 V UC ±10 %	
Nominal control current	22 mA @ 24 V DC, 4 mA @ 230 V AC	
Power rating	530 mW @ 24 V DC, 930 mVA @ 230 V AC	
Cut-in (switch-on) voltage	≥ 9.6 V AC, ≥ 9.6 V DC	
Dropout voltage	≤ 7.5 V AC, ≤ 6 V DC	
Input frequency	3 Hz	
Status indicator	Green LED	
Protective circuit	Rectifier	
<b>Load side</b>		
Switch-on delay	< 20 ms	
Switch-off delay	< 100 ms	
<b>Ordering data</b>		<b>Part No.</b>
Screw connection	TOS 24-230VUC 24VDC2A	<b>1127250000</b>
Tension clamp connection	TOZ 24-230VUC 24VDC2A	<b>1127380000</b>
<b>Notes</b>		
Spare solid-state relay, Type: SSS 24 V/24 V 2 A DC, <b>Part No.:</b> 4061190000		



## Solid-state relays, 3 - 33 V DC / 2 A Output versions

### Ordering data

Control side		5 V DC	12 V DC	24 V DC	24 V UC	48 V UC
Rated control voltage		5 V DC $\pm 20\%$	12 V DC $\pm 20\%$	24 V DC $\pm 20\%$	24 V UC $\pm 10\%$	48 V UC $\pm 10\%$
Nominal control current		10 mA DC $\pm 20\%$	9.6 mA DC ( $\pm 20\%$ )	10 mA DC $\pm 20\%$	10 mA AC $\pm 20\%$ , 6 mA DC ( $\pm 20\%$ )	8 mA AC ( $\pm 20\%$ ), 7 mA DC ( $\pm 20\%$ )
Power rating		50 mW	112 mW	240 mW	154 mW	290 mVA / 192 mW
Cut-in (switch-on) voltage		$\geq 3$ V DC	$\geq 4$ V DC	$\geq 15$ V DC	$\geq 14.4$ V AC, $\geq 11.2$ V DC	$\geq 28$ V AC, $\geq 28$ V DC
Dropout voltage		$\leq 1.7$ V DC	$\leq 6$ V DC	$\leq 15$ V DC	$\leq 15.7$ V AC, $\leq 15.7$ V DC	$\leq 24$ V AC, $\leq 24$ V DC
Input frequency		300 Hz	300 Hz	300 Hz	DC: 10 Hz / AC: 3 Hz	DC: 10 Hz / AC: 3 Hz
Status indicator		Green LED	Green LED	Green LED	Green LED	Green LED
Protective circuit		Reverse polarity protection, Integrated free-wheel diode	Reverse polarity protection, Integrated free-wheel diode	Reverse polarity protection, Integrated free-wheel diode	Rectifier	Rectifier
Load side						
Switch-on delay		$< 55$ $\mu$ s	$< 55$ $\mu$ s	$< 55$ $\mu$ s	$< 6.5$ ms	$< 6.5$ ms
Switch-off delay		$< 1$ ms	$< 1.2$ ms	$< 1.2$ ms	$< 10$ ms	$< 10$ ms
Ordering data						
Screw connection	Type	TOS 5VDC 24VDC2A	TOS 12VDC 24VDC2A	TOS 24VDC 24VDC2A	TOS 24VUC 24VDC2A	TOS 48VUC 24VDC2A
	Part No.	<b>1127140000</b>	<b>1127150000</b>	<b>1127170000</b>	<b>1127180000</b>	<b>1127190000</b>
Tension clamp connection	Type	TOZ 5VDC 24VDC2A	TOZ 12VDC 24VDC2A	TOZ 24VDC 24VDC2A	TOZ 24VUC 24VDC2A	TOZ 48VUC 24VDC2A
	Part No.	<b>1127270000</b>	<b>1127280000</b>	<b>1127290000</b>	<b>1127300000</b>	<b>1127310000</b>
Notes		Spare solid-state relay Type: SSS 5 V/24 V 2 A DC Part No.: <b>4064310000</b>	Spare solid-state relay Type: SSS 5 V/24 V 2 A DC Part No.: <b>4064310000</b>	Spare solid-state relay Type: SSS 24 V/24 V 2 A DC Part No.: <b>4061190000</b>	Spare solid-state relay Type: SSS 24 V/24 V 2 A DC Part No.: <b>4061190000</b>	Spare solid-state relay Type: SSS 24 V/24 V 2 A DC Part No.: <b>4061190000</b>

