

# **Electronics**

# **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
- RoHS compliant (Directive 2002/95/EC) as per product date code 0509

## **Applications**

Power supplies, heating & ventilation, control equipment



F0167-A

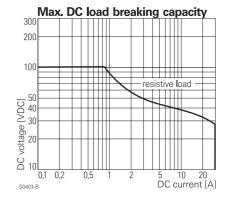
SCHRACK

# Approvals

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	single contact		
Type of interruption	micro dis	connection		
Rated current				
NO contact (PCB / flange mount)	30 / 20 A	30 / 20 A		
NC contact		3 A		
Rated voltage / max.switching voltage AC	400 / 6	600 VAC		
Maximum breaking capacity AC, NO / NC contact	ct 12 kVA	12 / 1.2 kVA		
Contact material	Ag	CdO		
Minimum contact load		nA, 12V		
Mechanical endurance		<sup>6</sup> cycles		
Rated frequency of operation with / without load	7 min <sup>-1</sup> /	300 min <sup>-1</sup>		



**Contact ratings** 

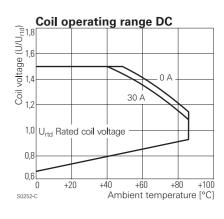
Туре	Load	Cycles
NO contacts, PCB version	30 A @ 400 VAC, VDE	1x10⁵
NO / NC contacts, PCB version	30 A / 3 A @ 400 VAC, VDE	3x10 <sup>4</sup>
NO contacts, flange mount version	20 A @ 400 VAC, VDE	1x10 <sup>5</sup>
NO / NC contacts, flange mount version	20 A / 3 A @ 400 VAC, VDE	3x10 <sup>4</sup>
NO contacts, all versions	20 A @ 480 VAC, VDE	1x10 <sup>5</sup>
NO / NC contacts, all versions	20 A / 3 A @ 28 VDC, UL	1x10 <sup>5</sup>

Coil data	
Rated coil voltage range DC coil	5110 VDC
AC coil	24240 VAC
Coil power DC coil	1700 mW
AC coil	4 VA
Operative range	1

Coil versions, DC-coil

Coil	Rated	Operate	Release	Coil	Rated coil
code	voltage	voltage	voltage	resistance	power
	VDČ	VDC	VDC	Ohm	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
A 11 C1	, ,				2000

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









# Power Relay T92 (Continued)

Coil versions, AC-coil 50/60 Hz

Rated	Frequ.	Operate	Release	DC-coil	Rated coil
voltage		voltage	voltage	resistance	power
VAC	Hz	VAC	VAC	Ohm	VA
24	60	19.2	2.4	44±10%	4
110/120	50/60	96.0	12.0	950±10%	4
220/240	50/60	192.0	24.0	3800±10%	4
	voltage VAC 24 110/120	voltage VAC Hz 24 60 110/120 50/60	voltage         voltage           VAC         Hz         VAC           24         60         19.2           110/120         50/60         96.0	voltage         voltage         voltage           VAC         Hz         VAC         VAC           24         60         19.2         2.4           110/120         50/60         96.0         12.0	voltage         voltage         voltage         voltage         resistance           VAC         Hz         VAC         VAC         Ohm           24         60         19.2         2.4         44±10%           110/120         50/60         96.0         12.0         950±10%

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 <sup>9</sup> Ohms
Dielectric strength coil-contact circuit	4000 V <sub>rms</sub>
open contact circuit	1500 V <sub>rms</sub>
adjacent contact circuits	2000 V <sub>rms</sub>
Clearance / creepage coil-contact circuit	≥ 8 / 9.5 mm
Tracking index of relay base	PTI 100M
Insulation to IEC 60664-1	
Type of insulation coil-contact circuit	basic
open contact circuit	functional
adjacent contact circuits	basic
Rated insulation voltage	400 V
Pollution degree	2
Rated voltage system	400/600 V
Overvoltage category	III

