

Power Relay T92

- 2 pole 30 A, 2 CO or 2 NO contacts
- High switching capacity up 30 A / 400 VAC
- DC- or AC coil
- 4 kV / 8 mm coil-contact
- Insulation to VDE 0631 and VDE 0700
- PCB- or quick connect terminals or chassis mount
- Adapter for DIN-rail mounting



T92_group

Applications

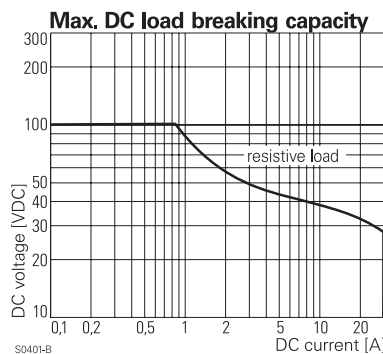
Power supplies, heating & ventilation, control equipment

Approvals

VDE REG.-Nr. 5386, E22575, LR15734
 Technical data of approved types on request

Contact data

Contact configuration	2 NO contacts	2 CO contacts
Contact set	single contact	
Type of interruption	micro disconnection	
Rated voltage / max. switching voltage AC	400 / 600 VAC	
Rated current		
NO contact (PCB / flange mount)	30 / 20 A	30 / 20 A
NC contact		3 A
Maximum breaking capacity AC, NO / NC contact	12 kVA	12 / 1.2 kVA
Contact material	AgCdO	
Minimum contact load	500mA, 12V	
Rated frequency of operation with / without load	7 min ⁻¹ / 300 min ⁻¹	
Operate- / release time (including bounce)	25 / 25 ms	



Contact ratings

Type	ContactLoad	Ambient temp. [°C]	Cycles
UL 508			
T92 AgCdO, DC coil	CO 30 A / 3 A 277 VAC, resistive	25°C	250x10 ³
T92 AgCdO, AC coil	CO 30 A / 3 A 277 VAC, resistive	25°C	100x10 ³
T92 AgCdO	CO 30 A / 3 A 277 VAC, gen. purp.	25°C	100x10 ³
T92 AgCdO	CO 20 A / 3 A 28 VDC, resistive	25°C	100x10 ³
IEC 61810			
T92 AgCdO, PCB, DC coil	CO 30 A / 3 A, 400 VAC, cosφ=1	85°C	30x10 ³
T92 AgCdO, PCB, AC coil	CO 30 A / 3 A, 400 VAC, cosφ=1	65°C	30x10 ³
T92 AgCdO, flange, DC coil	CO 20 A / 3 A, 400 VAC, cosφ=1	85°C	30x10 ³
T92 AgCdO, flange, AC coil	CO 20 A / 3 A, 400 VAC, cosφ=1	65°C	30x10 ³
T92 AgCdO, PCB, DC coil	NO 30 A 400 VAC, cosφ=1	85°C	100x10 ³
T92 AgCdO, PCB, AC coil	NO 30 A 400 VAC, cosφ=1	65°C	100x10 ³
T92 AgCdO, flange, DC coil	NO 20 A 400 VAC, cosφ=1	85°C	100x10 ³
T92 AgCdO, flange, AC coil	NO 20 A 400 VAC, cosφ=1	65°C	100x10 ³

Coil data

Rated coil voltage range DC coil	5...110 VDC
AC coil	24...240 VAC
Operative range to IEC 61810	1

Power Relay T92 (Continued)

Coil versions, DC-coil

Coil code	Rated voltage VDC	Operate voltage VDC	Release voltage VDC	Coil resistance Ohm	Rated coil power mW
12	12	9.0	1.2	86±10%	1674
24	24	18.0	2.4	350±10%	1646
48	48	36.0	4.8	1390±10%	1658
110	110	83.0	11.0	7255±10%	1668

