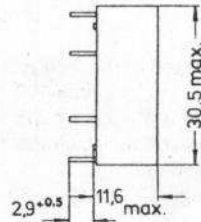


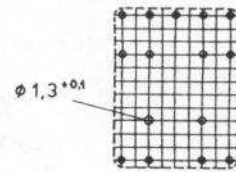
# ZETTLER

## Relays AZ 7-4C

### Platformrelays

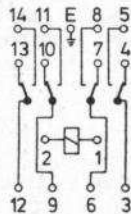


Dimensions in mm



Pin 2.54 mm  
Hole pattern viewed from pin side

**AZ 7-4C-..D**  
dustproof according  
to DIN 40 050  
Class IP 52



Circuit diagram

**AZ 7-4C-..DE**  
sealed according to DIN 40 050  
Class IP 67



**Authorisation:**  
UL : File E 43203  
CSA: File LR 36664-8  
for contact pins  
2 A/30 V DC or  
0.5 A/125 V AC



The AZ 7 relay family completes the ZETTLER platform relay programme. They are available in dustproof (IP 52) and sealed (IP 67) models. The small surface area and the low height enable it to be used on boards

15 mm apart with good surface usage. The connection pins can be flow-soldered provided the soldering recommendations given are followed. The AZ 7 relays are highly reliable and have a long service life, making them

especially suitable for plant controllers, alarm systems and telephone systems. AZ 7-4C has 4 change over contact sets. The contacts are welded as bi-furcated contacts. The grid is standard grid  $\frac{1}{16}$ " (2.54 mm).

## Technical Data

### General

shock resistance 1)	10 g
vibration resistance at 10-55 Hz double amplitude	1.5 mm
pick-up time at rated excitation	10 ms (typical)
drop off time at rated excitation	4 ms (typical)
max. switching rate	50 Hz
isolation resistance	> 1000 MΩ
dimensions	see page 1
weight	approx. 16 g
mounting position	any
connection	tinned

1) Contact breaks shorter than 10 μs

### Coil side

operating voltages	see list (special models on request)
drop out voltage	> 10 % of rated voltage
pick up excitation AW	normal sealed approx.100 approx.112
pick up power mW	approx.235 approx.310
permissible surrounding temperatures for operation with rated voltage °C	-40...+60 -40...+50
maximum permissible continuous dissipation (cold dissipation) up to 40 °C surrounding temperature	1.2 W
permissible final temp.	+105 °C
permissible storage temp. with protective cap.	-55 °C ... +105 °C
sealed model	-55 °C ... +65 °C
test voltage coil-frame	1500 Vrms
Inductance (H) at rated excitation	approx. $1.8 \times 10^{-7} \times N^2$

### Contact side

type of contact	4 change over contacts (double contacts)
contact material	AgNi + 10 μm Au 2)
switching power at constant resistance load	max. up to 30 V: 60 W/ 60 VA max. up to 60 V: 50 W/100 VA max. up to 250 V: 30 W/220 VA
switching voltage at max.	250 V DC/AC
switching current at max.	2 A DC/AC
insulated for voltage reference according to VDE 0110	Gr. B 250 V AC/300 V DC Gr. C 60 V AC/75 V DC
test voltage	
between contacts and coil	1500 Vrms
between change over contacts	1500 Vrms
between open contacts	750 Vrms
mechanical service life	10 <sup>8</sup> operations

2) Special material AgPd + 10 μm Au available on request

### Soldering and cleaning recommendations for models with dust proof cap.

We recommend a flux which is non-aggressive and non-creeping e.g. ZEVA FLUX C3. The board should not be flooded otherwise the flux could reach the component side. Max. soldering temp. +270 °C, soldering time 5 seconds. Relays should not be dipped into the cleansing solution!

Careful cleaning with a brush is permitted. We recommend the cleansing agents Freon and Kaltron.

### Soldering and cleaning recommendations for sealed models

The afore mentioned sealed models are guaranteed also against normal fluxes, soldering and cleaning processes of flat form group constructions. The models can also be immersed into the solution. Limits are: soldering temp. max. 270 °C, soldering time max. 5 seconds, temperature of cleansing solution max. +80 °C, washing time max. 30 seconds, supersonic pressure max. 0.5 bar. We recommend water with wetting agents, Isopropylalcohol, trichlorethylene for cleaning. Aceton, aqueous alkalines and Phenols should be avoided.

If these sealed models are necessary for operations please request further information on electrical operation conditions.

# ZETTLER

## Relays AZ 7-4C

### Order numbers

#### Model with dustproof cap

Rated voltage VDC	Resistance ± 10 % at 20 °C Ω	No. of turns	Pick-up voltage at 20 °C VDC	Drop-out voltage at 20 °C VDC	Operating voltage at 40 °C VDC		Order number
					min.	max.	
5	53	1500	3,6	0,5	4,3	7,5	AZ 7-4C- 5D
6	90	2000	4,2	0,6	4,9	10	AZ 7-4C- 6D
12	330	4000	8,4	1,2	9,9	19	AZ 7-4C-12D
24	1200	7000	16,8	2,4	20,1	36	AZ 7-4C-24D
48	4200	12500	33,6	4,8	40,8	67	AZ 7-4C-48D

#### Sealed model

Rated voltage VDC	Resistance ± 10 % at 20 °C Ω	No. of turns	Pick-up voltage at 20 °C VDC	Drop-out voltage at 20 °C VDC	Operating voltage at 40 °C VDC		Order number
					min.	max.	
5	53	1500	4,0	0,5	4,8	7,5	AZ 7-4C- 5DE
6	90	2000	4,8	0,6	5,8	10	AZ 7-4C- 6DE
12	330	4000	9,6	1,2	11,4	19	AZ 7-4C-12DE
24	1200	7000	19,2	2,4	23	36	AZ 7-4C-24DE
48	4200	12500	38,4	4,8	46,5	67	AZ 7-4C-48DE