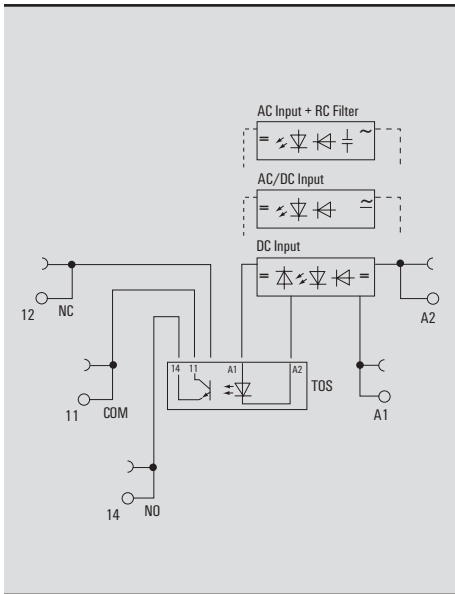
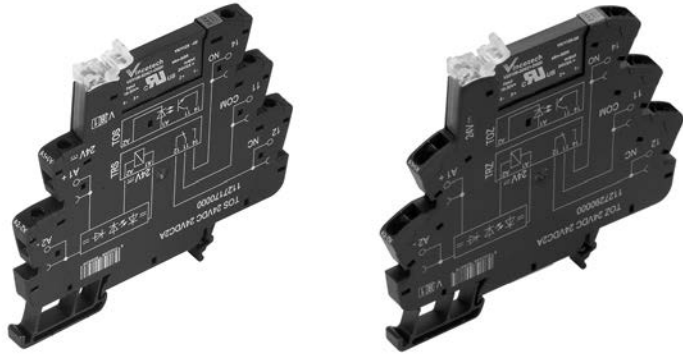
### Ordering data

Control side		60 V UC	120 V UC	230 V UC	120 V AC RC	230 V AC RC
Rated control voltage		60 V UC $\pm 10\%$	120 V UC $\pm 10\%$	230 V UC $\pm 10\%$	120 V AC $\pm 10\%$	230 V AC $\pm 10\%$
Nominal control current		5 mA AC ( $\pm 20\%$ ), 3 mA DC ( $\pm 20\%$ )	5 mA AC ( $\pm 30\%$ ), 3 mA DC ( $\pm 30\%$ )	3.5 mA AC ( $\pm 30\%$ ), 3 mA DC ( $\pm 30\%$ )	7 mA AC ( $\pm 20\%$ )	9 mA AC
Power rating		$< 300$ mW	0.48 VA	0.8 VA / 660 mW	0.84 VA	2.1 VA
Cut-in (switch-on) voltage		$\geq 28$ V AC, $\geq 28$ V DC	$\geq 65$ V AC, $\geq 63$ V DC	$\geq 130$ V AC, $\geq 107$ V DC	$\geq 65$ V AC	$\geq 103$ V AC
Dropout voltage		$\leq 24$ V AC, $\leq 31.2$ V DC	$\leq 78$ V AC, $\leq 89$ V DC	$\leq 126$ V AC, $\leq 153$ V DC	$\leq 71.5$ V AC	$\leq 109$ V AC
Input frequency		DC: 10 Hz / AC: 3 Hz	3 Hz	3 Hz	3 Hz	3 Hz
Status indicator		Green LED	Green LED	Green LED	Green LED	Green LED
Protective circuit		Rectifier	Rectifier	Rectifier	RC element	RC element
Load side						
Switch-on delay		$< 6.5$ ms	$< 6.5$ ms	$< 7$ ms	$< 6.5$ ms	$< 7$ ms
Switch-off delay		$< 10$ ms	$< 10$ ms	$< 10$ ms	$< 10$ ms	$< 10$ ms
Ordering data						
Screw connection	Type	TOS 60VUC 24VDC2A	TOS 120VUC 24VDC2A	TOS 230VUC 24VDC2A	TOS 120VAC RC 24VDC2A	TOS 230VAC RC 24VDC2A
	Part No.	<b>1127200000</b>	<b>1127210000</b>	<b>1127220000</b>	<b>1127230000</b>	<b>1127240000</b>
Tension clamp connection	Type	TOZ 60VUC 24VDC2A	TOZ 120VUC 24VDC2A	TOZ 230VUC 24VDC2A	TOZ 120VAC RC 24VDC2A	TOZ 230VAC RC 24VDC2A
	Part No.	<b>1127320000</b>	<b>1127330000</b>	<b>1127340000</b>	<b>1127350000</b>	<b>1127370000</b>
Notes		Spare solid-state relay Type: SSS 60 V/24 V 2 A DC Part No.: <b>4061200000</b>	Spare solid-state relay Type: SSS 60 V/24 V 2 A DC Part No.: <b>4061200000</b>	Spare solid-state relay Type: SSS 60 V/24 V 2 A DC Part No.: <b>4061200000</b>	Spare solid-state relay Type: SSS 60 V/24 V 2 A DC Part No.: <b>4061200000</b>	Spare solid-state relay Type: SSS 60 V/24 V 2 A DC Part No.: <b>4061200000</b>

## Solid-state relays, 24 - 230 V AC / 1 A

### Output versions

- Space saving, just 6.4 mm modular width
- 5 cross-connection levels
- Screw and tension clamp connection
- Multi-voltage input: 24...230 VUC in one module



