schleicher
control systems

Technical Data

DZE 12-SL / DZE 34-2SL

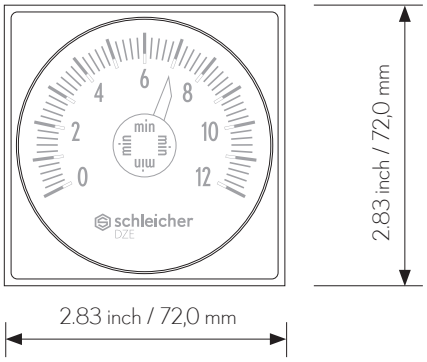
Response-delay single-range time-delay relay - electronic

- Devices for mono-voltage
- Response delay (RD)
- 1 Time range
- Contact complement:
  DZE 12-SL: 1 immediate and 1 delayed changeovers
  DZE 34-2SL: 1 immediate and 1 delayed make-break contacts
- Front dimensions: 2.83 x 2.83 inch / 72,0 x 72,0 mm

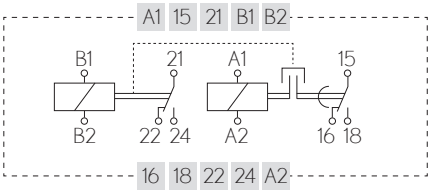
Function

On excitation of A1/A2 and B1/B2 (B1/B2 only in DZE 12-SL), the instantaneous contact is brought to the working position and the timing period begins. Once the preset time is reached, the time contact is activated. After de-excitation, the timer and all contacts go to the initial position. If voltage is interrupted during the timing period, then the instantaneous contact and timer fall to the initial position. During the timing period the operating time can be reduced but not increased. On resetting to zero, both contacts switch instantaneously. The DZE component is out-of-the-box directly interchangeable with electromechanical relay precursor models.

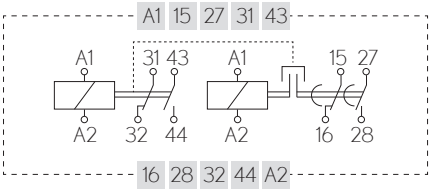
Dimension drawing



Circuit diagrams



DZE 12-SL / KS 232-1



DZE 34-2SL / KS 232-2

Accessories

Type	Name	For device	Article no.
B5	Jack plate for installation and surface mounting	DZE 12-SL	R9.211.0089.0
B7	Plug-in holder for installation	DZE 12-SL	R9.211.0209.0
B8	Plug-in holder for installation	DZE 34-2SL	R9.211.0259.0
DA1	Cover, black for panel cutout	DZE 12-SL / DZE 34-2SL	R9.211.0399.0
V4	Lockable cap, transparent	DZE 12-SL / DZE 34-2SL	R9.211.0179.0
Z1	Seal for panel mounting, black	DZE 12-SL / DZE 34-2SL	R9.211.0199.0

Time ranges

Adjustment ranges available:

Seconds	Minutes	Hours
3 s	3 min	3 h
6 s	6 min	6 h
30 s	12 min	30 h
60 s	30 min	60 h
	60 min	

new release: 12 January 2015 / previous release: 06 February 2014 / release no. 02 / datasheet DZE 12-SL / DZE 34-2SL / subject to change without further notice

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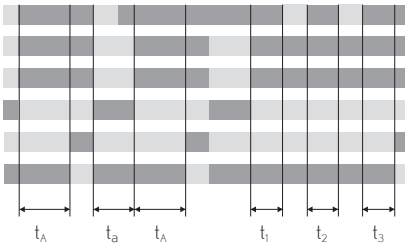
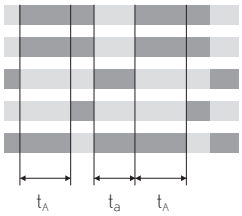
Function charts



DZE 12-SL Response delay (AV)

A1/A2 Controlled variable
B1/B2 Controlled variable
21/24 Instantaneous contact element
21/22 Instantaneous contact element
15/18 Delayed contact element
15/16 Delayed contact element

t_A = Operating time = $\sum_{1}^{n} t_x$
t_a = Recovery time



DZE 34-2SL Response delay (AV)

A1/A2 Controlled variable
43/44 Instantaneous contact elemen
31/32 Instantaneous contact elemen
27/28 Delayed contact element
15/16 Delayed contact element

t_a = Operating time

Product properties

Product standard (time-delay relay)	EN 61812-I: 2011
Function type	Analogue adjustable time-delay relay for mono-voltage
Function indicator:	LED scale (with 13 LEDs) for operating time
Supply circuit	
Nominal voltage U_N:	24 V AC/DC, 115 V AC, 230 V AC
Nominal frequency:	50 and 60 Hz
Operating voltage range:	0,8 to 1,1 x U_N
Rated power:	approx. 2,5 VA / approx. 2,3 W
Timing circuit	
Time setting / Number of time ranges:	analog / 1
Time ranges available:	see Table "Time Ranges"
Recovery time:	≤ 450 ms
Minimum on-time:	≤ 150 ms
Errors (average of full-scale value):	± 5 %
Repeat accuracy (deviation from average):	± 1 %
Output circuit	
Contact complement:	DZE 12-SL: 1 immediate and 1 delayed changeovers DZE34-2SL: 1 immediate and 1 delayed make-break contacts
Contact material:	$AgSnO_2$
Nominal switching voltage U_n:	250 V AC / 30 V DC
Max. continuous current I_n:	8 A
Utilization category to DIN EN 60947-5-1	AC-15: 250 V AC, I 3 A
(VDE 0660 Part 200): 2000-08; EN 60947-5-1	DC-13: 250 V DC, I 0,2 A
1997 + A12: 1999 + A1: 1999 + A2: 2000:	
Permitted operating frequency:	≤ 1200 Operating cycles/h
Mechanical endurance:	10^7 Operating cycles
Electrical endurance (in the case of resistive load and 20 operating cycles per minute):	10^5 (AC), $5^* 10^4$ (DC)
Response time:	≤ 10 ms
Release time:	≤ 10 ms
General data	
Air clearance and creepage distances between the electric circuits to:	DIN EN 60664-1: 2008-01; VDE 0110-1: 2008-01
Impulse voltage withstand level:	4 kV
Overvoltage category:	III
Pollution severity:	3 outside, 2 inside
Rated voltage:	AC 250 V
Test voltage U_{eff} 50 Hz to DIN VDE 0110-1, table A.1:	2.21 kV
Type of protection to DIN EN 60529: Front of casing / Rear of casing / Flat connector	IP 55 / IP 20 / IP 00
Ambient temperature, operating range:	50 to 130 °F / -10 bis +55 °C
Weight:	0.66 lbs. / 0,3 kg

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