

**Overload relay, 0.6-1A, 1N/0+1N/C**


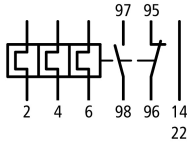




Powering Business Worldwide™

**Part no.** ZB32-1  
**Article no.** 278446

**Catalog No.** XTOB001CC1

**Delivery programme**

Product range			Overload relay ZB up to 150 A
Frame size			ZB32
Phase-failure sensitivity			IEC/EN 60947, VDE 0660 Part 102
Description			Test/off button Reset pushbutton manual/auto Trip-free release
Mounting type			Direct mounting
	$I_r$	A	0.6 - 1
Contact sequence			
Auxiliary contacts			
N/O = Normally open			1 N/O
N/C = Normally closed			1 N/C
For use with			DILM17, DILM25, DILM32, DILM38, DILMF8 DILMF11 DILMF14 DILMF17 DILMF25 DILMF32 DIULM17, DIULM25, DIULM32, SDAINLM30, SDAINLM45, SDAINLM55
Short-circuit protection			
Type "1" coordination 	gG/gL	A	25
Type "2" coordination 	gG/gL	A	4

**Notes**

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 Ex e-motors.



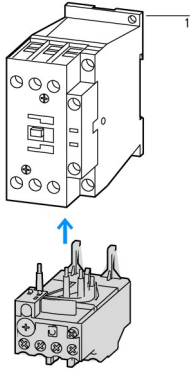
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PTB 10 ATEX 3010

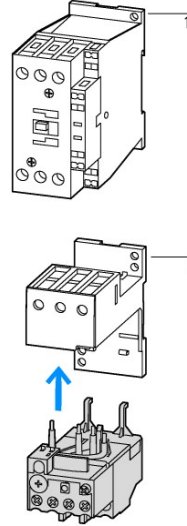
Observe manual MN03407004Z-DE/EN.

## Notes

Fitted directly to the contactor



Separate mounting



1 Contactor  
2 Bases

## Approvals

Product Standards  
UL File No.  
UL Category Control No.  
CSA File No.  
CSA Class No.  
North America Certification  
Specially designed for North America  
Suitable for  
Max. Voltage Rating  
Degree of Protection

UL 508; CSA-C22.2 No. 14; IEC/EN 60947-4-1; IEC/EN 60947-5-1; CE marking  
E29184  
NKCR  
12528  
3211-03  
UL listed, CSA certified  
No  
Branch circuits  
600 V AC  
IEC: IP20, UL/CSA Type: -

## 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		°C	
			Operating range to IEC/EN 60947 PTB: -5 °C - +55 °C
Open		°C	- 25 - 55
Enclosed		°C	- 25 - 40
Temperature compensation			Continuous
Weight		kg	0.15
Mechanical shock resistance		g	10 Sinusoidal Shock duration 10 ms
Protection type			IP20
Protection against direct contact when actuated from front (EN 50274)			Finger and back-of-hand proof

## Main conducting paths

Rated impulse withstand voltage	$U_{imp}$	V AC	6000
Overvoltage category/pollution degree			III/3
Rated insulation voltage	$U_i$	V	690
Rated operational voltage	$U_e$	V AC	690
Safe isolation to EN 61140			
Between auxiliary contacts and main contacts		V AC	440
Between main circuits		V AC	440
Temperature compensation residual error > 40 °C			$\approx$ 0.25 %/K
Current heat loss (3 conductors)			
Lower value of the setting range		W	2.5
Maximum setting		W	6
Terminal capacities		mm <sup>2</sup>	

Solid		mm <sup>2</sup>	2 x (1 - 6)
Flexible with ferrule		mm <sup>2</sup>	2 x (1 - 4) With ferrules to DIN 46228
Solid or stranded		AWG	14 - 8
Terminal screw			M4
Tightening torque		Nm	1.8
Tools			
Pozidriv screwdriver		Size	2
Standard screwdriver		mm	1 x 6

