

Description

Monostable power relay for single pole disconnection with a variety of versions available. Due to the possible combinations of the different configurations as well as due to different modes of mounting the power relay D1 is suitable for many applications.

Typical applications

Commercial vehicles, agricultural engines, watercraft, construction vehicles, motor homes and industrial trucks.



PR60

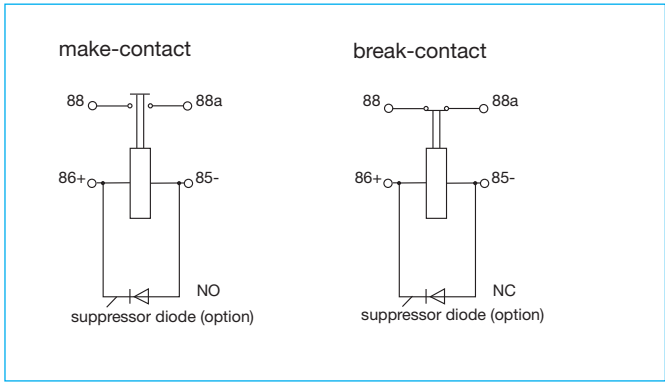
Technical data

Current rating	100 A, 200 A, 300 A
Coil data	
Rated voltage	DC 12 V DC 24 V DC 48 V
Operating voltage	9...16 V 18...32 V 36...54 V
Max. starting voltage (entire temperature range)	9 V 14 V 36 V
Isolating voltage	≤ 2 V ≤ 4 V ≤ 8 V
Coil current	1 A 0,4 A 0,2 A
Coil power	approx. 10 W / 7 W upon request approx. 10 W approx. 10 W
Ambient temperature	-40 °C...+85 °C
Protection class	
interior	IP67 (0.2 bar: 1 min) to IEC 529 and IP6K9K to DIN 40050 part 9 and IEC 529
terminals	IP00 to IEC 529
Vibration	5 g (50-2000 Hz)
Shock	10 g (11 msec)
Resistance to	oil, fuel, hydraulic fluids
Housing	galvanized steel, tin-plated or lacquered optional
Mounting method	side mount, optionally large or small foot mount
Options	special version with suppressor diode and/or blow magnet
Terminal thread	100 A: M8 200 A: M8 or M10 300 A: M10
Mounting position	any
Switching element	contacts AgSnO
Min. insulation resistance	100 MΩ
Insulation resistance after load	50 MΩ
High voltage resistance	1,050 V for 1 min
Max. initial contact voltage drop	150 mV
Contact voltage drop after endurance	175 mV
ON duty	100 %
Overload	100 A: 800 A for 1 s, 200 A for 20 s 200 A: 1 600 A for 1 s, 400 A for 20 s 300 A: 2 400 A for 1 s, 600 A for 20 s
Typical life	
rated load Ω	75,000 cycles (at DC 28 V)
mechanically	1,500,000 cycles
Starting time incl. bounce duration	max. 40 ms
Bounce duration	max. 5 ms
Release time	max. 20 ms (without suppressor diode)
Cable cross section at rated load	100 A: min. 50 mm ² 200 A: min. 70 mm ² 300 A: min. 95 mm ²
Mass	approx. 810 g (side mount, small foot mount) approx. 935 g (large foot mount)

