

- miniature - saves DIN rail space
- lockable test feature (not D2RG)
- optional no test lever
- mechanical operation indicator
- LED indication
- High voltage DC switching version



## Contacts

Contacts	D2RS-2011	D2RH-2011	D2RS-2012	D2RG-2022	
Contact arrangement	SPDT (1C)	SPDT (1C)	DPDT (2C)	DPST-NO(2A)	
Contact material	Ag alloy				
Max. switching voltage	AC/DC	250VAC, 30VDC		220VDC	
Min. breaking capacity	W	0.3W			
Rated load (resistive - cos φ = 1)	AC1/DC1	10A	16A	5A	5A
Max. switching power		2500VA/300W	4000VA/480W	1250VA/150W	1100W
initial resistance		≤ 100mΩ, max. at 1A/24VDC			

## Coil

Rated voltage	DC	6...125V	6...125V	6...125V	6...125V
	AC	12...230V	12...230V	12...230V	Unavailable
Operating range	See tables 1 & 2				

## Insulation

Insulation resistance	≥3000MΩ at 500VDC, 50%RH, 25°C
Dielectric strength	coil to contact 5000Vrms, 1min (50Hz)
	contact to contact 1000Vrms, 1min (50Hz)

## General Data

Operating time	typ. ≤ 15ms
Release time	typ. ≤ 15ms, ≤ 20ms (with diode)
Operating frequency	1200 op/hr at nominal load
Electrical life	ops. 1 x 10 <sup>5</sup>
Mechanical life	ops. 1 x 10 <sup>6</sup> (AC Coil) / 2 x 10 <sup>6</sup> (DC Coil)

## Environmental

Ambient temperature	operating -40 to +70°C
Shock resistance	10g
Vibration resistance	DA 1.5mm 10-55Hz
Dimensions	L x W x H 29 x 13 x 36mm (see fig. 1 for more informaton)
Weight	approx. ≤ 21g

## Ordering Code

D 2 R S - 2 0 1 1 - 2 3 - 1 0 4 8 -

### Series style

S: SPDT -  
10A/230VAC  
DPDT -  
5A/230VAC  
H: SPDT -  
16A/230VAC  
G: DPST-NO-  
5A/220VDC

Coil code:  
See tables  
1 & 2

### Contact material

20: AgNi 90/10

### Contact arrangement

11: SPDT (1C/O) D2RS & D2RH  
12: DPDT (2C/O) D2RS only  
22: DPST-NO (2N/O) D2RG only

### Environmental protection

2: In cover, IP40

### Mounting & terminations

3: Plug-in, for sockets

### Options

Blank: No options  
WT: Test lever (not available for D2RG)  
L: LED Indicator = Red; Green for D2RG type A1+.  
D: Diode (DC coils only) A1+

DC Coil Data at 20°C

Table 1

Coil voltage code	Nominal voltage (VDC)	Coil Resistance (Ω) ±10%	Must operate voltage max. (VDC)	Must release voltage min. (VDC)
1012	12	300	9.0	1.2
1024	24	1200	19.2	2.4
1048	48	4800	38.4	4.8
1110	110	23500	88.0	11.0
1125	125	32500	100.0	12.5

Blue mechanical test button - green LED indicator (see ordering codes)

AC Coil Data at 20°C (not available for D2RG)

Table 2

Coil voltage code	Nominal voltage (VAC)	Coil Resistance (Ω) ±10%	Must operate voltage max. (VAC)	Must release voltage min. (VAC)
5012	12	80	9.6	1.2
5024	24	320	19.2	2.4
5048	48	1350	38.4	4.8
5110	110	6900	88.0	11.0
5230	230	28000	184.0	23.0

Red mechanical test button - red LED indicator (see ordering codes)

