

NAIS**HIGHLY RELIABLE
MINIATURE
DIP RELAYS****DR-SDS relay**

UL File No.: E48393
CSA File No.: LR45064-2

- High breakdown (1500 V) and surge (1500 V) voltage between contacts and coil
- 1 coil and 2 coil latching types available
- High sensitivity
- High contact pressure

Specifications

Contacts

Arrangement	1 Form C
Contact material	PdNi Au layer
Initial contact resistance, (max.) (Measured by voltage drop 6 V DC 1 A)	100 mΩ
Rating (resistive)	
Max. switching power	33 VA, 20 W
Max. switching voltage	110 V AC / 30 V DC
Max. switching current	0.3 AC / 1 A DC
Min. switching capacity	10 mV / 0.1 mA
Electrical life (6 V / 100 mA)	10 ⁸
(24 V / 1 A)	10 ⁷
(0.3 A / 110 V AC)	10 ⁶
Mechanical life	10 ⁹

Coil

Nominal / minimum		
monostable	5 – 24 V DC	65 ... 130 mW
1 coil latching	5 – 24 V DC	35 ... 100 mW
2 coil latching	5 – 24 V DC	80 ... 200 mW

Characteristics

Max. operating speed	100 cpm (mechanical)
Operate time	approx. 2 ms
Release time (w/o diode)	approx. 0.6 ms
Contact bounce	1 ms
Initial breakdown voltage	
Between open contacts	750 Vrms
Between contacts and coil	1500 Vrms
Between live parts and ground	1000 Vrms
Initial insulation resistance	min. 1000 MΩ at 500 V DC
Surge voltage between contacts and coil (1.2/50μs)	1500
Ambient temperature	-40 °C to +70 °C
Shock resistance	more than 100 g
Vibration resistance	40 g, 10 to 200 Hz
Unit weight	approx. 6 g

Note: All specifications are based on the condition 25°C, 50% R.H. unless otherwise noted.

TYPICAL APPLICATIONS

- Telecommunications equipment
- Machine tools
- Industrial robots
- Optical instruments
- Business machines
- Optical instruments
- Medical equipment
- Detectors
- Alarm devices

ORDERING INFORMATION

Ex. DR — L2 — 24V — SDS

Operating function	Coil voltage*
Nil: Single side stable L: 1 coil latching L2: 2 coil latching	5, 12, 24

* other coil voltages on request

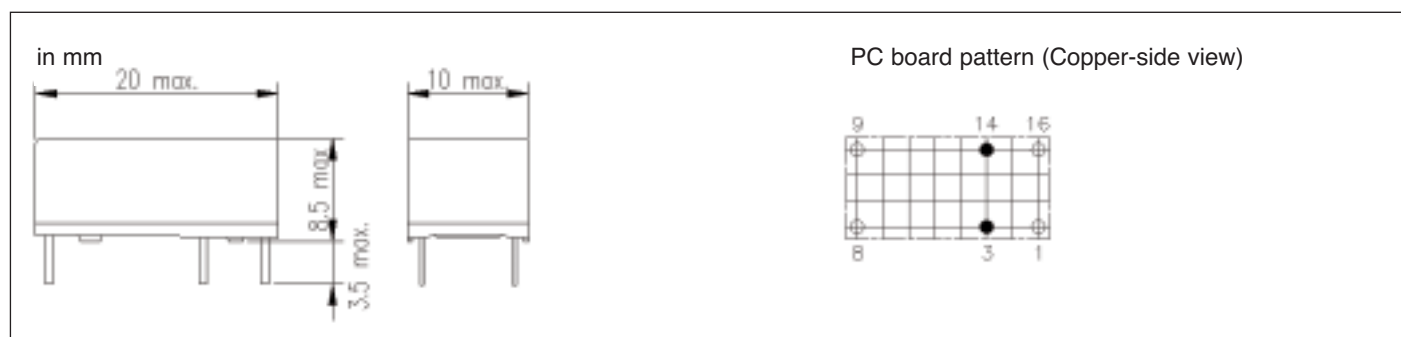
TYPES AND COIL DATA

Single side stable	Pick-up voltage, V DC (max.)	Drop-out voltage V DC (min.)	Maximum allowable voltage, V DC	Coil resistance Ω ($\pm 15\%$)	Nominal operating power, mW
DR-5V	3.75	0.5	16.5	320	78
DR-12V	9	1.2	30	1140	126
DR-24V	18	4.8	60	4370	131

1 coil latching	Pick-up voltage, V DC (max.)	Maximum allowable voltage, V DC	Coil resistance Ω ($\pm 15\%$)	Nominal operating power, mW
DR-L-5V	3.75	20	500	50
DR-L-12V	9	38	1850	78
DR-L-24V	18	67	5650	102

2 coil latching	Pick-up voltage, V DC (max.)	Maximum allowable voltage, V DC	Coil resistance Ω ($\pm 15\%$)	Nominal operating power, mW
DR-L2-5V	3.75	16	315	80
DR-L2-12V	9	30	1110	130
DR-L2-24V	18	46	2800	206

DIMENSIONS



Schematic (Bottom view)



Matsushita Electric Works

NAIS

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Rudolf-Diesel-Ring 2, D-83607 Holzkirchen, Tel. (08024) 648-0, Fax (08024) 648-555, <http://www.mew-europe.com>
 Stojanstraße 12, A-2344 Maria Enzersdorf, Tel. (02236) 26846, Fax (02236) 46133, <http://www.matsushita.at>
 De Rijn 4, (Postbus 211), 5684 PJ Best, (5680 AE Best), Netherlands, Tel. (0499) 372727, Fax (0499) 372185, <http://www.matsushita.nl>
 B.P. 44, F-91371 Verrières le Buisson CEDEX, Tél. 01 60135757, Fax 01 60135758, <http://www.matsushita-france.fr>
 Rudolf-Diesel-Ring 2, D-83607 Holzkirchen, Tel. (08024) 648-0, Fax (08024) 648-555, <http://www.matsushita.de>
 Irish Branch Office, Waverley, Old Naas Road, Bluebell, Dublin 12, Republic of Ireland, Tel: (01) 4600969, Fax: (01) 4601131
 Via del Commercio 3-5 (Z.I. Ferlina), I-37012 Bussolengo (VR), Tel. (045) 6752711, Fax (045) 6700444, <http://www.matsushita.it>
 Portuguese Branch Office, Avda 25 de Abril, Edifício Alvorada 5ªE, 2750-512 Cascais, Portugal, Tel. (21) 4828266, Fax (21) 4827421
 Sjöängsvägen 10, 19272 Sollentuna, Sweden, Tel. (08) 59476680, Fax (08) 59476690
 Barajas Park, San Severo 20, E-28042 Madrid, Tel. (91) 3293875, Fax (91) 3292976
 Grundstrasse 8, CH-6343 Rotkreuz, Tel. (041) 7997050, Fax (041) 7997055, <http://www.matsushita.ch>
 Sunrise Parkway, Linford Wood East, Milton Keynes, MK14 6LF, England, Tel. (01908) 231555, Fax (01908) 231599, <http://www.matsushita.co.uk>