



Electronic Time Relays

DZT 32-S L, DZT 32 L, DZT 42 L for single voltage

Function: ON-delay (AV)

1 time range

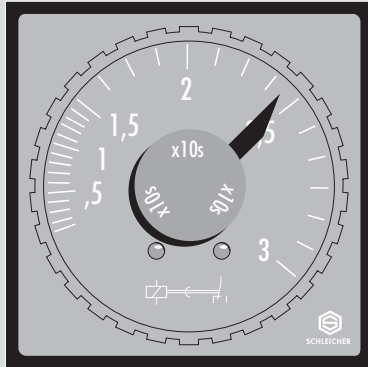
Contact equipment: DZT 32-S L = 1 timed and 1 instantaneous changeover

DZT 32 L = 2 timed changeover

DZT 42 L = 2 timed changeover

DZT 32-S L, ...

72 x 72



Function

AV (see page D 3/3).

Infinitely variable time setting is carried out with the aid of a transparent rotary knob.

Product Description

The electronic time relays DZT 32-S L, ... are single range devices and available in the following time ranges:

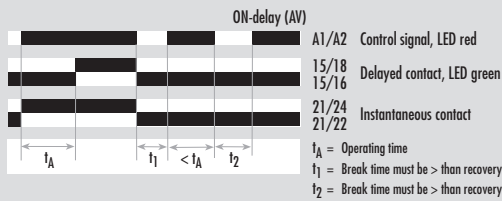
Time Range

0,05 to	1 s
0,15 to	3 s
0,5 to	10 s
1,5 to	30 s
5 to	100 s
15 to	300 s
0,5 to	10 min
1,5 to	30 min

Function Diagram

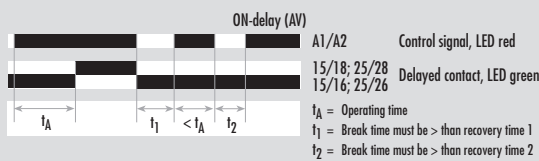
FD 0041

DZT 32-S L



DZT 32 L, DZT 42 L

FD 0026



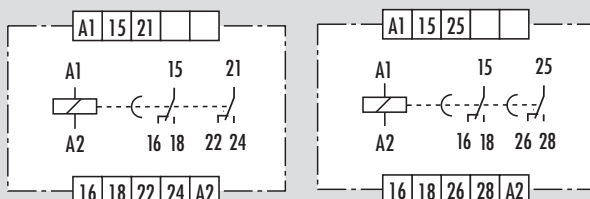
Connection Diagram

DZT 32-S L

KS 0191/2

DZT 32 L, DZT 42 L

KS 0085/4



Type	Standard voltage	Special voltage	Price Code
DZT 32-S L 1 s	24 V AC/DC	42 V AC/DC	D 3/21.1
DZT 32-S L 3 s	110 to 127 V AC	48 V AC/DC	
DZT 32-S L 10 s	220 to 240 V AC	60 V AC/DC	
DZT 32-S L 30 s	50 to 60 Hz	50 to 60 Hz	
DZT 32-S L 100 s	24 V AC/DC	42 V AC/DC	D 3/21.2
DZT 32-S L 300 s	110 to 127 V AC	48 V AC/DC	
DZT 32-S L 10 min	220 to 240 V AC	60 V AC/DC	
DZT 32-S L 30 min	50 to 60 Hz	50 to 60 Hz	
DZT 32 L 1 s	24 V AC/DC	42 V AC/DC	D 3/21.3
DZT 32 L 3 s	110 to 127 V AC	48 V AC/DC	
DZT 32 L 10 s	220 to 240 V AC	60 V AC/DC	
DZT 32 L 30 s	50 to 60 Hz	50 to 60 Hz	
DZT 32 L 100 s	24 V AC/DC	42 V AC/DC	D 3/21.4
DZT 32 L 300 s	110 to 127 V AC	48 V AC/DC	
DZT 32 L 10 min	220 to 240 V AC	60 V AC/DC	
DZT 32 L 30 min	50 to 60 Hz	50 to 60 Hz	
DZT 42 L 1 s	110 to 127 V DC	-	D 3/21.5
DZT 42 L 3 s	220 V DC		
DZT 42 L 10 s	240 V DC		
DZT 42 L 30 s			
DZT 42 L 100 s	110 to 127 V DC	-	D 3/21.6
DZT 42 L 300 s	220 V DC		
DZT 42 L 10 min	240 V DC		
DZT 42 L 30 min			



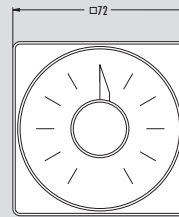
Accessories

Socket connector	B 5	for panel and surface mounting
Pin holder	B 7	for panel mounting
Cover	DA 1	for panel cutout
Lockable cover	V 4	
Seal	Z 1	

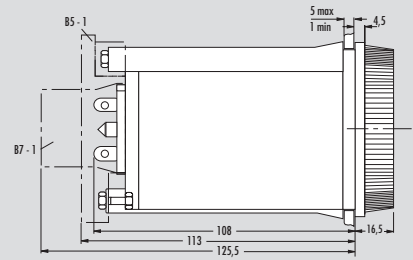
Price code for accessories (see page D 3/79).

