



Electronic Multi-Range Time Relays

KZT 71 KM for multi-voltage 24 to 240 V AC/DC

KZT 71 KD for dual-voltage 24 V AC/DC and 230 V AC, voltage selection by means of a DIP-switch

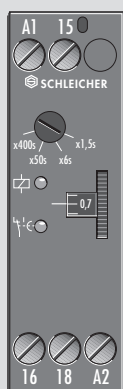
KZT 71 K for single voltage

Function: ON-delay (AV)

1 setting range: divided into 4 time ranges

Contact equipment: 1 timed changeover

KZT 71 KM, ...



Function

AV (see page K 2/3).

The setting of the functions and time ranges is done on the timer's front by means of selector switches. The time setting within a range is carried out with the aid of a thumbwheel.

On the KZT 71 KD the voltage can be selected with the DIP-switch situated on the rear of the item (factory preset at 220 V AC).

Product Description

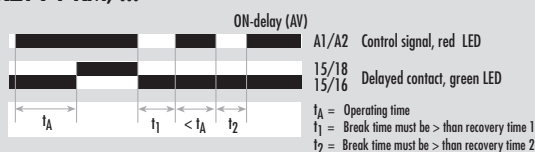
The electronic multi-function relays KZT 71... are available in 1 setting range, divided into 4 time ranges.

2

Function Diagram

FD 0026

KZT 71 KM, ...

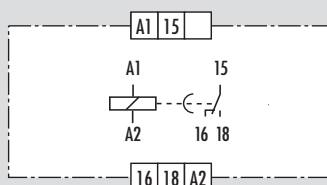


| Setting Range | Time Range |
|--|---------------|
| 0,15 s to 400 s divided into : | 0,15 to 1,5 s |
| | 0,6 to 6 s |
| | 5 to 50 s |
| | 40 to 400 s |
| or | |
| 1,5 s to 60 min divided into: | 1,5 to 15 s |
| | 0,1 to 1 min |
| | 0,8 to 8 min |
| | 6 to 60 min |

Connection Diagram

KS 0080/2

KZT 71 KM, ...

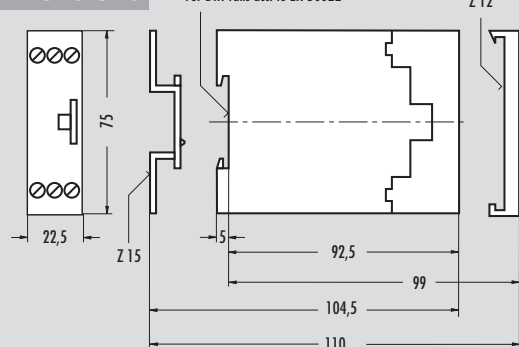


| Type | Standard voltage | Special voltage | Price Code |
|-------------------------------------|---|---|-----------------|
| KZT 71 KM 400 s KZT 71 KM 60 min | 24 to 240 V AC/DC 50 to 60 Hz | | K 2/19.1 |
| KZT 71 KD 400 s KZT 71 KD 60 min | 24 V AC/DC and 220 to 240 V AC 50 to 60 Hz | | K 2/19.2 |
| KZT 71 K 400 s KZT 71 K 60 min | 24 V AC/DC 110 to 127 V AC 220 to 240 V AC 50 to 60 Hz | 42 V AC/DC 48 V AC/DC 60 V AC/DC 50 to 60 Hz | K 2/19.3 |

Dimensions

For DIN-rails acc. to EN 50022

Z 12 K 1-8



Accessories

- Cover Z 12 (selectable transparent cover)
 - Seal Z 13 (to protect the time range selector switch)
 - Adaptor Z 15 (to be fixed with 2 screws type M49)
- The housing can be snapped onto the adaptor.

