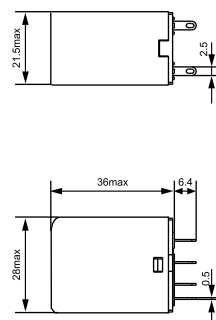


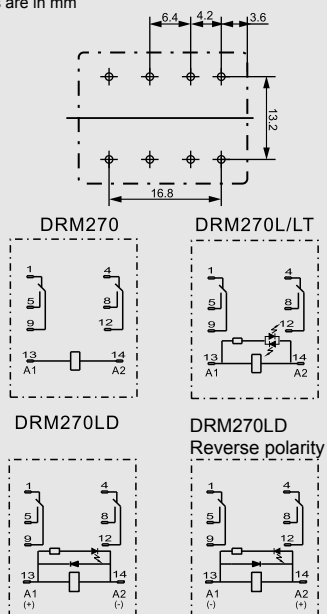
# DRM Auxiliary Relay

DRM 270 Relay  
2 change over contacts  
AC/DC coil

- Small size with high sensitivity
- Reasonable structure with wide usage
- Various types available
- Approvals with 



**Circuit diagram**  
PIN top view  
Dimensions are in mm



## Output

|                                                                                |                                                                       |
|--------------------------------------------------------------------------------|-----------------------------------------------------------------------|
| Load (resistive)                                                               | 10 A / 250 Vac                                                        |
| Switching power (resistive)                                                    | 2500 VA, 300W                                                         |
| Contact resistance (initial)                                                   | ≤ 50 mΩ                                                               |
| Min. load voltage / current                                                    | 12 V / 10 mA or 5 V / 1 mA (gold plated contact)                      |
| Contact material                                                               | Silver alloy or silver alloy with gold plating                        |
| Electrical endurance / Mechanical endurance                                    | > 25×10 <sup>4</sup> (1800 Ops/h) / > 2×10 <sup>7</sup> (18000 Ops/h) |
| Response / dropout delay at rated voltage                                      | ≤ 20 ms / ≤ 20 ms                                                     |
| Dielectric strength: Between Coil-contacts / open contacts / adjacent contacts | 2000VAC/1min / 1000VAC/1min / 2000VAC/1min (leakage current: 1mA)     |

## Input

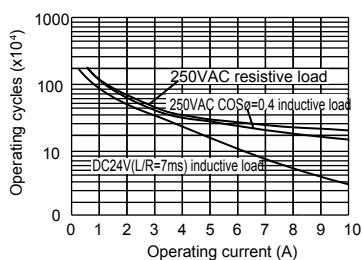
|                         |                                                        |
|-------------------------|--------------------------------------------------------|
| Response voltage @ 25°C | DC: ≥ 75% of rated voltage, AC: ≥ 80% of rated voltage |
| Dropout voltage @ 25°C  | DC: ≥ 10% of rated voltage, AC: ≥ 30% of rated voltage |
| Max. voltage @ 25°C     | 110% of rated voltage                                  |
| Insulation resistance   | ≥ 1000 MΩ                                              |
| Coil power consumption  | DC: ≤ 0.9 W, AC: 1.2 VA                                |

## General

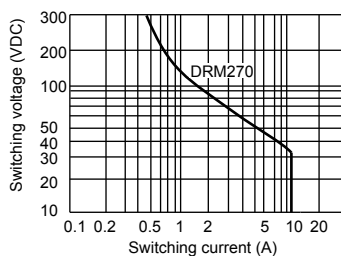
|                      |                                        |
|----------------------|----------------------------------------|
| Ambient temperature  | DC: -40 °C...+60°C, AC: -40 °C...+55°C |
| Storage temperature  | -40 °C...+70°C                         |
| Humidity             | 35%~85% RH                             |
| Atmospheric pressure | 86-106KPa                              |
| Shock resistance     | 10G (half wave of sine pulse: 11ms)    |
| Vibration resistance | 10~55Hz dual amplitude: 1.0mm 10~55Hz  |
| Mounting             | Push-in connection or PCB welding      |
| Weight               | 35 g                                   |
| Min. in package      | 20 pcs                                 |

## Application

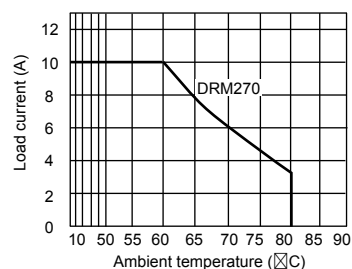
**DRM270 electrical life**



**Max. DC load break capacity**



**Temperature derating curve**



# DRM Auxiliary Relay

DRM 270 Relay  
2 change over contacts  
AC/DC coil

## Type code

Type DRM

Type of construction  
2 change over contact

Coil voltage

006 6Vdc / 012 12Vdc  
024 24Vdc / 048 48Vdc  
110 110Vdc / 220 220Vdc  
524 24Vac / 548 48Vac  
615 115Vac / 730 230Vac

LED L (Red for AC coil; green for DC coil)

Test lever T (Red for AC coil; green for DC coil)

Suppressor diode D

|                                                   |  |  |  |  |  |
|---------------------------------------------------|--|--|--|--|--|
| DRM                                               |  |  |  |  |  |
| Type DRM                                          |  |  |  |  |  |
| Type of construction                              |  |  |  |  |  |
| 2 change over contact                             |  |  |  |  |  |
| Coil voltage                                      |  |  |  |  |  |
| 006 6Vdc / 012 12Vdc                              |  |  |  |  |  |
| 024 24Vdc / 048 48Vdc                             |  |  |  |  |  |
| 110 110Vdc / 220 220Vdc                           |  |  |  |  |  |
| 524 24Vac / 548 48Vac                             |  |  |  |  |  |
| 615 115Vac / 730 230Vac                           |  |  |  |  |  |
| LED L (Red for AC coil; green for DC coil)        |  |  |  |  |  |
| Test lever T (Red for AC coil; green for DC coil) |  |  |  |  |  |
| Suppressor diode D                                |  |  |  |  |  |

## Ordering information

### Input

|                             |                 |
|-----------------------------|-----------------|
| Rated voltage               | 24 V AC         |
| Rated current (50Hz / 60Hz) | 62.4mA/52.2mA   |
| Coil resistance             | 160Ω ±10%       |
| Response / dropout voltage  | 19.2V / 7.2V    |
| Max. voltage                | 26.4V           |
| Power consumption           | 1.0~1.2VA(60Hz) |

## 24 V AC 2CO

## 48 V AC 2CO

## 115 V AC 2CO

## 230 V AC 2CO

## Ordering information

|                                              |           |                   |
|----------------------------------------------|-----------|-------------------|
| Standard                                     | Type      | DRM270524         |
|                                              | Order No. | <b>7760056055</b> |
| With LED                                     | Type      | DRM270524L        |
|                                              | Order No. | <b>7760056064</b> |
| With LED and test lever                      | Type      | DRM270524LT       |
|                                              | Order No. | <b>7760056073</b> |
| With LED, gold plated contact                | Type      |                   |
|                                              | Order No. |                   |
| With LED and test lever, gold plated contact | Type      |                   |
|                                              | Order No. |                   |

DRM270524

**7760056055**

DRM270524L

**7760056064**

DRM270524LT

**7760056073**

DRM270548

**7760056056**

DRM270548L

**7760056065**

DRM270548LT

**7760056074**

DRM270615

**7760056057**

DRM270615L

**7760056066**

DRM270615LT

**7760056075**

DRM270730

**7760056058**

DRM270730L

**7760056067**

DRM270730LT

**7760056076**

DRM270730L Au

**7760056184**

DRM270730LT Au

**7760056186**

Note

## Ordering information

### Input

|                            |           |
|----------------------------|-----------|
| Rated voltage              | 12 V DC   |
| Rated current              | 75mA      |
| Coil resistance            | 160Ω ±10% |
| Response / dropout voltage | 9V / 1.2V |
| Max. voltage               | 13.2V     |
| Power consumption          | 0.9W      |

## 12 V DC 2CO

## 24 V DC 2CO

## 48 V DC 2CO

## 110 V DC 2CO

## 220 V DC 2CO

## Ordering information

### Relay

|                                              |           |                   |
|----------------------------------------------|-----------|-------------------|
| Standard                                     | Type      | DRM270012         |
|                                              | Order No. | <b>7760056050</b> |
| With LED                                     | Type      | DRM270012L        |
|                                              | Order No. | <b>7760056059</b> |
| With LED and test lever                      | Type      | DRM270012LT       |
|                                              | Order No. | <b>7760056068</b> |
| With LED and suppressor diode                | Type      |                   |
|                                              | Order No. |                   |
| With LED, gold plated contact                | Type      |                   |
|                                              | Order No. |                   |
| With LED and test lever, gold plated contact | Type      |                   |
|                                              | Order No. |                   |

DRM270012

**7760056050**

DRM270012L

**7760056059**

DRM270012LT

**7760056068**

DRM270024

**7760056051**

DRM270024L

**7760056060**

DRM270024LT

**7760056069**

DRM270024LD

**7760056077**

DRM270024L Au

**7760056183**

DRM270024LT Au

**7760056185**

DRM270048

**7760056052**

DRM270048L

**7760056061**

DRM270048LT

**7760056070**

DRM270110

**7760056053**

DRM270110L

**7760056062**

DRM270110LT

**7760056071**

DRM270220

**7760056054**

DRM270220L

**7760056063**

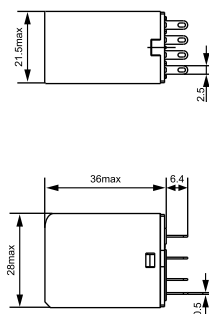
DRM270220LT

**7760056072**

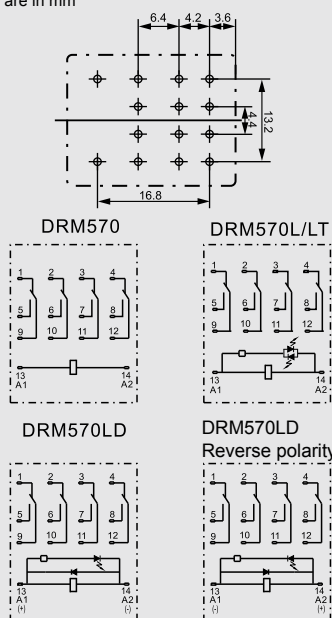
# DRM Auxiliary Relay

DRM 570 Relay  
4 change over contacts  
AC/DC coil

- Small size with high sensitivity
- Reasonable structure with wide usage
- Various types available
- Approvals with 



Circuit diagram  
PIN top view  
Dimensions are in mm



## Output

|                                                                                |                                                                       |
|--------------------------------------------------------------------------------|-----------------------------------------------------------------------|
| Load (resistive)                                                               | 10 A / 250 Vac                                                        |
| Switching power (resistive)                                                    | 2500 VA, 300W                                                         |
| Contact resistance (initial)                                                   | ≤ 50 mΩ                                                               |
| Min. load voltage / current                                                    | 12 V / 10 mA or 5 V / 1 mA (gold plated contact)                      |
| Contact material                                                               | Silver alloy or silver alloy with gold plating                        |
| Electrical endurance / Mechanical endurance                                    | > 25×10 <sup>4</sup> (1800 Ops/h) / > 2×10 <sup>7</sup> (18000 Ops/h) |
| Response / dropout delay at rated voltage                                      | ≤ 20 ms / ≤ 20 ms                                                     |
| Dielectric strength: Between Coil-contacts / open contacts / adjacent contacts | 2000VAC/1min / 1000VAC/1min / 2000VAC/1min (leakage current: 1mA)     |

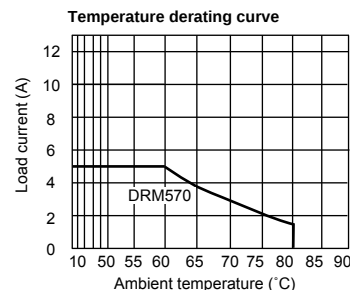
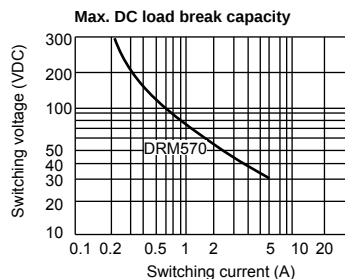
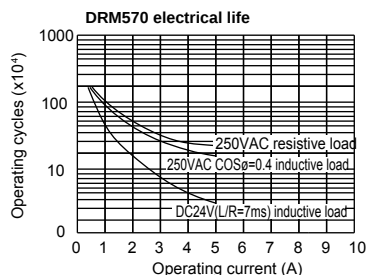
## Input

|                         |                                                        |
|-------------------------|--------------------------------------------------------|
| Response voltage @ 25°C | DC: ≥ 75% of rated voltage, AC: ≥ 80% of rated voltage |
| Dropout voltage @ 25°C  | DC: ≥ 10% of rated voltage, AC: ≥ 30% of rated voltage |
| Max. voltage @ 25°C     | 110% of rated voltage                                  |
| Insulation resistance   | ≥ 1000 MΩ                                              |
| Coil power consumption  | DC: ≤ 0.9 W, AC: 1.2 VA                                |

## General

|                      |                                        |
|----------------------|----------------------------------------|
| Ambient temperature  | DC: -40 °C...+60°C, AC: -40 °C...+55°C |
| Storage temperature  | -40°C...+70°C                          |
| Humidity             | 35%~85% RH                             |
| Atmospheric pressure | 86-106KPa                              |
| Shock resistance     | 10G (half wave of sine pulse: 11ms)    |
| Vibration resistance | 10~55Hz dual amplitude: 1.0mm 10~55Hz  |
| Mounting             | Push-in connection or PCB welding      |
| Weight               | 35 g                                   |
| Min. in package      | 20 pcs                                 |

## Application



# DRM Auxiliary Relay

DRM 570 Relay  
4 change over contacts  
AC/DC coil

## Type code

Type DRM

Type of construction  
4 change over contact

Coil voltage

006 6Vdc / 012 12Vdc  
024 24Vdc / 048 48Vdc  
110 110Vdc / 220 220Vdc  
524 24Vac / 548 48Vac  
615 115Vav / 730 230Vac

LED L (Red for AC coil; green for DC coil)

Test lever T (Red for AC coil; green for DC coil)

Suppressor diode D

DRM

Relay

## Ordering information

### Input

|                             |                 |
|-----------------------------|-----------------|
| Rated voltage               | 24 V AC         |
| Rated current (50Hz / 60Hz) | 62.4mA/52.2mA   |
| Coil resistance             | 160Ω ±10%       |
| Response / dropout voltage  | 19.2V / 7.2V    |
| Max. voltage                | 26.4V           |
| Power consumption           | 1.0~1.2VA(60Hz) |

## 24 V AC 4CO

## 48 V AC 4CO

## 115 V AC 4CO

## 230 V AC 4CO

## Ordering information

|                                              |           |                   |
|----------------------------------------------|-----------|-------------------|
| Standard                                     | Type      | DRM570524         |
|                                              | Order No. | <b>7760056083</b> |
| With LED                                     | Type      | DRM570524L        |
|                                              | Order No. | <b>7760056092</b> |
| With LED and test lever                      | Type      | DRM570524LT       |
|                                              | Order No. | <b>7760056101</b> |
| With LED, gold plated contact                | Type      |                   |
|                                              | Order No. |                   |
| With LED and test lever, gold plated contact | Type      |                   |
|                                              | Order No. |                   |

DRM570524

**7760056083**

DRM570524L

**7760056092**

DRM570524LT

**7760056101**

DRM570548

**7760056084**

DRM570548L

**7760056093**

DRM570548LT

**7760056102**

DRM570615

**7760056085**

DRM570615L

**7760056094**

DRM570615LT

**7760056103**

DRM570730

**7760056086**

DRM570730L

**7760056095**

DRM570730LT

**7760056104**

DRM570730L Au

**7760056188**

DRM570730LT Au

**7760056190**

Note

## Ordering information

### Input

|                            |           |
|----------------------------|-----------|
| Rated voltage              | 12 V DC   |
| Rated current              | 75mA      |
| Coil resistance            | 160Ω ±10% |
| Response / dropout voltage | 9V / 1.2V |
| Max. voltage               | 13.2V     |
| Power consumption          | 0.9W      |

## 12 V DC 4CO

## 24 V DC 4CO

## 48 V DC 4CO

## 110 V DC 4CO

## 220 V DC 4CO

## Ordering information

|                                              |           |                   |
|----------------------------------------------|-----------|-------------------|
| Standard                                     | Type      | DRM570012         |
|                                              | Order No. | <b>7760056078</b> |
| With LED                                     | Type      | DRM570012L        |
|                                              | Order No. | <b>7760056087</b> |
| With LED and test lever                      | Type      | DRM570012LT       |
|                                              | Order No. | <b>7760056096</b> |
| With LED and suppressor diode                | Type      |                   |
|                                              | Order No. |                   |
| With LED, gold plated contact                | Type      |                   |
|                                              | Order No. |                   |
| With LED and test lever, gold plated contact | Type      |                   |
|                                              | Order No. |                   |

DRM570012

**7760056078**

DRM570012L

**7760056087**

DRM570012LT

**7760056096**

DRM570024

**7760056079**

DRM570024L

**7760056088**

DRM570024LT

**7760056097**

DRM570024LD

**7760056105**

DRM570024L Au

**7760056187**

DRM570024LT Au

**7760056189**

DRM570048

**7760056080**

DRM570048L

**7760056089**

DRM570048LT

**7760056098**

DRM570110

**7760056081**

DRM570110L

**7760056090**

DRM570110LT

**7760056099**

DRM570220

**7760056082**

DRM570220L

**7760056091**

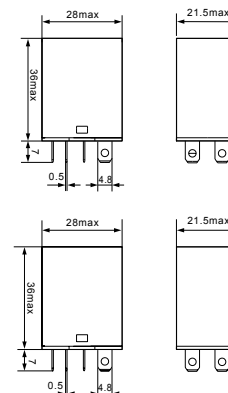
DRM570220LT

**7760056100**

# DRL Power Relay

DRL Power Relay  
1 or 2 change over contacts, AC/DC coil

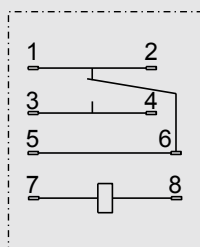
- Arc shield
- High dielectric strength: 2,000 V
- Approvals with 



