

- 2 pole 8 A, 2 CO or 2 NO contacts
- DC- or AC-coil
- Sensitive coil 400 mW
- Reinforced insulation
- WG version: Product in accordance to IEC60335-1
- RoHS compliant (Directive 2002/95/EC) as per product date code 0413



FD149-B

**Applications**

Domestic appliances, heating control, emergency lighting, modems

**Approvals**

VDE REG.-Nr. 6106, **UL** US E214025, **BEAR** C0786  
 Technical data of approved types on request

**Contact data**

Contact configuration	2 CO or 2 NO
Contact set	single contact
Type of interruption	micro disconnection
Rated current	8 A, UL: 10 A
Rated voltage / max.switching voltage AC	240/400 VAC
Limiting continuous current	UL: 10 A
Maximum breaking capacity AC	2000 VA
Limiting making capacity, max 4 s, duty factor 10%	15 A
Contact material	AgNi 90/10, AgNi 90/10 gold plated, AgSnO <sub>2</sub>
Mechanical endurance DC coil	> 30 x 10 <sup>6</sup> cycles
AC coil	> 5 x 10 <sup>6</sup> cycles
Rated frequency of operation with / without load	6 / 1200 min <sup>-1</sup>

**Contact ratings**

Type	Load	Cycles
RT424	8 A, 250 VAC, NO contact, 70°C, EN61810-1	100x10 <sup>3</sup>
RT444	6(3) A, 250 VAC, NO contact, 85°C; EN60730-1	100x10 <sup>3</sup>
RT424	6(2) A, 250 VAC, NO/NC contact, 85°C; EN60730-1	100x10 <sup>3</sup>
RT424	10 A, 250 VAC, CO contact, 70°C; General purpose, UL508	30x10 <sup>3</sup>
RT424	1/2hp @ 240 VAC, 1/4hp @ 120 VAC, UL508	
RT424	Pilot duty B300, UL508	
RT424	8 A, 30 VDC, General Purpose, UL508	
RT424	4 A, 230 VAC, cosφ=0.6, gas burner	150x10 <sup>3</sup>

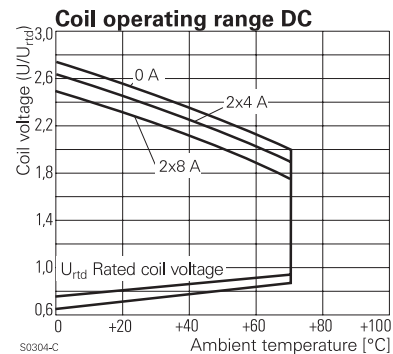
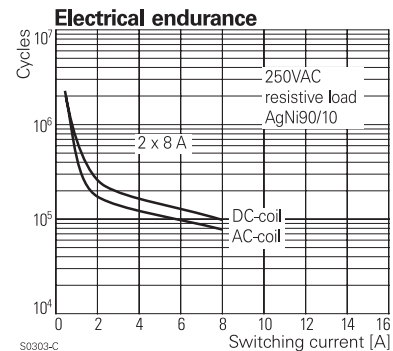
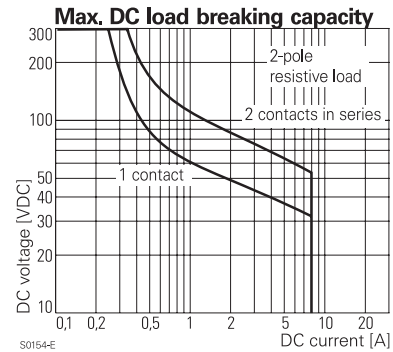
**Coil data**

Rated coil voltage range DC coil	5...110 VDC
AC coil	24...230 VAC
Coil power DC coil	typ 400 mW
AC coil	typ 0,75 VA
Operative range	2
Coil insulation system according UL1446	class F

**Coil versions, DC-coil**

Coil code	Rated voltage VDC	Operate voltage VDC	Release voltage VDC	Coil resistance Ω	Rated coil power mW
005	5	3.5	0.5	62±10%	403
006	6	4.2	0.6	90±10%	400
012	12	8.4	1.2	360±10%	400
024	24	16.8	2.4	1440±10%	400
048	48	33.6	4.8	5520±10%	417
060	60	42.0	6.0	8570±12%	420
110	110	77.0	11.0	28800±12%	420

All figures are given for coil without preenergization, at ambient temperature +23°C  
 Other coil voltages on request



**Coil versions, AC-coil 50Hz**

Coil code	Rated voltage	Operate voltage	Release voltage	Coil resistance	Rated coil power
	VAC	50 Hz	50 Hz	$\Omega$	50 Hz
	VAC	VAC	VAC		VA
524	24	18.0	3.6	350 ± 10%	0.76
615	115	86.3	17.3	8100 ± 15%	0.76
700	200	150.0	30.0	24350 ± 15%	0.76
730	230	172.5	34.5	32500 ± 15%	0.74

All figures are given for coil without preenergization, at ambient temperature +23°C

**Insulation**

Dielectric strength coil-contact circuit	5000 V <sub>rms</sub>	
open contact circuit	1000 V <sub>rms</sub>	
adjacent contact circuits	2500 V <sub>rms</sub>	
Clearance / creepage coil-contact circuit	≥ 10 / 10 mm	
adjacent contact circuits	≥ 3 / 4 mm	
Material group of insulation parts	≥ IIIa	
Tracking index of relay base	PTI 250 V	
Insulation to IEC 60664-1		
Type of insulation coil-contact circuit	reinforced	
open contact circuit	functional	
adjacent contact circuits	basic	
Rated insulation voltage	250 V	
Pollution degree	3	2
Rated voltage system	240 V	400 V
Overvoltage category	III	

