V23047A1012A501 Product Details

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V23047A1012A501
(V23047-A1012-A501)
TE Internal Number:
1393258-4
Active

Force Guided Contact Relays

Converted to EU RoHS/ELV Compliant
(Statement of Compliance)

Product Highlights:

- V23047 Series
- Contact - Rated Current = 6 A
- Terminal Type = Through Hole
- Contact - Arrangement = 2 Form C, DPDT, 2 C/O
- Contact - Limiting Continuous Current = 8 A

View all Features

Quick Links

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Documentation & Additional Information

Product Drawings:
- None Available

Catalog Pages/Data Sheets:
- Safety Relay SR2M (PDF, English)

Product Specifications:
- None Available

Application Specifications:
- None Available

Instruction Sheets:
- None Available

CAD Files:
- None Available

List all Documents

Additional Information:
- Product Line Information

Additional Product Images:
- Schematic
- Wiring Diagram
- PCB Holes

Related Products:
- Tooling

Product Features (Please use the Product Drawing for all design activity)

Electrical Characteristics:
- Contact - Rated Current (A) = 6
- Contact - Limiting Continuous Current (A) = 8
- Contact - Limiting Making Current (A) = 8
- Contact - Limiting Breaking Current (A) = 8
- Insulation - Initial Dielectric Between Open Contacts (V rms) = 1000
- Insulation - Initial Dielectric Between Contacts and Coil (V rms) = 3000
- Contact - Switching Voltage Max. (VAC) = 250
- Contact - Limiting Short-Time Current (A) = 8
- Coil - Rated Voltage (VAC) = 230
- Coil - Resistance (Ω) = 206
- Coil - Rated Power, DC (mW) = 700
- Insulation - Initial Dielectric Between Adjacent Contacts (V rms) = 2000
- Insulation - Clearance Class = 5mm to 8mm Class
- Insulation - Creepage Class = 3mm to 5.5mm Class

Contact Features:
- Terminal Type = Through Hole
- Contact Material = AgNi
- Contact - Special Features = Single Button, Forcibly Guided

Configuration Features:
- Contact - Arrangement = 2 Form C, DPDT, 2 C/O
- Coil - Magnetic System = Monostable, DC

Industry Standards:
- RoHS/ELV Compliance = RoHS compliant, ELV compliant
- Lead Free Solder Processes = Wave solder capable to 260°C, Wave solder capable to 240°C
- RoHS/ELV Compliance History = Converted to comply with RoHS directive
- Approved/Registered Standards = VDE Component Mark, UL Recognized, TUV Approved

Dimensions:

- Length (mm [in]) = 29.00 [1.142]
- Width (mm [in]) = 12.60 [0.496]
- Height (mm [in]) = 25.40 [1.000]
- Insulation - Clearance Between Contact and Coil (mm [in]) = 5.5 [0.217]
- Insulation - Creepage Between Contact and Coil (mm [in]) = 5.5 [0.217]

Body Features:

- Mount Type = PCB
- Weight (g [oz]) = 90.00 [3.175]

Environmental:

- Environmental - Ambient Temperature, Max. (°C [°F]) = 50 [122]
- Environmental - Ambient Temperature Class = 0 to 50°C Class

Packaging Features:

- Packaging Method = Tube

Other:

- Series = V23047
- Brand = Schrack
- Comment = Well suited for emergency shut-off, machine control, elevator and escalator control, light barrier control

Force Guided Relay SR2M

- **2 pole relay with force guided contacts according to EN 50205**
- **Reinforced insulation between poles**

F0188-D

Typical applications
Emergency shut-off, press control, machine control, elevator and escalator control, safety relays

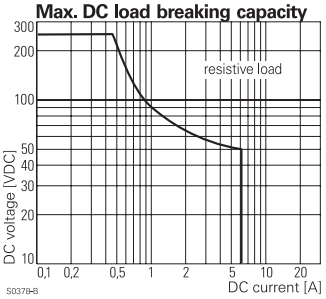
Approvals

VDE 116064, UL E214025, TUV 968/EZ 111, CQC0617015579
Technical data of approved types on request