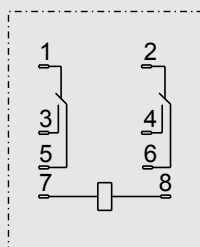
## Circuit diagram

PIN top view  
Dimensions are in mm

### 1CO



### 2CO



## Output

|                              |                                                     |
|------------------------------|-----------------------------------------------------|
| Max. switching voltage       | 250 V AC                                            |
| Continuous current           | 16 A @ 1CO / 10 A @ 2CO                             |
| Contact material             | AgCdO                                               |
| Min. load voltage / current  | 12 V / 100 mA                                       |
| Contact resistance (initial) | < 50 mΩ                                             |
| Electrical endurance         | > 10 × 10 <sup>4</sup> cycles (1,800 cycles / hour) |
| Response / dropout delay     | < 20 ms / < 20 ms                                   |

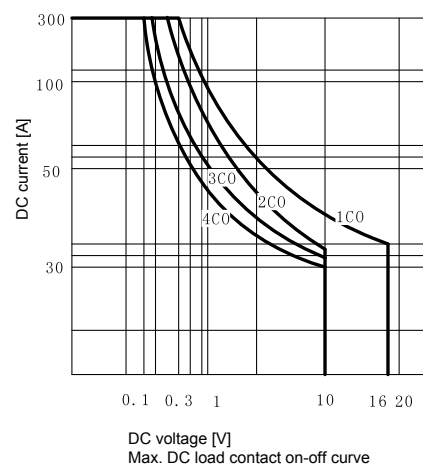
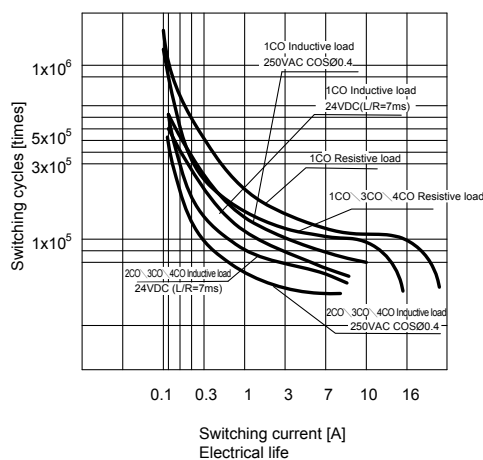
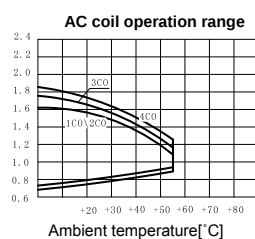
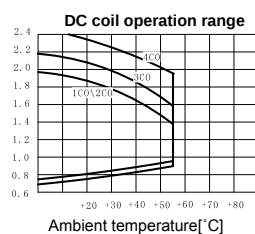
## Input

|                         |                                                          |
|-------------------------|----------------------------------------------------------|
| Response voltage @ 25°C | AC: ≤ 80% of rated voltage<br>DC: ≤ 75% of rated voltage |
| Dropout voltage @ 25°C  | AC: ≥ 30% of rated voltage<br>DC: ≥ 10% of rated voltage |
| Max. voltage @ 25°C     | 110% of rated voltage                                    |
| Coil power consumption  | 1.2 VA / 0.9 W                                           |

## General

|                               |                                                                    |
|-------------------------------|--------------------------------------------------------------------|
| Operation temperature         | - 25 ... 55°C                                                      |
| Storage temperature           | - 25 ... 55°C                                                      |
| Humidity                      | 35 ... 85 %                                                        |
| Dielectric strength           | Coil-contact<br>Between N.O. contacts<br>Between adjacent contacts |
| Clearance / creepage distance | 1.5 mm / 4 mm                                                      |
| Insulation IEC60664           |                                                                    |

|                         |                                     |
|-------------------------|-------------------------------------|
| Rated voltage           | 250 V                               |
| Pollution category      | 3                                   |
| Over voltage category   | III                                 |
| Vibration resistance    | 10~55Hz dual amplitude: 1.0mm       |
| Shock resistance        | 10G (half wave of sine pulse: 11ms) |
| Approval                | CE; TÜV; UL                         |
| Weight                  | 35 g                                |
| Min. in package         | 20 pcs                              |
| Dimension               |                                     |
| Length x Width x Height | 28 x 21.5 x 43 mm                   |



# DRL Power Relay

DRL Power Relay  
1 or 2 change over contacts, AC/DC coil

|                      |                            |  |  |  |
|----------------------|----------------------------|--|--|--|
| Type code            | DRL                        |  |  |  |
| Type code            |                            |  |  |  |
| Type DRL             |                            |  |  |  |
| Type of construction | 170 1 change over contact  |  |  |  |
|                      | 270 2 change over contacts |  |  |  |
| Coil voltage         | 012 12Vdc / 024 24Vdc      |  |  |  |
|                      | 048 48Vdc / 110 110Vdc     |  |  |  |
|                      | 220 220Vdc / 524 24Vac     |  |  |  |
|                      | 615 115Vac / 730 230Vac    |  |  |  |
| LED indicator        |                            |  |  |  |

| Ordering information       | 12 V DC     | 24 V DC      | 48 V DC      | 110 V DC      | 220 V DC     |
|----------------------------|-------------|--------------|--------------|---------------|--------------|
| Input                      |             |              |              |               |              |
| Rated voltage              | 12 V DC     | 24 V DC      | 48 V DC      | 110 V DC      | 220 V DC     |
| Response / dropout voltage | 9 V / 1.2 V | 18 V / 2.4 V | 36 V / 4.8 V | 82.5 V / 11 V | 165 V / 22 V |
| Power consumption          | 0.9 W       | 0.9 W        | 0.9 W        | 0.9 W         | 0.9 W        |
| Rated coil current         | 75 mA       | 36.9 mA      | 18.5 mA      | 10 mA         | 5.2 mA       |
| Coil resistance            | 160Ω ±10%   | 650Ω ±10%    | 2,600Ω ±10%  | 11,000Ω ±10%  | 42,000Ω ±10% |

| Ordering information           |            |            |            |            |            |
|--------------------------------|------------|------------|------------|------------|------------|
| 1 change over contact 1CO Type | DRL170012L | DRL170024L | DRL170048L | DRL170110L | DRL170220L |
| Order No.                      | 1133450000 | 1133460000 | 1133470000 | 1133480000 | 1133490000 |
| 2 change over contact 2CO Type | DRL270012L | DRL270024L | DRL270048L | DRL270110L | DRL270220L |
| Order No.                      | 1133510000 | 1133520000 | 1133530000 | 1133540000 | 1133550000 |

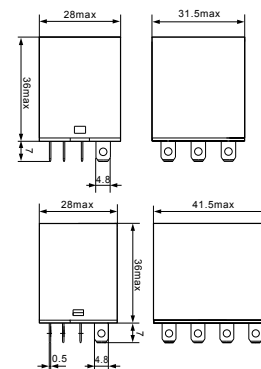
| Ordering information       | 24 V AC        | 115 V AC      | 230 V AC     |  |  |
|----------------------------|----------------|---------------|--------------|--|--|
| Input                      |                |               |              |  |  |
| Rated voltage              | 24 V AC        | 115 V AC      | 230 V AC     |  |  |
| Response / dropout voltage | 19.2 V / 7.2 V | 92 V / 34.5 V | 184 V / 69 V |  |  |
| Power consumption          | 1.2 VA         | 1.2 VA        | 1.2 VA       |  |  |
| Rated coil current (50 Hz) | 54 mA          | 12.9 mA       | 6.8 mA       |  |  |
| Coil resistance            | 160Ω ±10%      | 3,750Ω ±10%   | 13,000Ω ±10% |  |  |

| Ordering information           |            |            |            |  |  |
|--------------------------------|------------|------------|------------|--|--|
| 1 change over contact 1CO Type | DRL170524L | DRL170615L | DRL170730L |  |  |
| Order No.                      | 1133840000 | 1133850000 | 1133860000 |  |  |
| 2 change over contact 2CO Type | DRL270524L | DRL270615L | DRL270730L |  |  |
| Order No.                      | 1133870000 | 1133880000 | 1133890000 |  |  |

# DRL Power Relay

DRL Power Relay  
3 or 4 change over contacts, AC/DC coil

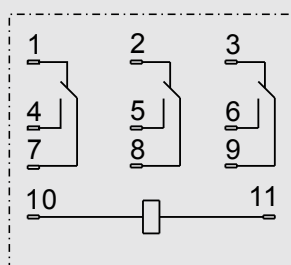
- Arc shield
- High dielectric strength: 2,000 V
- Approvals with 



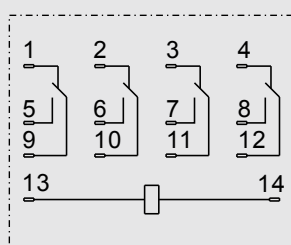
## Circuit diagram

PIN top view  
Dimensions are in mm

### 3CO



### 4CO



## Output

|                              |                                                     |
|------------------------------|-----------------------------------------------------|
| Max. switching voltage       | 250 V AC                                            |
| Continuous current           | 10A                                                 |
| Contact material             | AgCdO                                               |
| Min. load voltage / current  | 12 V / 100 mA                                       |
| Contact resistance (initial) | < 50 mΩ                                             |
| Electrical endurance         | > 10 × 10 <sup>4</sup> cycles (1,800 cycles / hour) |
| Response / dropout delay     | < 20 ms / < 20 ms                                   |

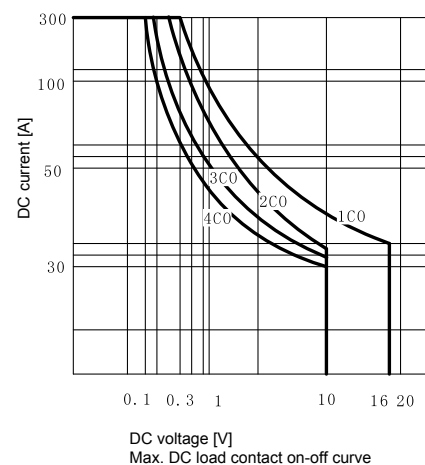
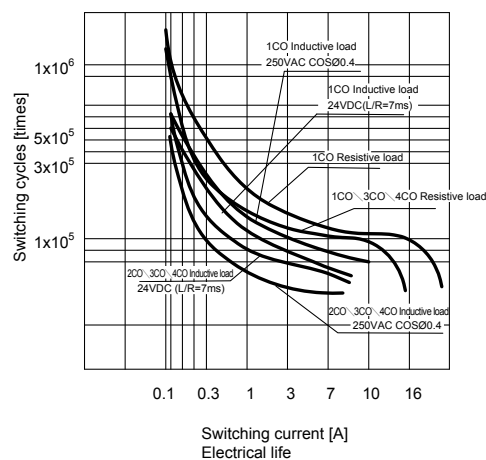
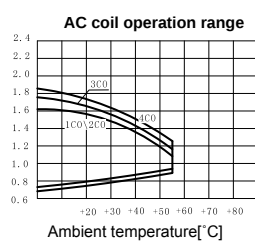
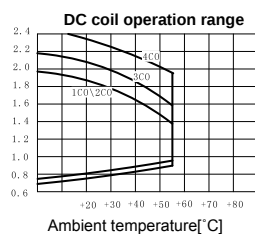
## Input

|                          |                                                          |
|--------------------------|----------------------------------------------------------|
| Response voltage @ 25 °C | AC: ≤ 80% of rated voltage<br>DC: ≤ 75% of rated voltage |
| Dropout voltage @ 25 °C  | AC: ≥ 30% of rated voltage<br>DC: ≥ 10% of rated voltage |
| Max. voltage @ 25 °C     | 110% of rated voltage                                    |
| Coil power consumption   | 3CO: 2 VA / 1.4 W; 4CO: 2.5 VA / 1.5 W                   |

## General

|                               |                                                                    |
|-------------------------------|--------------------------------------------------------------------|
| Operation temperature         | - 25 ... 55°C                                                      |
| Storage temperature           | - 25 ... 55°C                                                      |
| Humidity                      | 35 ... 85 %                                                        |
| Electrical strength           | Coil-contact<br>Between N.O. contacts<br>Between adjacent contacts |
| Clearance / creepage distance | 1.5 mm / 4 mm                                                      |
| Insulation IEC60664           |                                                                    |
| Rated voltage                 | 250 V                                                              |
| Pollution category            | 3                                                                  |
| Over voltage category         | III                                                                |

|                         |                                     |
|-------------------------|-------------------------------------|
| Vibration resistance    | 10~55Hz dual amplitude: 1.0mm       |
| Shock resistance        | 10G (half wave of sine pulse: 11ms) |
| Approval                | CE; TÜV; UL                         |
| Weight                  | 3CO: 50g; 4CO: 65g                  |
| Min. in package         | 10                                  |
| Dimension               |                                     |
| Length x Width x Height | 28 x 21.5 x 43 mm                   |



# DRL Power Relay

DRL Power Relay  
3 or 4 change over contacts, AC/DC coil

Type code **DRL**

Type code  
Type DRL  
Type of construction  
370 3 change over contact  
570 4 change over contacts

Coil voltage  
012 12Vdc / 024 24Vdc  
048 48Vdc / 110 110Vdc  
220 220Vdc / 524 24Vac  
615 115Vac / 730 230Vac

LED indicator

Relay

| Ordering information       | 12 V DC            | 24 V DC             | 48 V DC                 | 110 V DC                | 220 V DC                  |
|----------------------------|--------------------|---------------------|-------------------------|-------------------------|---------------------------|
| <b>Input</b>               |                    |                     |                         |                         |                           |
| Rated voltage              | 12 V DC            | 24 V DC             | 48 V DC                 | 110 V DC                | 220 V DC                  |
| Response / dropout voltage | 9 V / 1.2 V        | 18 V / 2.4 V        | 36 V / 4.8 V            | 82.5 V / 11 V           | 165 V / 22 V              |
|                            | 3CO 4CO            | 3CO 4CO             | 3CO 4CO                 | 3CO 4CO                 | 3CO 4CO                   |
| Power consumption          | 1.4 W 1.5 W        | 1.4 W 1.5 W         | 1.4 W 1.5 W             | 1.4 W 1.5 W             | 1.4 W 1.5 W               |
| Rated coil current         | 120 mA 125 mA      | 60 mA 66.7 mA       | 30 mA 31.2 mA           | 13.1 mA 16.2 mA         | 6.7 mA 7.6 mA             |
| Coil resistance            | 100Ω ±10% 96Ω ±10% | 400Ω ±10% 360Ω ±10% | 1,600Ω ±10% 1,540Ω ±10% | 8,400Ω ±10% 6,800Ω ±10% | 33,000Ω ±10% 29,000Ω ±10% |

| Ordering information           |                   |                   |                   |                   |                   |
|--------------------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
| 3 change over contact 3CO Type | DRL370012L        | DRL370024L        | DRL370048L        | DRL370110L        | DRL370220L        |
| Order No.                      | <b>1133570000</b> | <b>1133580000</b> | <b>1133590000</b> | <b>1133600000</b> | <b>1133610000</b> |
| 4 change over contact 4CO Type | DRL570012L        | DRL570024L        | DRL570048L        | DRL570110L        | DRL570220L        |
| Order No.                      | <b>1133620000</b> | <b>1133630000</b> | <b>1133640000</b> | <b>1133650000</b> | <b>1133660000</b> |

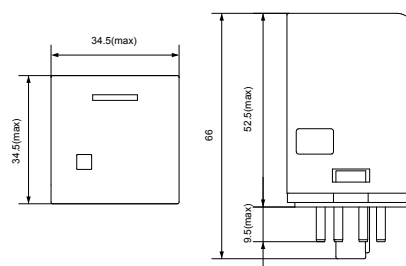
| Ordering information       | 24 V AC            | 115 V AC                | 230 V AC               |  |  |
|----------------------------|--------------------|-------------------------|------------------------|--|--|
| <b>Input</b>               |                    |                         |                        |  |  |
| Rated voltage              | 24 V AC            | 115 V AC                | 230 V AC               |  |  |
| Response / dropout voltage | 19.2 V / 7.2 V     | 92 V / 34.5 V           | 184 V / 69 V           |  |  |
|                            | 3CO 4CO            | 3CO 4CO                 | 3CO 4CO                |  |  |
| Power consumption          | 2 VA 2.5 VA        | 2 VA 2.5 VA             | 2 VA 2.5 VA            |  |  |
| Rated coil current (50 Hz) | 80 mA 93.5 mA      | 16 mA 25.5 mA           | 10 mA 13.1 mA          |  |  |
| Coil resistance            | 102Ω ±10% 80Ω ±10% | 2,300Ω ±10% 1,680Ω ±10% | 8,600Ω ±10% 6700Ω ±10% |  |  |

| Ordering information           |                   |                   |                   |  |  |
|--------------------------------|-------------------|-------------------|-------------------|--|--|
| 3 change over contact 3CO Type | DRL370524L        | DRL370615L        | DRL370730L        |  |  |
| Order No.                      | <b>1133910000</b> | <b>1133920000</b> | <b>1133930000</b> |  |  |
| 4 change over contact 4CO Type | DRL570524L        | DRL570615L        | DRL570730L        |  |  |
| Order No.                      | <b>1133940000</b> | <b>1133950000</b> | <b>1133960000</b> |  |  |