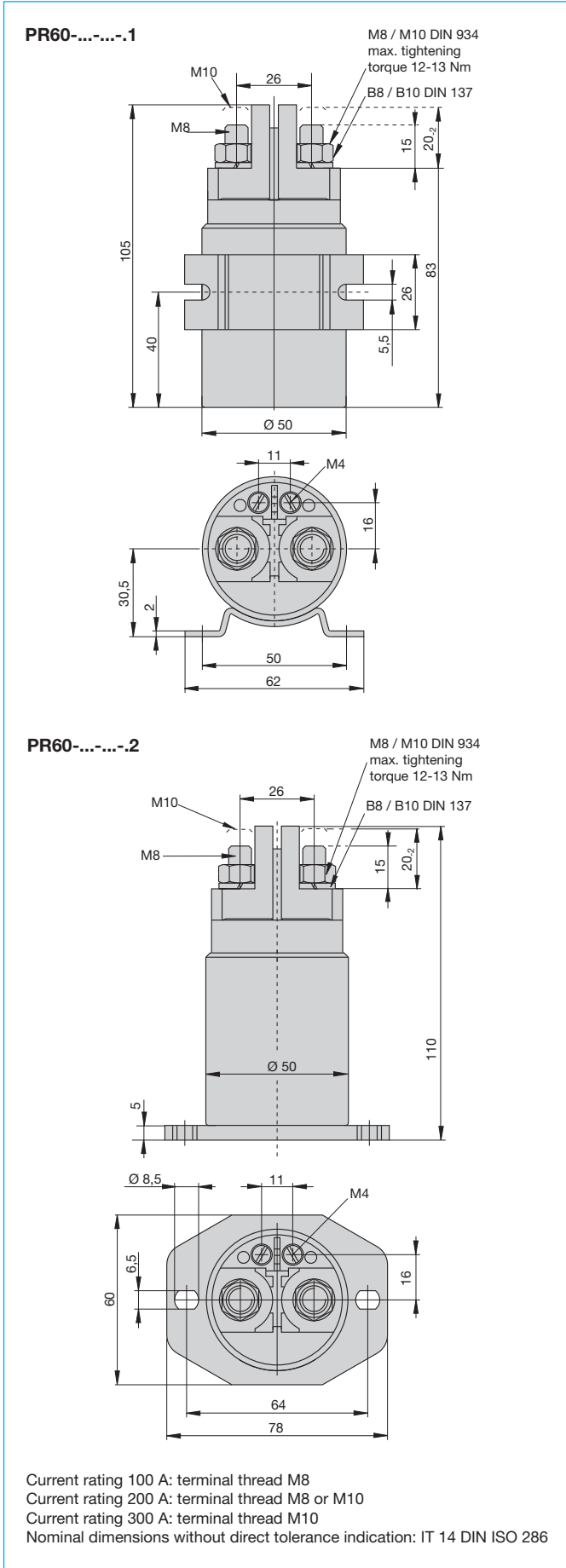
Ordering information

Type no.										
PR60										
Contact type										
1 make contact										
2 break contact										
Coil resistance										
1 12 V										
2 24 V										
3 48 V										
Current rating										
1 100 A										
2 200 A										
3 300 A (only for make contacts)										
Design of main terminals										
1 M8 (for current ratings 100 A and 200 A)										
2 M10 (for current ratings 200 A and 300 A)										
Contact design										
2 AgSnO (standard)										
Options										
0 without										
2 suppressor diode										
3 blow magnet, recommended for voltages ≥ 40 V										
4 suppressor diode and blow magnet										
other suppressor circuits of coil terminals upon request										
Housing										
1 galvanised steel (standard)										
2 tin-plated										
3 lacquered (upon request)										
Mounting method										
1 side mount (standard)										
2 small foot mount										
3 large foot mount										
PR60	-	1	2	2-2	2	0-1	1	ordering example		

Schematic diagram

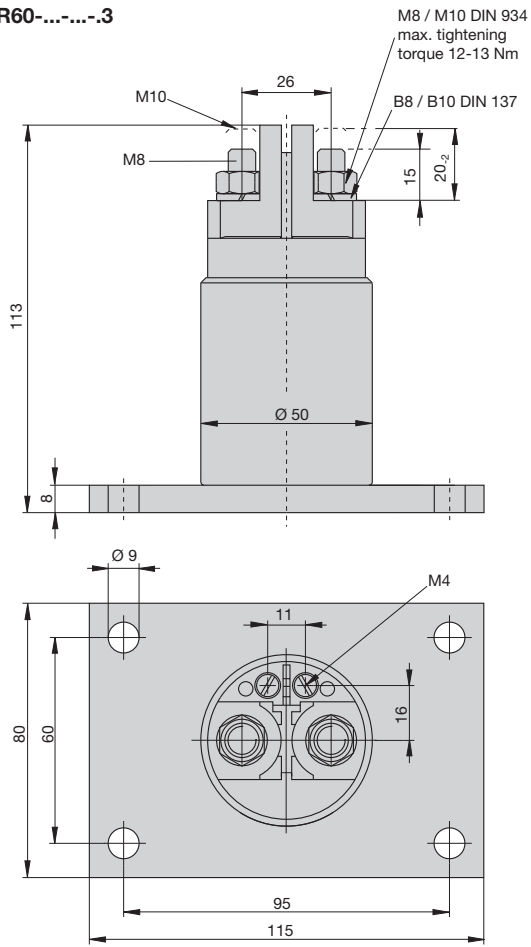


Dimensions



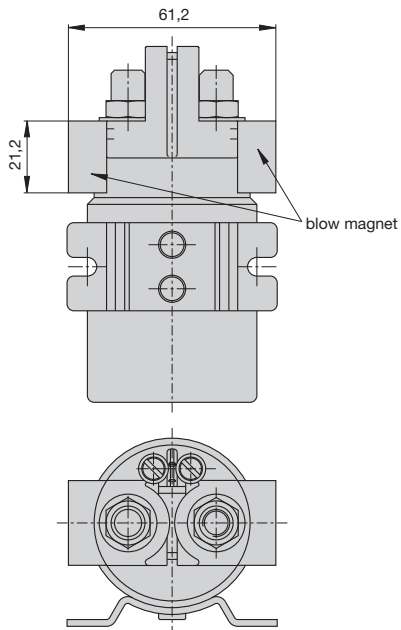
Dimensions

PR60-...-...-3



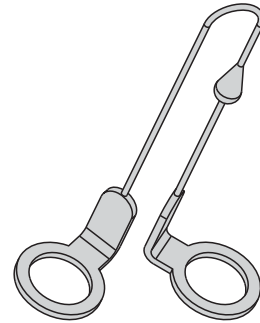
Current rating 100 A: terminal thread M8
 Current rating 200 A: terminal thread M8 or M10
 Current rating 300 A: terminal thread M10
 Nominal dimensions without direct tolerance indication: IT 14 DIN ISO 286

PR60-...-...-3-.. with blow magnet



Accessories

**Suppressor diode
 X 223 02 901**



All dimensions without tolerances are for reference only. In the interest of improved design, performance and cost effectiveness the right to make changes in these specifications without notice is reserved. Product markings may not be exactly as the ordering codes. Errors and omissions excepted.