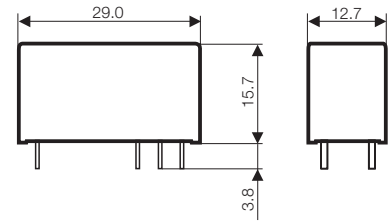
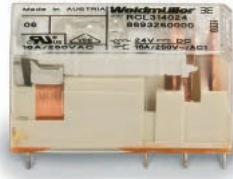


# Relay couplers - RIDERSERIES

## RCL relay 1 CO contact AC/DC coil

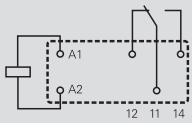
- 3000 or 4000 VA switching capacity
- Low height of 15.7 mm
- Hard gold-plated contacts available
- For boiler controls, timing relays, garage door controls, Interface modules



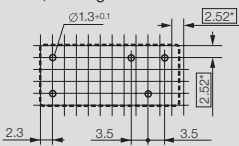
### Circuit diagram

View of connections  
Dimensions in mm

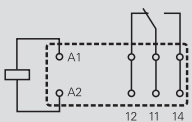
1 C/O changeover contacts



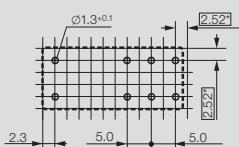
12 A, Pinning 3.5 mm



1 C/O changeover contacts



16 A, Pinning 5 mm



### Output

max. switching voltage AC	250 V
Continuous current	12 A for 3.5 mm / 16 A for 5 mm pinning
Contact base material	AgNi 90/10 or AgNi 5µm Au
Mechanical endurance	AC coil 10x10 <sup>6</sup> / DC coil 30x10 <sup>6</sup> switching operations
Response time / Drop-out time	7 ms / 3 ms

### Rated data

Status indicator/Free wheel diode	no/no
Operating temperature	-40 °C...+70 °C
UL 94 flammability rating	V-0
Approvals	cURus; VDE;

### Insulation coordination (IEC 60664)

Rated voltage	250 V
Creepage and clearance path input - output	10 mm
Overvoltage category	III
Pollution severity	3
Protective separation to VDE 0106 part 101	yes

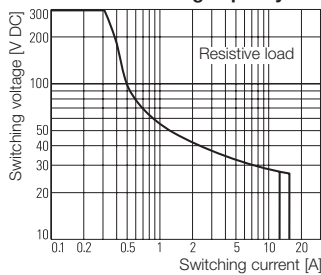
### Dimensions

Length x width x height                      mm                      29 / 12.7 / 15.7

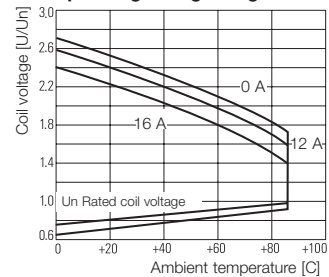
### Note

## Applications

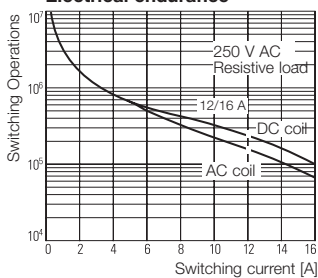
### DC load breaking capacity



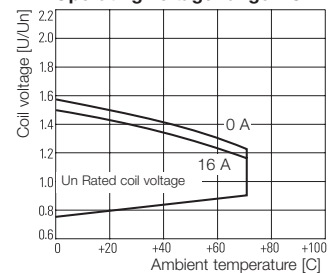
### Operating voltage range DC



### Electrical endurance



### Operating voltage range AC



**RCL relay**  
**1 CO contact AC/DC coil**

Type code

Type **RIDER Control Low**

Type of construction

- 1 12 A, Pitch 3.5 mm, flux proof
- 2 12 A, Pitch 5 mm, flux proof
- 3 16 A, Pitch 5 mm, flux proof