# DRR Power Relay

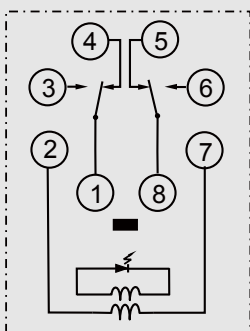
DRR Power Relay  
2 change over contacts, AC/DC coil

- 2500 VA switchover capacity
- 8-pin plug in DIN rail installation
- Approvals with TÜV CE

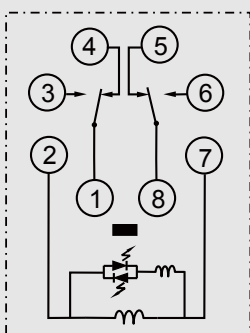


Circuit diagram  
PIN top view  
Dimensions are in mm

AC



DC



## Output

|                              |                                                     |
|------------------------------|-----------------------------------------------------|
| Max. switching voltage       | 250 V AC                                            |
| Continuous current           | 10A                                                 |
| Contact material             | AgCdO                                               |
| Min. load voltage / current  | 12 V / 100 mA                                       |
| Contact resistance (initial) | < 50 mΩ                                             |
| Electrical endurance         | > 10 × 10 <sup>4</sup> cycles (1,800 cycles / hour) |
| Response / dropout delay     | < 30 ms / < 20 ms                                   |

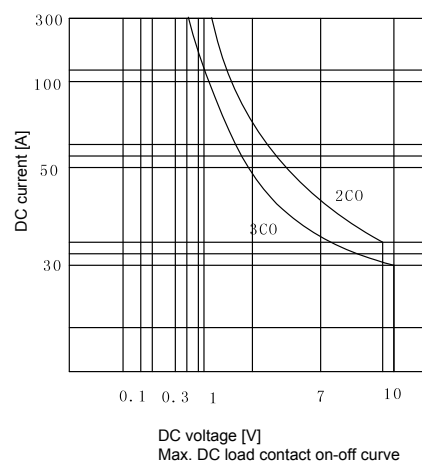
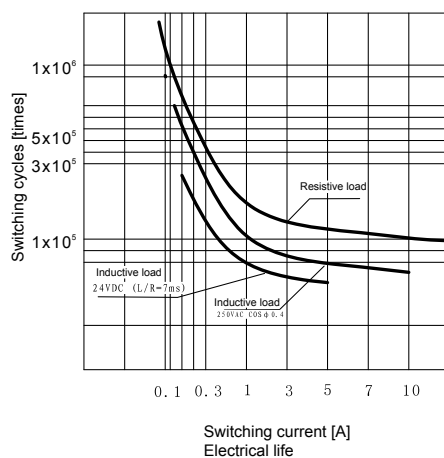
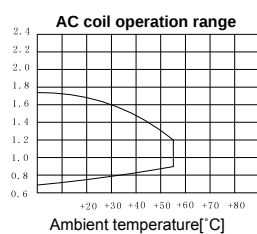
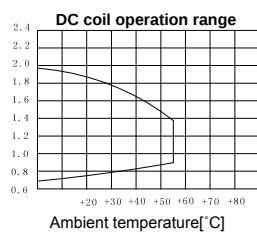
## Input

|                         |                                                          |
|-------------------------|----------------------------------------------------------|
| Response voltage @ 25°C | AC: ≤ 80% of rated voltage<br>DC: ≤ 75% of rated voltage |
| Dropout voltage @ 25°C  | AC: ≥ 30% of rated voltage<br>DC: ≥ 15% of rated voltage |
| Max. voltage @ 25°C     | 110% of rated voltage                                    |
| Coil power consumption  | 2.7 VA / 1.5 W                                           |

## General

|                               |                                                                    |
|-------------------------------|--------------------------------------------------------------------|
| Operation temperature         | - 25 ... 55°C                                                      |
| Storage temperature           | - 25 ... 55°C                                                      |
| Humidity                      | 5 ... 85 %                                                         |
| Electrical strength           | Coil-contact<br>Between N.O. contacts<br>Between adjacent contacts |
| Clearance / creepage distance | 1.5 mm / 4 mm                                                      |
| Insulation IEC60664           |                                                                    |

|                         |                                     |
|-------------------------|-------------------------------------|
| Rated voltage           | 250 V                               |
| Pollution category      | 3                                   |
| Over voltage category   | III                                 |
| Vibration resistance    | 10~55Hz dual amplitude: 1.0mm       |
| Shock resistance        | 10G (half wave of sine pulse: 11ms) |
| Approval                | CE; TÜV; UL                         |
| Weight                  | 75g                                 |
| Min. in package         | 10                                  |
| Dimension               |                                     |
| Length x Width x Height | 34.5 x 34.5 x 66 mm                 |



# DRR Power Relay

DRL Power Relay  
2 change over contacts, AC/DC coil

Type code **DRR**  
Type code  
Type DRR  
Type of construction  
270 2 change over contacts

Coil voltage  
012 12Vdc / 024 24Vdc  
048 48Vdc / 110 110Vdc  
220 220Vdc / 524 24Vac  
615 115Vac / 730 230Vac

LED indicator

| Ordering information       | 12 V DC 2CO | 24 V DC 2CO  | 48 V DC 2CO  | 110 V DC 2CO    | 220 V DC 2CO |
|----------------------------|-------------|--------------|--------------|-----------------|--------------|
| <b>Input</b>               |             |              |              |                 |              |
| Rated voltage              | 12 V DC     | 24 V DC      | 48 V DC      | 110 V DC        | 220 V DC     |
| Response / dropout voltage | 9 V / 1.8 V | 18 V / 3.6 V | 36 V / 7.2 V | 82.5 V / 16.5 V | 165 V / 33 V |
| Power consumption          | 1.5 W       | 1.5 W        | 1.5 W        | 1.5 W           | 1.5 W        |
| Rated coil current         | 125 mA      | 55.8 mA      | 29.3 mA      | 14.9 mA         | 7.5 mA       |
| Coil resistance            | 96Ω ±10%    | 430Ω ±10%    | 1640Ω ±10%   | 7360Ω ±10%      | 29500Ω ±10%  |

| Ordering information |                   |                   |                   |                   |                   |
|----------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
| Type                 | DRR270012L        | DRR270024L        | DRR270048L        | DRR270110L        | DRR270220L        |
| Order No.            | <b>1133360000</b> | <b>1133370000</b> | <b>1133380000</b> | <b>1133390000</b> | <b>1133400000</b> |

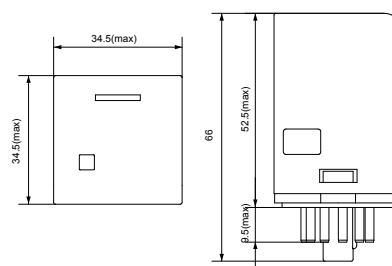
| Ordering information            | 24 V AC 2CO    | 115 V AC 2CO    | 230 V AC 2CO    |  |  |
|---------------------------------|----------------|-----------------|-----------------|--|--|
| <b>Input</b>                    |                |                 |                 |  |  |
| Rated voltage                   | 24 V AC        | 115 V AC        | 230 V AC        |  |  |
| Response / dropout voltage      | 19.2 V / 7.2 V | 92 V / 34.5 V   | 184 V / 69 V    |  |  |
| Power consumption               | 2.7 VA         | 2.7 VA          | 2.7 VA          |  |  |
| Rated coil current (50 Hz/60Hz) | 130 mA/116 mA  | 29.8 mA/25.4 mA | 14.9 mA/12.7 mA |  |  |
| Coil resistance                 | 62.5Ω ±10%     | 1250Ω ±10%      | 6500Ω ±10%      |  |  |

| Ordering information |                   |                   |                   |  |  |
|----------------------|-------------------|-------------------|-------------------|--|--|
| Type                 | DRR270524L        | DRR270615L        | DRR270730L        |  |  |
| Order No.            | <b>1133760000</b> | <b>1133780000</b> | <b>1133800000</b> |  |  |

# DRR Power Relay

DRR Power Relay  
3 change over contacts, AC/DC coil

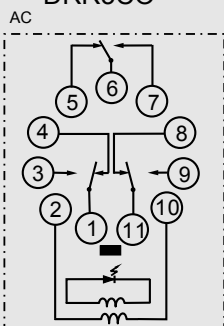
- 2500 VA switchover capacity
- 11-pin plug in DIN rail installation
- Approvals with TÜV CE



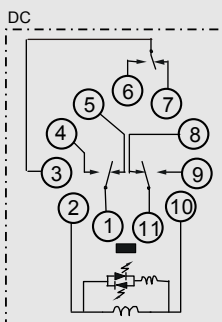
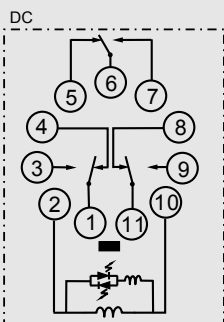
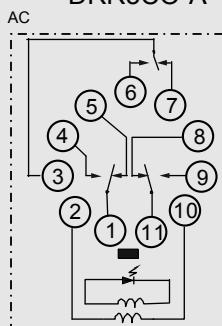
## Circuit diagram

PIN top view  
Dimensions are in mm

DRR3CO



DRR3CO-A



## Output

|                              |                                                     |
|------------------------------|-----------------------------------------------------|
| Max. switching voltage       | 250 V AC                                            |
| Continuous current           | 10A                                                 |
| Contact material             | AgNi 90/10                                          |
| Min. load voltage / current  | 12 V / 100 mA                                       |
| Contact resistance (initial) | < 50 mΩ                                             |
| Electrical endurance         | > 10 × 10 <sup>4</sup> cycles (1,800 cycles / hour) |
| Response / dropout delay     | < 30 ms / < 20 ms                                   |

## Input

|                         |                                                          |
|-------------------------|----------------------------------------------------------|
| Response voltage @ 25°C | AC: ≤ 80% of rated voltage<br>DC: ≤ 80% of rated voltage |
| Dropout voltage @ 25°C  | AC: ≥ 30% of rated voltage<br>DC: ≥ 15% of rated voltage |

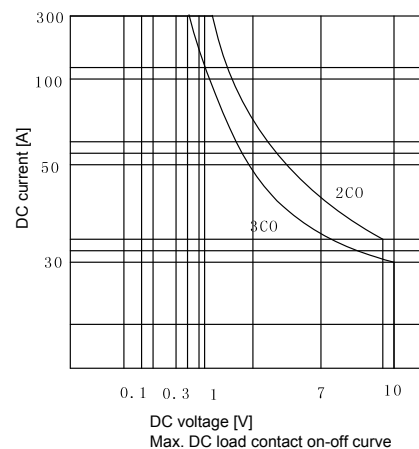
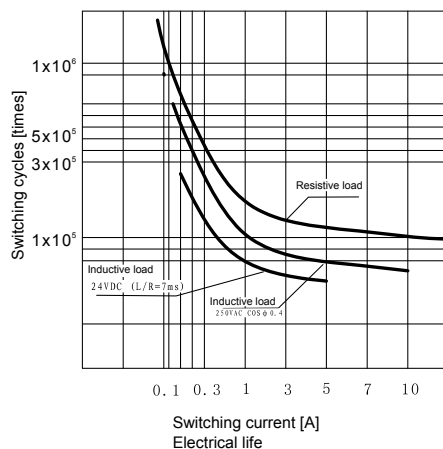
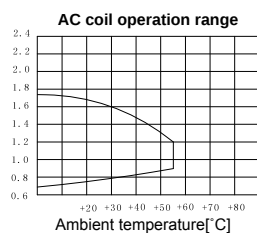
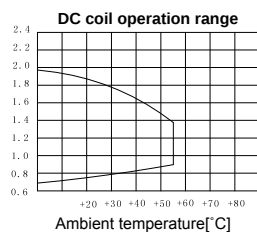
|                        |                       |
|------------------------|-----------------------|
| Max. voltage @ 25°C    | 110% of rated voltage |
| Coil power consumption | 2.7 VA / 1.5 W        |

## General

|                               |                                                                    |
|-------------------------------|--------------------------------------------------------------------|
| Operation temperature         | - 25 ... 55°C                                                      |
| Storage temperature           | - 25 ... 55°C                                                      |
| Humidity                      | 5 ... 85 %                                                         |
| Electrical strength           | Coil-contact<br>Between N.O. contacts<br>Between adjacent contacts |
| Clearance / creepage distance | 1.5 mm / 4 mm                                                      |
| Insulation IEC60664           |                                                                    |
| Rated voltage                 | 250 V                                                              |
| Pollution category            | 3                                                                  |
| Over voltage category         | III                                                                |
| Vibration resistance          | 10-55Hz dual amplitude: 1.0mm                                      |
| Shock resistance              | 10G (half wave of sine pulse: 11ms)                                |
| Approval                      | CE; TÜV; UL                                                        |
| Weight                        | 75g                                                                |
| Min. in package               | 10                                                                 |

## Dimension

|                         |                     |
|-------------------------|---------------------|
| Length x Width x Height | 34.5 x 34.5 x 66 mm |
|-------------------------|---------------------|



# DRR Power Relay

DRL Power Relay  
3 change over contacts, AC/DC coil

|                      |                                                                                                      |  |  |  |
|----------------------|------------------------------------------------------------------------------------------------------|--|--|--|
| Type code            | DRR                                                                                                  |  |  |  |
| Type DRR             |                                                                                                      |  |  |  |
| Type of construction | 370 3 change over contacts                                                                           |  |  |  |
| Coil voltage         | 012 12Vdc / 024 24Vdc<br>048 48Vdc / 110 110Vdc<br>220 220Vdc / 524 24Vac<br>615 115Vac / 730 230Vac |  |  |  |
| LED indicator        |                                                                                                      |  |  |  |

| Ordering information       | 12 V DC 3CO | 24 V DC 3CO  | 48 V DC 3CO  | 110 V DC 3CO    | 220 V DC 3CO |
|----------------------------|-------------|--------------|--------------|-----------------|--------------|
| Input                      |             |              |              |                 |              |
| Rated voltage              | 12 V DC     | 24 V DC      | 48 V DC      | 110 V DC        | 220 V DC     |
| Response / dropout voltage | 9 V / 1.8 V | 18 V / 3.6 V | 36 V / 7.2 V | 82.5 V / 16.5 V | 165 V / 33 V |
| Power consumption          | 1.5 W       | 1.5 W        | 1.5 W        | 1.5 W           | 1.5 W        |
| Rated coil current         | 125 mA      | 55.8 mA      | 29.3 mA      | 14.9 mA         | 7.5 mA       |
| Coil resistance            | 96Ω ±10%    | 430Ω ±10%    | 1640Ω ±10%   | 7360Ω ±10%      | 29500Ω ±10%  |

| Ordering information |              |              |              |              |              |
|----------------------|--------------|--------------|--------------|--------------|--------------|
| Type                 | DRR370012L   | DRR370024L   | DRR370048L   | DRR370110L   | DRR370220L   |
| Order No.            | 1133410000   | 1133420000   | 1133430000   | 1133440000   | 1133560000   |
| Type                 | DRR370012L-A | DRR370024L-A | DRR370048L-A | DRR370110L-A | DRR370220L-A |
| Order No.            | 7760056250   | 7760056251   | 7760056252   | 7760056253   | 7760056254   |

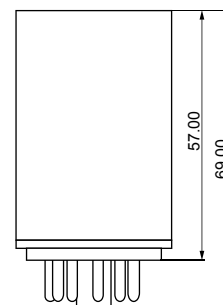
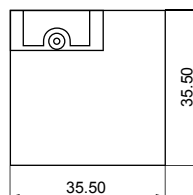
| Ordering information            | 24 V AC 3CO    | 115 V AC 3CO    | 230 V AC 3CO    |  |  |
|---------------------------------|----------------|-----------------|-----------------|--|--|
| Input                           |                |                 |                 |  |  |
| Rated voltage                   | 24 V AC        | 115 V AC        | 230 V AC        |  |  |
| Response / dropout voltage      | 19.2 V / 7.2 V | 92 V / 34.5 V   | 184 V / 69 V    |  |  |
| Power consumption               | 2.7 VA         | 2.7 VA          | 2.7 VA          |  |  |
| Rated coil current (50 Hz/60Hz) | 130 mA/116 mA  | 29.8 mA/25.4 mA | 14.9 mA/12.7 mA |  |  |
| Coil resistance                 | 62.5Ω ±10%     | 1250Ω ±10%      | 6500Ω ±10%      |  |  |

| Ordering information |              |              |              |  |  |
|----------------------|--------------|--------------|--------------|--|--|
| Type                 | DRR370524L   | DRR370615L   | DRR370730L   |  |  |
| Order No.            | 1133810000   | 1133820000   | 1133830000   |  |  |
| Type                 | DRR370524L-A | DRR370615L-A | DRR370730L-A |  |  |
| Order No.            | 7760056255   | 7760056256   | 7760056257   |  |  |

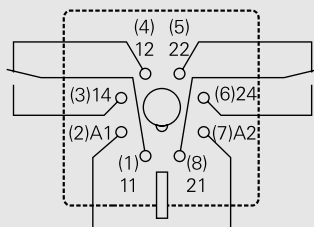
# RRD Power Relay

RRD Relay  
2 change over contacts  
AC/DC coil

- 2500 VA switchover capacity
- With test lever
- Approvals with  $\text{CE}$  VDE  $\text{cURus}$



**Circuit diagram**  
PIN top view  
Dimensions are in mm



## Output

|                                           |                                     |
|-------------------------------------------|-------------------------------------|
| Max. switching voltage                    | 250 V AC                            |
| Continuous current                        | 10A                                 |
| Contact material                          | AgNi 90/10                          |
| Mechanical endurance                      | 20x10 <sup>6</sup> switching cycles |
| Response / dropout delay at rated voltage | 12 ms / 5 ms                        |

## General

|                            |                 |
|----------------------------|-----------------|
| Operation temperature      | - 45°C ... 55°C |
| UL 94 fire retardant class | V-0             |
| Approval                   | cURus; CE; VDE  |