Price code for accessories: see page K 2/71



TECHNICAL DATA

FUNCTION according to DIN VDE 0435 Part 1 110:04.89

Function display Point 3.12
Function diagram

POWER SUPPLY

Rated voltage U_N V AC/DC
Rated voltage U_N V AC
Rated consumption at 50 Hz and U_N (AC) VA
Rated consumption at 50 Hz and U_N (AC) W
Rated consumption DC W
Starting current inrush A/ms
Rated frequency Hz
Operating voltage range

TIME CIRCUIT

Time setting/Number of time ranges
2 setting ranges available
Recovery time 1/2
Release value
Permissible parallel load
Internal rectifier
Average of the error
Dispersion
Influence of the energizing quantity or supply voltage
Influence of the ambient temperature

OUTPUT CIRCUIT

Contact equipment
Contact material
Switching voltage U_n V AC/DC
Maximum continuous current I_n A
Application category according to EN 60947-5-1:1991
Permissible switching frequency switching cycles/h
Mechanical service life switching cycles
Response time ms
Release time ms

GENERAL DATA

Creepage and clearance distances between circuits acc. to DIN VDE 0110-1:04.97: Rated surge voltage kV
Over voltage category
Contamination level
Design voltage V AC
Test voltage U_{eff} 50 Hz acc. to DIN VDE 0110-1, Table A.1 kV
Protection class housing/terminals acc. to DIN VDE 0470 Sec. 1:11.92
Radiated noise
Noise immunity

Ambient temperature, working range °C
Dimensions
Connection diagram
Weight kg
Accessories
Approvals

GENERAL TECHNICAL SPECIFICATIONS

KZT 71 KM

Multi-range time relay for multi-voltage

ON-delay time relay
1 LED green, 1 LED red
FD 0026

24 to 240

7,5
1,9
1,9
-
50 to 60
0,8 to 1,1 x U_N

analog/4
1. setting range 0,15 to 400 s
divided into:
0,15 to 1,5; 0,6 to 6; 5 to 50;
40 to 400
2. setting range 1,5 s to 60 min
divided into:
1,5 s to 15 s; 0,1 min to 1 min;
0,8 to 8; 6 to 60
ca. 50/ca. 50
≥ 10; permiss. line inductivity 0,2 μF
yes
no
diagram 4, page i.5
≤ ± 0,5
≤ 0,02
≤ 0,025

1 timed changeover
Ag-alloy; gold-plated
230/230
5
AC-15 U_e 230 V AC, I_e 2 A
DC-13 U_e 24 V DC, I_e 2 A
3600
20 x 10⁶
-
ca. 25

4
III
3 outside, 2 inside
250
2,21
IP 30/IP 20
EN 50081-1:03.93, -2:03.94
EN 50082-2:1995

-20 to + 60
K 1-8
KS 0080/2
0,12
cover Z 12, seal Z 13,
adaptor Z 15
page i.4

page i.5

KZT 71 KD

Multi-range time relay for dual-voltage with switchable supply voltages

ON-delay time relay
1 LED green, 1 LED red
FD 0026

24

220 to 240

1,8 | 8,4
1,5 | 1,1
1,0
1,5/2 | 0,7/0,5
50 to 60
0,8 to 1,1 x U_N

analog/4
1. setting range 0,15 to 400 s
divided into:
0,15 to 1,5; 0,6 to 6; 5 to 50;
40 to 400
2. setting range 1,5 s to 60 min
divided into:
1,5 s to 15 s; 0,1 min to 1 min;
0,8 to 8; 6 to 60
ca. 60/ca. 70
≥ 15
yes
no
diagram 4, page i.5
≤ ± 0,5
≤ 0,02
≤ 0,025

1 timed changeover
Ag-alloy; gold-plated
230/230
5
AC-15 U_e 230 V AC, I_e 2 A
DC-13 U_e 24 V DC, I_e 2 A
3600
20 x 10⁶
-
ca. 20