### Auxiliary and control circuits

Rated impulse withstand voltage	$U_{imp}$	V	4000
Overvoltage category/pollution degree			III/3
Terminal capacities		mm <sup>2</sup>	
Solid		mm <sup>2</sup>	2 x (0.75...4)
Flexible with ferrule		mm <sup>2</sup>	2 x (0.75 - 2.5)
Solid or stranded		AWG	2 x (18 - 12)
Terminal screw			M3.5
Tightening torque		Nm	0.8 - 1.2
Tools			
Pozidriv screwdriver		Size	2
Standard screwdriver		mm	1 x 6
Rated insulation voltage	$U_i$	V AC	500
Rated operational voltage	$U_e$	V AC	500
Safe isolation to EN 61140			
between the auxiliary contacts		V AC	240
Conventional thermal current	$I_{th}$	A	6
Rated operational current	$I_e$	A	
AC-15			
Make contact			
120 V	$I_e$	A	1.5
220 V 230 V 240 V	$I_e$	A	1.5
380 V 400 V 415 V	$I_e$	A	0.5
500 V	$I_e$	A	0.5
Break contact			
120 V	$I_e$	A	1.5
220 V 230 V 240 V	$I_e$	A	1.5
380 V 400 V 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

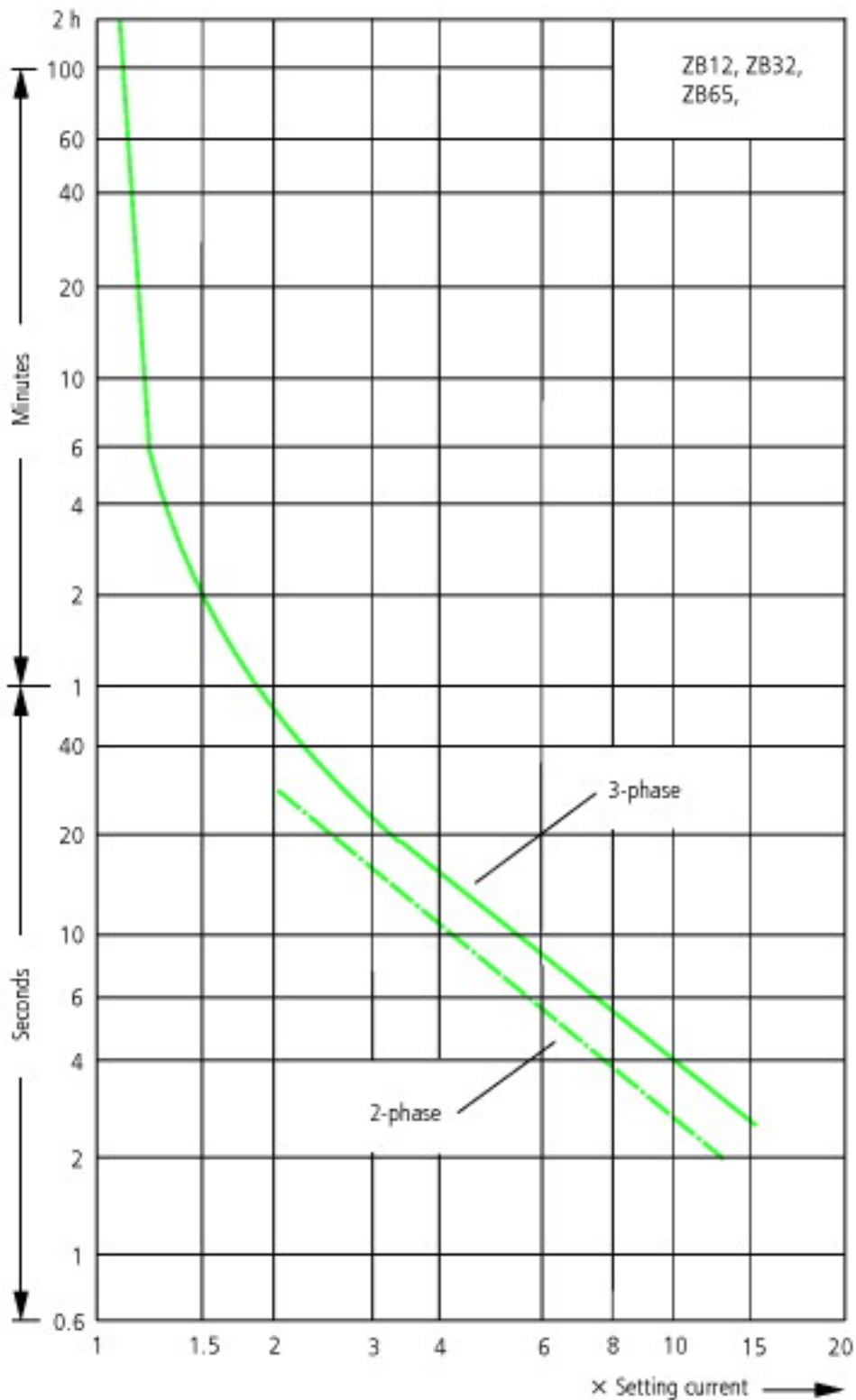
**Notes** Ambient air temperature: Operating range to IEC/EN 60947, PTB: -5°C to +55°C  
Rated operational current: Making and breaking conditions to DC-13, time constant as stated  
Main circuits terminal capacity solid and flexible conductors with ferrules: When using 2 conductors use equal cross-sections  
See overlay "Fuses" for short-circuit strength time/current characteristic (please enquire)  
6 mm flexible with ferrules to DIN 46228  
Rated operational current DC-13, 60 V: N/O auxiliary contact 0.6 A