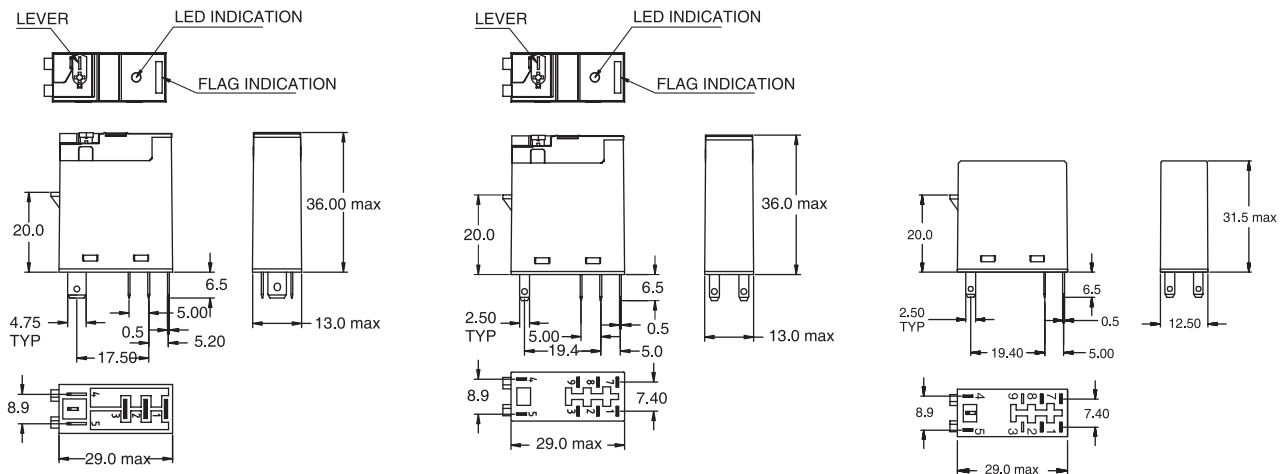
Overall Dimensions mm

Fig. 1

D2RS-2011-23 - \*\*\*\* - WTL SPDT  
D2RH-2011-23 - \*\*\*\* - WTL SPDT

D2RS-2012-23 - \*\*\*\* - WTL DPDT

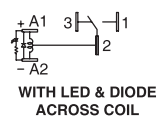
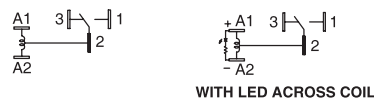
D2RG-2022-23 - 10\*\* - L DPST-NO



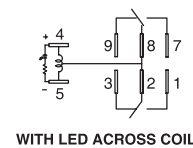
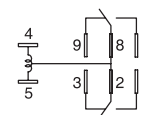
Wiring Diagrams

Fig. 2

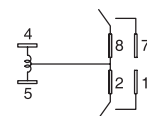
D2RS-2011-23 - \*\*\*\*  
D2RH-2011-23 - \*\*\*\*



D2RS-2012-23 - \*\*\*\*

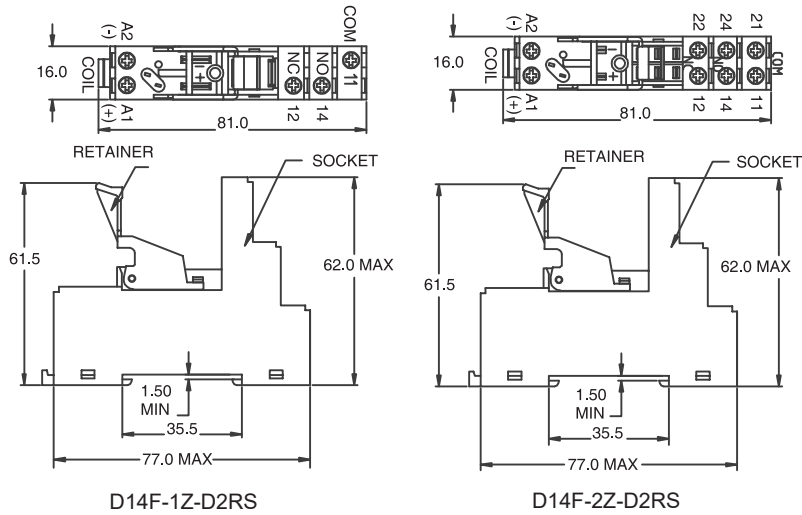


D2RG-2022-23 - \*\*\*\*



DIN Rail mounting sockets for D2R Series relays

Fig. 3



Notes:

- 1) D14F-1Z-D2RS fits DR2RS-2011 & D2RH-2011 SPDT types
- 2) D14F-2Z-D2RS fits D2RS-2012 DPDT & D22RG DPST-NO types.
- 2) Includes retaining clip
- 4) Can be used with DM\*\*-BK optional plug-in modules