Type of contact

- 1 1 CO contacts
- 3 1 NO contacts

Contact material

- 4 AgNi 90/10
- 5 AgNi 90/10 hgp



DC coil

- 006 6 V DC
- 012 12 V DC
- 024 24 V DC
- 048 48 V DC
- 060 60 V DC
- 110 110 V DC

AC coil

- 512 12 V AC
- 524 24 V AC
- 548 48 V AC
- 615 115 V AC
- 730 230 V AC

**Ordering data**

Input	6 V DC 1CO	12 V DC 1CO	24 V DC 1CO	48 V DC 1CO
Rated voltage	6 V DC	12 V DC	24 V DC	48 V DC
DC Response/dropout Volt	4.2 V / 0.6 V	8.4 V / 1.2 V	16.8 V / 2.4 V	33.6 V / 4.8 V
Power rating	500 mW	500 mW	500 mW	500 mW
Rated current DC	66.7 mA	33.3 mA	16.7 mA	8.7 mA
Coil resistance	90 Ω ±10%	360 Ω ±10%	1440 Ω ±10%	5520 Ω ±10%

Ordering data Relay	6 V DC 1CO	12 V DC 1CO	24 V DC 1CO	48 V DC 1CO
12 A / 3.5 mm Type	RCL114006	RCL114012	RCL114024	RCL114048
AgNi 90/10 Order No.	<b>8693400000</b>	<b>8693190000</b>	<b>8693180000</b>	<b>8693480000</b>
16 A / 5 mm Type	RCL314006	RCL314012	RCL314024	RCL314048
AgNi 90/10 Order No.	<b>8693800000</b>	<b>8693240000</b>	<b>8693260000</b>	<b>8693380000</b>
16 A / 5 mm Type		RCL315012	RCL315024	RCL315048
AgNi 5µm Au Order No.		<b>on request</b>	<b>8824830000</b>	<b>on request</b>

Note	6 V DC 1CO	12 V DC 1CO	24 V DC 1CO	48 V DC 1CO

**Ordering data**

Input	24 V AC 1CO	48 V AC 1CO	115 V AC 1CO	230 V AC 1CO
Rated voltage	24 V AC	48 V AC	115 V AC	230 V AC
AC Response/dropout Volt	18.0 V / 3.6 V	64 V / 7.2 V	86.3 V / 17.3 V	172.5 V / 34.5 V
Power rating	0,75 VA	0,75 VA	0,75 VA	0,75 VA
Rated current AC	31.6 mA	15,6 mA	6.6 mA	3.2 mA
Coil resistance	1440 Ω ±10%	1420 Ω ±10%	8100 Ω ±15%	32500 Ω ±15%

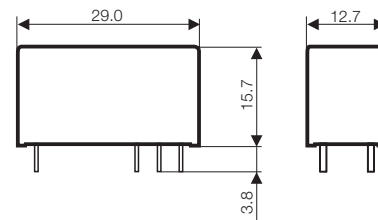
Ordering data Relay	24 V AC 1CO	48 V AC 1CO	115 V AC 1CO	230 V AC 1CO
12 A / 3.5 mm Type	RCL114524	RCL114548	RCL114615	RCL114730
AgNi 90/10 Order No.	<b>8693220000</b>	<b>8693510000</b>	<b>8693390000</b>	<b>8693230000</b>
16 A / 5 mm Type	RCL314524	RCL314548	RCL314615	RCL314730
AgNi 90/10 Order No.	<b>8693500000</b>	<b>8693880000</b>	<b>8693890000</b>	<b>8693320000</b>
16 A / 5 mm Type	RCL315524	RCL315548	RCL315615	RCL315730
AgNi 5µm Au Order No.	<b>8824870000</b>	<b>on request</b>	<b>8824880000</b>	<b>8824890000</b>

Note	24 V AC 1CO	48 V AC 1CO	115 V AC 1CO	230 V AC 1CO

## Relay couplers - RIDERSERIES

### RCL relay 2 CO contact AC/DC coil

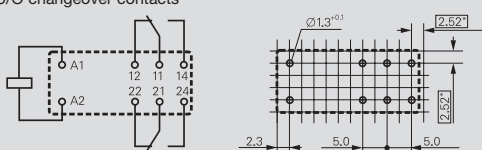
- 2000 VA switching capacity
- Low height of 15.7 mm
- Hard gold-plated contacts available
- For domestic appliances, heating controllers, emergency lighting systems, modems



#### Circuit diagram

View of connections  
Dimensions in mm

2 C/O changeover contacts



#### Output

max. switching voltage AC	250 V
Continuous current	8 A / 1 contact
Contact base material	AgNi 90/10 or AgNi 5µm Au
Mechanical endurance	AC coil 5x10 <sup>6</sup> / DC coil 30x10 <sup>6</sup> switching operations
Response time / Drop-out time	7ms / 2ms

