

## Overload relay 2,4 - 4A



Powering Business Worldwide™

**Part no.**  
**Article no.**

**ZE-4**  
**014518**

### Program

Product range			ZE overload relays for mini contactor relays
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
<b>Setting range</b>			
Overload releases	$I_r$	A	2.4 - 4
Contact sequence			
Auxiliary contacts			
N/O = Normally open			1 N/O
N/C = Normally closed			1 N/C
For use with			DILEM DIULEM/21/MV SDAINLEM
Short-circuit protection			
Type "1" coordination	gG/gL	A	20
Type "2" coordination	gG/gL	A	10

#### 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



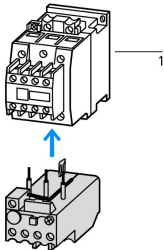
II (2) GD

PTB 10 ATEX 3014

Observe manual AWB2300-1425D/GB.

#### Notes

When fitted directly to the contactor a clearance of at least 5 mm is required between the overload relays.



1 Contactor

### Approbationen

UL approval	Yes
CSA approval	Yes
Product Standards	UL 508; CSA-C22.2 No. 14; IEC/EN 60947-4-1; CE marking
UL File No.	E29184
UL CCN	NKCR
CSA File No.	12528
CSA Class No.	3211-03
NA Certification	UL listed, CSA certified
Specially designed for NA	No
Suitable for	Branch circuits
Max. Voltage Rating	600 V AC

**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 - 50
Enclosed		°C	- 25 - 40
Temperature compensation			Continuous
Weight		kg	0.07
Mechanical shock resistance		g	10 Sinusoidal Shock duration 10 ms
Protection type			IP20
Protection against direct contact when actuated from front (EN 90274)			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 VDE 0106 Part 101 and Part 101/A1			
Between auxiliary contacts and main contacts		V AC	300
Between main circuits		V AC	300
Temperature compensation residual error > 40°C			$\leq 0.25\%/K$
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 (0.75 - 2.5)
Flexible with ferrule		mm <sup>2</sup>	2 x (0.5 - 1.5)
Solid or stranded		AWG	18 - 14
Terminal screw			M3.5
Tightening torque		Nm	1.2
Tools			
Pozidriv screwdriver		Size	2
Standard screwdriver		mm	0.8 x 5.5

**Auxiliary and control circuits**

Rated impulse withstand voltage	$U_{imp}$	V	6000
Overvoltage category/pollution degree			III/3
Terminal capacities		mm <sup>2</sup>	
Solid		mm <sup>2</sup>	2 x (0.75 - 2.5)
Flexible with ferrule		mm <sup>2</sup>	2 x (0.5 - 1.5)
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	0.8 x 5.5
Rated insulation voltage	$U_i$	V AC	690
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	300
Conventional thermal current	$I_{th}$	A	6
Rated operational current	$I_e$	A	
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	0.3
Break contact			
120 V	$I_e$	A	1.5
240 V	$I_e$	A	1.5
415 V	$I_e$	A	0.7
500 V	$I_e$	A	0.5
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	4