Dimensions

D 1-30



Panel cutout □ 68^{+0,7}





TECHNICAL DATA

FUNCTION according to DIN VDE 0435 Part 110:04.89

Point 3.12

Function display
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
Available setting ranges
Recovery time 1/2
Minimum switch-ON time
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 of the instantaneous changeover ms
Release time of the timed/instantaneous changeover 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
Test voltage U_{eff} 50 Hz acc. to DIN VDE 0110-1, Table A.1 kV
Protection class: Housing front panel/housing rear panel/flat pin terminal
Radiated noise
Noise immunity
Ambient temperature, working range °C
Dimensions
Connection diagram
Weight kg
Accessories

Approvals

GENERAL TECHNICAL SPECIFICATIONS

DZT 32-S L

Single range time relay for single voltage
ON-delay time relay
2 LED
FD 0041

24	42	48	60	110-127	220-240
3,6	3,2	3,5	2,5	4,0	7,8
3,2	2,9	3,3	2,4	2,2	3,1
2,4	2,2	2,4	1,8		
2/2	8/2	6/1,5	6/1,5	5/1,5	5/1,5
50 to 60					
0,8 to 1,1 x U_N					

analog/1
0,05 to 1; 0,15 to 3; 0,5 to 10;
1,5 to 30; 5 to 100; 15 to 300;
0,5 to 10; 1,5 to 30
ca. 35/ca. 70
-
≥ 15
yes
no
diagram 3, page i.5
≤ ± 0,5
≤ 0,02
≤ 0,025

1 timed and 1 instantaneous 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
6000
30 x 10⁶
ca. 20
ca. 20/ca. 15

4
III
3 outside, 2 inside
250
2,21
IP 50/IP 20/IP 00
EN 50081-1:03.93, -2:03.94
EN 50082-2:1995

-20 to + 60
D 1-30
KS 0191/2
0,2
cover DA 1, sealable cover V 4,
seal Z 1, socket connector B 5,
pin holder B 7
page i.4

page i.5

DZT 32 L

Single range time relay for single voltage
ON-delay time relay
2 LED
FD 0026

24	42	48	60	110-127	220-240
1,7	2,1	1,9	1,6	1,8	5,8
1,3	1,7	1,8	1,3	0,9	1,5
1,4	1,4	1,5	0,8		
2/2	8/2	6/2	6/5	5/1	5/5
50 to 60					
0,8 to 1,1 x U_N					

analog/1
0,05 to 1; 0,15 to 3; 0,5 to 10;
1,5 to 30; 5 to 100; 15 to 300;
0,5 to 10; 1,5 to 30
ca. 35/ca. 70
-
≥ 15
yes
no
diagram 3, page i.5
≤ ± 0,5
≤ 0,02
≤ 0,025

2 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
6000
30 x 10⁶
-
ca. 25

4
III
3 outside, 2 inside
250
2,21
IP 50/IP 20/IP 00
EN 50081-1:03.93, -2:03.94
EN 50082-2:1995

-20 to + 60
D 1-30
KS 0085/4
0,18
cover DA 1, sealable cover V 4,
seal Z 1, socket connector B 5,
pin holder B 7
page i.4

page i.5





TECHNICAL DATA

FUNCTION according to DIN VDE 0435 Part 110:04.89

Function display Point 3.12
Function diagram

POWER SUPPLY

Rated voltage U_N V DC
Rated consumption DC W
Starting current inrush A/ms
Operating voltage range

TIME CIRCUIT

Time setting/Number of time ranges
Available setting ranges s
Recovery time 1/2 min
Minimum switch-ON time ms
Release value % U_N
Permissible parallel load
Internal rectifier
Average of the error % ± 10 ms
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
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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 front panel/housing rear panel/flat pin terminal IP 50/IP 20/IP 00
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 D 1-30
Connection diagram KS 0085/4
Weight kg 0,2
Accessories cover DA 1, sealable cover V 4, seal Z 1, socket connector B 5, pin holder B 7

Approvals

GENERAL TECHNICAL SPECIFICATIONS

DZT 42 L

Single range time relay for single voltage
ON-delay time relay
2 LED
FD 0026

110-127	220	240
1,6	2,8	3,0
0,1/6	,04/8	,04/10
0,8 to 1,1 x U_N		

analog/1
0,05 to 1; 0,15 to 3; 0,5 to 10;
1,5 to 30; 5 to 100; 15 to 300;
0,5 to 10; 1,5 to 30
ca. 35/ca. 70
-
 ≥ 15
yes
no
diagram 3, page i.5
 $\leq \pm 0,5$
 $\leq 0,02$
 $\leq 0,025$

2 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
6000
 30×10^6
-
ca. 25

4
III
3 outside, 2 inside
250
2,21
IP 50/IP 20/IP 00
EN 50081-1:03.93, -2:03.94
EN 50082-2:1995

-20 to + 60
D 1-30
KS 0085/4
0,2
cover DA 1, sealable cover V 4,
seal Z 1, socket connector B 5,
pin holder B 7
page i.4

page i.5