## Insulation coordination

### Electrical strength

|                               |                   |
|-------------------------------|-------------------|
| Coil-contact                  | 2,500V AC / 1 min |
| Between N.O. contacts         | 1,500V AC / 1 min |
| Between adjacent contacts     | 2,500V AC / 1 min |
| Clearance / creepage distance | 2.8 mm / 4 mm     |

Insulation IEC60664

|                       |       |
|-----------------------|-------|
| Rated voltage         | 250 V |
| Pollution category    | 3     |
| Over voltage category | III   |

Insulation VDE 0110b (2/79)

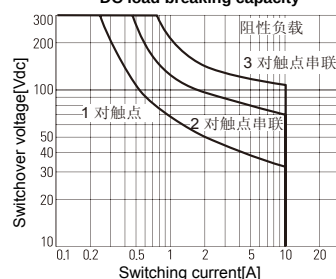
|                                  |         |
|----------------------------------|---------|
| Dielectric index of relay socket | CTI 175 |
|----------------------------------|---------|

## Dimension

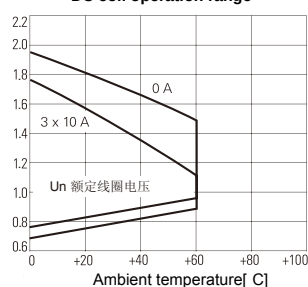
|                         |                     |
|-------------------------|---------------------|
| Length x Width x Height | 35.5 x 35.5 x 57 mm |
|-------------------------|---------------------|

## Application

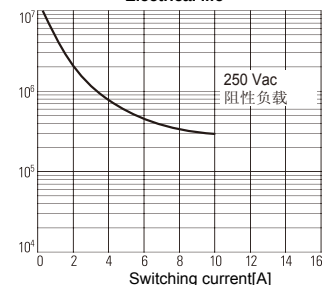
**DC load breaking capacity**



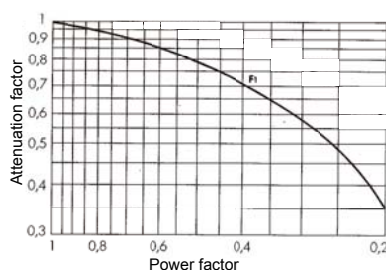
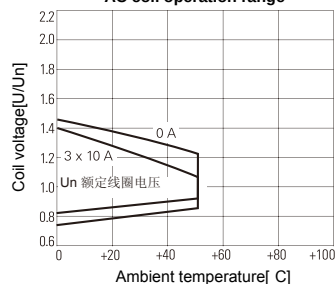
**DC coil operation range**



**Electrical life**



**AC coil operation range**



Derating curve at  $\text{COS}\varphi < 1$  (inductive load)  
Actual action times = action times in resistive load x factor in the table

# RRD Power Relay

RRD Relay  
2 change over contacts  
AC/DC coil

## Type code

Type RIDER Round

Contacts

- 2 2 change over contact, 8-pin
- 3 3 change over contacts, 11-pin

Contact material

2 AgNi 90/10

Type of construction

- 1 DC with test lever
- 3 DC with test lever and bipolar LED
- 6 AC with test lever
- 8 AC with test lever and bipolar LED

DC Coil

|     |          |     |
|-----|----------|-----|
| 006 | 6 V DC   |     |
| 012 | 12 V DC  |     |
| 024 | 24 V DC  | 0C4 |
| 048 | 48 V DC  | 0E8 |
| 060 | 60 V DC  | 0G0 |
| 110 | 110 V DC | 1B0 |
| 220 | 220 V DC | 2C0 |

AC Coil

|     |          |  |
|-----|----------|--|
| 506 | 6 V AC   |  |
| 512 | 12 V AC  |  |
| 524 | 24 V AC  |  |
| 548 | 48 V AC  |  |
| 615 | 115 V AC |  |
| 730 | 230 V AC |  |

Free wheel diode

## Ordering information

| Input                      | 24 V DC 2CO           | 48 V DC 2CO            | 110 V DC 2CO            | 220 V DC 2CO            |
|----------------------------|-----------------------|------------------------|-------------------------|-------------------------|
| Rated voltage              | 24 V DC               | 48 V DC                | 110 V DC                | 220 V DC                |
| Response / dropout voltage | 18.0 V / 2.4 V        | 36.0 V / 4.8 V         | 82.5 V / 11.5 V         | 165 V / 22 V            |
| Power consumption          | 1,2 W                 | 1,2 W                  | 1,2 W                   | 1,2 W                   |
| Rated coil current         | 50.5 mA               | 24.0 mA                | 11.0 mA                 | 5,5 mA                  |
| Coil resistance            | 475 $\Omega \pm 10\%$ | 2000 $\Omega \pm 10\%$ | 10000 $\Omega \pm 12\%$ | 40000 $\Omega \pm 15\%$ |

## Ordering information

|                         |           |                   |                   |                   |                   |
|-------------------------|-----------|-------------------|-------------------|-------------------|-------------------|
| With test lever         | Type      | RRD221024         | RRD221048         | RRD22 1110        |                   |
| AgNi 90/10              | Order No. | <b>8690370000</b> | <b>8690390000</b> | <b>8690410000</b> |                   |
| With test lever and LED | Type      | RRD223024         | RRD223048         | RRD2231 10        | RRD223220         |
| AgNi 90/10              | Order No. | <b>8690380000</b> | <b>8690400000</b> | <b>8690420000</b> | <b>8798600000</b> |
|                         | Type      |                   |                   |                   |                   |
|                         | Order No. |                   |                   |                   |                   |

## Ordering information

| 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               |
| Response / dropout voltage | 19.2 V / 9.6 V       | 38.4 V / 19.2 V       | 92.0 V / 46.0 V        | 184.0 V / 92.0 V       |
| Power consumption          | 2,3 VA               | 2,3 VA                | 2,3 VA                 | 2,3 VA                 |
| Rated coil current         | 94.2 mA              | 47.5 mA               | 20.6 mA                | 10.1 mA                |
| Coil resistance            | 86 $\Omega \pm 10\%$ | 345 $\Omega \pm 10\%$ | 2000 $\Omega \pm 10\%$ | 8300 $\Omega \pm 12\%$ |

## Ordering information Relay

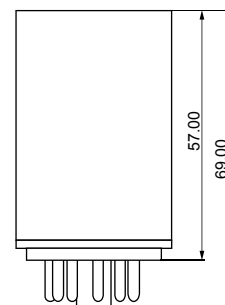
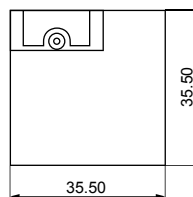
|                         |           |                   |                   |                   |                   |
|-------------------------|-----------|-------------------|-------------------|-------------------|-------------------|
| With test lever         | Type      | RRD226024         | RRD226048         | RRD2261 15        | RRD226230         |
| AgNi 90/10              | Order No. | <b>8690270000</b> | <b>8690290000</b> | <b>8690310000</b> | <b>8690330000</b> |
| With test lever and LED | Type      | RRD228024         | RRD228048         | RRD2281 15        | RRD228230         |
| AgNi 90/10              | Order No. | <b>8690280000</b> | <b>8690300000</b> | <b>8690320000</b> | <b>8690340000</b> |
|                         | Type      |                   |                   |                   |                   |
|                         | Order No. |                   |                   |                   |                   |

## Note

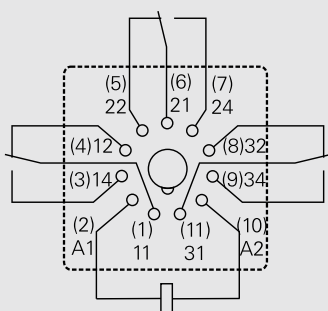
# RRD Power Relay

RRD Relay  
3 change over contacts  
AC/DC coil

- 2500 VA switchover capacity
- With test lever
- Approvals with  $\text{CE}$  VDE  $\text{cURus}$



**Circuit diagram**  
PIN top view  
Dimensions are in mm



## Output

|                                           |                                     |
|-------------------------------------------|-------------------------------------|
| Max. switching voltage                    | 250 V AC                            |
| Continuous current                        | 10A                                 |
| Contact material                          | AgNi 90/10                          |
| Mechanical endurance                      | 20x10 <sup>6</sup> switching cycles |
| Response / dropout delay at rated voltage | 12 ms / 5 ms                        |

## General

|                            |                                               |
|----------------------------|-----------------------------------------------|
| Operation temperature      | AC Coil- 45°C ... 50°C/DC Coil- 45°C ... 60°C |
| UL 94 fire retardant class | V-0                                           |
| Approval                   | cURus; CE; VDE                                |

## Insulation coordination

|                               |                   |
|-------------------------------|-------------------|
| Electrical strength           |                   |
| Coil-contact                  | 2,500V AC / 1 min |
| Between N.O. contacts         | 1,500V AC / 1 min |
| Between adjacent contacts     | 2,500V AC / 1 min |
| Clearance / creepage distance | 2.8 mm / 4 mm     |

Insulation IEC60664

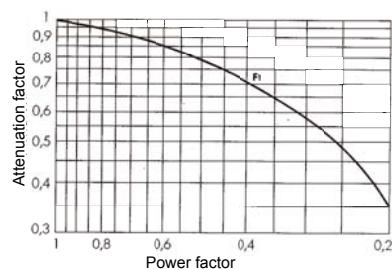
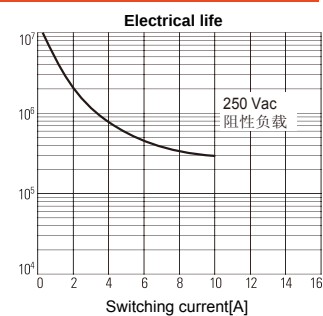
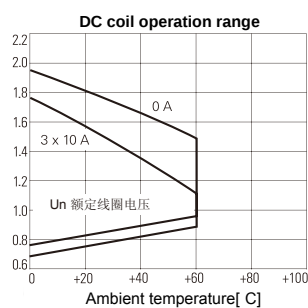
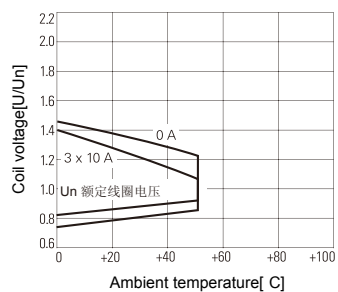
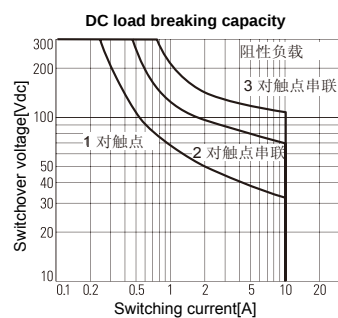
|                                  |         |
|----------------------------------|---------|
| Rated voltage                    | 250 V   |
| Pollution category               | 3       |
| Over voltage category            | III     |
| Insulation VDE 0110b (2/79)      | C / 250 |
| Dielectric index of relay socket | CTI 175 |

## Dimension

|                         |                     |
|-------------------------|---------------------|
| Length x Width x Height | 35.5 x 35.5 x 57 mm |
|-------------------------|---------------------|

## Note

## Application



Derating curve at  $\cos\phi < 1$  (inductive load)  
Actual action times = action times in resistive load x factor in the table

# RRD Power Relay

RRD Relay  
3 change over contacts  
AC/DC coil

## Type code

Type RIDER Round

Contacts

- 2 2 change over contact, 8-pin
- 3 3 change over contacts, 11-pin

Contact material

2 AgNi 90/10

Type of construction

- 1 DC with test lever
- 3 DC with test lever and bipolar LED
- 6 AC with test lever
- 8 AC with test lever and bipolar LED

RRD

DC Coil

|     |          |     |
|-----|----------|-----|
| 006 | 6 V DC   |     |
| 012 | 12 V DC  |     |
| 024 | 24 V DC  | 0C4 |
| 048 | 48 V DC  | 0E8 |
| 060 | 60 V DC  | 0G0 |
| 110 | 110 V DC | 1B0 |
| 220 | 220 V DC | 2C0 |

Free wheel diode

AC Coil

|     |          |
|-----|----------|
| 506 | 6 V AC   |
| 512 | 12 V AC  |
| 524 | 24 V AC  |
| 548 | 48 V AC  |
| 615 | 115 V AC |
| 730 | 230 V AC |

## Ordering information

### Input

|                            |                       |
|----------------------------|-----------------------|
| Rated voltage              | 12 V DC               |
| Response / dropout voltage | 9 V / 1.2 V           |
| Power consumption          | 1.2 W                 |
| Rated coil current         | 109.1 mA              |
| Coil resistance            | 110 $\Omega \pm 10\%$ |

## 12 V DC 3CO

## 24 V DC 3CO

## 110 V DC 3CO

## 220 V DC 3CO

## Ordering information

|                                            |           |
|--------------------------------------------|-----------|
| With test lever                            | Type      |
| AgNi 90/10                                 | Order No. |
| With test lever and LED                    | Type      |
| AgNi 90/10                                 | Order No. |
| With test lever and suppressing diode      | Type      |
| AgNi 90/10                                 | Order No. |
| With LED, test lever and suppressing diode | Type      |
| AgNi 90/10                                 | Order No. |

RRD321012

**8799030000**

RRD321024

**8690610000**

RRD32 1110

**8690650000**

RRD321220

**7940007742**

RRD323024

**8690620000**

RRD3231 10

**8690660000**

RRD323220

**8798610000**

RRD3210C4

**8797650000**

RRD3211B0

**8797640000**

RRD3212C0

**8797610000**

RRD3230C4

**7940007732**

RRD3232C0

**8829400000**

## Note

## Ordering information

### Input

|                            |                      |
|----------------------------|----------------------|
| Rated voltage              | 24 V AC              |
| Response / dropout voltage | 19.2 V / 9.6 V       |
| Power consumption          | 2.3 VA               |
| Rated coil current         | 94.2 mA              |
| Coil resistance            | 86 $\Omega \pm 10\%$ |

## 24 V AC 3CO

## 48 V AC 3CO

## 115 V AC 3CO

## 230 V AC 3CO

24 V AC

19.2 V / 9.6 V

2.3 VA

94.2 mA

86  $\Omega \pm 10\%$

48 V AC

38.4 V / 19.2 V

2.3 VA

47.5 mA

115 V AC

92 V / 46 V

2.3 VA

20.6 mA

2000  $\Omega \pm 10\%$

230 V AC

184 V / 92 V

2.3 VA

10.1 mA

8300  $\Omega \pm 12\%$

## Ordering information

|                         |           |
|-------------------------|-----------|
| With test lever         | Type      |
| AgNi 90/10              | Order No. |
| With test lever and LED | Type      |
| AgNi 90/10              | Order No. |
|                         | Type      |
|                         | Order No. |

RRD326024

**8690450000**

RRD328024

**8690460000**

RRD326048

**8690470000**

RRD328048

**8690480000**

RRD3261 15

**8690550000**

RRD3281 15

**8690560000**

RRD326230

**8690570000**

RRD328230

**8690580000**

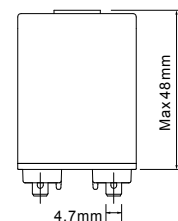
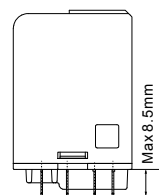
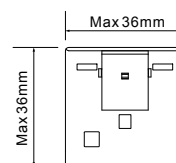
## Note

# DRH DC Relay

## DRH DC Relay

1 N.O. contact and 1 N.C. contact  
AC / DC coil

- Suitable to switch heavy DC load
- Arc shield
- With LED and test lever
- Approval with  $\text{CE}$   $\text{cULus}$  TÜV

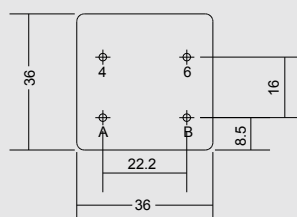


### Circuit diagram

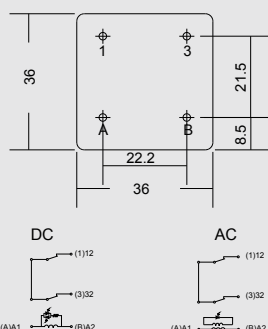
PIN top view

Dimensions are in mm

#### 1NO



#### 1NC



### Output

|                                        |                               |
|----------------------------------------|-------------------------------|
| Max. switching voltage                 | AC: 500 V; DC: 220 V          |
| Continuous current                     | 16 A@ 500 VAC; 10 A@ 220 VDC  |
| Contact material                       | AgSnO <sub>2</sub>            |
| Min. load voltage / current            | 12 VDC / 100 mA               |
| Contact resistance (initial)           | < 50 mΩ                       |
| Electrical endurance                   | > 10 × 10 <sup>4</sup> cycles |
| Response / dropout delay               | < 20 ms / < 20 ms             |
| Max. switching frequency at rated load | 1 Hz                          |

### Input

|                         |                                                          |
|-------------------------|----------------------------------------------------------|
| Response voltage @ 25°C | AC: ≤ 80% of rated voltage<br>DC: ≤ 75% of rated voltage |
| Dropout voltage @ 25°C  | AC: ≥ 30% of rated voltage<br>DC: ≥ 10% of rated voltage |

|                        |                       |
|------------------------|-----------------------|
| Max. voltage @ 25°C    | 110% of rated voltage |
| Coil power consumption | 2.5 VA / 1.5 W        |

### General

|                               |                                                                                                                             |
|-------------------------------|-----------------------------------------------------------------------------------------------------------------------------|
| Operation temperature         | -40°C ... 60°C                                                                                                              |
| Storage temperature           | -40°C ... 60°C                                                                                                              |
| Humidity                      | 35 ... 85 %                                                                                                                 |
| Electrical strength           | Coil-contact: 4,000V AC / 1 min<br>Between N.O. contacts: 2,500V AC / 1 min<br>Between adjacent contacts: 4,000V AC / 1 min |
| Clearance / creepage distance | 1.5 mm / 4 mm                                                                                                               |
| Insulation IEC60664           |                                                                                                                             |

|                       |       |
|-----------------------|-------|
| Rated voltage         | 400 V |
| Pollution category    | 3     |
| Over voltage category | III   |