### Technical data

Load side			
Solid-state type	Triac		
Nominal switching voltage / current	24 V AC ... 250 V AC / min. 20 mA / max. 1 A		
Voltage drop at max. load	≤ 1.6 V		
Short-circuit-proof / Protective circuit, load side	No / No		
Continuous current	1 A		
General data			
Ambient temperature (operational)	-40 °C...+60 °C		
Storage temperature	-40 °C...+85 °C		
Humidity	5...95 % rel. humidity T <sub>90</sub> = 40 °C, no condensation		
Approvals	CE, GL, cULus		
Insulation coordination (EN 50 178)			
Rated voltage	300 V		
Rated impulse withstand voltage	6 kV (1.2/50 μs)		
Clearance and creepage distances for control side - load side	≥ 5.5 mm		
Surge voltage category	III		
Pollution severity	2		
Dimensions			
Screw connection			
Tension clamp connection			
Clamping range (nominal / min. / max.)	mm <sup>2</sup>	1.5 / 0.14 / 1.5	1.5 / 0.14 / 1.5
Length x width x height	mm	88 / 6.4 / 90	88 / 6.4 / 90
Notes			
Accessories and dimensional drawings: refer to the TERMSERIES Accessories page.			

### Ordering data

Control side		24 V - 230 V UC	
Rated control voltage		24...230 V UC ±10 %	
Nominal control current		22 mA @ 24 V DC, 4 mA @ 230 V AC	
Power rating		530 mW @ 24 V DC, 930 mVA @ 230 V AC	
Cut-in (switch-on) voltage		≥ 9.6 V AC, ≥ 9.6 V DC	
Dropout voltage		≤ 7.5 V AC, ≤ 6 V DC	
Input frequency		3 Hz	
Status indicator		Green LED	
Protective circuit		Rectifier	
Load side			
Switch-on delay		< 20 ms	
Switch-off delay		< 100 ms	
Ordering data		Type	
Screw connection		TOS 24-230VUC 230VAC1A	<b>1127500000</b>
Tension clamp connection		TOZ 24-230VUC 230VAC1A	<b>1127620000</b>
Notes		Part No.	
Spare solid-state relay, Type: SSS 24 V/230 V 1 A AC, Part No.:		<b>4061210000</b>	

## Solid-state relays, 24 - 230 V AC / 1 A Output versions

### Ordering data

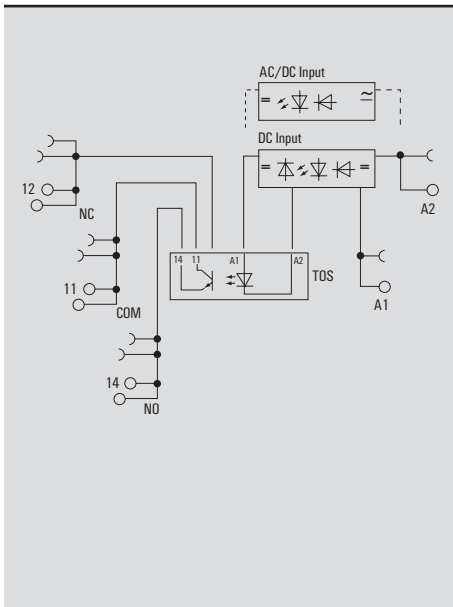
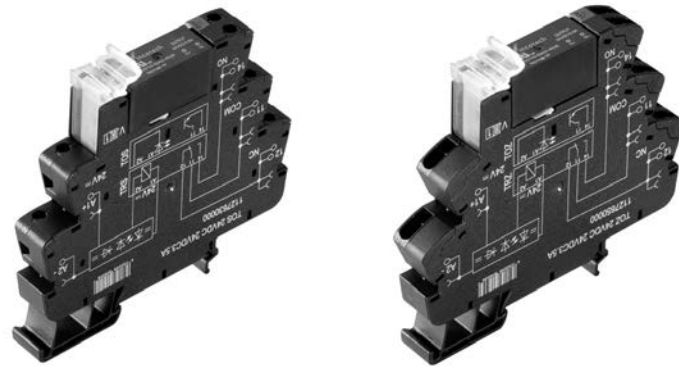
Control side		5 V DC	12 V DC	24 V DC	24 V UC	48 V UC
Rated control voltage		5 V DC $\pm 20\%$	12 V DC $\pm 20\%$	24 V DC $\pm 20\%$	24 V UC $\pm 10\%$	48 V UC $\pm 10\%$
Nominal control current		15 mA DC ( $\pm 20\%$ )	9.6 mA DC ( $\pm 20\%$ )	10 mA DC $\pm 20\%$	10 mA AC $\pm 20\%$ , 6 mA DC ( $\pm 20\%$ )	6 mA AC ( $\pm 20\%$ ), 4 mA DC ( $\pm 20\%$ )
Power rating		75 mW	112 mW	260 mW	154 mW	290 mVA / 192 mW
Cut-in (switch-on) voltage		$\geq 3$ V DC	$\geq 4$ V DC	$\geq 15$ V DC	$\geq 14.4$ V AC, $\geq 11.2$ V DC	$\geq 28$ V AC, $\geq 28$ V DC
Dropout voltage		$\leq 1.7$ V DC	$\leq 6$ V DC	$\leq 15$ V DC	$\leq 15.7$ V AC, $\leq 15.7$ V DC	$\leq 24$ V AC, $\leq 24$ V DC
Input frequency		3 Hz	3 Hz	3 Hz	3 Hz	3 Hz
Status indicator		Green LED	Green LED	Green LED	Green LED	Green LED
Protective circuit		Reverse polarity protection, Integrated free-wheel diode	Reverse polarity protection, Integrated free-wheel diode	Reverse polarity protection, Integrated free-wheel diode	Rectifier	Rectifier
Load side						
Switch-on delay		< 12 ms	< 12 ms	< 11 ms	< 11 ms	< 11 ms
Switch-off delay		< 12 ms	< 12 ms	< 11 ms	< 11 ms	< 11 ms
Ordering data						
Screw connection	<b>Type</b> <b>Part No.</b>	TOS 5VDC 230VAC1A <b>1127390000</b>	TOS 12VDC 230VAC1A <b>1127400000</b>	TOS 24VDC 230VAC1A <b>1127410000</b>	TOS 24VUC 230VAC1A <b>1127420000</b>	TOS 48VUC 230VAC1A <b>1127430000</b>
Tension clamp connection	<b>Type</b> <b>Part No.</b>	TOZ 5VDC 230VAC1A <b>1127510000</b>	TOZ 12VDC 230VAC1A <b>1127520000</b>	TOZ 24VDC 230VAC1A <b>1127530000</b>	TOZ 24VUC 230VAC1A <b>1127540000</b>	TOZ 48VUC 230VAC1A <b>1127550000</b>
<b>Notes</b>		Spare solid-state relay Type: SSS 5 V/230 V 1 A AC <b>Part No.: 1132260000</b>	Spare solid-state relay Type: SSS 5 V/230 V 1 A AC <b>Part No.: 1132260000</b>	Spare solid-state relay Type: SSS 24 V/230 V 1 A AC <b>Part No.: 4061210000</b>	Spare solid-state relay Type: SSS 24 V/230 V 1 A AC <b>Part No.: 4061210000</b>	Spare solid-state relay Type: SSS 24 V/230 V 1 A AC <b>Part No.: 4061210000</b>

