

Power PCB Relay U/UB

- 1 pole 7 A, mono or bistable
- 1 CO or 1 NO or 1 NC contact
- Bistable and DC-version
- Wash tight version
- Version for 10 A on request
- RoHS compliant (Directive 2002/95/EC)
as per product date code 0402



F0153-B

Applications

Heating control, installation, battery powered equipment

Approvals

UL E194065
Technical data of approved types on request

Contact data

Contact configuration	1 CO, 1 NO or 1 NC
Contact set	single contact
Type of interruption	micro disconnection
Rated current	standard and bistable: 7 A sensitive: 5 A
Rated voltage / max.switching voltage AC	240/400 V
Maximum breaking capacity AC	standard and bistable: 1750 VA sensitive: 1250 VA
Limiting making capacity, max 4 s, duty factor 10%	12 A
Contact material	AgNi 90/10
Mechanical endurance	20x10 ⁶ cycles
Rated frequency of operation with / without load	10/300 min ⁻¹

Contact ratings

Type	Load	Cycles
standard and bistable	7 A, 250 VAC, resistive	5x10 ⁴
standard	5 A, 250 VAC, resistive	1,5x10 ⁵
sensitive	5 A, 250 VAC, resistive	1x10 ⁵
bistable	5 A, 250 VAC, resistive	1x10 ⁵
standard and bistable	7 A, 24 VDC, resistive	5x10 ⁴
sensitive	5 A, 24 VDC, resistive	3x10 ⁴

Coil data

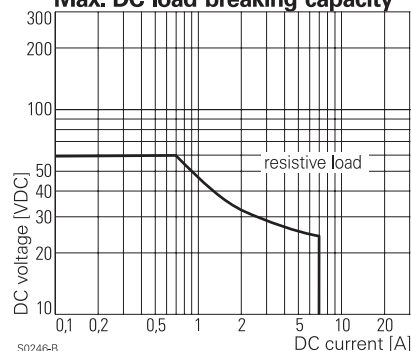
		monostable	sensitive
Rated coil voltage range DC coil		6 ... 48 VDC	
Coil power DC coil	3..24 VDC	450 mW	330 mW
	48 VDC	610 mW	570 mW
Operative range		2	

Coil versions, DC-coil

Coil code	Rated voltage VDC	Operate voltage VDC	Release voltage VDC	Coil resistance Ohm	Rated coil power mW
standard coil					
003	6	4.2	0.6	80±10%	450
005	12	8.4	1.2	320±10%	450
007	24	16.8	2.4	1280±10%	450
008	48	33.6	4.8	3800±10%	606
sensitive coil					
103	6	4.4	0.6	110±10%	327
105	12	8.8	1.2	440±10%	327
107	24	17.5	2.4	1780±10%	324
108	48	35.0	4.8	4000±10%	576

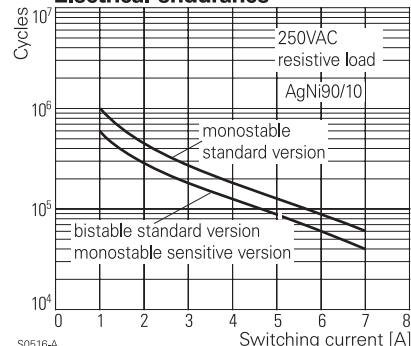
All figures are given for coil without preenergization, at ambient temperature +23°C
Other coil voltages on request

Max. DC load breaking capacity



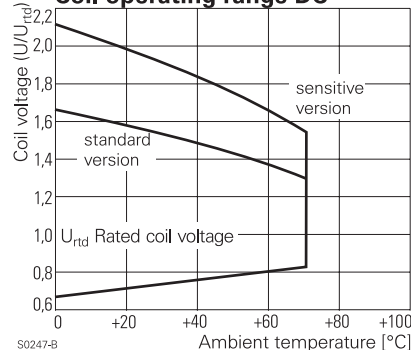
S0246-B

Electrical endurance



S0516-A

Coil operating range DC



S0247-B

Power PCB Relay U/UB (Continued)

Coil data

Rated coil voltage range	6 ... 48 VDC
Rated operate power	900...1300 mW / 20 ms
Reset voltage min., % of rated coil voltage	25%
Reset voltage max., % of rated coil voltage	45%

Coil versions, bistable

Coil code	Rated voltage VDC	Operate voltage VDC	Reset voltage VDC	Coil resistance Ohm	Rated coil power mW
003	6	4.7	1.5	33 ± 10%	1091
005	12	9.4	3.0	119 ± 10%	1210
007	24	18.7	6.0	475 ± 10%	1213
008	48	37.4	12.0	1750 ± 10%	1317

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

Insulation

Dielectric strength coil-contact circuit	2000 V _{rms} version V23148-*0***
	4000 V _{rms} version V23148-*1***
open contact circuit	1000 V _{rms}
Clearance / creepage coil-contact circuit	≥ 2.5 / 2.5 mm version V23148-*0***
	≥ 3.5 / 3.5 mm version V23148-*1***
Material group of insulation parts	≥ IIIa
Insulation to IEC 60664-1	
Type of insulation coil-contact circuit	basic
open contact circuit	functional
Rated insulation voltage	250 V
Pollution degree	2
Rated voltage system	230/400 V
Overvoltage category	II

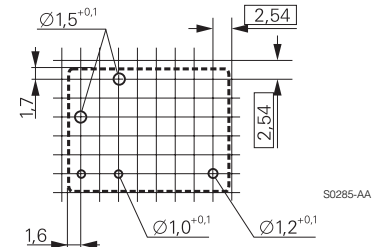
Other data

RoHS - Directive 2002/95/EC	compliant as per produc date code 0402
Flammability class according to UL94	V-0
Ambient temperature range	-25...+70°C
Operate- / release time	standard: 5/3 ms
	sensitive: 7/3 ms
Operate- / reset time	5/3 ms
Bounce time NO / NC contact	2/10 ms
Vibration resistance (function) NO / NC contact	10/10 g
Shock resistance (function) NO / NC contact	10/10 g
Category of protection	RT III - wash tight
Resistance to soldering heat wash-tight version	260°C / 5 s
Relay weight	9,5 g
Packaging unit	25 pcs

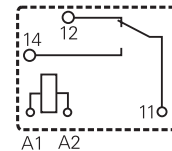
PCB layout / terminal assignment

Bottom view on solder pins

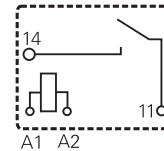
Monostable and bistable 1 coil



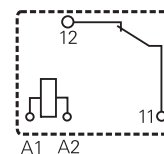
CO contact



NO contact



NC contact



Dimensions

