Coupling relays - RP series

- PCB power relay
- Solderable and pluggable
- 2 change over contacts
- VDE, UL, cUL

Technical data

1. Mechanical design

Self-extinguishing plastic housing, IP rating IP40
Mounting position: any
Weight: 14g

2. Coil

AC-version:

Type	Rated voltage AC
RP 524-2	24V
RP 615-2	115V
RP 730-2	230V
RP 730-hv	230V

hv gold-plated contacts

Rated consumption (50Hz): 0.7VA
Rated frequency: 50/60 Hz
Must release voltage: ≥0.15 x U_N
Tolerance: 0.8 to 1.1 x U_N

DC-version:

Type	Rated voltage DC
RP 012-2	12V
RP 024-2	24V
RP 024-hv	24V

hv gold-plated contacts

Rated consumption: 0.4W
Must release voltage: ≥0.1 x U_N
Tolerance: 0.7 to 2.55 x U_N

3. Contacts

AC-version:
Switching voltage: max. 250V AC resp. 150V DC
min. 5V
Switching current: max. 8A
min. 10mA
Inrush current: max. 10A
Switching capacity: 1000VA (8A / 250V AC)
100W (8A / 12.5V DC)
Resistance: ≤100mΩ
Switching frequency: 120/min without load
10/min at rated load
Contact material: AgNi 90/10

DC-version:
Switching voltage: max. 400V AC resp. 300V DC
min. 5V
Breaking current: max. 8A
min. 5mA
Incrush current: max. 30A
Switching capacity: 2000VA (8A / 400V AC)
190W (8A / 24V DC)
Resistance: ≤100mΩ
Switching frequency: 1200/min without load
10/min at rated load
Contact material: AgNi 90/10

4. General data

AC-version:
Response time: 10ms
Release time: 8ms
Mechanical life: 20 x 10^6 operations
Electrical life: 1.5 x 10^5 operations at rated load
Vibration resistance: 4g
Shock resistance: 5g

DC-version:
Response time: 7ms
Release time: 3ms
Mechanical life: 30 x 10^6 operations
Electrical life: 1.5 x 10^5 operations at rated load
Vibration resistance: 10g normally closed contact
5g normally open contact
Shock resistance: 20g

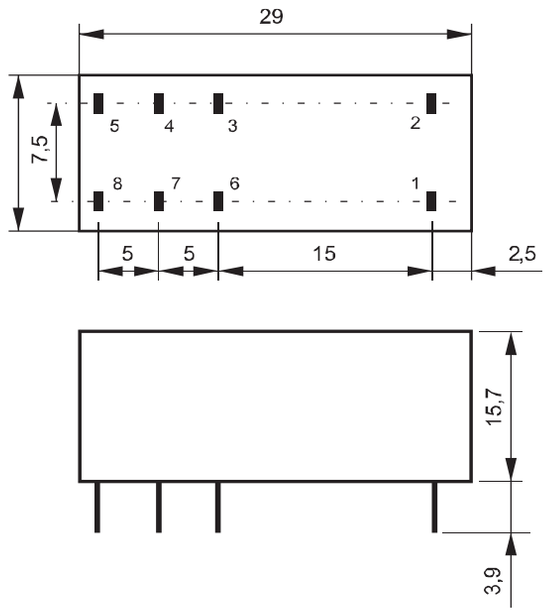
5. Insulation

Coil - Contact (50Hz): 5000V AC
Contact - contact: 2500V AC
Terminal - terminal: 1000V AC
Insulation category: C250 / B400
(according to DINVDE 110)
Surge voltage: 2.5kV AC