### Ordering data

Control side		60 V UC	120 V UC	230 V UC	120 V AC RC	230 V AC RC
Rated control voltage		60 V UC $\pm 10\%$	120 V UC $\pm 10\%$	230 V UC +5 %/ -10 %	120 V AC $\pm 10\%$	230 V AC $\pm 10\%$
Nominal control current		5 mA AC ( $\pm 20\%$ ), 3 mA DC ( $\pm 20\%$ )	5 mA AC ( $\pm 30\%$ ), 3 mA DC ( $\pm 30\%$ )	3.5 mA AC ( $\pm 30\%$ ), 3 mA DC ( $\pm 30\%$ )	7 mA AC ( $\pm 20\%$ )	9 mA AC
Power rating		< 300 mW	0.48 VA	0.8 VA / 660 mW	0.84 VA	2.1 VA
Cut-in (switch-on) voltage		$\geq 28$ V AC, $\geq 28$ V DC	$\geq 65$ V AC, $\geq 63$ V DC	$\geq 130$ V AC, $\geq 107$ V DC	$\geq 65$ V AC	$\geq 103$ V AC
Dropout voltage		$\leq 22$ V AC, $\leq 28.6$ V DC	$\leq 78$ V AC, $\leq 89$ V DC	$\leq 126$ V AC, $\leq 153$ V DC	$\leq 71.5$ V AC	$\leq 109$ V AC
Input frequency		3 Hz	3 Hz	3 Hz	3 Hz	3 Hz
Status indicator		Green LED	Green LED	Green LED	Green LED	Green LED
Protective circuit		Rectifier	Rectifier	Rectifier	RC element	RC element
Load side						
Switch-on delay		< 11 ms	< 11 ms	< 20 ms	< 11 ms	< 20 ms
Switch-off delay		< 11 ms	< 11 ms	< 20 ms	< 11 ms	< 20 ms
Ordering data						
Screw connection	<b>Type</b> <b>Part No.</b>	TOS 60VUC 230VAC1A <b>1127440000</b>	TOS 120VUC 230VAC1A <b>1127450000</b>	TOS 230VUC 230VAC1A <b>1127470000</b>	TOS 120VAC RC 230VAC1A <b>1127480000</b>	TOS 230VAC RC 230VAC1A <b>1127490000</b>
Tension clamp connection	<b>Type</b> <b>Part No.</b>	TOZ 60VUC 230VAC1A <b>1127570000</b>	TOZ 120VUC 230VAC1A <b>1127580000</b>	TOZ 230VUC 230VAC1A <b>1127590000</b>	TOZ 120VAC RC 230VAC1A <b>1127600000</b>	TOZ 230VAC RC 230VAC1A <b>1127610000</b>
<b>Notes</b>		Spare solid-state relay Type: SSS 60 V/230 V 1 A AC <b>Part No.: 4061220000</b>	Spare solid-state relay Type: SSS 60 V/230 V 1 A AC <b>Part No.: 4061220000</b>	Spare solid-state relay Type: SSS 60 V/230 V 1 A AC <b>Part No.: 4061220000</b>	Spare solid-state relay Type: SSS 60 V/230 V 1 A AC <b>Part No.: 4061220000</b>	Spare solid-state relay Type: SSS 60 V/230 V 1 A AC <b>Part No.: 4061220000</b>