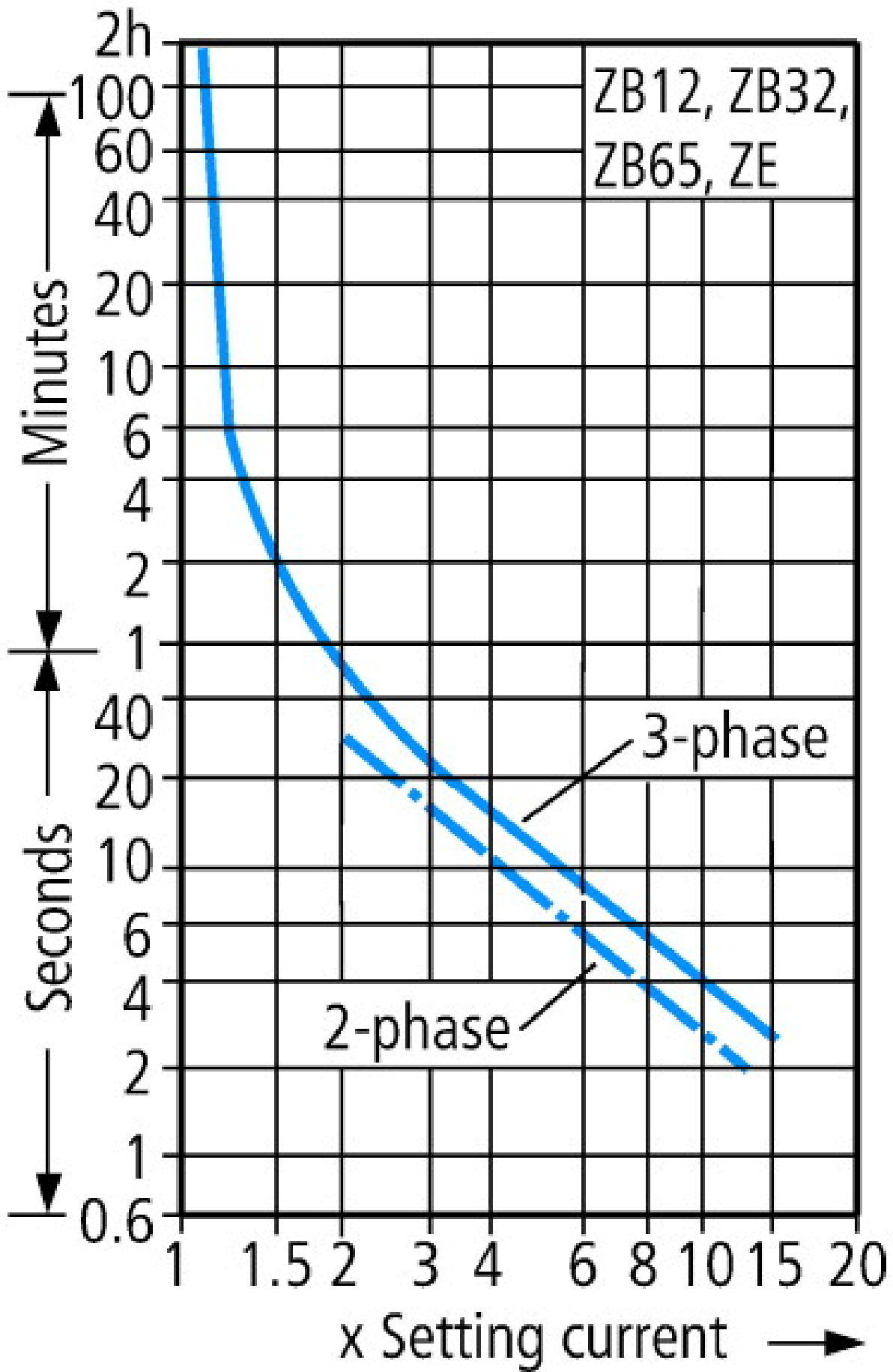
## Notes

**Notes** Ambient temperature: operating range to IEC/EN 60947, PTB: -5°C to +50°C  
Rated operational current: Making and breaking conditions to DC-13, L/R constant as stated  
See overlay: "Fuses" for short-circuit rating time/current characteristic (please enquire)

## Technical data according to ETIM 4.0

Number of auxiliary contacts as N/Cs			1
Number of auxiliary contacts as N/Os			1
Mounting type			Direct mounting
Adjustable current range		A	4
Connection type main circuit			Screw connection
Tripping class			CLASS 10
Number of auxiliary contacts as changeover contacts			0