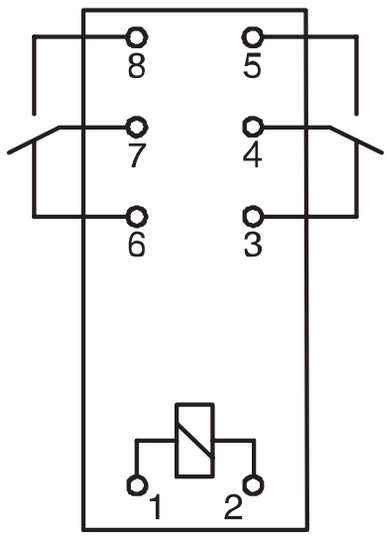
6. Ambient conditions

Ambient temperature: -40 to +70°C (according to IEC 68-1)
Storage temperature: -40 to + 85°C
Soldering temperature: max. 270°C / 5s
Pollution degree: 3 (according to IEC 664-1)

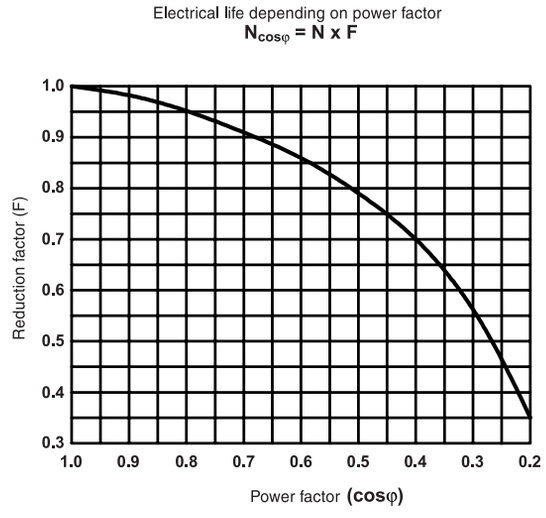
Dimensions

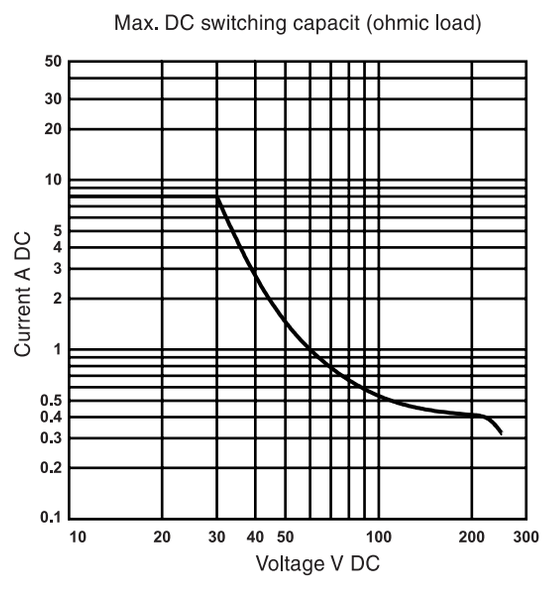


Connections



Reduction factors





Sockets and accessories

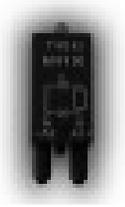
ES 50, ES 50/3, PSS8/3

1. General data

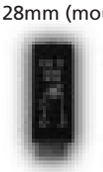
Self-extinguishing plastic housing
Mounted on DIN-Rail according to EN 50022
Mounting position: any
Shockproof terminal connection according to VBG 4
(Philips Gr.1 required), IP rating IP 20
Initial torque: 0.7 Nm
Screw terminals:
1 x 0.5 to 2.5mm² with/without multicore cable end
1 x 4mm² without multicore cable end
2 x 0.5 to 1.5mm² with/without multicore cable end
2 x 2.5mm² flexible without multicore cable end
Ambient temperature: -40 to +85°C ES 50, ES 50/3
-25 to +100°C PSS8/3
Surge voltage: >3000V
Approvals: UL

Type	Plug-in modules	Name plate	Retaining clip
ES 50 (TPE 8)	Type x2	included	HB/RP
ES 50/3	Type x2		
PSS8/3 (7564)	EM x		HB/PSS

Plug-in modules type x2 (TP series)

