

# /// Plug-in industrial relay with 4 contacts

Rugged plug-in relays for extreme reliability, within long endurance applications and harsh environments

# Fast switching at pull-in

Option R4 for D-relays

Part of D-platform



# Description

D-relay with fast switching contacts: maximum pull-in time 7 ms for all four change-over contacts. For DC coil voltages only. To avoid unwanted tripping, no normally open contact will make below 60% of the nominal voltage.

Input voltage must be a rising edge with

- minimum slew rate: 1 V/ms

- minimum time: 10 ms

Polarization and back EMF protection diode (option D and P) are integrated. No LED available.

The mechanical life will be 1 million operations.

All other specifications as mentioned in the datasheet of the D-relay.

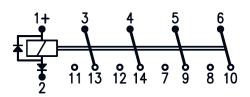
#### **Application**

Suitable for energy controlling systems or any critical application where the reduction of total switching time is important.

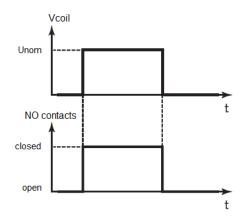
# Features D-R4 relay

- Contacts pull-in time < 7 ms</li>
- Instantaneous compact plug-in relay, 4 C/O contacts
- · Integrated back EMF suppression diode
- Integrated polarisation diode
- Coil voltages 6 to 250 VDC
- · High DC breaking capacity
- Maximum continuous current 10 A
- Maximum switching voltage 250 VDC, 440 VAC
- Minimum switching current 10 mA (optional 1 mA)
- Mechanical life 1 million operations
- Solve-All relay application concept
- Transparent cover for easy visual inspection
- · Integrated snap-lock, no external retaining clip needed
- Wide range of sockets for panel, rack or 35 mm rail
- Flexibility with many options
- · Optional positive mechanical keying relay to socket

#### Connection diagram



## Timing diagram



#### Compliancy

IEC 61810 IEC 60947 IEC 60947-5 IEC 60255



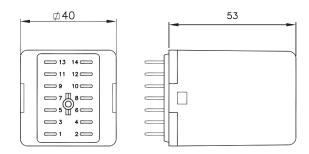


# Instantaneous relay Option R4 for D-relay

## D-relay options next to R4

- · Magnetic arc blow-out
- · Gold plated contacts
- Extra dust protection
- Double zener diode
- · Double make/double break contacts
- AgSnO2 contacts
- Push-to-test button

# D-relay dimensions (mm)



# Solve-All relay application concept

The unique D relay with all its options has been designed in close cooperation with customers from the power utility industry.

The Solve-All relay application concept offers ultimate flexibility to design and supply tailor made D relays.

Sockets		Mounting			
		Surface / Wall	35 mm rail	Panel / Flush	PCB
Terminal connection	Screw	V23	V23	-	-
	Screw - wide terminals	V22BR	V22BR	-	-
	Spring clamp	V29	V29	V33	-
	Faston	-	-	V31	-
	Crimp	-	-	V26	-
	Solder tag	-	-	V3	-
	PCB	-	-	-	V32

For more information see the respective datasheets

For more detailed technical specifications, drawings and ordering information, go to the product page on www.morssmitt.com

# Over 10 million Mors Smitt relays in use in applications worldwide!

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Page 2/2