## Characteristics



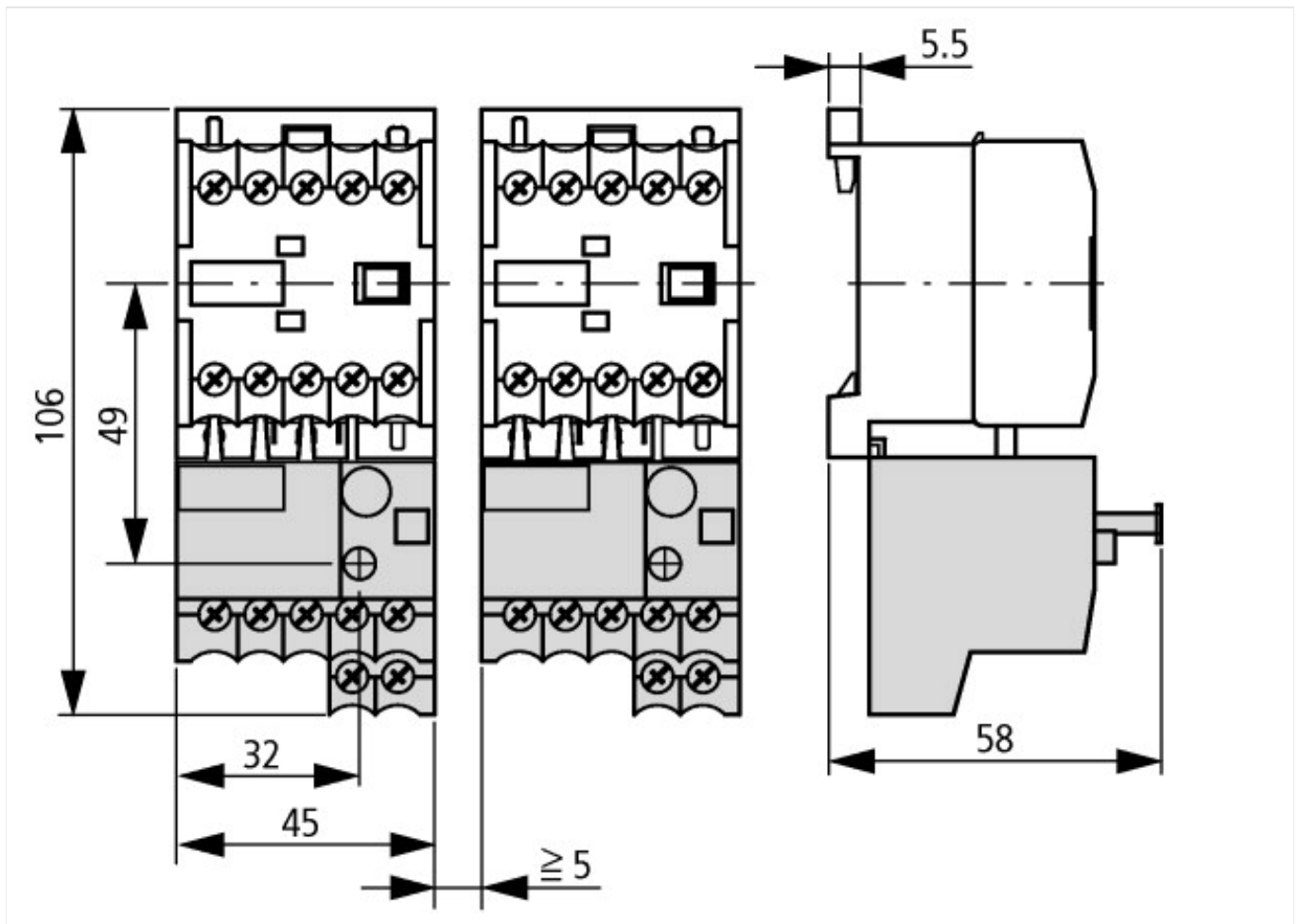
These tripping characteristics are mean values of the spread at 20 °C ambient temperature in a cold state. Tripping time depends on response current. On devices at operating temperature the tripping time of the overload relay drops to approx. 25 % of the read value. Specific characteristics for each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

#### CAD-Data

Product standards CAD data:

<http://eaton-moeller.partcommunity.com>

#### Dimensions



#### Additional product information (links)

IL03407007Z (IL03407007Z) Overload relay

[ftp://ftp.moeller.net/DOCUMENTATION/AWA\\_INSTRUCTIONS/IL03407007Z2010\\_10.pdf](ftp://ftp.moeller.net/DOCUMENTATION/AWA_INSTRUCTIONS/IL03407007Z2010_10.pdf)

MN03407003Z-EN (AWB2300-1425) ZE motor-protective relay; Overload monitoring of Ex e motors - Deutsch / English

[ftp://ftp.moeller.net/DOCUMENTATION/AWB\\_MANUALS/MN03407003Z\\_DE\\_EN.pdf](ftp://ftp.moeller.net/DOCUMENTATION/AWB_MANUALS/MN03407003Z_DE_EN.pdf)