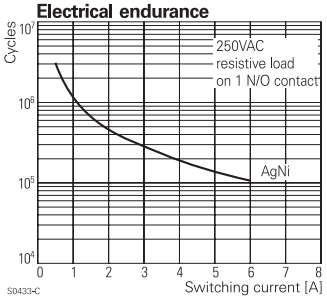
Contact Data

Contact arrangement	1 form A + 1 form B contacts (1 NO + 1 NC) or 2 form C contacts (2 CO)
According EN50205 only 1NO / 1NC (11-14 and 22-21 or 12-11 and 21-24) shall be used as force guided contacts.	
Rated voltage	250VAC
Max. switching voltage	400VAC
Rated current	6A
Contact material	AgNi
Contact style	single contact, force guided
1 form A + B, 1 NO + 1NC	type A according to EN 50205
2 form C, 2CO	type B according to EN 50205
Min. recommended contact load	5V/10mA
Initial contact resistance	≤100mΩ at 1A, 24VDC ≤20Ω at 10mA, 5VDC
Frequency of operation, with/without load	6/300min^{-1}
Contact ratings, IEC60947-5-1,	
on 1 form A (NO) contact	AC15-3A DC13-6A
Mechanical endurance	10x10^6 operations

Max. DC load breaking capacity



Electrical endurance



Coil Data

Coil voltage range	5 to 110VDC

Coil versions, DC-coil

Coil code	Rated voltage VDC	Operate voltage VDC	Release voltage VDC	Coil resistance Ω±10%[1]	Rated coil power mW
005	5	3.8	0.5	35.7	700
006	6	4.5	0.6	51	706
009	9	6.8	0.9	116	698
012	12	9	1.2	206	699

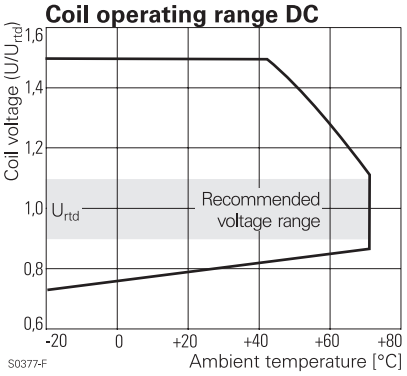
Coil Data (contunied)

Coil versions, DC-coil

Coil code	Rated voltage VDC	Operate voltage VDC	Release voltage VDC	Coil resistance Ω±10%[1]	Rated coil power mW
015	15	11.3	1.5	321	701
018	18	13.5	1.8	483	671
021	21	16	2.1	630	700
024	24	18	2.4	823	700
036	36	27	3.6	1851	700
040	40	30	4.0	2286	700
048	48	36	4.8	3291[1]	700
060	60	45	6	5142[1]	700
080	85	63.8	8.5	9143[1]	790
110	110	83	11	17285[1]	700

[1] Coil resistance ±12%.
All figures are given for coil without pre-energization, at ambient temperature +23°C.

Coil operating range DC



Insulation

Initial dielectric strength	
between open contacts	1500V$_{rms}$
between contact and coil	4000V$_{rms}$
between adjacent contacts	3000V$_{rms}$
Clearance/creepage	
between open contacts	microdisconnection
between contact and coil	≥8/8mm
between adjacent contacts	≥5.5/5.5mm
Insulation to EN 50178, type of insulation	
between contact and coil	reinforced
between adjacent contacts	reinforced

Force Guided Relay SR2M (Continued)

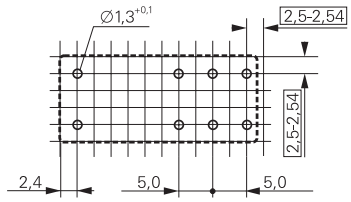
Other Data

Material compliance: EU RoHS/ELV, China RoHS, REACH, Halogen content refer to the Product Compliance Support Center at www.te.com/customersupport/rohssupportcenter	
Ambient temperature	-25 to 70°C
Category of environmental Protection IEC 61 810	RTIII
Weight	20g
Resistance to soldering heat THT IEC 60068-2-20	260°C/5s
Packaging/unit	tube/20 pcs.