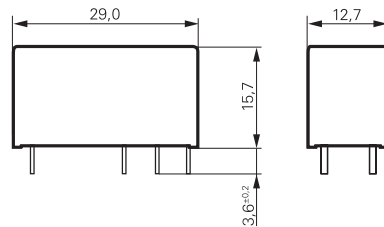
**Other data**

RoHS - Directive 2002/95/EC	compliant as per product date code 0413	
Flammability class according to UL94	V-0	
For WG version: GWFI to IEC 60335-1	> 850°C	
GWT to IEC 60335-1 current ≤ 0,2 A	> 650°C	
current > 0,2 A	> 750°C	
Ambient temperature range	-40...+70°C	
Operate- / release time DC coil	typ 7 / 2 ms	
Bounce time DC coil NO / NC contact	typ 1 / 3 ms	
Vibration resistance (function) NO / NC contact	20 / 5 g, 30 ... 300 Hz	
Shock resistance (destruction)	100 g	
Category of protection	RTII - flux proof, RTIII - wash tight	
Mounting	pcb or on socket	
Mounting distance DC / AC coils	0 / 2.5 mm	
Resistance to soldering heat flux-proof version	270°C / 10 s	
wash-tight version	260°C / 5 s	
Relay weight	13 g	
Packaging unit	20 / 500 pcs	

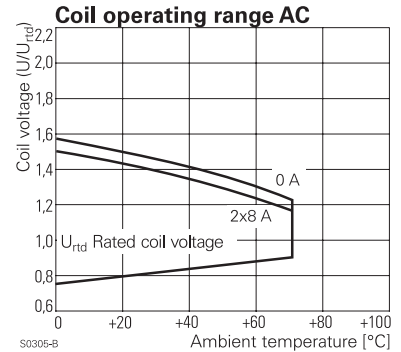
**Accessories**

For details see datasheet accessories RT

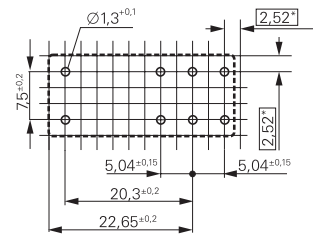
**Dimensions**



S0272-BA

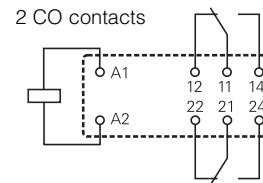


**PCB layout / terminal assignment**  
Bottom view on solder pins



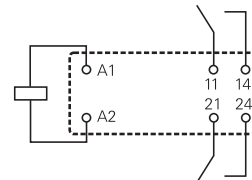
S0418-CA

\*) With the recommended PCB hole sizes a grid pattern from 2.5 mm to 2.54 mm can be used.



S0163-BJ

**2 NO contacts**



S0163-BK

**Product key**



Type

Version

- 4 8 A, pinning 5 mm, flux proof**
- E 8 A, pinning 5 mm, wash tight**

Contact configuration

- 2 2 CO contacts**   **4 2 NO contacts**

Contact material

- 3 AgSnO<sub>2</sub>**
- 4 AgNi 90/10**   **5 AgNi 90/10 gold plated**

Coil

Coil code: please refer to coil versions table

Version

- Blank** Standard version
- WG** Product in accordance with IEC 60335-1 (domestic appliances)

Preferred types in bold print

Product key	Version	Contacts	Cont. material	Coil	Coil	Part number
RT424005	8 A	2 CO contacts	AgNi 90/10	DC-coil	5 VDC	5-1393243-9
RT424006	pinning 5 mm				6 VDC	6-1393243-1
RT424012	flux proof				12 VDC	6-1393243-3
RT424024					24 VDC	6-1393243-8
RT424048					48 VDC	7-1393243-0
RT424060					60 VDC	7-1393243-3
RT424110					110 VDC	7-1393243-5
RT424524				AC-coil	24 VAC	7-1393243-6
RT424615					115 VAC	7-1393243-8
RT424730					230 VAC	7-1393243-9
RT425005			AgNi 90/10 gold plated	DC-coil	5 VDC	8-1393243-0
RT425012					12 VDC	8-1393243-2
RT425024					24 VDC	8-1393243-5
RT425524				AC-coil	24 VAC	9-1393243-1
RT425615					115 VAC	9-1393243-2
RT425730					230 VAC	9-1393243-3
RT444012		2 NO contacts	AgNi 90/10	DC-coil	12 VDC	9-1393243-7
RT444024					24 VDC	9-1393243-9
RTE24005	8 A	2 CO contacts			5 VDC	0-1393243-1
RTE24006	pinning 5 mm				6 VDC	0-1393243-2
RTE24012	wash tight				12 VDC	0-1393243-4
RTE24024					24 VDC	1-1393243-0
RTE24048					48 VDC	1-1393243-1
RTE24060					60 VDC	1-1393243-3
RTE24110					110 VDC	1-1393243-4
RTE24524				AC-coil	24 VAC	1-1393243-5
RTE24615					115 VAC	1-1393243-7
RTE24730					230 VAC	1-1393243-8
RTE25005			AgNi 90/10 gold plated	DC-coil	5 VDC	1-1393243-9
RTE25012					12 VDC	2-1393243-0
RTE25024					24 VDC	2-1393243-1