**Solid-state relays,  
0 - 33 V DC / 3.5 A  
12 - 275 V AC / 1 A  
Output versions**

- Space saving, just 12.8 mm modular width
- 5 cross-connection levels
- Screw and tension clamp connection
- Multi-voltage input: 24...230 VUC in one module



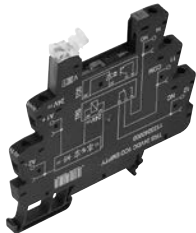
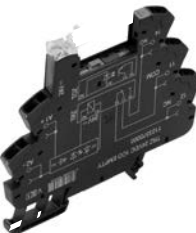
**Technical data**

	<b>0-33 V DC / 3.5 A</b>	<b>12-275 V AC / 1 A</b>
<b>Load side</b>		
Solid-state type	Bipolar transistor	Triac
Nominal switching voltage / current	3...33 V DC / 3.5 A	12-275 V AC / 1 A
Voltage drop at max. load	≤ 0.3 V	≤ 1.1 V
Short-circuit-proof / Protective circuit, load side	No / Integrated free-wheel diode	No / No
Continuous current	3.5 A	1 A
<b>General data</b>		
Ambient temperature (operational)	-40 °C...+60 °C	
Storage temperature	-40 °C...+85 °C	
Humidity	5...95 % rel. humidity T <sub>u</sub> = 40 °C, no condensation	
Approvals	CE, GL, cULus	
<b>Insulation coordination (EN 50 178)</b>		
Rated voltage	300 V	
Rated impulse withstand voltage	6 kV (1.2/50 μs)	
Clearance and creepage distances for control side - load side	≥ 5.5 mm	
Surge voltage category	III	
Pollution severity	2	
<b>Dimensions</b>	<b>Screw connection</b>	<b>Tension clamp connection</b>
Clamping range (nominal / min. / max.)	mm <sup>2</sup> 1.5 / 0.14 / 1.5	1.5 / 0.14 / 1.5
Length x width x height	mm 88 / 12.8 / 90	88 / 12.8 / 90
<b>Notes</b>	Accessories and dimensional drawings: refer to the TERMSERIES Accessories page.	

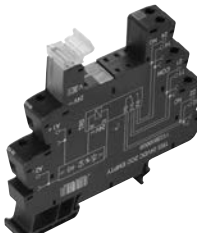
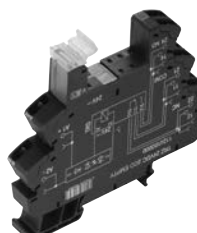
**Ordering data**

<b>Control side</b>	<b>24 V DC</b>	<b>24 V - 230 V UC</b>		
Rated control voltage	24 V DC ±20 %	24...230 V UC ±10 %		
Nominal control current	8 mA DC (±20 %)	22 mA @ 24 V DC, 4 mA @ 230 V AC		
Power rating	≤ 200 mW	530 mW @ 24 V DC, 930 mVA @ 230 V AC		
Cut-in (switch-on) voltage	≥ 11.2 V DC	≥ 9.6 V AC, ≥ 9.6 V DC		
Dropout voltage	≤ 13 V DC	≤ 7.5 V AC, ≤ 6 V DC		
Input frequency	300 Hz	3 Hz		
Status indicator	Green LED	Green LED		
Protective circuit	Reverse polarity protection, Integrated free-wheel diode	Rectifier		
<b>Load side</b>				
Switch-on delay	< 50 μs	< 20 ms		
Switch-off delay	< 250 μs	< 100 ms		
<b>Ordering data</b>	<b>Type</b>	<b>Part No.</b>	<b>Type</b>	<b>Part No.</b>
Screw connection 0-33 VDC/3.5A	TOS 24VDC 24VDC3.5A	<b>1127630000</b>	TOS 24-230VUC 24VDC3.5A	<b>1127640000</b>
Tension clamp connection 0-33 VDC/3.5A	TOZ 24VDC 24VDC3.5A	<b>1127650000</b>	TOZ 24-230VUC 24VDC3.5A	<b>1127670000</b>
<b>Notes</b>	Spare solid-state relay, Type: SSR 10-32 V DC/0-35 V DC 5 A, <b>Part No.: 1132310000</b>			
<b>Ordering data</b>	<b>Type</b>	<b>Part No.</b>	<b>Type</b>	<b>Part No.</b>
Screw connection 12-275 VAC/1A	TOS 24VDC 230VAC1A	<b>1127680000</b>	TOS 24-230VUC 230VAC1A	<b>1127690000</b>
Tension clamp connection 12-275 VAC/1A	TOZ 24VDC 230VAC1A	<b>1127700000</b>	TOZ 24-230VUC 230VAC1A	<b>1127710000</b>
<b>Notes</b>	Spare solid-state relay, Type: SSR 10 - 32 VDC/12 - 275 VAC 3A, <b>Part No.: 1132290000</b>			

