

Type: **ZB12-16**
 Article No.: **290168**



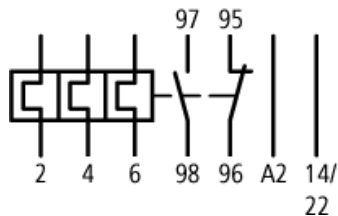
Phase failure sensitivity to IEC/EN 60947

For direct mounting

Ordering information

Overload releases	I_r	A	12 – 16
Auxiliary contacts N/O = Normally open			1 N/O
Auxiliary contacts N/C = Normally closed			1 N/C
For use with			DILM7, DILM9, DILM12, DILM15, DIULM7, DIULM9, DIULM12, SDAINLM12, SDAINLM16, SDAINLM22
Short-circuit protection Type “1” coordination	gG/gL	A	50
Short-circuit protection Type “2” coordination	gG/gL	A	25

Contact sequence



Note concerning the product

Overload release: tripping class 10 A

Short-circuit protection: Observe the maximum permissible fuse of the contactor with direct device mounting.

Suitable for protection of EEx e-motors. EC prototype test certification on request.

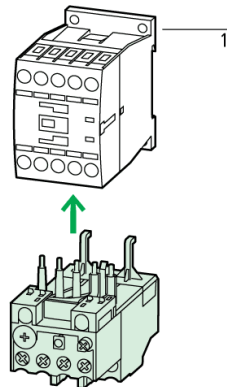


PTB 04 ATEX 3022

Observe manual AWB2300-1545D/GB

Notes concerning the product group

Fitted directly to the contactor



1 Contactor



276970

General

Standards

IEC/EN 60947, VDE 0660, UL, CSA

Climatic proofing

Damp heat, constant, to IEC 60068-2-78;
Damp heat, cyclic, to IEC 60068-2-30

Ambient temperature			
Open		°C	–25/55
Enclosed		°C	–25/40
Temperature compensation			Continuous
Weight			
Weights		kg	0.15
Mechanical shock resistance half-sinusoidal shock 10 ms to IEC 60068–2–27		g	10
Protection type			IP00
Protection against direct contact when actuated from front (IEC 536)			Finger- and back-of-hand proof

Main conducting paths

Rated impulse withstand voltage	U_{imp}	V AC	6000
Overtoltage category/pollution degree			III/3
Rated insulation voltage			
AC	U_i	V AC	690
Rated operational voltage	U_e	V AC	690
Safe isolation to VDE 0106 Part 101 and Part 101/A1			
Between auxiliary contacts and main contacts		V AC	440
Between main circuits		V AC	440
Overload release setting range		A	0,1 – 32
Temperature compensation residual error > 40°C		%/K	0.25
Current heat loss (3 conductors)			
Lower value of the setting range		W	2,5
Maximum setting		W	6
Terminal capacities			
Solid		mm ²	2 × (1 – 6)
Flexible with ferrule		mm ²	2 × (1 – 4) 2 × (1 – 6)
Solid or stranded		AWG	14 – 8
Terminal screw			M4
Tightening torque		Nm	1.8
Tools			
Pozidriv screwdriver		Size	2
Standard screwdriver		mm	1 × 6

Auxiliary and control circuits

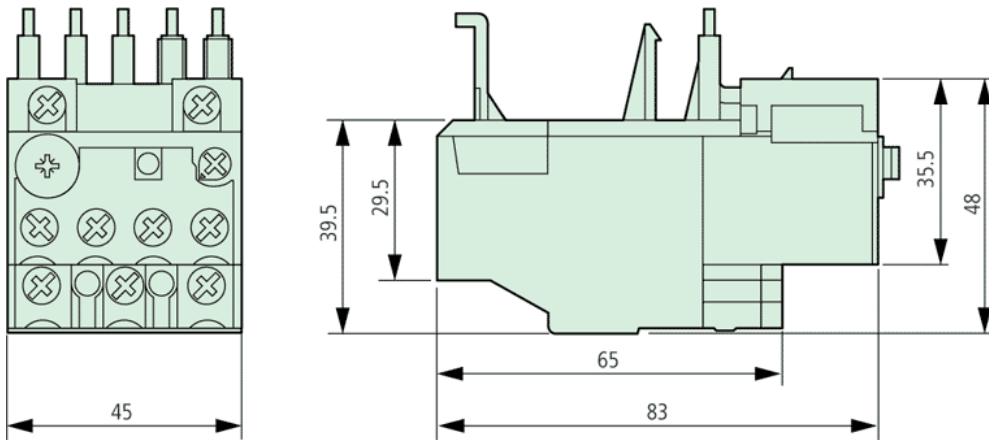
Rated impulse withstand voltage	U_{imp}	V	6000
Overvoltage category/pollution degree			III/3
Terminal capacities			
Solid		mm ²	2 × (0.75 – 4)
Flexible with ferrule		mm ²	2 × (0.75 – 2.5)
Solid or stranded		AWG	2 × (18 – 12)
Terminal screw			M3.5
Tightening torque		Nm	0.8 – 1.2
Tools			
Pozidriv screwdriver		Size	2
Standard screwdriver		mm	1 × 6
Rated insulation voltage	U_i	V AC	500
Rated operational voltage	U_e	V AC	500
Safe isolation to VDE 0106 Part 101 and Part 101/A1			
between the auxiliary contacts		V AC	240
Conventional thermal current	I_{th}	A	6
Rated operational current			
AC–15			
Make contact			
120 V	I_e	A	1,5
240 V	I_e	A	1,5
415 V	I_e	A	0,5
500 V	I_e	A	0,5
Break contact			
120 V	I_e	A	1,5
240 V	I_e	A	1,5
415 V	I_e	A	0,9
500 V	I_e	A	0,8
DC–13 L/R – 15 ms			
24 V	I_e	A	0,9
60 V	I_e	A	0,75
110 V	I_e	A	0,4
220 V	I_e	A	0,2
Short-circuit rating without welding			
max. fuse		A gG/gL	6
Notes			

