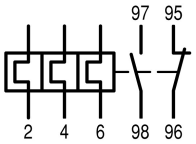
Overload relay 1 - 1,6A

Part no. ZE-1,6
Article no. 014432
Catalog No. XTOM1P6AC1

Powering Business Worldwide™

Delivery programme

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
Setting range			
Overload releases	I_r	A	1 - 1.6
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	6

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

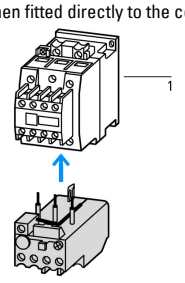
II (2) G

PTB 10 ATEX 3014

Observe manual MN03407003Z-DE/EN.

Notes

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



1 Contactor

Approvals

Product Standards	UL 508; CSA-C22.2 No. 14; IEC/EN 60947-4-1; IEC/EN 60947-5-1; 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
Degree of Protection	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 - 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 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	300
Between main circuits		V AC	300
Temperatur compensation residual error > 40 °C			0.25%/K
Current heat loss (3 conductors)			
Lower value of the setting range		W	2.5
Maximum setting		W	6
Terminal capacities		mm^2	
Solid		mm^2	2 x (0.75 - 2.5)
Flexible with ferrule		mm^2	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	4000
Overvoltage category/pollution degree			III/3
Terminal capacities		mm^2	
Solid		mm^2	2 x (0.75 - 2.5)
Flexible with ferrule		mm^2	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	500
Rated operational voltage	U_e	V AC	500
Safe isolation to EN 61140			
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	
230 V	I_e	A	1.5
415 V	I_e	A	
400 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	
230 V	I_e	A	1.5
415 V	I_e	A	0.7
415 V	I_e	A	
400 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