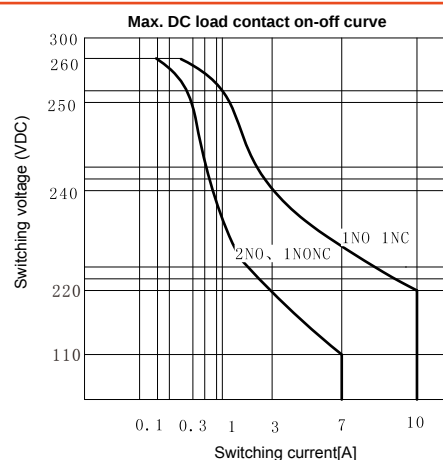
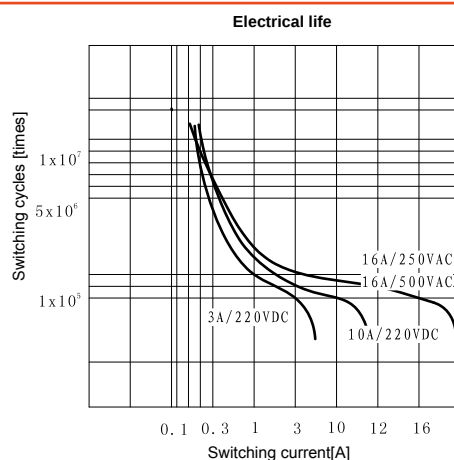
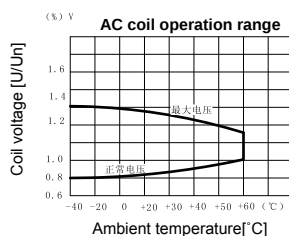
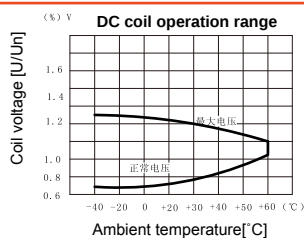
|                      |                                     |
|----------------------|-------------------------------------|
| Vibration resistance | 10~55Hz dual amplitude: 1.0mm       |
| Shock resistance     | 10G (half wave of sine pulse: 11ms) |

|          |             |
|----------|-------------|
| Approval | CE; TÜV; UL |
|----------|-------------|

|        |      |
|--------|------|
| Weight | 48 g |
|--------|------|

### Dimension

|                         |                 |
|-------------------------|-----------------|
| Length x Width x Height | 36 x 36 x 48 mm |
|-------------------------|-----------------|



# DRH DC Relay

DRH DC Relay  
1 N.O. contact and 1 N.C. contact  
AC / DC coil

Type code **DRH**

Type DRH

Type of construction

173 1NO

174 1NC

Coil voltage

012 12Vdc / 024 24Vdc

048 48Vdc / 110 110Vdc

220 220Vdc / 524 24Vac

548 48Vac / 615 115Vac

730 230Vac

With LED or test lever

LT

## Ordering information

### Input

|                               | 12 V DC     | 24 V DC      | 48 V DC      | 110 V DC      | 220 V DC     |
|-------------------------------|-------------|--------------|--------------|---------------|--------------|
| Rated voltage                 | 12 V DC     | 24 V DC      | 48 V DC      | 110 V DC      | 220 V DC     |
| DC response / dropout voltage | 9 V / 1.2 V | 18 V / 2.4 V | 36 V / 4.8 V | 82.5 V / 11 V | 165 V / 22 V |
| Power consumption             | 1.5 W       | 1.5 W        | 1.5 W        | 1.5 W         | 1.5 W        |
| DC rated current              | 120 mA      | 60 mA        | 30 mA        | 13.03 mA      | 6.7 mA       |
| Coil resistance               | 100Ω ±10%   | 400Ω ±10%    | 1,600Ω ±10%  | 8,400Ω ±10%   | 33,000Ω ±10% |

## Ordering information

| 1 N.O. contact               | Type | DRH173012LT                  | DRH173024LT                  | DRH173048LT                  | DRH173110LT                  | DRH173220LT                  |
|------------------------------|------|------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|
| Order No.                    |      | <b>1219840000</b>            | <b>1219850000</b>            | <b>1219860000</b>            | <b>1219870000</b>            | <b>1219880000</b>            |
| 1 N.C. contact               | Type | DRH174012LT                  | DRH174024LT                  | DRH174048LT                  | DRH174110LT                  | DRH174220LT                  |
| Order No.                    |      | <b>1219940000</b>            | <b>1219950000</b>            | <b>1219960000</b>            | <b>1219970000</b>            | <b>1219980000</b>            |
| With test lever locking clip | Type | Test lever block for DRH/DRW | Test lever block for DRH/DRW | Test lever block for DRH/DRW | Test lever block for DRH/DRW | Test lever block for DRH/DRW |
| Order No.                    |      | <b>7760056249</b>            | <b>7760056249</b>            | <b>7760056249</b>            | <b>7760056249</b>            | <b>7760056249</b>            |

## Ordering information

### Input

|                               | 24 V AC       | 48 V AC         | 115 V AC      | 230 V AC     |
|-------------------------------|---------------|-----------------|---------------|--------------|
| Rated voltage                 | 24 V AC       | 48 V AC         | 115 V AC      | 230 V AC     |
| AC response / dropout voltage | 19.2V / 7.2 V | 38.4 V / 14.4 V | 92 V / 34.5 V | 184 V / 69 V |
| Power consumption             | 2.5 VA        | 2.5 VA          | 2.5 VA        | 2.5 VA       |
| AC rated current              | 101.7 mA      | 51.04 mA        | 21.2 mA       | 10.61 mA     |
| Coil resistance               | 100Ω ±10%     | 350Ω ±10%       | 2,200Ω ±10%   | 8,000Ω ±10%  |

## Ordering information

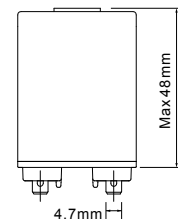
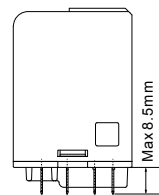
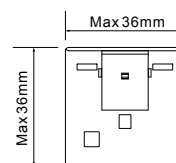
| 1 N.O. contact               | Type | DRH173524LT                  | DRH173548LT                  | DRH173615LT                  | DRH173730LT                  |
|------------------------------|------|------------------------------|------------------------------|------------------------------|------------------------------|
| Order No.                    |      | <b>1219890000</b>            | <b>1219910000</b>            | <b>1219920000</b>            | <b>1219930000</b>            |
| 1 N.C. contact               | Type | DRH174012LT                  | DRH174024LT                  | DRH174048LT                  | DRH174110LT                  |
| Order No.                    |      | <b>1219990000</b>            | <b>1220010000</b>            | <b>1220020000</b>            | <b>1220030000</b>            |
| With test lever locking clip | Type | Test lever block for DRH/DRW | Test lever block for DRH/DRW | Test lever block for DRH/DRW | Test lever block for DRH/DRW |
| Order No.                    |      | <b>7760056249</b>            | <b>7760056249</b>            | <b>7760056249</b>            | <b>7760056249</b>            |

# DRH DC Relay

## DRH DC Relay

2 N.O. contact and 1 N.O./1 N.C. contact  
AC / DC coil

- Suitable to switch heavy DC load
- Arc shield
- With LED and test lever
- Approval with  $\text{CE}$   $\text{cULus}$  TÜV

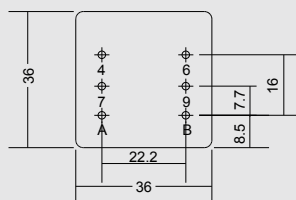


### Circuit diagram

PIN top view

Dimensions are in mm

#### 2NO



#### DC

(7)11 (4)14

(9)31 (8)34

(A)A1 (B)A2

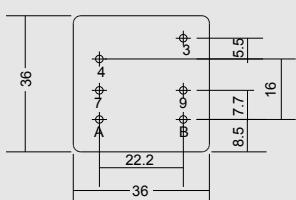
#### AC

(7)11 (4)14

(9)31 (8)34

(A)A1 (B)A2

#### 1NO/1NC



#### DC

(7)11 (4)14

(9)31 (3)32

(A)A1 (B)A2

#### AC

(7)11 (4)14

(9)31 (3)32

(A)A1 (B)A2

### Output

|                                        |                                                |
|----------------------------------------|------------------------------------------------|
| Max. switching voltage                 | AC: 250 V; DC: 220 V                           |
| Continuous current                     | 2NO 16 A@ 250 VAC; 3 A@ 220 VDC; 7A@110VDC     |
|                                        | 1NO/1NC 16 A@ 250 VAC; 3 A@ 220 VDC; 7A@110VDC |
| Contact material                       | AgSnO <sub>2</sub>                             |
| Min. load voltage / current            | 12 VDC / 100 mA                                |
| Contact resistance (initial)           | < 50 mΩ                                        |
| Electrical endurance                   | > 10 × 10 <sup>4</sup> cycles                  |
| Response / dropout delay               | < 20 ms / < 20 ms                              |
| Max. switching frequency at rated load | 1 Hz                                           |

### Input

|                         |                            |
|-------------------------|----------------------------|
| Response voltage @ 25°C | AC: ≤ 80% of rated voltage |
|                         | DC: ≤ 75% of rated voltage |
| Dropout voltage @ 25°C  | AC: ≥ 30% of rated voltage |
|                         | DC: ≥ 10% of rated voltage |
| Max. voltage @ 25°C     | 110% of rated voltage      |

Coil power consumption

2.5 VA / 1.5 W

### General

|                               |                                             |
|-------------------------------|---------------------------------------------|
| Operation temperature         | - 40 ... 60°C                               |
| Storage temperature           | - 40 ... 60°C                               |
| Humidity                      | 35 ... 85 %                                 |
| Electrical strength           | Coil-contact 4,000V AC / 1 min              |
|                               | Between N.O. contacts 2,500V AC / 1 min     |
|                               | Between adjacent contacts 4,000V AC / 1 min |
| Clearance / creepage distance | 1.5 mm / 4 mm                               |
| Insulation IEC60664           |                                             |
| Rated voltage                 | 400 V                                       |
| Pollution category            | 3                                           |
| Over voltage category         | III                                         |

Vibration resistance 10~55Hz dual amplitude: 1.0mm

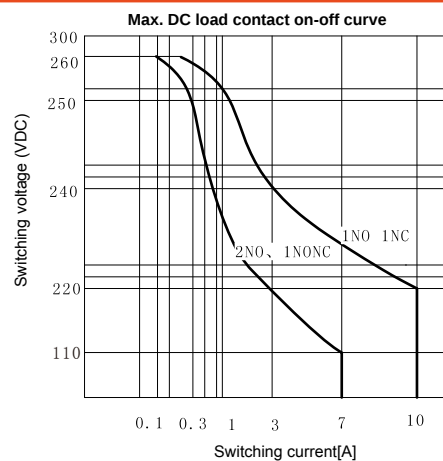
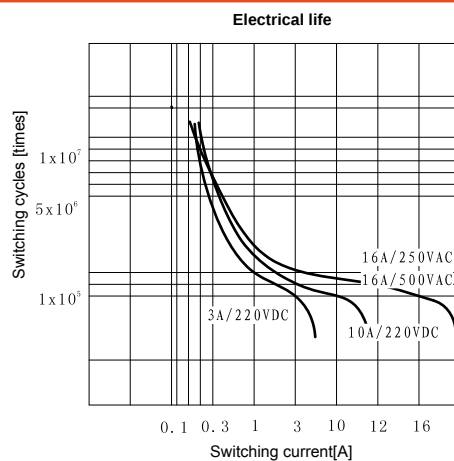
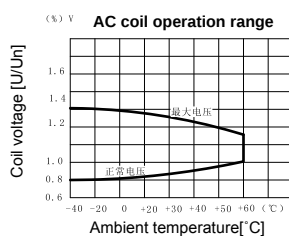
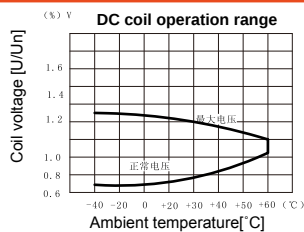
Shock resistance 10G (half wave of sine pulse: 11ms)

Approval CE; TÜV; UL

Weight 48 g

### Dimension

Length x Width x Height 36 x 36 x 48 mm



# DRH DC Relay

DRH DC Relay  
2 N.O. contact and 1 N.C. contact  
AC / DC coil

Type code **DRH**

Type DRH

Type of construction  
275 1NO/1NC  
276 2NO

Coil voltage

012 12Vdc / 024 24Vdc  
048 48Vdc / 110 110Vdc  
220 220Vdc / 524 24Vac  
548 48Vac / 615 115Vac  
730 230Vac

With LED or test lever  
LT

## Ordering information

### Input

|                               | 12 V DC     | 24 V DC      | 48 V DC      | 110 V DC      | 220 V DC     |
|-------------------------------|-------------|--------------|--------------|---------------|--------------|
| Rated voltage                 | 12 V DC     | 24 V DC      | 48 V DC      | 110 V DC      | 220 V DC     |
| DC response / dropout voltage | 9 V / 1.2 V | 18 V / 2.4 V | 36 V / 4.8 V | 82.5 V / 11 V | 165 V / 22 V |
| Power consumption             | 1.5 W       | 1.5 W        | 1.5 W        | 1.5 W         | 1.5 W        |
| DC rated current              | 120 mA      | 60 mA        | 30 mA        | 13.03 mA      | 6.7 mA       |
| Coil resistance               | 100Ω ±10%   | 400Ω ±10%    | 1,600Ω ±10%  | 8,400Ω ±10%   | 33,000Ω ±10% |

## Ordering information

| 1 N.O. contact/<br>1 N.C. contact | Type<br>Order No. | DRH275012LT<br>1220040000                  | DRH275024LT<br>1220050000                  | DRH275048LT<br>1220060000                  | DRH275110LT<br>1220070000                  | DRH275220LT<br>1220080000                  |
|-----------------------------------|-------------------|--------------------------------------------|--------------------------------------------|--------------------------------------------|--------------------------------------------|--------------------------------------------|
| 2 N.O. contact                    | Type<br>Order No. | DRH276012LT<br>1220140000                  | DRH276024LT<br>1220150000                  | DRH276048LT<br>1220170000                  | DRH276110LT<br>1220180000                  | DRH276220LT<br>1220190000                  |
| With test lever locking clip      | Type<br>Order No. | Test lever block for DRH/DRW<br>7760056249 | Test lever block for DRH/DRW<br>7760056249 | Test lever block for DRH/DRW<br>7760056249 | Test lever block for DRH/DRW<br>7760056249 | Test lever block for DRH/DRW<br>7760056249 |

## Ordering information

### Input

|                               | 24 V AC       | 48 V AC         | 115 V AC      | 230 V AC     |
|-------------------------------|---------------|-----------------|---------------|--------------|
| Rated voltage                 | 24 V AC       | 48 V AC         | 115 V AC      | 230 V AC     |
| DC response / dropout voltage | 19.2V / 7.2 V | 38.4 V / 14.4 V | 92 V / 34.5 V | 184 V / 69 V |
| Power consumption             | 2.5 VA        | 2.5 VA          | 2.5 VA        | 2.5 VA       |
| DC rated current              | 101.7 mA      | 51.04 mA        | 21.2 mA       | 10.61 mA     |
| Coil resistance               | 100Ω ±10%     | 350Ω ±10%       | 2,200Ω ±10%   | 8,000Ω ±10%  |

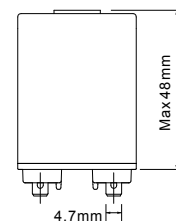
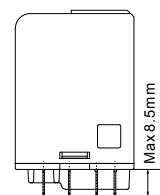
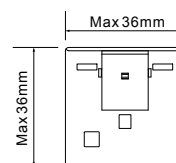
## Ordering information

| 1 N.O. contact/<br>1 N.C. contact | Type<br>Order No. | DRH275524LT<br>1220090000                  | DRH275548LT<br>1220110000                  | DRH275615LT<br>1220120000                  | DRH275730LT<br>1220130000                  |
|-----------------------------------|-------------------|--------------------------------------------|--------------------------------------------|--------------------------------------------|--------------------------------------------|
| 2 N.O. contact                    | Type<br>Order No. | DRH276524LT<br>1220200000                  | DRH276548LT<br>1220210000                  | DRH276615LT<br>1220220000                  | DRH276730LT<br>1220230000                  |
| With test lever locking clip      | Type<br>Order No. | Test lever block for DRH/DRW<br>7760056249 | Test lever block for DRH/DRW<br>7760056249 | Test lever block for DRH/DRW<br>7760056249 | Test lever block for DRH/DRW<br>7760056249 |

# DRW Power Relay

DRW power relay  
2CO / 3CO contacts  
AC / DC coil

- Suitable to switch high voltage load
- With LED and test lever
- Approval with  $\text{CE}$   $\text{cULUS}$  TÜV

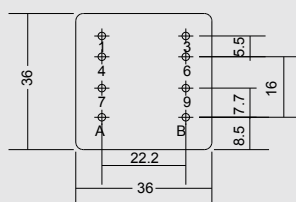


## Circuit diagram

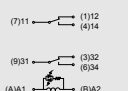
PIN top view

Dimensions are in mm

### 2CO



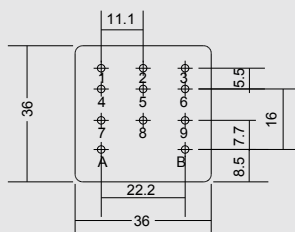
#### DC



#### AC



### 3CO



#### DC



#### AC



## Output

|                                        |                               |
|----------------------------------------|-------------------------------|
| Max. switching voltage                 | 400 V AC                      |
| Continuous current                     | 16 A@ 400 VAC; 16 A@ 30 VDC   |
| Contact material                       | AgCdO                         |
| Min. load voltage / current            | 12 VDC / 100 mA               |
| Contact resistance (initial)           | < 50 mΩ                       |
| Electrical endurance                   | > 10 × 10 <sup>4</sup> cycles |
| Response / dropout delay               | < 20 ms / < 10 ms             |
| Max. switching frequency at rated load | 1 Hz                          |