		<p>ambient temperature to IEC/EN 60947, PTB: -5°C to $+55^{\circ}\text{C}$</p> <p>Rated operating current on and off switching conditions to DC-13, L/R constant to details when using 2 conductors of the same cross section</p> <p>Short-circuit rating: Time/current curve as transparent overlay "fuses" (please enquire)</p> <p>6 mm² flexible with ferrule to DIN 46228</p> <p>Rated operational current DC-13, 60 V: auxiliary N/O contact 0.6 A</p>
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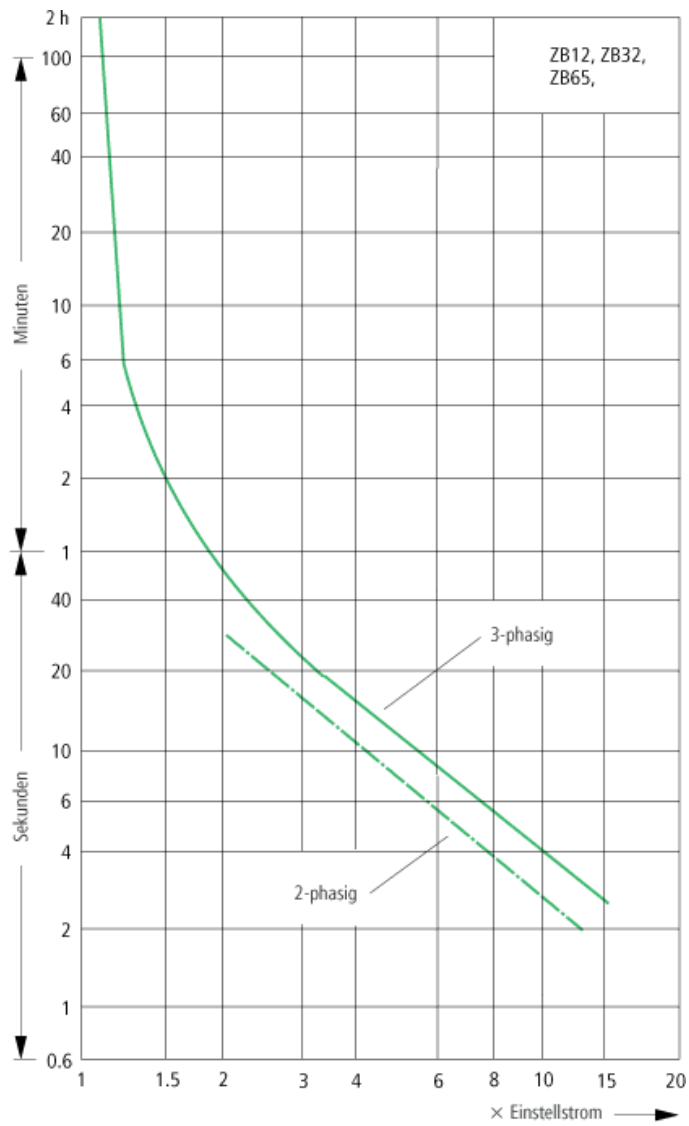
Dimensions

Explanation		<p>These tripping characteristics are mean values of the spread at 20 °C ambient temperature in a cold state. Tripping time depends on response current. On devices at operating temperature the tripping time of the overload relay drops to approx. 25 % of the read value. Specific characteristics for each individual setting range can be found in the manual.</p>
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Dimensions



Characteristic curve



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