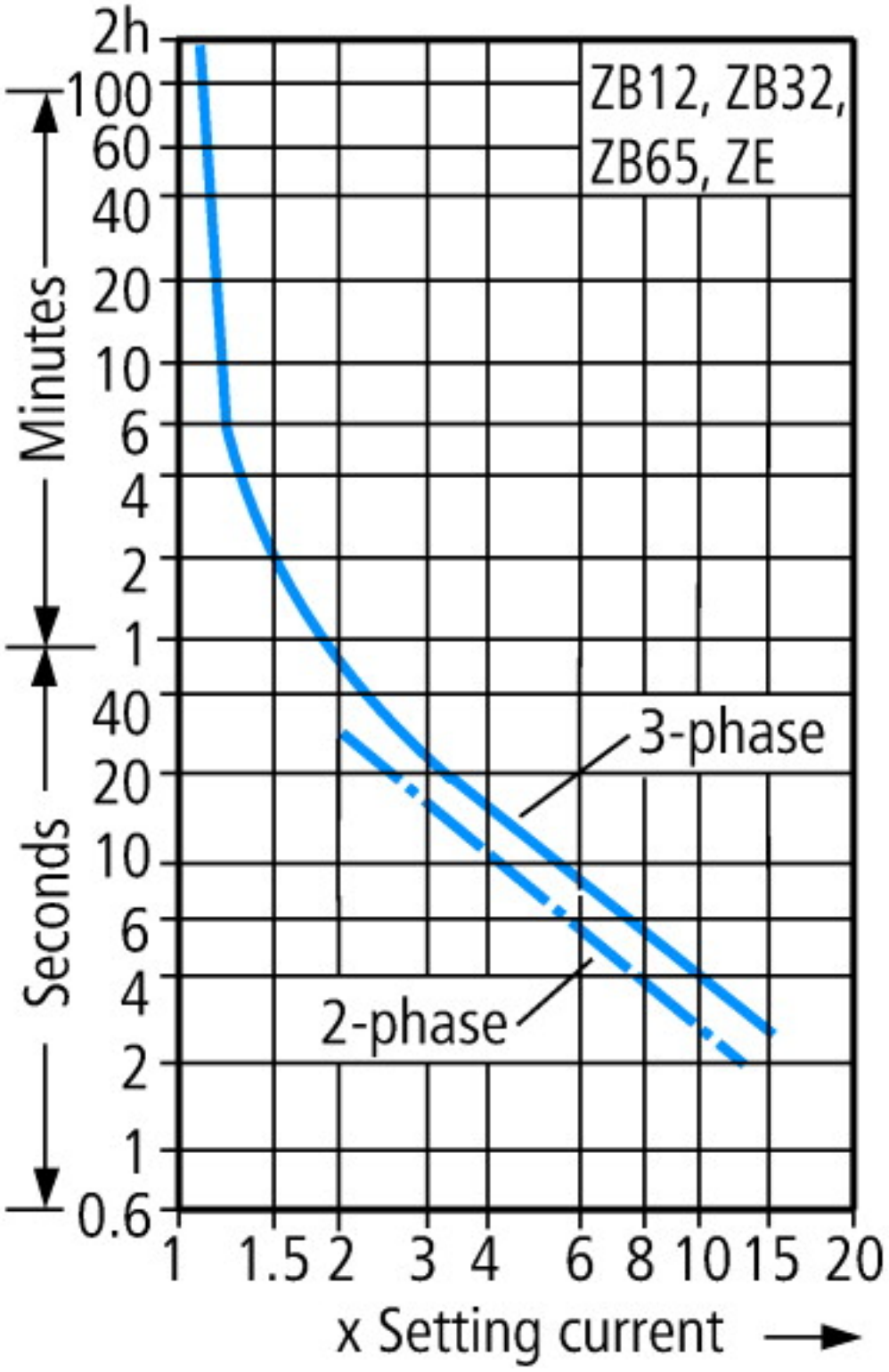
Notes

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 ETIM 4.0

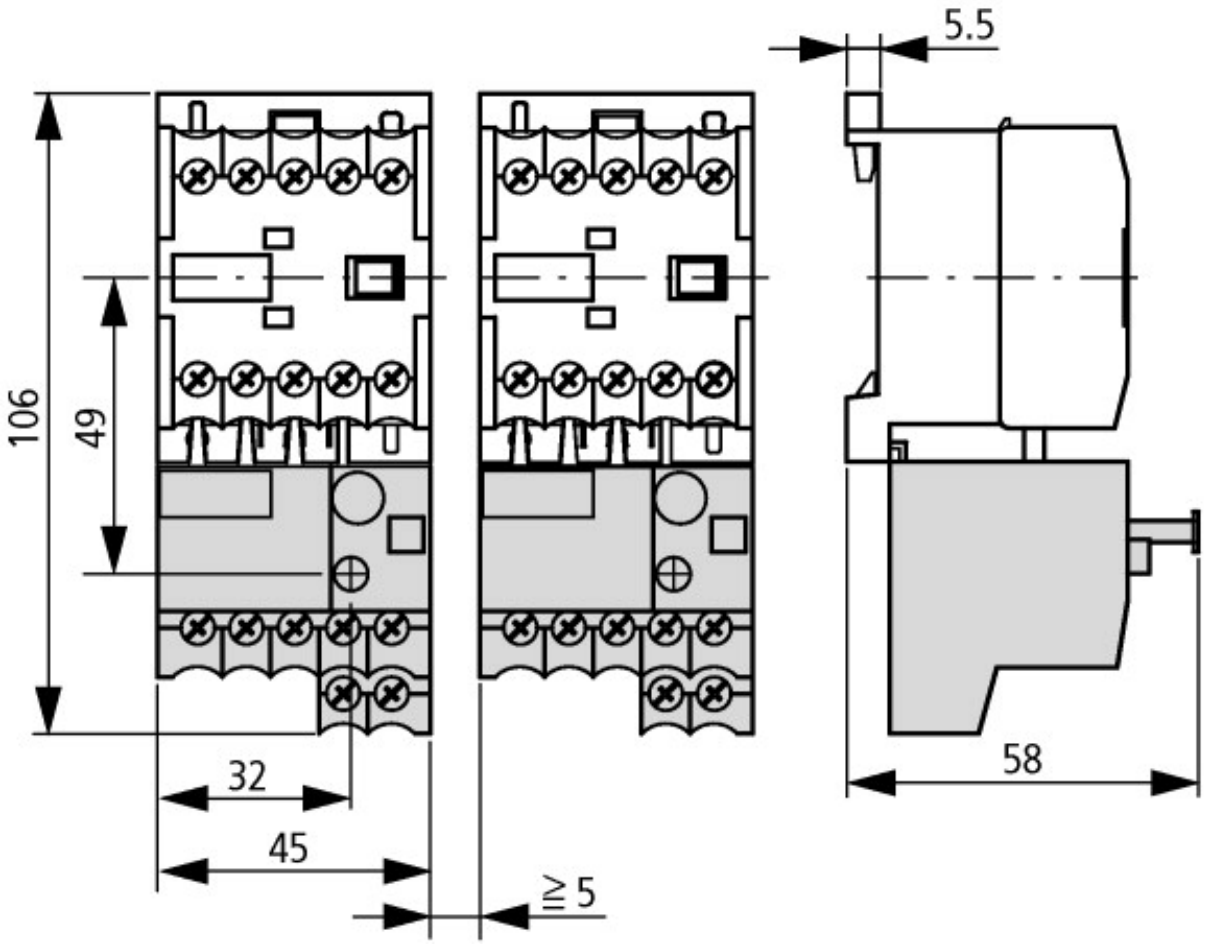
Adjustable current range		A	1 - 1.6
Mounting method			Direct attachment
Connection type main current circuit			Screw connection
Number of auxiliary contacts as normally closed contact			1
Number of auxiliary contacts as normally open contact			1
Number of auxiliary contacts as change-over contact			0
Release class			CLASS 10

Characteristics



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



Additional product information (links)

IL03407007Z (AWA2300-0883) Overload relay	
IL03407007Z (AWA2300-0883) Overload relay	ftp://ftp.moeller.net/DOCUMENTATION/AWA_INSTRUCTIONS/IL03407007Z2010_10.pdf
MN03407003Z-EN (AWB2300-1425) ZE motor-protective relay; Overload monitoring of Ex e motors	
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