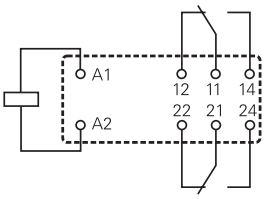
For more detailed information see product specification 2158001

PCB layout / terminal assignment
Bottom view on solder pins

2 form C, 2 CO contacts

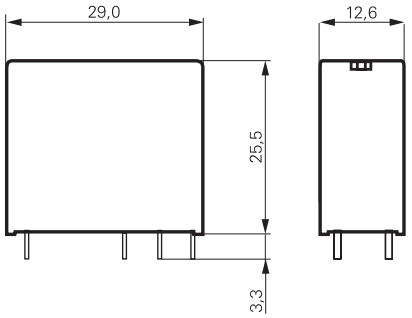


S0163-CO



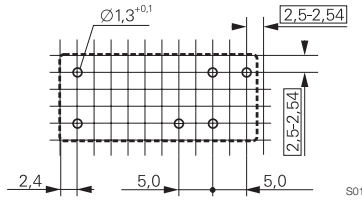
S0163-BJ

Dimensions

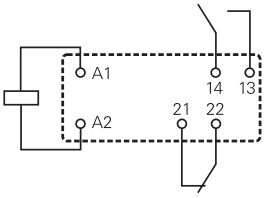


S0273-BB

1 form A + 1 form B contacts, 1 NO + 1 NC



S0163_CU



S0163-CV

Force Guided Relay SR2M (Continued)

Product code structure Typical product code **V23047 -A1 012 -A 5 11**

Type
V23047 Relay with force guided contacts SR2M
Version
A1 standard
Coil
Coil code: please refer to coil versions table (e.g. 024=24VDC)
Contact set
A single contact
Contact material
5 AgNi
Contact configuration
01 2 form C contacts (2 CO)
11 1 form A + 1 form B contacts (1 NO + 1 NC)
Other types on request

Product code	Version	Cont. material	Contact arrangement	Coil	Part number
V23047-A1005-A501	Standard	AgNi	2 form C (CO)	5VDC	1393258-2
V23047-A1005-A511	wash tight		1 A + 1 B, (1 NO + 1 NC)		7-1415006-1
V23047-A1006-A501			2 form C (CO)	6VDC	3-1415011-1
V23047-A1006-A511			1 A + 1 B, (1 NO + 1 NC)		6-1415011-1
V23047-A1009-A501			2 form C (CO)	9VDC	1393258-3
V23047-A1009-A511			1 A + 1 B, (1 NO + 1 NC)		7-1415011-1
V23047-A1012-A501			2 form C (CO)	12VDC	1393258-4
V23047-A1012-A511			1 A + 1 B, (1 NO + 1 NC)		1393258-5
V23047-A1018-A501			2 form C (CO)	18VDC	1393258-8
V23047-A1018-A511			1 A + 1 B, (1 NO + 1 NC)		1393258-9
V23047-A1021-A501			2 form C (CO)	21VDC	1-1393258-1
V23047-A1021-A511			1 A + 1 B, (1 NO + 1 NC)		1-1393258-2
V23047-A1024-A501			2 form C (CO)	24VDC	1-1393258-5
V23047-A1024-A511			1 A + 1 B, (1 NO + 1 NC)		1-1393258-7
V23047-A1036-A501			2 form C (CO)	36VDC	2-1393258-0
V23047-A1036-A511			1 A + 1 B, (1 NO + 1 NC)		8-1415011-1
V23047-A1040-A501			2 form C (CO)	40VDC	2-1393258-1
V23047-A1040-A511			1 A + 1 B, (1 NO + 1 NC)		2-1393258-2
V23047-A1048-A501			2 form C (CO)	48VDC	3-1415006-1
V23047-A1048-A511			1 A + 1 B, (1 NO + 1 NC)		9-1415011-1
V23047-A1060-A511				60VDC	2-1393258-3
V23047-A1110-A501			2 form C (CO)	110VDC	1-1415012-1
V23047-A1110-A511			1 A + 1 B, (1 NO + 1 NC)		2-1415012-1