Empty socket 6.4 mm

	Type / 1 CO, Screw connection	Input voltage	Qty.	Part No.
	TRS 5VDC 1CO empty	5 V DC <sup>1)</sup>	10	1123220000
	TRS 12VDC 1CO empty	12 V DC <sup>2)</sup>	10	1123230000
	TRS 24VDC 1CO empty	24 V DC <sup>3)</sup>	10	1123240000
	TRS 24VUC 1CO empty	24 V AC / DC <sup>3)</sup>	10	1123250000
	TRS 48VUC 1CO empty	48 V AC / DC <sup>3)</sup>	10	1123270000
	TRS 60VUC 1CO empty	60 V AC / DC <sup>4)</sup>	10	1123280000
	TRS 120VUC 1CO empty	120 V AC / DC <sup>4)</sup>	10	1123290000
	TRS 230VUC 1CO empty	230 V AC / DC <sup>4)</sup>	10	1123300000
	TRS 120VAC RC 1CO empty	120 V AC <sup>4)</sup>	10	1123310000
	TRS 230VAC RC 1CO empty	230 V AC <sup>4)</sup>	10	1123320000
	TRS 24-230VUC 1CO empty	24...230 V AC / DC <sup>3)</sup>	10	1123330000
<b>Type / 1 CO, Tension clamp connection</b>				
	TRZ 5VDC 1CO empty	5 V DC <sup>1)</sup>	10	1123340000
	TRZ 12VDC 1CO empty	12 V DC <sup>2)</sup>	10	1123350000
	TRZ 24VDC 1CO empty	24 V DC <sup>3)</sup>	10	1123370000
	TRZ 24VUC 1CO empty	24 V AC / DC <sup>3)</sup>	10	1123380000
	TRZ 48VUC 1CO empty	48 V AC / DC <sup>3)</sup>	10	1123390000
	TRZ 60VUC 1CO empty	60 V AC / DC <sup>4)</sup>	10	1123400000
	TRZ 120VUC 1CO empty	120 V AC / DC <sup>4)</sup>	10	1123410000
	TRZ 230VUC 1CO empty	230 V AC / DC <sup>4)</sup>	10	1123420000
	TRZ 120VAC RC 1CO empty	120 V AC <sup>4)</sup>	10	1123430000
	TRZ 230VAC RC 1CO empty	230 V AC <sup>4)</sup>	10	1123440000
	TRZ 24-230VUC 1CO empty	24...230 V AC / DC <sup>3)</sup>	10	1123450000
Useable with <sup>1)</sup> RSS...005; SSS 5V... <sup>2)</sup> RSS...012 <sup>3)</sup> RSS...024; SSS 24V... <sup>4)</sup> RSS...060; SSS 60V...				

Empty socket 12.8 mm

	Type / 1 CO, Screw connection	Input voltage	Qty.	Part No.	
	TOS 24VDC empty	24 V DC <sup>1)</sup>	10	1127720000	
	TOS 24-230VUC empty	24...230 V AC / DC <sup>1)</sup>	10	1127730000	
	<b>Type / 2 CO, Screw connection</b>				
	TRS 5VDC 2CO empty	5 V DC <sup>2)</sup>	10	1123950000	
	TRS 12VDC 2CO empty	12 V DC <sup>3)</sup>	10	1123970000	
	TRS 24VDC 2CO empty	24 V DC <sup>4)</sup>	10	1123980000	
	TRS 24VUC 2CO empty	24 V AC / DC <sup>4)</sup>	10	1123990000	
	TRS 48VUC 2CO empty	48 V AC / DC <sup>5)</sup>	10	1124000000	
	TRS 60VUC 2CO empty	60 V AC / DC <sup>6)</sup>	10	1124010000	
	TRS 120VUC 2CO empty	120 V AC / DC <sup>7)</sup>	10	1124020000	
	TRS 230VUC 2CO empty	230 V AC / DC <sup>7)</sup>	10	1124030000	
TRS 120VAC RC 2CO empty	120 V AC <sup>7)</sup>	10	1124040000		
TRS 230VAC RC 2CO empty	230 V AC <sup>7)</sup>	10	1124050000		
TRS 24-230VUC 2CO empty	24...230 V AC / DC <sup>4)</sup>	10	1124070000		
<b>Type / 1 CO, Tension clamp connection</b>					
	TOZ 24VDC empty	24 V DC <sup>1)</sup>	10	1127740000	
	TOZ 24-230VUC empty	24...230 V AC / DC <sup>1)</sup>	10	1127750000	
	<b>Type / 2 CO, Tension clamp connection</b>				
	TRZ 5VDC 2CO empty	5 V DC <sup>2)</sup>	10	1124080000	
	TRZ 12VDC 2CO empty	12 V DC <sup>3)</sup>	10	1124090000	
	TRZ 24VDC 2CO empty	24 V DC <sup>4)</sup>	10	1124100000	
	TRZ 24VUC 2CO empty	24 V AC / DC <sup>4)</sup>	10	1124110000	
	TRZ 48VUC 2CO empty	48 V AC / DC <sup>5)</sup>	10	1124120000	
	TRZ 60VUC 2CO empty	60 V AC / DC <sup>6)</sup>	10	1124130000	
	TRZ 120VUC 2CO empty	120 V AC / DC <sup>7)</sup>	10	1124140000	
	TRZ 230VUC 2CO empty	230 V AC / DC <sup>7)</sup>	10	1124150000	
TRZ 120VAC RC 2CO empty	120 V AC <sup>7)</sup>	10	1124170000		
TRZ 230VAC RC 2CO empty	230 V AC <sup>7)</sup>	10	1124180000		
TRZ 24-230VUC 2CO empty	24...230 V AC / DC <sup>4)</sup>	10	1124190000		
Useable with <sup>1)</sup> RCL31.024; SSR 10...32VDC/... <sup>2)</sup> RCL42.005 <sup>3)</sup> RCL42.012 <sup>4)</sup> RCL42.024 <sup>5)</sup> RCL42.048 <sup>6)</sup> RCL42.060 <sup>7)</sup> RCL42.110					