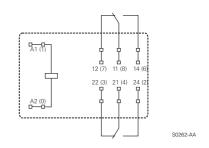
RoHS - Directive 2002/95/EC compliant per product date code 0509  Flammability class according to UL94  Ambient temperature range DC-coil -40+85°C AC-coil -40+65°C  Operate- / release time 15 ms / 10 ms  Bounce time NO / NC contact 10 ms / 15 ms  Vibration resistance (function) NO / NC contact 1.65 mm, 1055 Hz  Shock resistance (function) NO / NC contact 10 g, 11 ms half sine	Other data	
Ambient temperature range DC-coil AC-coil AC-coil Operate- / release time Bounce time NO / NC contact Vibration resistance (function) NO / NC contact Shock resistance (function) NO / NC contact 10 g, 11 ms half sine	RoHS - Directive 2002/95/EC	compliant per product date code 0509
AC-coil Operate- / release time Bounce time NO / NC contact Vibration resistance (function) NO / NC contact Shock resistance (function) NO / NC contact 10 ms / 15 ms 10 ms / 15 ms 1.65 mm, 1055 Hz 10 g, 11 ms half sine	Flammability class according to UL94	V-0
Operate- / release time 15 ms / 10 ms Bounce time NO / NC contact 10 ms / 15 ms Vibration resistance (function) NO / NC contact 1.65 mm, 1055 Hz Shock resistance (function) NO / NC contact 10 g, 11 ms half sine	Ambient temperature range DC-coil	-40+85°C
Bounce time NO / NC contact 10 ms / 15 ms  Vibration resistance (function) NO / NC contact 1.65 mm, 1055 Hz  Shock resistance (function) NO / NC contact 10 g, 11 ms half sine	AC-coil	-40+65°C
Vibration resistance (function) NO / NC contact 1.65 mm, 1055 Hz Shock resistance (function) NO / NC contact 10 g, 11 ms half sine	Operate- / release time	15 ms / 10 ms
Shock resistance (function) NO / NC contact 10 g, 11 ms half sine	Bounce time NO / NC contact	10 ms / 15 ms
	Vibration resistance (function) NO / NC contact	1.65 mm, 1055 Hz
Shock resistance (destruction) 100 g 11 ms half sine	Shock resistance (function) NO / NC contact	
Shock resistance (destruction)	Shock resistance (destruction)	100 g, 11 ms half sine
Category of protection RT I (dust protected)	Category of protection	RT I (dust protected)
RT III (wash tight)		RT III (wash tight)
Relay weight 86 g	Relay weight	86 g
Packaging unit 30 pcs	Packaging unit	30 pcs

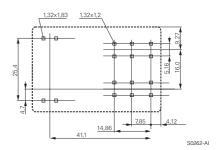
# Coil operating range AC 1,6 1,6 1,0 1,0 0,8 0,6 0 +20 +40 +60 +80 +100 Sozsac Ambient temperature [°C]

## PCB layout / terminal assignment

Bottom view on solder pins

### PCB version

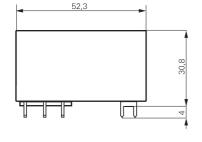


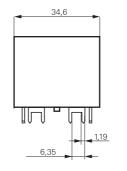


# Only necessary terminals are present on 2 NO models.

## **Dimensions**

PCB version







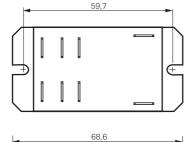


# **Electronics**

## Power Relay T92 (Continued)

#### **Dimensions**



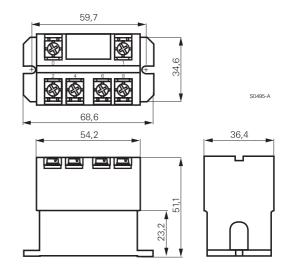








## M4 screw terminals



Only necessary terminals are present on 2 NO models.

## Product key

T 9

26,4



2



2

Type Enclosure

P dust protected

**s** wash tight (PCB version only)

Contact configuration

7 2 NO contacts

11 2 CO contacts

Coil version

tina

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 scew 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				0-1393212-5
T92S7D12-24		pcb-version		DC-coil	24 VDC	1-1393212-0
T92S7D22-24		flange mount				1-1393212-7