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

Coil versions, AC-coil 50 / 60 Hz

Coil code	Rated voltage VAC	Frequ. Hz	Operate voltage VAC	Release voltage VAC	DC-coil resistance Ohm	Rated coil power VA
24	24	60	19.2	2.4	37±10%	4
120	110 / 120	50 / 60	96.0	12.0	950±10%	4
240	220 / 240	50 / 60	192.0	24.0	3800±10%	4

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

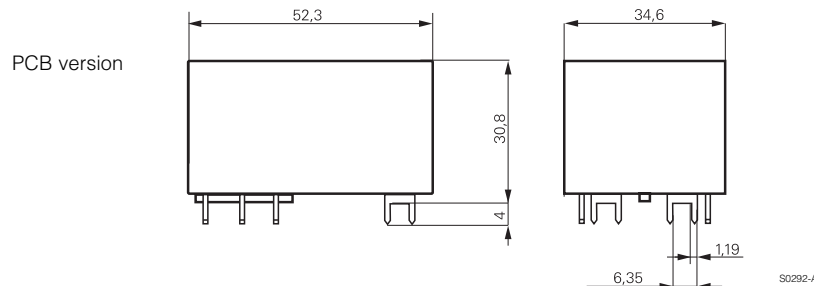
Insulation

Insulation resistance coil-contact circuit	< 10 ⁹ Ohms
Dielectric strength coil-contact circuit	4000 V _{rms}
open contact circuit	1500 V _{rms}
adjacent contact circuits	2000 V _{rms}
Clearance / creepage coil-contact circuit	≥ 5.5 / 8 mm
Tracking index of relay base	PTI 250
Insulation to IEC 61810-1	
Type of insulation coil-contact circuit	basic
open contact circuit	micro disconnection
adjacent contact circuits	basic
Rated insulation voltage	250 V
Pollution degree	3
Rated voltage system	250 V
Overvoltage category	III

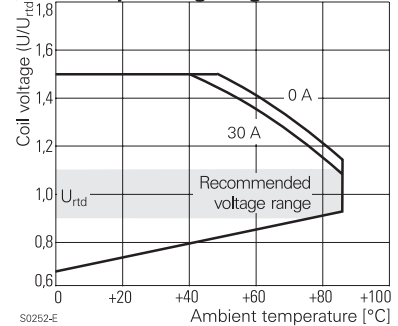
Other data

Mechanical endurance	>5x10 ⁶ cycles
Material	RoHS - Directive 2002/95/EC compliant per product date code 0509
Environment	
Ambient temperature range DC-coil	-40...+85°C
AC-coil	-40...+65°C
Vibration resistance (function) NO / NC contact	1.65 mm, 10...55 Hz
Shock resistance (function) NO / NC contact	10 g, 11 ms half sine
Shock resistance (destruction)	100 g, 11 ms half sine
Category of protection	RT I (dust protected) RT III (wash tight)
Processing	
Relay weight	86 g
Packaging unit	30 pcs

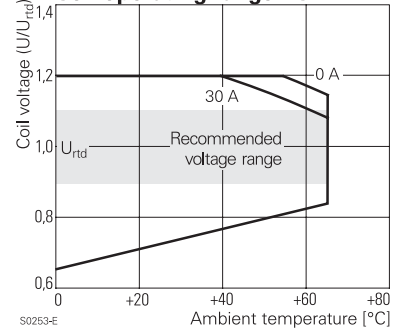
Dimensions



Coil operating range DC



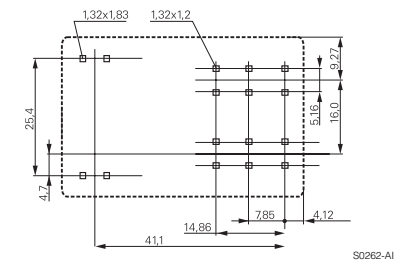
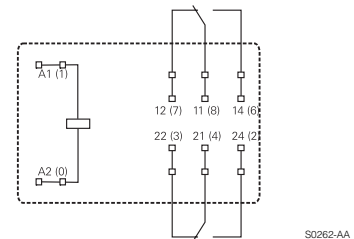
Coil operating range AC