#### Rated data

Status indicator/Free wheel diode	no/no
Operating temperature	-40 °C...+70 °C
UL 94 flammability rating	V-0
Approvals	cURus; VDE;

#### Insulation coordination (IEC 60664)

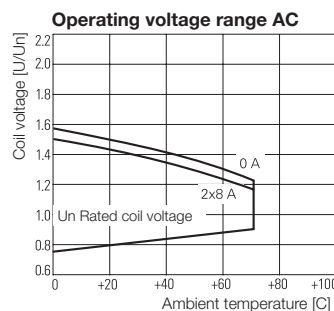
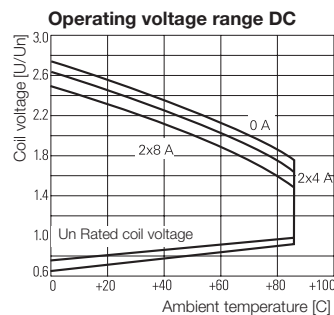
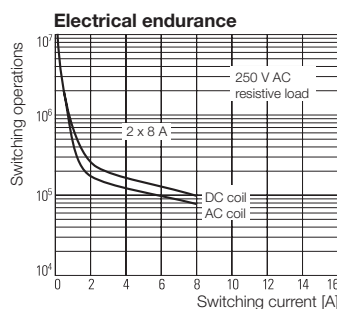
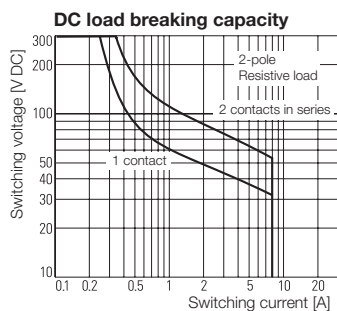
Rated voltage	250 V
Creepage and clearance path input - output	10 mm
Overtoltage category	III
Pollution severity	3
Protective separation to VDE 0106 part 101	yes

#### Dimensions

Length x width x height                      mm                      29 / 12.7 / 15.7

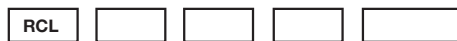
#### Note

## Applications



**RCL relay**  
**2 CO contact AC/DC coil**

Type code



Type RIDER Control Low

Type of construction  
4 8 A, pitch 5 mm, flux proof

Type of contact

2 2 CO contacts  
4 2 NO contacts

Contact material

4 AgNi 90/10  
5 AgNi 90/10 hgp

DC coil

006 6 V DC  
012 12 V DC  
024 24 V DC  
048 48 V DC  
060 60 V DC  
110 110 V DC

AC coil

512 12 V AC  
524 24 V AC  
548 48 V AC  
615 115 V AC  
730 230 V AC

**Ordering data**

Input	12 V DC 2CO	24 V DC 2CO	48 V DC 2CO	110 V DC 2CO
Rated voltage	12 V DC	24 V DC	48 V DC	110 V DC
DC Response/dropout Volt	8,4 V / 1,2 V	16,8 V / 2,4 V	33,6 V / 4,8 V	77 V / 11 V
Power rating	500 mW	500 mW	500 mW	500 mW
Rated current DC	33,3 mA	16,7 mA	8,7 mA	4,1 mA
Coil resistance	360 Ω ±10%	1440 Ω ±10%	5620 Ω ±10%	26600 Ω ±12%

Ordering data Relay				
8 A / 5 mm Type	RCL 424012 12Vdc-Rel2U	RCL 424024 24Vdc-Rel2U	RCL424048	RCL 424110 110Vdc-Rel2U
AgNi 90/10 Order No.	<b>4058560000</b>	<b>4058570000</b>	<b>4058750000</b>	<b>4058590000</b>
Type Order No.				
8 A / 5 mm Type	RCL425012	RCL 425024 24Vdc-Rel2U	RCL425048	RCL425110
AgNi 5µm Au Order No.	<b>on request</b>	<b>4058580000</b>	<b>on request</b>	<b>8828370000</b>