## Input

|                         |                                                          |
|-------------------------|----------------------------------------------------------|
| Response voltage @ 25°C | AC: ≤ 80% of rated voltage<br>DC: ≤ 75% of rated voltage |
| Dropout voltage @ 25°C  | AC: ≥ 30% of rated voltage<br>DC: ≥ 10% of rated voltage |
| Max. voltage @ 25°C     | 110% of rated voltage                                    |
| Coil power consumption  | 2.5 VA / 1.5 W                                           |

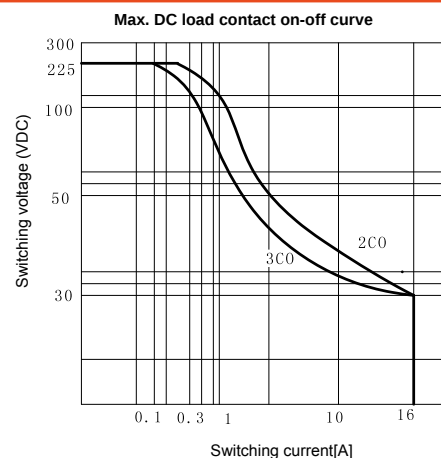
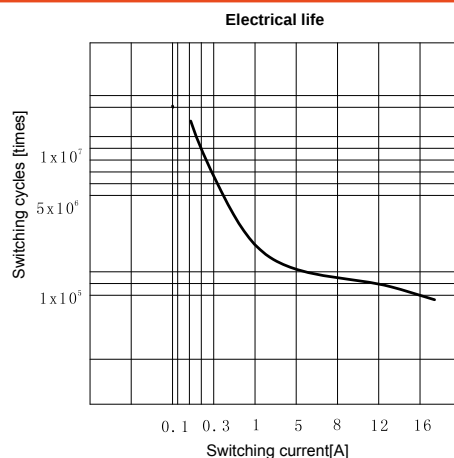
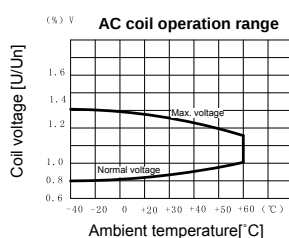
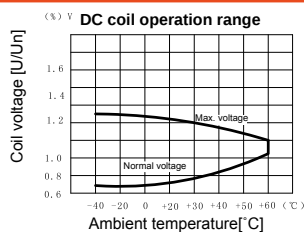
## General

|                               |                                                                                                                             |
|-------------------------------|-----------------------------------------------------------------------------------------------------------------------------|
| Operation temperature         | 2CO: -40 ... 60°C; 3CO: -40 ... 50°C;                                                                                       |
| Storage temperature           | -40 ... 60°C                                                                                                                |
| Humidity                      | 35 ... 85 %                                                                                                                 |
| Electrical strength           | Coil-contact: 4,000V AC / 1 min<br>Between N.O. contacts: 2,500V AC / 1 min<br>Between adjacent contacts: 4,000V AC / 1 min |
| Clearance / creepage distance | 3.5 mm / 6 mm                                                                                                               |
| Insulation IEC60664           |                                                                                                                             |
| Rated voltage                 | 400 V                                                                                                                       |
| Pollution category            | 3                                                                                                                           |
| Over voltage category         | III                                                                                                                         |

|                      |                                     |
|----------------------|-------------------------------------|
| Vibration resistance | 10-55Hz dual amplitude: 1.0mm       |
| Shock resistance     | 10G (half wave of sine pulse: 11ms) |
| Approval             | CE; TÜV; UL                         |
| Weight               | 51 g                                |

## Dimension

|                         |                 |
|-------------------------|-----------------|
| Length x Width x Height | 36 x 36 x 48 mm |
|-------------------------|-----------------|



# DRW Power Relay

DRW power relay  
2CO / 3CO contacts  
AC / DC coil

Type code **DRW**

Type DRW

Type of construction

270 2CO

174 1NC

Coil voltage

012 12Vdc / 024 24Vdc

048 48Vdc / 110 110Vdc

220 220Vdc / 524 24Vac

548 48Vac / 615 115Vac

730 230Vac / 900 400Vac

With LED or test lever

LT

Relay

## Ordering information

| Input                         | 12 V DC     | 24 V DC     | 48 V DC      | 110 V DC      | 220 V DC     |
|-------------------------------|-------------|-------------|--------------|---------------|--------------|
| Rated voltage                 | 12 V DC     | 24 V DC     | 48 V DC      | 110 V DC      | 220 V DC     |
| DC response / dropout voltage | 9 V / 1.2 V | 8 V / 2.4 V | 36 V / 4.8 V | 82.5 V / 11 V | 115 V / 22 V |
| Power consumption             | 1.5 W       | 1.5 W       | 1.5 W        | 1.5 W         | 1.5 W        |
| DC rated current              | 120 mA      | 60 mA       | 30 mA        | 13.03 mA      | 6.7 mA       |
| Coil resistance               | 100Ω ±10%   | 400Ω ±10%   | 1,600Ω ±10%  | 8,400Ω ±10%   | 33,000Ω ±10% |

## Ordering information

|                              |           |                              |                              |                              |                              |                              |
|------------------------------|-----------|------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|
| 2CO contact                  | Type      | DRW270012LT                  | DRW270024LT                  | DRW270048LT                  | DRW270110LT                  | DRW270220LT                  |
|                              | Order No. | <b>1219730000</b>            | <b>1219740000</b>            | <b>1219750000</b>            | <b>1219760000</b>            | <b>1219770000</b>            |
| 3CO contact                  | Type      | DRW370012LT                  | DRW370024LT                  | DRW370048LT                  | DRW370110LT                  | DRW370220LT                  |
|                              | Order No. | <b>1219780000</b>            | <b>1219790000</b>            | <b>1219810000</b>            | <b>1219820000</b>            | <b>1219830000</b>            |
| With test lever locking clip | Type      | Test lever block for DRH/DRW | Test lever block for DRH/DRW | Test lever block for DRH/DRW | Test lever block for DRH/DRW | Test lever block for DRH/DRW |
|                              | Order No. | <b>7760056249</b>            | <b>7760056249</b>            | <b>7760056249</b>            | <b>7760056249</b>            | <b>7760056249</b>            |

## Ordering information

| Input                         | 24V AC        | 48V AC          | 115V AC       | 230V AC      | 400V AC       |
|-------------------------------|---------------|-----------------|---------------|--------------|---------------|
| Rated voltage                 | 24 V AC       | 48 V AC         | 115 V AC      | 230 V AC     | 400 V AC      |
| AC response / dropout voltage | 19.2V / 7.2 V | 38.4 V / 14.4 V | 92 V / 34.5 V | 184 V / 69 V | 320 V / 120 V |
| Power consumption             | 2.5 VA        | 2.5 VA          | 2.5 VA        | 2.5 VA       | 2.5 VA        |
| AC rated current              | 101.7 mA      | 51.04 mA        | 21.2 mA       | 10.61 mA     | 6.1 mA        |
| Coil resistance               | 100Ω ±10%     | 350Ω ±10%       | 2,200Ω ±10%   | 8,000Ω ±10%  | 30,000Ω ±10%  |

## Ordering information

|                              |           |                              |                              |                              |                              |                              |
|------------------------------|-----------|------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|
| 2CO contact                  | Type      | DRW270524LT                  | DRW270548LT                  | DRW270615LT                  | DRW2701730LT                 | DRW270900LT                  |
|                              | Order No. | <b>1219350000</b>            | <b>1219360000</b>            | <b>1219370000</b>            | <b>1219380000</b>            | <b>1219390000</b>            |
| 3CO contact                  | Type      | DRW370524LT                  | DRW370548LT                  | DRW370615LT                  | DRW370730LT                  | DRW370900LT                  |
|                              | Order No. | <b>1219410000</b>            | <b>1219420000</b>            | <b>1219430000</b>            | <b>1219440000</b>            | <b>1219450000</b>            |
| With test lever locking clip | Type      | Test lever block for DRH/DRW | Test lever block for DRH/DRW | Test lever block for DRH/DRW | Test lever block for DRH/DRW | Test lever block for DRH/DRW |
|                              | Order No. | <b>7760056249</b>            | <b>7760056249</b>            | <b>7760056249</b>            | <b>7760056249</b>            | <b>7760056249</b>            |

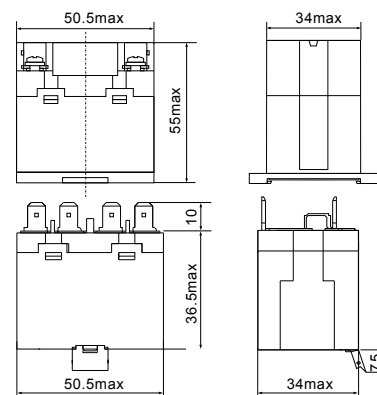
# PWR High Power Relay

PWR high power relay

1 N.O. contact

AC / DC coil

- Max. load current: 30 A
- Various mounting methods available
- Approval with  $\text{CE}$  TÜV

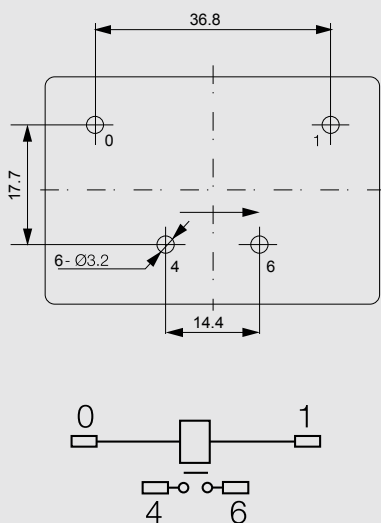


## Circuit diagram

PIN top view

Dimensions are in mm

1NO



## Output

|                              |                               |
|------------------------------|-------------------------------|
| Max. switching voltage       | 277 V AC                      |
| Continuous current           | 30 A                          |
| Contact material             | Ag alloy                      |
| Min. load voltage / current  | 12 VDC / 100 mA               |
| Contact resistance (initial) | < 50 mΩ                       |
| Electrical endurance         | > 10 × 10 <sup>4</sup> cycles |
| Response / dropout delay     | < 20 ms / < 10 ms             |

## Input

|                         |                                                          |
|-------------------------|----------------------------------------------------------|
| Response voltage @ 25°C | AC: ≤ 75% of rated voltage<br>DC: ≤ 75% of rated voltage |
| Dropout voltage @ 25°C  | AC: ≥ 15% of rated voltage<br>DC: ≥ 15% of rated voltage |
| Max. voltage @ 25°C     | 110% of rated voltage                                    |
| Coil power consumption  | 2.5 VA / 1.9 W                                           |

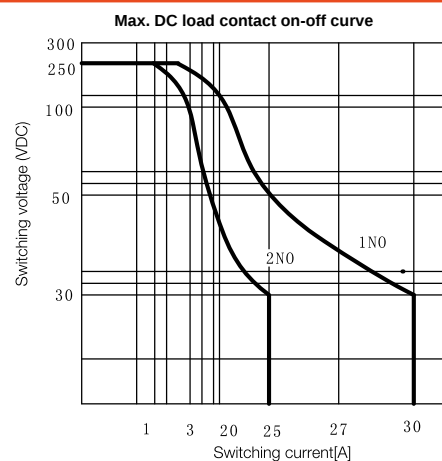
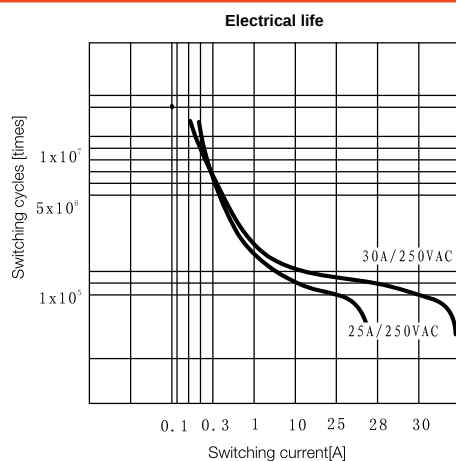
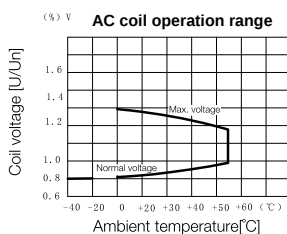
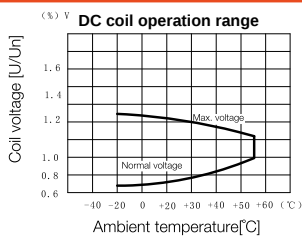
## General

|                               |                                                                    |
|-------------------------------|--------------------------------------------------------------------|
| Operation temperature         | - 25 ... 55°C                                                      |
| Storage temperature           | - 25 ... 55°C                                                      |
| Humidity                      | 35 ... 85 %                                                        |
| Electrical strength           | Coil-contact<br>Between N.O. contacts<br>Between adjacent contacts |
| Clearance / creepage distance | 3.5 mm / 6 mm                                                      |
| Insulation IEC60664           |                                                                    |
| Rated voltage                 | 250 V                                                              |
| Pollution category            | 3                                                                  |
| Over voltage category         | III                                                                |

|                      |                                                              |
|----------------------|--------------------------------------------------------------|
| Vibration resistance | 10-55Hz dual amplitude: 1.0mm                                |
| Shock resistance     | 10G (half wave of sine pulse: 11ms)                          |
| Approval             | CE; TÜV                                                      |
| Weight               | Push-in connection/PCB welding: 90g; DIN-rail mounting: 120g |

## Dimension

|                         |                     |
|-------------------------|---------------------|
| Length x Width x Height | 34 x 50.5 x 36.5 mm |
|-------------------------|---------------------|



# PWR High Power Relay

PWR high power relay  
1 N.O. contact  
AC / DC coil

Type code

PWR

Type PWR

Type of construction and mounting

153 1N.O. contact, push-in connection

173 1N.O. contact, DIN-rail mounting

Coil voltage

006 6Vdc / 012 12Vdc

024 24Vdc / 048 48Vdc

110 110Vdc / 220 220Vdc

524 24Vac / 548 48Vac

615 115Vac / 730 230Vac

880 380Vac

L with LED

T with test lever

P PCB welding

Relay

## Ordering information

| Input                         | 6 V DC 1NO    | 12 V DC 1NO | 24 V DC 1NO  | 48 V DC 1NO  | 110 V DC 1NO    | 220 V DC 1NO |
|-------------------------------|---------------|-------------|--------------|--------------|-----------------|--------------|
| Rated voltage                 | 6 V DC        | 12 V DC     | 24 V DC      | 48 V DC      | 110 V DC        | 220 V DC     |
| DC response / dropout voltage | 4.5 V / 0.9 V | 9 V / 1.8 V | 18 V / 3.6 V | 36 V / 7.2 V | 82.5 V / 16.5 V | 165 V / 33 V |
| Power consumption             | 1.9 W         | 1.9 W       | 1.9 W        | 1.9 W        | 1.9 W           | 1.9 W        |
| DC rated current              | 317 mA        | 160 mA      | 79.2 mA      | 39.3 mA      | 17.3 mA         | 8.6 mA       |
| Coil resistance               | 18.9Ω ±10%    | 75Ω ±10%    | 303Ω ±10%    | 1,220Ω ±10%  | 6,360Ω ±10%     | 25,474Ω ±10% |

## Ordering information

|                                      |           |             |             |             |             |             |             |
|--------------------------------------|-----------|-------------|-------------|-------------|-------------|-------------|-------------|
| plug-in , need socket                | Type      | PWR153006LT | PWR153012LT | PWR153024LT | PWR153048LT | PWR153110LT | PWR153220LT |
|                                      | Order No. | 1219590000  | 1219610000  | 1219620000  | 1219630000  | 1219640000  | 1219650000  |
| Din rail installation,no need socket | Type      | PWR173006L  | PWR173012L  | PWR173024L  | PWR173048L  | PWR173110L  | PWR173220L  |
|                                      | Order No. | 1219460000  | 1219470000  | 1219480000  | 1219490000  | 1219510000  | 1219520000  |
| PCB soldering                        | Type      | PWR153006P  | PWR153012P  | PWR153024P  | PWR153048P  | PWR153110P  | PWR153220P  |
|                                      | Order No. | 1233010000  | 1233020000  | 1233030000  | 1233040000  | 1233050000  | 1233060000  |

## Ordering information

| Input                         | 24 V AC 1NO | 48 V AC 1NO  | 115 V AC 1NO    | 230 V AC 1NO     | 380 V AC 1NO |  |
|-------------------------------|-------------|--------------|-----------------|------------------|--------------|--|
| Rated voltage                 | 24 V AC     | 48 V AC      | 115 V AC        | 230 V AC         | 115 V AC     |  |
| AC response / dropout voltage | 18V / 3.6 V | 36 V / 7.2 V | 86.3 V / 17.3 V | 172.5 V / 34.5 V | 285 V / 57 V |  |
| Power consumption             | 2.5 VA      | 2.5 VA       | 2.5 VA          | 2.5 VA           | 2.5 VA       |  |
| AC rated current              | 87.3 mA     | 43.6 mA      | 22.1 mA         | 11.0 mA          | 6.1 mA       |  |
| Coil resistance               | 275Ω ±10%   | 1,100Ω ±10%  | 5,200Ω ±10%     | 21,000Ω ±10%     | 62,650Ω ±10% |  |