4
III
3 outside, 2 inside
250
2,21
IP 30/IP 20
EN 50081-1:03.93, -2:03.94
EN 50082-2:1995

-20 to + 60
K 1-8
KS 0080/2
0,12
cover Z 12, seal Z 13,
adaptor Z 15
page i.4

page i.5



TECHNICAL DATA

FUNCTION according to DIN VDE 0435 Part 1 110:04.89

Function display Point 3.12
Function diagram

POWER SUPPLY

Rated voltage U_N V AC/DC
Rated voltage U_N V AC

Rated consumption at 50 Hz and U_N (AC) VA
Rated consumption at 50 Hz and U_N (AC) W
Rated consumption DC W
Starting current inrush A/ms
Rated frequency Hz
Operating voltage range

TIME CIRCUIT

Time setting/Number of time ranges
2 setting ranges available

s
s

s/min
min
ms
ms
% U_N

%
Dispersion % ± 10 ms
Influence of the energizing quantity or supply voltage %/% ΔU_N
Influence of the ambient temperature %/K

OUTPUT CIRCUIT

Contact equipment
Contact material
Switching voltage U_n V AC/DC
Maximum continuous current I_n A
Application category according to EN 60947-5-1:1991

Permissible switching frequency switching cycles/h
Mechanical service life switching cycles
Response time ms
Release time ms

GENERAL DATA

Creepage and clearance distances between circuits acc. to DIN VDE 0110-1:04.97: Rated surge voltage kV
Over voltage category III
Contamination level 3 outside, 2 inside
Design voltage V AC 250
Test voltage U_{eff} 50 Hz acc. to DIN VDE 0110-1, Table A.1 kV 2,21
Protection class housing/terminals acc. to DIN VDE 0470 Sec. 1:11.92 IP 30/IP 20
Radiated noise EN 50081-1:03.93, -2:03.94
Noise immunity EN 50082-2:1995

Ambient temperature, working range °C -20 to +60
Dimensions K 1-8
Connection diagram KS 0080/2
Weight kg 0,12
Accessories cover Z 12, seal Z 13, adaptor Z 15

Approvals

GENERAL TECHNICAL SPECIFICATIONS

KZT 71 K

Multi-range time relay for single voltage

ON-delay time relay
1 LED green, 1 LED red
FD 0026

| 24 | 42 | 48 | 60 | 110-127 | 220-240 |
|----|----|----|----|---------|---------|
|----|----|----|----|---------|---------|

| | | | | | |
|--------------------|-----|-----|-----|-----|-----|
| 1,8 | 1,7 | 1,8 | 1,8 | 5,3 | 8,4 |
| 1,5 | 1,6 | 1,6 | 1,5 | 1,7 | 1,1 |
| 1,0 | 1,4 | 1,5 | 1,2 | | |
| 1,5/2 | 3/1 | 2/1 | 3/5 | 5/5 | 7/5 |
| 50 to 60 | | | | | |
| 0,8 to 1,1 x U_N | | | | | |

analog/4
1. setting range 0,15 to 400 s
divided into:
0,15 to 1,5; 0,6 to 6; 5 to 50;
40 to 400
2. setting range 1,5 s to 60 min
divided into:
1,5 s to 15 s; 0,1 min to 1 min;
0,8 to 8; 6 to 60
ca. 60/ca. 70
-
 ≥ 15
yes
no
diagram 4, page i.5
 $\leq \pm 0,5$
 $\leq 0,02$
 $\leq 0,025$

1 timed changeover
Ag-alloy; gold-plated
230/230
5
AC-15 U_e 230 V AC, I_e 2 A
DC-13 U_e 24 V DC, I_e 2 A
3600
20 x 10⁶
-
ca. 20

4
III
3 outside, 2 inside
250
2,21
IP 30/IP 20
EN 50081-1:03.93, -2:03.94
EN 50082-2:1995

-20 to +60
K 1-8
KS 0080/2
0,12
cover Z 12, seal Z 13,
adaptor Z 15
page i.4

page i.5