Note				

**Ordering data**

Input	24 V AC 2CO	48 V AC 2CO	115 V AC 2CO	230 V AC 2CO
Rated voltage	24 V AC	48 V AC	115 V AC	230 V AC
AC Response/dropout Volt	18 V / 3,6 V	64 V / 7,2 V	86,3 V / 17,3 V	172,5 V / 34,5 V
Power rating	0,75 VA	0,75 VA	0,75 VA	0,75 VA
Rated current AC	31,6 mA	15,6 mA	6,6 mA	3,2 mA
Coil resistance	350 Ω ±10%	1420 Ω ±10%	8100 Ω ±15%	32500 Ω ±15%

Ordering data Relay				
8 A / 5 mm Type	RCL 424524 24Vac-Rel2U	RCL424548	RCL 424615 115Vac-Rel2U	RCL 424730 230Vac-Rel2U
AgNi 90/10 Order No.	<b>4058600000</b>	<b>8693340000</b>	<b>4058610000</b>	<b>4058630000</b>
Type Order No.				
8 A / 5 mm Type	RCL425524	RCL425548	RCL 425615 115Vac-Rel2U	RCL 425730 230Vac-Rel2U
AgNi 5µm Au Order No.	<b>on request</b>	<b>on request</b>	<b>4058620000</b>	<b>4058640000</b>

Note				

# Relay couplers - RIDERSERIES

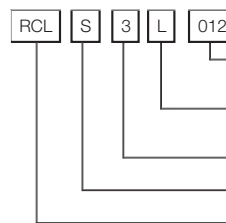
## RCLS – Inrush Power

- 1 NO
- High making currents possible
- RCLS3L 120 A for max. 20 ms
- RCLS3T 165 A for max. 20 ms / 800 A for 200 µs
- New contact principle

### Switching contact for AgSnO2



### Switching contact for AgSnO2+W

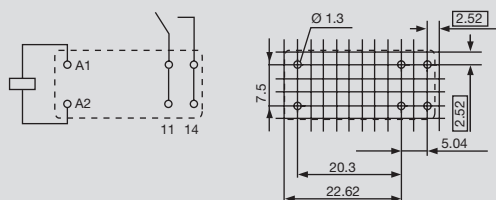


**Coil**  
 012 = 12 V DC  
 024 = 24 V DC  
**Contact material**  
 L = AgSnO2  
 T = W-pre-make contact + AgSnO2  
**Type of contact**  
 3 = 1 NO  
**Version**  
 S = Inrush Power  
**Type = RCL**

### Circuit diagram

View of connections  
Dimensions in mm

1 NO contact



Output	
Max. switching voltage AC	240 V
Rated current	16 A
Max. switching current	120 A @ 20 ms (RCLS3L) 165 A @ 20 ms / 800 A @ 200 µs (RCLS3T)
Contact base material	AgSnO2 (RCLS3L) / AgSnO2 + W (RCLS3T)
Mechanical endurance	10 x 10 <sup>6</sup> (RCLS3L) / 5 x 10 <sup>6</sup> (RCLS3T)
Response time / Release time	10 ms / 4 ms
Rated data	
Ambient temp., fitted w/o distance	-25 °C ... +70 °C
Flammability rating UL 94	V-0
Approvals	cURus / VDE
Insulation coordinates (IEC 60664)	
Rated voltage	250 V
Creepage and clearance path input – output	10 mm
Overtoltage category	III
Pollution severity	2
Dimensions	
Length x width x height	mm 29 / 12.7 / 15.7
Information	

### Order data

Input	12 V DC 1NO	24 V DC 1NO	12 V DC 1NO	24 V DC 1NO
Rated voltage	12 V DC	24 V DC	12 V DC	24 V DC
Rated current DC	33.3 mA	16.7 mA	33.3 mA	16.7 mA
Power rating	400 mW	400 mW	400 mW	400 mW
Oper. -/drop-out volt. DC-coil	8.4 V / 1.2 V	16.8 V / 2.4 V	8.4 V / 1.2 V	16.8 V / 2.4 V

Order data		12 V DC 1NO	24 V DC 1NO	12 V DC 1NO	24 V DC 1NO
Break contact element	Type	RCLS 3L012	RCLS 3L024	RCLS 3T012	RCLS 3T024
	Order No.	8866890000	8866900000	8866910000	8866920000
Information		Contact material AgSnO2	Contact material AgSnO2	Contact material AgSnO2 + W	Contact material AgSnO2 + W