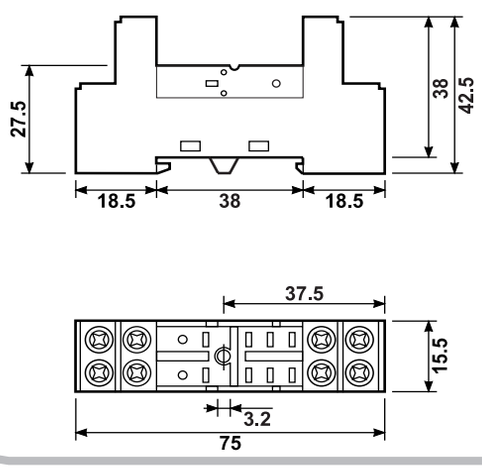
Type	Function	Height 27mm (mounted)
Typ 12 (TPD2)	Diode 6-220V DC (+A2, -A1)	
Typ 22 (TPD1)	Diode 6-220V DC (- A2, +A1)	
Typ 32 (TPL2)	LED + Diode 6-24V DC (+A2, -A1)	
Typ 42 (TPL1)	LED + Diode 6-24V DC (-A2, +A1)	
Typ 52 (TPR)	RC module 110-230V AC	
Typ 62 (TPL3)	LED 6-24V AC/DC	
Typ 72 (TPV1)	Varistor 24V AC	
Typ 82 (TPV2)	Varistor 230V AC	
Typ 92 (TPL4)	LED 110-230V AC/DC	

Plug-in modules EM series

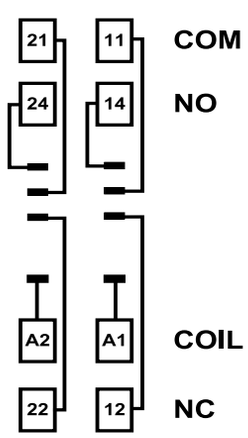
Type	Function	Height 28mm (mounted)
EM 03	RC module 110-230V AC	
EM 04	Varistor 24V AC	
EM 05	Varistor 230V AC	
EM 10	LED 110-230V AC	
EM 11	LED 6-24V AC/DC	
EM 12	LED+Diode 6-24V DC	

Dimensions

ES 50

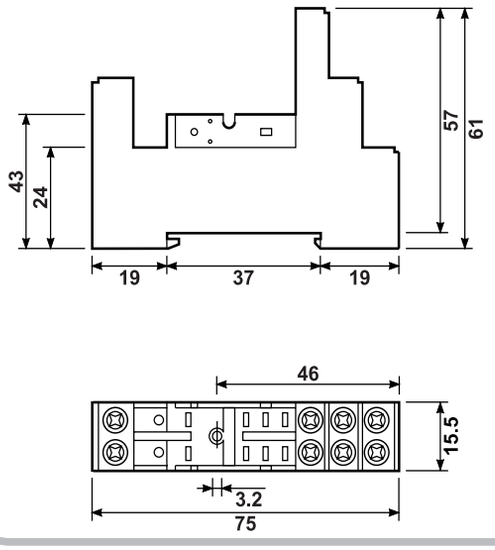


Connections

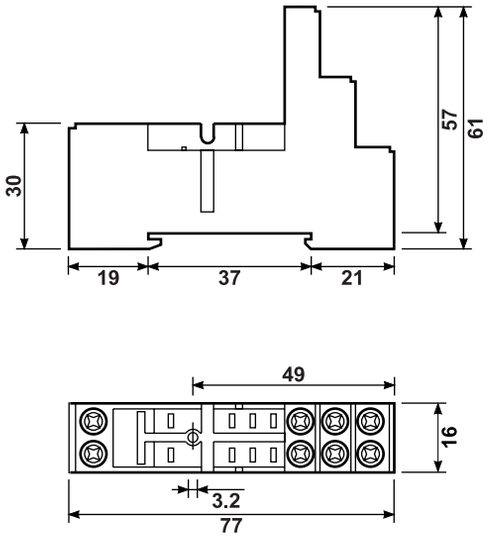


Dimensions

ES 50/3



PSS8/3



Connections