## Technical data ETIM 5.0

Low-voltage industrial components (EG000017) / Thermal overload relay (EC000106)			
Electric engineering, automation, process control engineering / Low-voltage switch technology / Overload protection device / Thermal overload relay (ecl@ss8-27-37-15-01 [AKF075010])			
Adjustable current range		A	0.6 - 1
Mounting method			Direct attachment
Connection type main current circuit			Screw connection
Number of auxiliary contacts as normally closed contact			1
Number of auxiliary contacts as normally open contact			1
Number of auxiliary contacts as change-over contact			0
Release class			CLASS 10

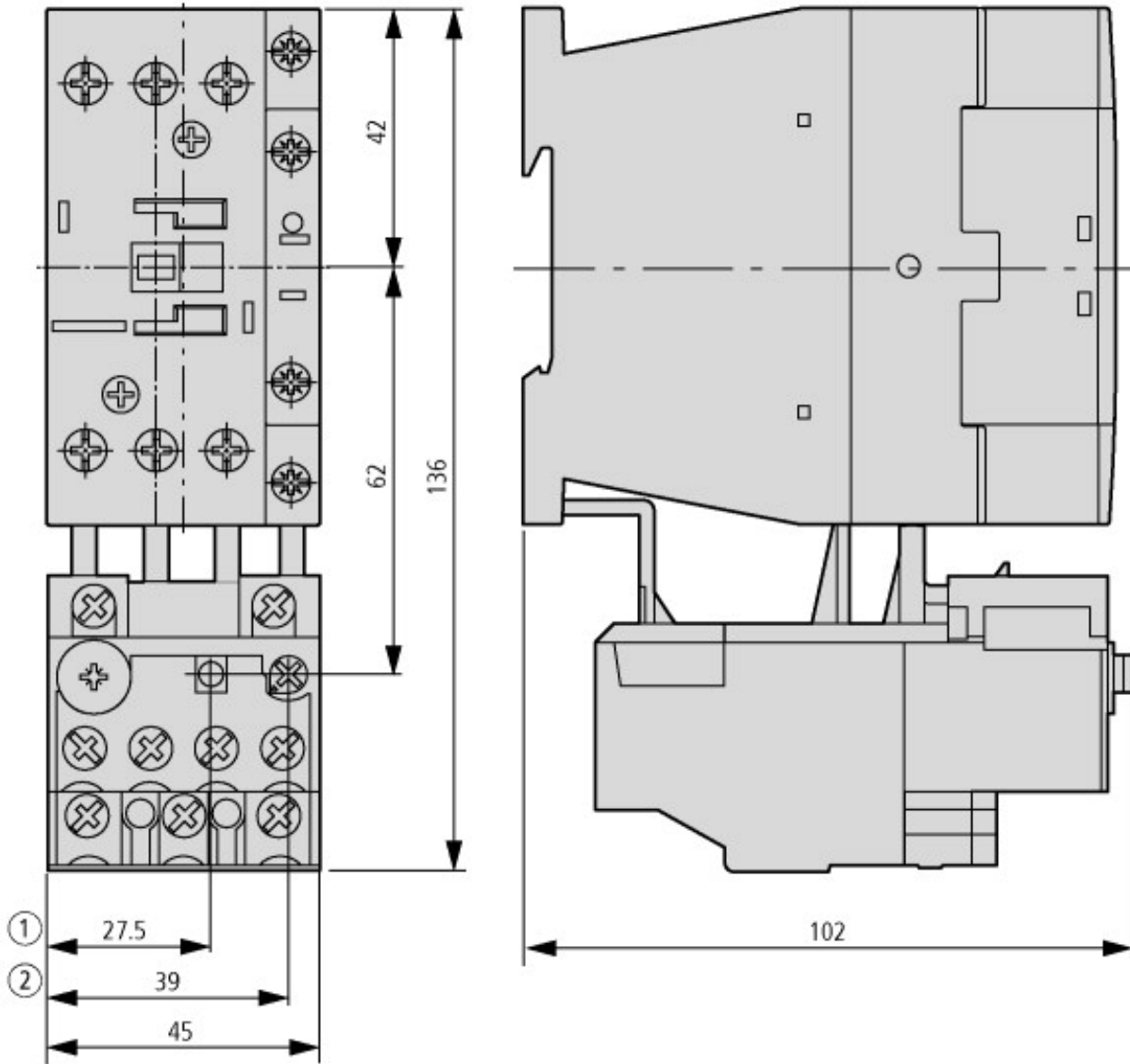
## Characteristics

Characteristic curves