**RSS relay module**



Technical data
Type of contact / Number of contacts
Contact material
Max. switching voltage / current
Min. switching voltage / current
Min. mechanical lifetime
Min. electrical lifetime
Max. switch-on / switch-off delay
Ambient temperature (operational)
Making / Dropout voltage coil
<b>Notes</b>

RSS113...	RSS112...
1 CO contact	1 CO contact
AgNi	AgNi 5uAu <sup>3)</sup>
250 V / 6 A <sup>1)</sup>	250 V / 6 A <sup>1)</sup>
5 V / 100 mA <sup>2)</sup>	1 V / 1 mA
5 x 10 <sup>6</sup> <sup>1)</sup>	5 x 10 <sup>6</sup> <sup>1)</sup>
NO: 5 x 10 <sup>4</sup> ; NC: 3 x 10 <sup>4</sup> <sup>1)</sup>	NO: 5 x 10 <sup>4</sup> ; NC: 3 x 10 <sup>4</sup> <sup>1)</sup>
8 / 4 ms	8 / 4 ms
-40...+85 °C	-40...+85 °C
typ. 70 % / 5 % U <sub>NOM</sub>	typ. 70 % / 5 % U <sub>NOM</sub>
<sup>1)</sup> At resistive load <sup>2)</sup> 10 V / 10 mA; 24 V / 1 mA <sup>3)</sup> Au-plate operate up to 0.25 W	

Coil data
RSS...005
RSS...012
RSS...024
RSS...060

Nom. voltage / current
5 V DC / 34 mA
12 V DC / 14 mA
24 V DC / 7 mA
60 V DC / 3 mA

Part No.	Part No.
<b>4061580000</b>	<b>1174540000</b>
<b>4061610000</b>	<b>1220670000</b>
<b>4060120000</b>	<b>4061590000</b>
<b>4061630000</b>	<b>4061600000</b>

**RCL relay module**



Technical data
Type of contact / Number of contacts
Contact material
Max. switching voltage / current
Min. switching voltage / current
Min. mechanical lifetime
Min. electrical lifetime
Max. switch-on / switch-off delay
Ambient temperature (operational)
Making / Dropout voltage coil
<b>Notes</b>

RCL424...	RCL425...
2 CO contact	2 CO contact
AgNi	AgNi 5uAu <sup>3)</sup>
250 V / 8 A <sup>1)</sup>	250 V / 8 A <sup>1)</sup>
5 V / 100 mA <sup>2)</sup>	1 V / 1 mA
30 x 10 <sup>6</sup> <sup>1)</sup>	30 x 10 <sup>6</sup> <sup>1)</sup>
10 x 10 <sup>3</sup> <sup>1)</sup>	10 x 10 <sup>3</sup> <sup>1)</sup>
8 / 6 ms	8 / 6 ms
-40...+85 °C	-40...+85 °C
typ. 70 % / 10 % U <sub>NOM</sub>	typ. 70 % / 10 % U <sub>NOM</sub>
<sup>1)</sup> At resistive load <sup>2)</sup> 10 V / 10 mA; 24 V / 1 mA <sup>3)</sup> Au-plate operate up to 0.25 W	

Coil data
RCL...005
RCL...012
RCL...024
RCL...048
RCL...060
RCL...110

Nom. voltage / current	Nominal current
5 V DC / 80 mA	80 mA
12 V DC / 33 mA	33 mA
24 V DC / 16 mA	16 mA
48 V DC / 8 mA	8 mA
60 V DC / 6 mA	6 mA
110 V DC / 3 mA	3 mA

Part No.	Part No.
<b>8693790000</b>	<b>1174490000</b>
<b>4058560000</b>	<b>4074580000</b>
<b>4058570000</b>	<b>4058580000</b>
<b>4058750000</b>	<b>1201230000</b>
<b>4058760000</b>	<b>1201260000</b>
<b>4058590000</b>	<b>8828370000</b>

**Small solid-state relay**



Similar to illustration

Coil data
SSS 5 V...
SSS 24 V...
SSS 60 V...
SSS 5 V...
SSS 24 V...
SSS 60 V...
SSS 5 V...
SSS 24 V...
SSS 60 V...