PCB layout / terminal assignment

Bottom view on solder pins

PCB version

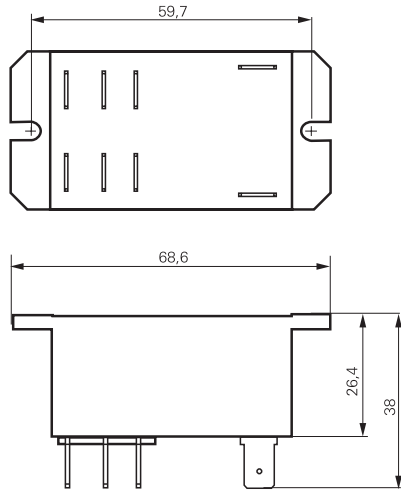


Only necessary terminals are present on 2 NO models.

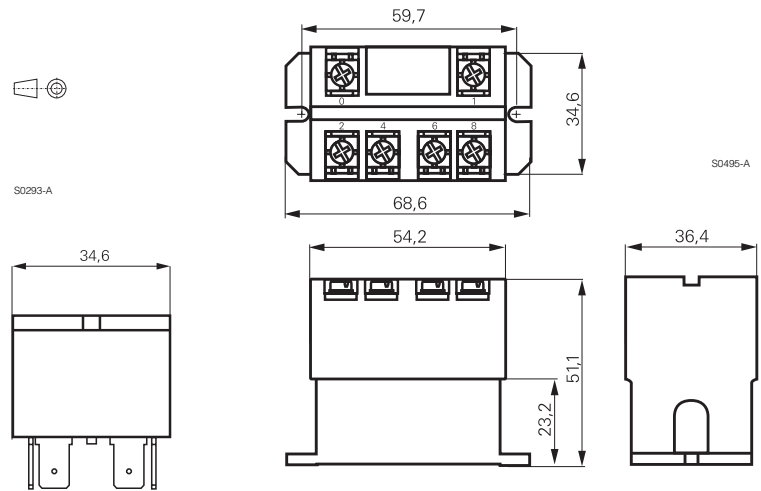
Power Relay T92 (Continued)

Dimensions

Flange mount



M4 screw terminals



Only necessary terminals are present on 2 NO models.

Product key	Typical product key							T92	P	7	A	2	2	-24
Type	T92 Power relay T92													
Enclosure	P dust protected S wash tight (PCB version only)													
Contact configuration	7 2 NO contacts (2 form A)							11 2 CO contacts (2 form C)						
Coil version	A AC-coil 50/60 Hz D DC-coil													
Mounting	1 PCB-version 2 Flange mount, 6.35 mm quick connect terminals for contacts and coil 5 M4 screw terminals (requires enclosure P and contact configuration 7, UL/CSA approved only)													
Contact material	2 AgCdO													
Coil	Coil code: please refer to coil versions table													

Other types on request

Product key	Version	Mounting	Cont.configuration	Coil	Coil	Part number
T92P11A22-24	dust-proof	flange mount	2 CO contacts	AC-coil	24 VAC	4-1393211-3
T92P11A22-240					240 VAC	4-1393211-4
T92P7A22-120			2 NO contacts		120 VAC	5-1393211-7
T92P7A22-240					240 VAC	6-1393211-2
T92P7D12-12		pcb-version		DC-coil	12 VDC	6-1393211-5
T92P7D22-12		flange mount				6-1393211-9
T92P7D22-24					24 VDC	7-1393211-1
T92S11A12-240	wash tight	pcb-version	2 CO contacts	AC-coil	240 VAC	8-1393211-2
T92S11A22-240		flange mount				8-1393211-7
T92S11D12-24		pcb-version		DC-coil	24 VDC	9-1393211-0
T92S7A12-240			2 NO contacts	AC-coil	240 VAC	9-1393211-9
T92S7A22-240		flange mount				1393212-5
T92S7D12-24		pcb-version		DC-coil	24 VDC	1-1393212-0
T92S7D22-24		flange mount				1-1393212-7