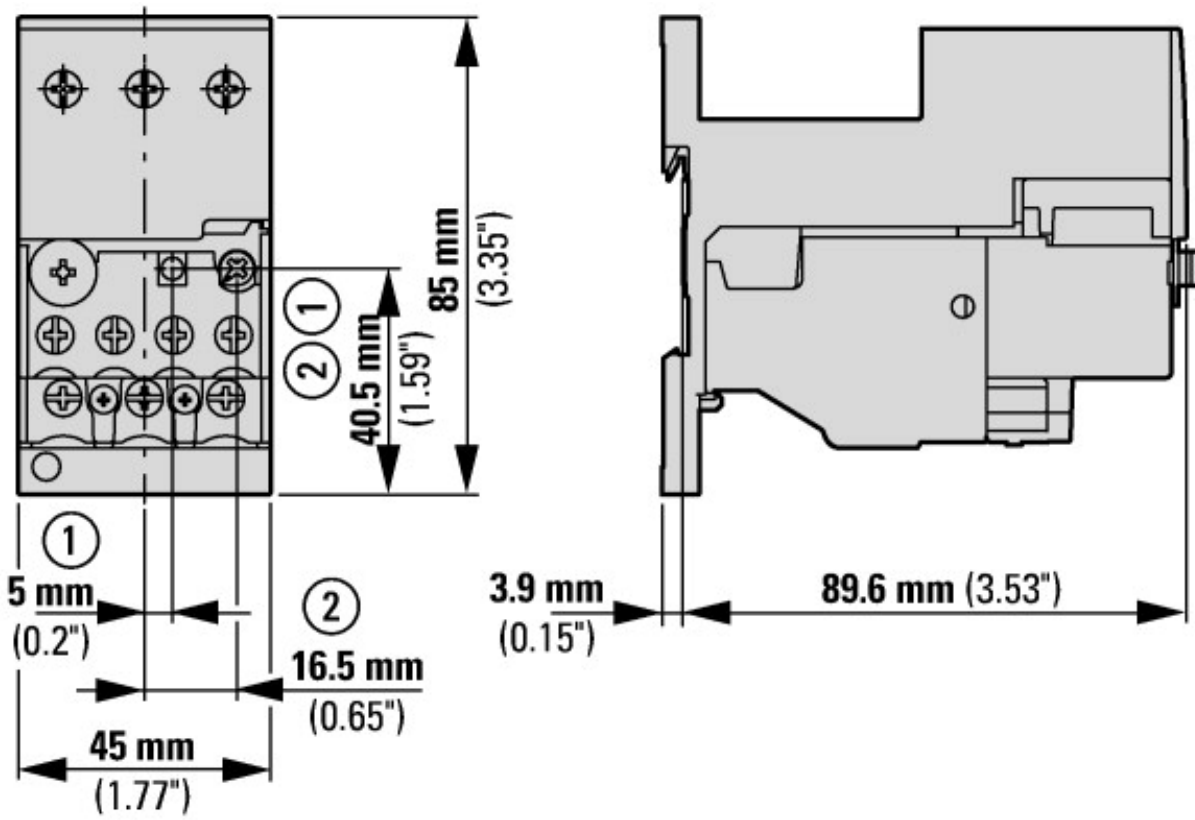


These tripping characteristics are mean values of the spread at 20 °C ambient temperature in a cold state. Tripping time depends on response current. On devices at operating temperature the tripping time of the overload relay drops to approx. 25 % of the read value. Specific characteristics for each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

## Dimensions



- ① OFF
- ② Reset/ON



With base ZB32-XEZ

#### Additional product information (links)

IL03407015Z (AWA2300-2114) Overload relay

IL03407015Z (AWA2300-2114) Overload relay

[ftp://ftp.moeller.net/DOCUMENTATION/AWA\\_INSTRUCTIONS/IL03407015Z2013\\_01.pdf](ftp://ftp.moeller.net/DOCUMENTATION/AWA_INSTRUCTIONS/IL03407015Z2013_01.pdf)