Technical data
Output
Switching voltage
Continuous current
Peak reverse voltage
Forward voltage
Test voltage input / output
Ambient temperature (operational)
Storage temperature
<b>Notes</b>

SSS...24 V 0.1 A DC
Bipolar transistor
0...48 V DC
100 mA
54 V
< 1 V DC
2.5 kV
-20...+60 °C
-40...+70 °C

SSS...24 V 2 A DC
MOS-FET
0...24 V DC
2 A
33 V
< 120 mV
2.5 kV
-20...+60 °C
-40...+70 °C

SSS...230 V 1 A AC
Triac
24...240 V AC
1 A
600 V
< 1 V
3.75 kV
-20...+60 °C
-40...+70 °C

Nom. voltage / current
2,5...6 V DC / 4 mA
16...30 V DC / 7 mA
52...72 V DC / 3 mA
2,5...6 V DC / 9 mA
18...30 V DC / 7 mA
40...72 V DC / 3 mA
2,5...6 V DC / 15 mA
18...30 V DC / 7 mA
40...72 V DC / 3 mA

Part No.
<b>4064320000</b>
<b>4061180000</b>
<b>4061230000</b>
—
—
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—
—
—

Part No.
—
—
—
<b>4064310000</b>
<b>4061190000</b>
<b>4061200000</b>
—
—
—
—

Part No.
—
—
—
—
—
—
<b>1132260000</b>
<b>4061210000</b>
<b>4061220000</b>

**Solid-state relay**



Similar to illustration

Coil data
SSR10...32 V DC/...

Technical data
Output
Switching voltage
Continuous current
Peak reverse voltage
Forward voltage
Test voltage input / output
Ambient temperature (operational)
Storage temperature
<b>Notes</b>

—
—
—
—
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SSR.../0-35 V DC 5A
MOS-FET
0...33 V DC
1 mA...5 A
35 V
< 300 mV
2.5 kV
-20...+80 °C
-40...+100 °C

SSR.../12-275 V AC 3A
TRIAC, zero cross switch
12...275 V AC
50 mA...3 A
600 V
< 1.1 V
2.5 kV
-20...+80 °C
-40...+100 °C

Nom. voltage / current
10...32 V/3...13 mA

Part No.
<b>1132310000</b>

Part No.
<b>1132290000</b>

**Plug-in cross-connection**

	Type	Number of poles / Pitch	Qty.	Part No.
	ZQV 1.5N/R6.4/2 GE	2 / 6.4	10	1193670000
	ZQV 1.5N/R6.4/10 GE	10 / 6.4	10	1193680000
	ZQV 1.5N/R6.4/19 GE	19 / 6.4	10	1193690000
	ZQV 1.5N/R12.8/10 GE	10 / 12.8	10	1193700000

**Supply terminal**

	Type	Connection technology	Qty.	Part No.
	TXS SUPPLY	Screw connection	10	1240780000
	TXZ SUPPLY	Tension clamp connection	10	1240790000

**Other accessories**

	Type / Isolation plate		Qty.	Part No.
	TW TXS/TXZ R3.2	Isolation plate 3.2 mm pitch	10	1240800000
	<b>Markers</b>			
	WS 10/6 MC Middle	10 x 6 mm	600	1818400000
	<b>Screwdriver</b>			
	SDK PH0	only screw connection	1	9008470000
	SD 0.6 x 3.5 x 100		1	9008330000
	SD TO 0.6 X 3.0	only tension clamp connection	1	1323880000
	<b>End bracket</b>			
	WEW35/2 SW		100	1061210000

**Technical data**

Conductor		Screw connection		Tension clamp connection	
1 conductor					
Solid H07V-U	mm <sup>2</sup>	0.14...2.5		0.14... 1.5	
Stranded H07V-K	mm <sup>2</sup>	0.14... 1.5		0.14... 1.5	
... with wire end ferrule	mm <sup>2</sup>	0.25... 1.5		0.14... 1.5	
... with wire end ferrule with plastic collar	mm <sup>2</sup>	0.25... 1.5		0.14... 1.5	
2 conductor with same size					
Solid H07V-U	mm <sup>2</sup>	0.5... 1.0		0.5... 1.0	
Stranded H07V-K	mm <sup>2</sup>	0.5... 1.0		0.5... 1.0	
... with twin wire end ferrule H...D ZH	mm <sup>2</sup>	0.5... 1.5		0.5... 1.0	
Clamping range AWG.../1	AWG	26... 14		26... 16	
Clamping range AWG.../7	AWG	26... 16		26... 16	
Clamping range AWG.../19	AWG	26... 16		26... 16	
Plug gauge to IEC 60947-1	Size	A1 / B1		A1 / B1	
<b>General data</b>					
Nominal torque	Nm	0.4			
Stripping length	mm	8		8	
Continuous current ZQV 1.5N/R6.4	A	UL: 10		UL: 10	
No. Contact durability relay / ZQV		10		10	
<b>Notes</b>					

**Dimensions**