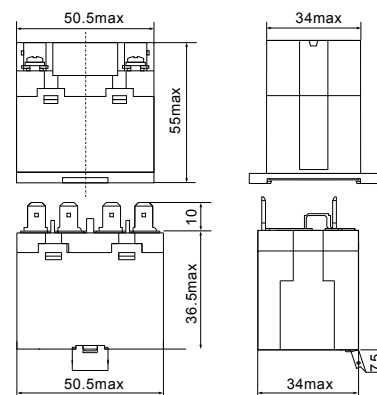
## Ordering information

|                                  |           |             |             |             |             |             |  |
|----------------------------------|-----------|-------------|-------------|-------------|-------------|-------------|--|
| Din-rail mounting without socket | Type      | PWR153524LT | PWR153548LT | PWR153615LT | PWR153730LT | PWR153880LT |  |
|                                  | Order No. | 1219230000  | 1219240000  | 1219250000  | 1219260000  | 1219270000  |  |
| Push-in connection with socket   | Type      | PWR173524L  | PWR173548L  | PWR173615L  | PWR173730L  | PWR173880L  |  |
|                                  | Order No. | 1219090000  | 1219120000  | 1219130000  | 1219140000  | 1219150000  |  |
| PCB welding                      | Type      | PWR153524P  | PWR153548P  | PWR153615P  | PWR153730P  | PWR153880P  |  |
|                                  | Order No. | 1232860000  | 1232870000  | 1232880000  | 1232890000  | 1232900000  |  |

# PWR High Power Relay

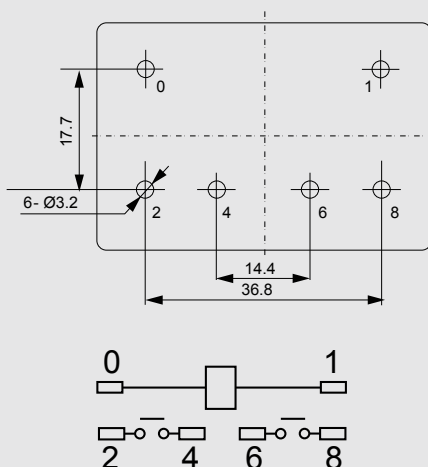
PWR high power relay  
2 N.O. contact  
AC / DC coil

- Max. load current: 25 A
- Various mounting methods available
- Approval with CE TÜV



Circuit diagram  
PIN top view  
Dimensions are in mm

2NO



## Output

|                              |                               |
|------------------------------|-------------------------------|
| Max. switching voltage       | 277 V AC                      |
| Continuous current           | 25 A                          |
| Contact material             | Ag alloy                      |
| Min. load voltage / current  | 12 VDC / 100 mA               |
| Contact resistance (initial) | < 50 mΩ                       |
| Electrical endurance         | > 10 × 10 <sup>4</sup> cycles |
| Response / dropout delay     | < 30 ms / < 30 ms             |

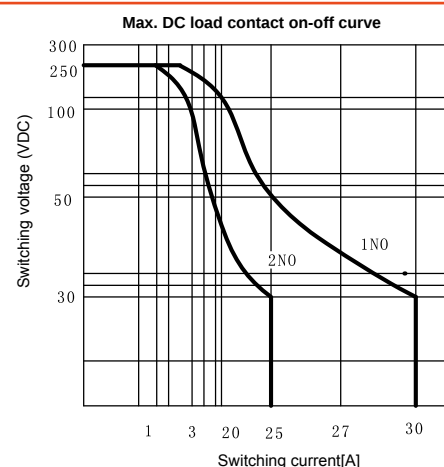
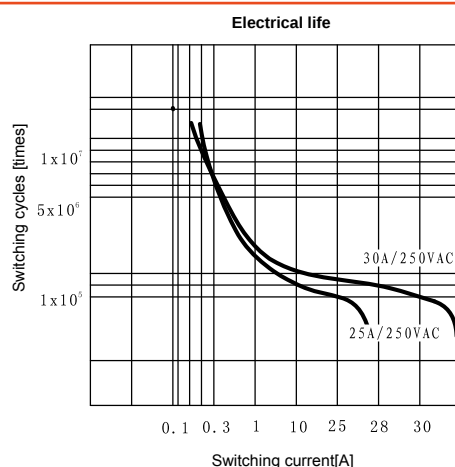
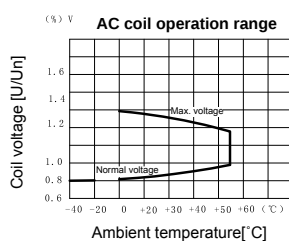
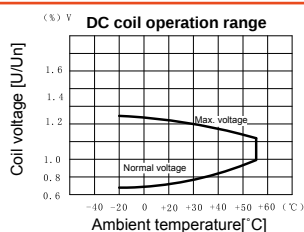
## Input

|                         |                                                          |
|-------------------------|----------------------------------------------------------|
| Response voltage @ 25°C | AC: ≤ 75% of rated voltage<br>DC: ≤ 75% of rated voltage |
| Dropout voltage @ 25°C  | AC: ≥ 15% of rated voltage<br>DC: ≥ 15% of rated voltage |

|                        |                       |
|------------------------|-----------------------|
| Max. voltage @ 25°C    | 110% of rated voltage |
| Coil power consumption | 2.5 VA / 1.9 W        |

## General

|                               |                                                                    |
|-------------------------------|--------------------------------------------------------------------|
| Operation temperature         | - 25 ... 55°C                                                      |
| Storage temperature           | - 25 ... 55°C                                                      |
| Humidity                      | 35 ... 85 %                                                        |
| Electrical strength           | Coil-contact<br>Between N.O. contacts<br>Between adjacent contacts |
| Clearance / creepage distance | 1.5 mm / 4 mm                                                      |
| Insulation IEC60664           |                                                                    |
| Rated voltage                 | 250 V                                                              |
| Pollution category            | 3                                                                  |
| Over voltage category         | III                                                                |
| Vibration resistance          | 10-55Hz dual amplitude: 1.0mm                                      |
| Shock resistance              | 10G (half wave of sine pulse: 11ms)                                |
| Approval                      | CE; TÜV                                                            |
| Weight                        | Push-in connection/PCB welding: 90g; DIN-rail mounting: 120g       |
| Dimension                     |                                                                    |
| Length x Width x Height       | 34 x 50.5 x 36.5 mm                                                |



# PWR High Power Relay

PWR high power relay  
2 N.O. contact  
AC / DC coil

|                                   |                                                                                                                                            |  |  |  |  |
|-----------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|--|
| Type code                         | PWR                                                                                                                                        |  |  |  |  |
| Type PWR                          |                                                                                                                                            |  |  |  |  |
| Type of construction and mounting | 256 2N.O. contact, push-in connection<br>276 2N.O. contact, DIN-rail mounting                                                              |  |  |  |  |
| Coil voltage                      | 006 6Vdc / 012 12Vdc<br>024 24Vdc / 048 48Vdc<br>110 110Vdc / 220 220Vdc<br>524 24Vac / 548 48Vac<br>615 115Vac / 730 230Vac<br>880 380Vac |  |  |  |  |
| L                                 | with LED                                                                                                                                   |  |  |  |  |
| T                                 | with test lever                                                                                                                            |  |  |  |  |
| P                                 | PCB welding                                                                                                                                |  |  |  |  |

| Ordering information          | 6 V DC 2NO    | 12 V DC 2NO | 24 V DC 2NO  | 48 V DC 2NO  | 110 V DC 2NO    | 220 V DC 2NO |
|-------------------------------|---------------|-------------|--------------|--------------|-----------------|--------------|
| Input                         |               |             |              |              |                 |              |
| Rated voltage                 | 6 V DC        | 12 V DC     | 24 V DC      | 48 V DC      | 110 V DC        | 220 V DC     |
| DC response / dropout voltage | 4.5 V / 0.9 V | 9 V / 1.8 V | 18 V / 3.6 V | 36 V / 7.2 V | 82.5 V / 16.5 V | 165 V / 33 V |
| Power consumption             | 1.9 W         | 1.9 W       | 1.9 W        | 1.9 W        | 1.9 W           | 1.9 W        |
| DC rated current              | 317 mA        | 160 mA      | 79.2 mA      | 39.3 mA      | 17.3 mA         | 8.6 mA       |
| Coil resistance               | 18.9Ω ±10%    | 75Ω ±10%    | 303Ω ±10%    | 1,220Ω ±10%  | 6,360Ω ±10%     | 25,474Ω ±10% |

| Ordering information                 |           |             |             |             |             |             |             |
|--------------------------------------|-----------|-------------|-------------|-------------|-------------|-------------|-------------|
| plug-in , need socket                | Type      | PWR256006LT | PWR256012LT | PWR256024LT | PWR256048LT | PWR256110LT | PWR256220LT |
|                                      | Order No. | 1219660000  | 1219670000  | 1219680000  | 1219690000  | 1219710000  | 1219720000  |
| Din rail installation,no need socket | Type      | PWR276006L  | PWR276012L  | PWR276024L  | PWR276048L  | PWR276110L  | PWR276220L  |
|                                      | Order No. | 1219530000  | 1219540000  | 1219550000  | 1219560000  | 1219570000  | 1219580000  |
| PCB soldering                        | Type      | PWR256006P  | PWR256012P  | PWR256024P  | PWR256048P  | PWR256110P  | PWR256220P  |
|                                      | Order No. | 1233070000  | 1233080000  | 1233090000  | 1233110000  | 1233120000  | 1233130000  |

| Ordering information          | 24 V AC 2NO | 48 V AC 2NO  | 115 V AC 2NO    | 230 V AC 2NO     | 380 V AC 2NO |  |
|-------------------------------|-------------|--------------|-----------------|------------------|--------------|--|
| Input                         |             |              |                 |                  |              |  |
| Rated voltage                 | 24 V AC     | 48 V AC      | 115 V AC        | 230 V AC         | 115 V AC     |  |
| AC response / dropout voltage | 18V / 3.6 V | 36 V / 7.2 V | 86.3 V / 17.3 V | 172.5 V / 34.5 V | 285 V / 57 V |  |
| Power consumption             | 2.5 VA      | 2.5 VA       | 2.5 VA          | 2.5 VA           | 2.5 VA       |  |
| AC rated current              | 87.3 mA     | 43.6 mA      | 22.1 mA         | 11.0 mA          | 6.1 mA       |  |
| Coil resistance               | 275Ω ±10%   | 1,100Ω ±10%  | 5,200Ω ±10%     | 21,000Ω ±10%     | 62,650Ω ±10% |  |

| Ordering information                 |           |             |             |             |             |             |  |
|--------------------------------------|-----------|-------------|-------------|-------------|-------------|-------------|--|
| plug-in , need socket                | Type      | PWR256524LT | PWR256548LT | PWR256615LT | PWR256730LT | PWR256880LT |  |
|                                      | Order No. | 1219280000  | 1219290000  | 1219320000  | 1219330000  | 1219340000  |  |
| Din rail installation,no need socket | Type      | PWR276524L  | PWR276548L  | PWR276615L  | PWR276730L  | PWR276880L  |  |
|                                      | Order No. | 1219160000  | 1219170000  | 1219180000  | 1219190000  | 1219220000  |  |
| PCB soldering                        | Type      | PWR256524P  | PWR256548P  | PWR256615P  | PWR256730P  | PWR256880P  |  |
|                                      | Order No. | 1232910000  | 1232920000  | 1232930000  | 1232940000  | 1232990000  |  |

# Relay Socket

Separated socket (for RCL relay)



## Ordering information

| Technical data                     |         |                                                   |
|------------------------------------|---------|---------------------------------------------------|
| Rated current                      | 1CO/2CO | 1 x 12A / 2 x 12A                                 |
| Rated voltage                      |         | 300 Vac                                           |
| Coil/contact electrical strength   |         | >4000 V <sub>rms</sub>                            |
| Insulation (VDE 0110b)             |         | C / 250 Vac                                       |
| Ambient temperature                |         | -40...+70°C                                       |
| Protection level                   |         | IP 20                                             |
| Electric shock prevention category |         | VBG 4                                             |
| Wire cross section / with terminal |         | 2 x 2.5 mm <sup>2</sup> / 2 x 1.5 mm <sup>2</sup> |
| Wiring torque / max.               |         | 0.5Nm / 0.8Nm                                     |
| Packing unit                       |         | 10 pcs.                                           |

## Sockets connected by screws, DIN-rail mounting

| Description                                          | Type         | Order No.  |
|------------------------------------------------------|--------------|------------|
| 3.5mm pitch, DIN-rail mounting                       | SRC ECO 1CO* | 7760056005 |
| 5mm pitch screw connected sockets, DIN-rail mounting | SRC ECO 2CO* | 7760056006 |
| Accessories                                          |              |            |
| Mark, for SRC ECO relay sockets                      | Mark SRC ECO | 7760056178 |

\* SRC ECO sockets already have plastic release clip and mark

Separated socket (for RCM and DRM relays)



## Ordering information

| Technical data                     |  |                                                   |
|------------------------------------|--|---------------------------------------------------|
| Rated current                      |  | 4 x 6 A, 3 x 10 A, 2 x 12 A                       |
| Rated voltage                      |  | 300 Vac                                           |
| Coil/contact electrical strength   |  | >4000 V <sub>rms</sub>                            |
| Insulation (VDE 0110b)             |  | C / 250 Vac                                       |
| Ambient temperature                |  | -40...+70°C                                       |
| Protection level                   |  | IP 20                                             |
| Electric shock prevention category |  | VBG 4                                             |
| Wire cross section / with terminal |  | 2 x 2.5 mm <sup>2</sup> / 2 x 1.5 mm <sup>2</sup> |
| Wiring torque / max.               |  | 0.5 Nm / 0.8 Nm                                   |
| Packing unit                       |  | 10 pcs.                                           |

## Sockets connected by screws, DIN-rail mounting

| Description                                         | Type         | Order No.  |
|-----------------------------------------------------|--------------|------------|
| Sockets connected by screws, DIN-rail mounting, 2CO | SCM 2CO      | 8690880000 |
|                                                     | SCM ECO 2CO* | 7760056007 |
| Sockets connected by screws, DIN-rail mounting, 3CO | SCM 3CO      | 8690890000 |
| Sockets connected by screws, DIN-rail mounting, 4CO | SCM 4CO      | 8690900000 |
|                                                     | SCM ECO 4CO* | 7760056008 |

\* SRC ECO sockets already have plastic release clip and mark

## Relay clips (plastic and metal)

### Ordering information

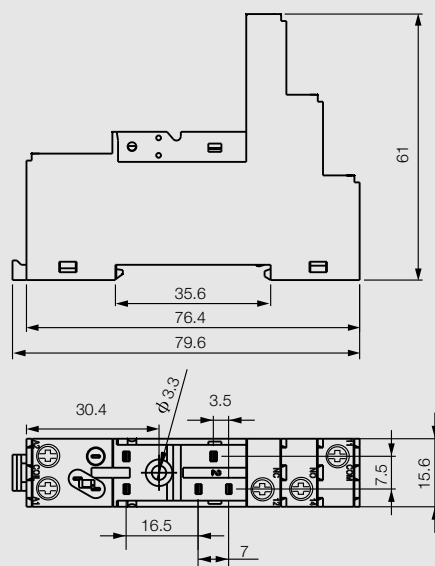
For SCM 2CO, SCM 3CO and SCM 4CO

| Description                     | Type         | Order No.  |
|---------------------------------|--------------|------------|
| Plastic clip for RCM of 29 mm   | SCM CLIP P   | 8691110000 |
| Metal clip for RCM of 29 mm     | SCM CLIP M   | 7760056039 |
| Accessories                     |              |            |
| Mark, for SRC ECO relay sockets | Mark SCM ECO | 7760056179 |

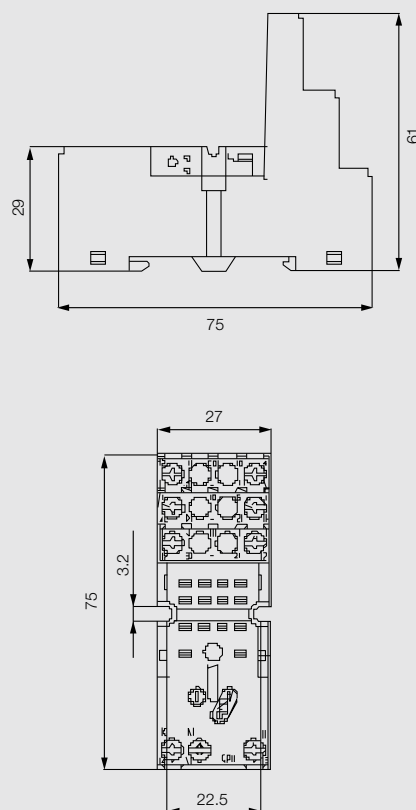
### Circuit diagram

PIN top view

Dimensions are in mm



Dimensions are in mm

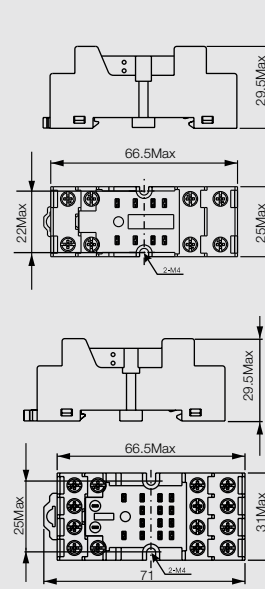


# Relay Socket

Hybrid socket (for RCM and DRM relay)



Dimensions are in mm



## Ordering information

| Technical data                                  |         |
|-------------------------------------------------|---------|
| Rated current                                   | 2CO/4CO |
| Rated voltage                                   |         |
| Dielectric withstand voltage / coil-contacts    |         |
| Dielectric withstand voltage / between contacts |         |
| Wiring torque / max.                            |         |
| Wire                                            |         |
| Environments                                    |         |
| Weight                                          | 2CO/4CO |
| Min. in package                                 |         |

| Description               |     |
|---------------------------|-----|
| DIN-Rail mounting sockets | 2CO |
| DIN-Rail mounting sockets | 4CO |

| Accessories                     |  |
|---------------------------------|--|
| Mark, for SRC ECO relay sockets |  |

|                         |
|-------------------------|
| 12A/10A                 |
| 300Vac                  |
| 2500Vrms                |
| 2500Vrms                |
| 0.5Nm/0.8Nm             |
| 0.5-2.5 mm <sup>2</sup> |
| -40°C...+70°C           |
| 35g/43g                 |
| 20pcs                   |

| Type    | Qty. | Order No.  |
|---------|------|------------|
| FS 2CO* | 10   | 7760056106 |
| FS 4CO  | 10   | 7760056107 |

Mark FS 7760056180

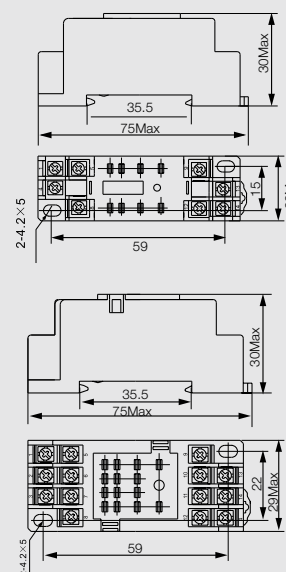
\* Functional module is not suitable for this type of sockets.

Note: FS sockets already have marks.

Economic socket (for RCM and DRM relay)



Dimensions are in mm



## Ordering information

| Technical data                                  |         |
|-------------------------------------------------|---------|
| Rated current                                   | 2CO/4CO |
| Rated voltage                                   |         |
| Dielectric withstand voltage / coil-contacts    |         |
| Dielectric withstand voltage / between contacts |         |
| Wiring torque / max.                            |         |
| Wire                                            |         |
| Environments                                    |         |
| Weight                                          | 2CO/4CO |
| Min. in package                                 |         |

| Description                                      |     |
|--------------------------------------------------|-----|
| DIN-Rail mounting sockets                        | 2CO |
| DIN-Rail mounting sockets                        | 4CO |
| DIN-Rail mounting sockets with finger protection | 2CO |
| DIN-Rail mounting sockets with finger protection | 4CO |

Note: functional module is not suitable for this type of sockets

|                        |
|------------------------|
| 10A/5A                 |
| 300V                   |
| 2000V                  |
| 2000V                  |
| 0.5Nm/0.8Nm            |
| 0.5-2.5mm <sup>2</sup> |
| -40°C...+70°C          |
| 43g/56g                |
| 20pcs                  |

| Type         | Qty. | Order No.  |
|--------------|------|------------|
| FS 2CO ECO   | 10   | 7760056126 |
| FS 4CO ECO   | 10   | 7760056127 |
| FS 2CO F ECO | 10   | 1190740000 |
| FS 4CO F ECO | 10   | 1190750000 |

Metal clip (recommended for vibration occasion)

| Type                                                     | Order No.  |
|----------------------------------------------------------|------------|
| DRM clip M (for DRM relay)                               | 7760056108 |
| Metal clip set (for DRM relay, only with FS ECO sockets) | 7760056128 |

Functional modules

| Technical data                                 | Type                 | Order No.  |
|------------------------------------------------|----------------------|------------|
| Suppressor diode 6...230Vdc                    | RIM 1 6/230VDC       | 7760056169 |
| RC-combined protection 110...230 Vac           | RIM 3 110/230VAC     | 7760056014 |
| RC-combined protection 110...230Vac with LED * | RIM 3 110/230VAC LED | 7760056045 |
| Green LED 6...24 Vdc with suppressor diode     | RIM 2 6/24VDC        | 7760056015 |
| Green LED 24...60 Vdc with suppressor diode    | RIM 2 24/60VDC       | 7760056016 |
| Green LED 110...230 Vdc with suppressor diode  | RIM 2 110/230VDC     | 7760056017 |
| Green LED 6...24 Vdc / Vac                     | RIM 3 6/24VUC        | 7940018457 |
| Green LED 24...60 Vdc / Vac                    | RIM 3 24/60VUC       | 7760056018 |
| Green LED 110...230 Vdc / Vac                  | RIM 3 110/230VUC     | 7940018455 |

\* For SCM/SRC sockets only, not for FS sockets.



DRM clip M



Metal clip set



# Relay Socket

DRL relay socket SLD



## Ordering information

| Technical data                       |                                   |      |            |
|--------------------------------------|-----------------------------------|------|------------|
| Rated voltage                        | 300 V                             |      |            |
| Rated current                        | 10 A                              |      |            |
| Coil/contact electrical strength     | 2,000 V                           |      |            |
| Electrical strength between contacts | 2,500 V                           |      |            |
| Operation temperature                | -40 ... 85°C                      |      |            |
| Pollution class                      | 2                                 |      |            |
| Over voltage class                   | III                               |      |            |
| Wiring torque                        | 1.0 Nm                            |      |            |
| Wire cross section                   | 0.5 ... 2.5 mm²                   |      |            |
| Protection level (IEC 61810)         | IP10                              |      |            |
| Weight                               | 2CO: 50 g ; 3CO: 60 g ; 4CO: 76 g |      |            |
| Approvals                            | CE                                |      |            |
| Description                          | Type                              | Qty. | Order No.  |
| DIN-rail mounted socket, 2CO         | SLD 2CO                           | 10   | 1132830000 |
| DIN-rail mounted socket, 3CO         | SLD 3CO                           | 10   | 1132840000 |
| DIN-rail mounted socket, 4CO         | SLD 4CO                           | 10   | 1132850000 |
| Metal clips (pair)                   | SLD Clip M                        | 10   | 7760056242 |

DRL relay socket SLD



## Ordering information

| Technical data                       |                             |              |
|--------------------------------------|-----------------------------|--------------|
| Rated voltage                        | 300 V                       |              |
| Rated current                        | 10 A                        |              |
| Coil/contact electrical strength     | 2,000 V                     |              |
| Electrical strength between contacts | 2,500 V                     |              |
| Operation temperature                | -40 ... 85°C                |              |
| Pollution class                      | 2                           |              |
| Over voltage class                   | III                         |              |
| Wiring torque                        | 1.0 Nm                      |              |
| Wire cross section                   | 0.5 ... 2.5 mm <sup>2</sup> |              |
| Protection level (IEC 61810)         | IP20                        |              |
| Approvals                            | CE                          |              |
| Description                          | Type                        | Order No.    |
| DIN-rail mounted socket, 2CO         | SLD F 2CO                   | 107760056225 |
| DIN-rail mounted socket, 3CO         | SLD F 3CO                   | 107760056226 |
| DIN-rail mounted socket, 4CO         | SLD F 4CO                   | 107760056227 |

## Ordering information

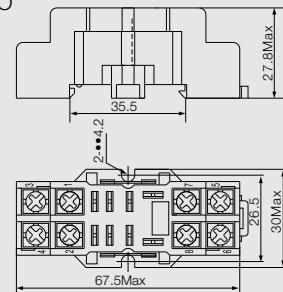
| Technical data        |              | Order No.  |
|-----------------------|--------------|------------|
| Metal clips SLD F 2CO | Metal clip   | 7760056108 |
| Metal clips SLD F 3CO | SLD clip 3CO | 7760056234 |
| Metal clips SLD F 4CO | SLD clip 4CO | 7760056235 |

## Ordering information

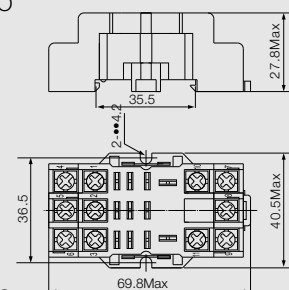
| Technical data                                    |                  | Order No.  |
|---------------------------------------------------|------------------|------------|
| Suppressing diode 6...230Vdc, for SLD F 2CO/3CO   | RIM 1 6/230Vdc   | 7760056169 |
| Blocking modular 110...230 Vac, for SLD F 2CO/3CO | RIM 3 110/230Vac | 7760056014 |
| Blocking modular 6 ... 230 Vac, for SLD F 4CO     | RIM 5 6/230Vac   | 1174670000 |
| Suppressing diode 6...230 Vdc, for SLD F 4CO      | RIM 5 6/230Vdc   | 1174650000 |

Dimensions are in mm

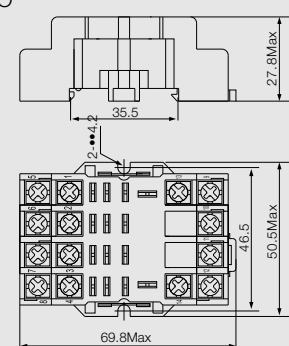
SLD 2CO



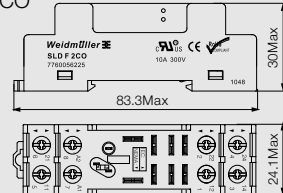
SLD 3CO



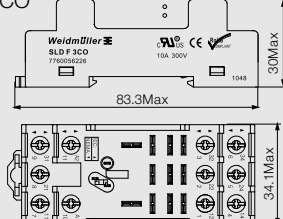
SLD 4CO



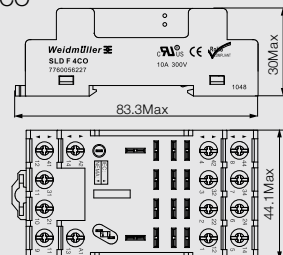
SLD F 2CO



SLD F 3CO



SLD F 4CO



# Relay Socket

DRR/RRD relay sockets



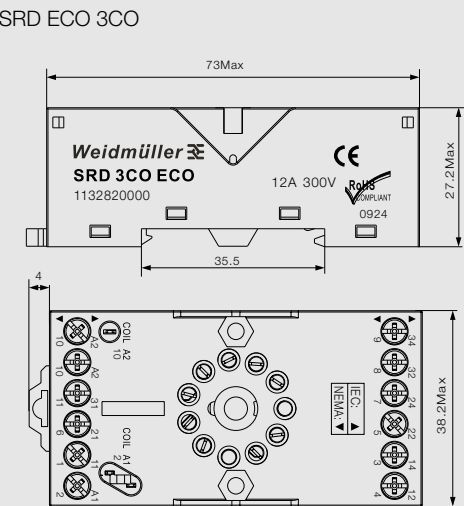
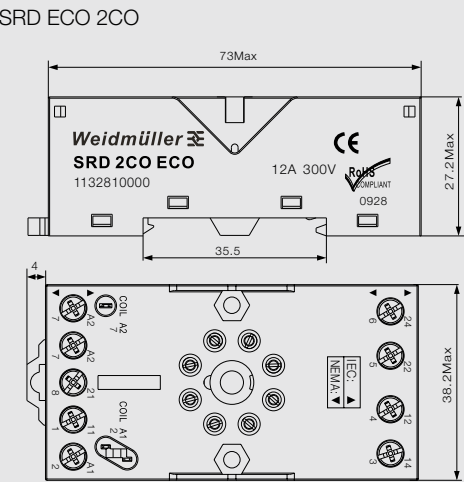
| Ordering information                 |                 |      |            |
|--------------------------------------|-----------------|------|------------|
| Technical data                       |                 |      |            |
| Rated voltage                        | 300 V           |      |            |
| Rated current                        | 12 A            |      |            |
| Coil/contact electrical strength     | 4,000 V         |      |            |
| Electrical strength between contacts | 2,500 V         |      |            |
| Operating temperature                | -40 ... 85°C    |      |            |
| Pollution class                      | 2               |      |            |
| Over voltage class                   | III             |      |            |
| Wiring torque                        | 1.0 Nm          |      |            |
| Wire cross section                   | 0.5 ... 2.5 mm² |      |            |
| Protection level (IEC 61810)         | IP20            |      |            |
| Weight                               | 50 g            |      |            |
| Approvals                            | CE              |      |            |
| Description                          | Type            | Qty. | Order No.  |
| DIN-rail mounting rockets, 8-pin     | SRD ECO 2CO     | 10   | 1132810000 |
| DIN-rail mounting rockets, 11-pin    | SRD ECO 3CO     | 10   | 1132820000 |
|                                      |                 |      |            |
|                                      |                 |      |            |

| Description                      |                       | Order No.  |
|----------------------------------|-----------------------|------------|
| Metal clip for DRR relay sockets | DRR SOCKET METAL CLIP | 1134160000 |
| Metal clip for RRD relay sockets | SRD-I CLIP M          | 8869370000 |



| Functional modules                   |                     |                      |
|--------------------------------------|---------------------|----------------------|
| Technical data                       |                     |                      |
| RC combined protection 6 ... 230 Vac | Type RIM 5 6/230Vac | Order No. 1174670000 |
| Protective diode 6 ... 230 Vdc       | RIM 5 6/230Vdc      | 1174650000           |
|                                      |                     |                      |
|                                      |                     |                      |

Dimensions are in mm



# Relay Socket

PWR relay socket



## Product performance

| Technical data           |                      |
|--------------------------|----------------------|
| Rated current            | 30 A                 |
| Rated voltage            | 400 V AC             |
| Medium withstand voltage | 2500 V/S             |
| Screw torque             | 1.0Nm                |
| External wire            | 20-10/0.5-5.5AWG/mm² |
| Environments             | -40~+85°C            |
| Weight                   | 56g                  |

## Assembled relays and accessories

| Technical data   |            |            |
|------------------|------------|------------|
| Product type     | Relay type | Order No.  |
| PWR relay socket | SWR        | 1220240000 |

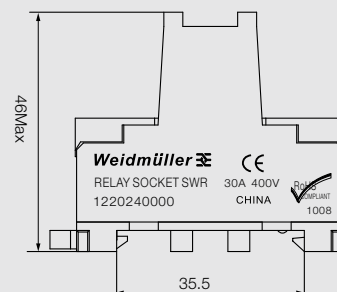
DRH and DRW relay socket



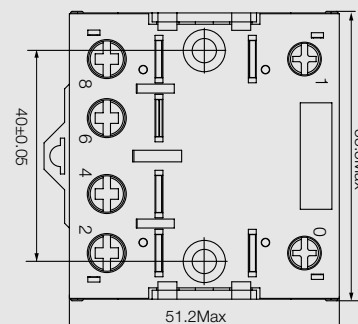
## Ordering information

| Technical data                       |                    |      |            |
|--------------------------------------|--------------------|------|------------|
| Rated voltage                        | 400 V AC           |      |            |
| Rated current                        | 16 A               |      |            |
| Coil/contact electrical strength     | 4,000 V            |      |            |
| Electrical strength between contacts | 4,000 V            |      |            |
| Operation temperature                | -40 ... 60°C       |      |            |
| Pollution class                      | 2                  |      |            |
| Over voltage class                   | II                 |      |            |
| Wiring torque/max.                   | 1.2 Nm             |      |            |
| Wire cross section                   | 0.5 ... 4 mm²      |      |            |
| Protection level (IEC 61810)         | IP20               |      |            |
| Weight                               | 64g                |      |            |
| Approvals                            | CE, UL             |      |            |
| Description                          | Type               | Qty. | Order No.  |
| Relay socket, for DRH and DRW relays | SPW ECO 3CO        | 10   | 1220250000 |
| Metal clip                           | Metal clip DRH/DRW | 10   | 1220260000 |

## Shape

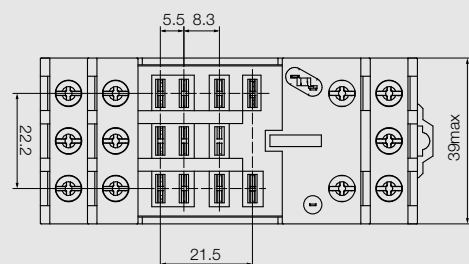
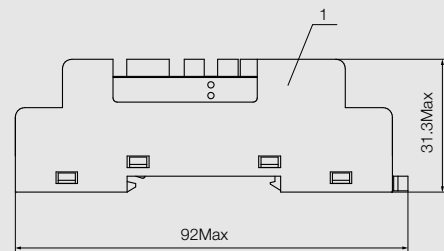


## Mounting



## Dimensions are in mm

SPW ECO 3CO



## Relay



|                    |             |                  |
|--------------------|-------------|------------------|
| 12 A               |             |                  |
| 2 x 12 A           |             |                  |
| 300 V AC           |             |                  |
| - 40 °C ... +80 °C |             |                  |
| <b>AL</b>          |             |                  |
| <b>Type</b>        | <b>Qty.</b> | <b>Order No.</b> |
| SRC 05 PCB         | 20          | 7760056110       |
| SRC 08 PCB         | 20          | 7760056111       |



| 10 A                                                                              |      |            |
|-----------------------------------------------------------------------------------|------|------------|
| 250 V AC                                                                          |      |            |
| - 40 °C ... +80 °C                                                                |      |            |
|  |      |            |
| Type                                                                              | Qty. | Order No.  |
| SCM 08 PCB                                                                        | 10   | 7760056112 |
| SCM 11 PCB                                                                        | 10   | 1132790000 |
| SCM 14 PCB                                                                        | 10   | 7760056113 |
| metal clip DRM PCB                                                                |      | 1209690000 |

|                    |             |                  |
|--------------------|-------------|------------------|
| 10 A               |             |                  |
| 250 VAC            |             |                  |
| - 40 °C ... +70 °C |             |                  |
| <b>Type</b>        | <b>Qty.</b> | <b>Order No.</b> |
| SRD 2CO PCB        | 25          | 8697750000       |
| SRD 3CO PCB        | 25          | 8697730000       |



|                    |             |                  |
|--------------------|-------------|------------------|
| 16A                |             |                  |
| 400 VAC            |             |                  |
| - 40 °C ... +70 °C |             |                  |
| <b>Type</b>        | <b>Qty.</b> | <b>Order No.</b> |
| SPW PCB            | 10          | 1132800000       |
| SPW METAL CLIP     |             | 1238770000       |

