

Overload relay 9 - 12A

Part no.
Article no.

ZB12-12
278441

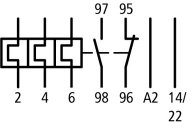
Catalog No.

XT0B012BC1



Powering Business Worldwide™

Delivery programme

Product range			Overload relay ZB up to 150 A
Product range			Accessories
Accessories			Overload relays
Frame size			ZB12
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	9 - 12
Contact sequence			
Auxiliary contacts			
N/O = Normally open			1 N/O
N/C = Normally closed			1 N/C
For use with			DILM7, DILM9, DILM12, DILM15, DIULM7, DIULM9, DIULM12, SDAINLM12, SDAINLM16, SDAINLM22 DS7-34...SX012...
Short-circuit protection			
Type "1" coordination 	gG/gL	A	50
Type "2" coordination 	gG/gL	A	25

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.



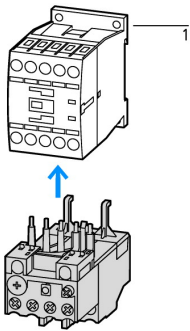
II (2) GD

PTB 10 ATEX 3010

Observe manual MN03407004Z-DE/EN.

Notes

Fitted directly to the contactor



1 Contactor

Approvals

Product Standards
UL File No.
UL CCN
CSA File No.
CSA Class No.
NA Certification
Specially designed for NA
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
Temperatur compensation residual error > 40 °C			$\pm 0.25\%/K$
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 (1 - 6)
Flexible with ferrule		mm ²	2 x (1 - 4)
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	6000
Overvoltage category/pollution degree			III/3
Terminal capacities		mm ²	
Solid		mm ²	2 x (0.75...4)
Flexible with ferrule		mm ²	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
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	0.5
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	0.9
415 V	I _e	A	
400 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

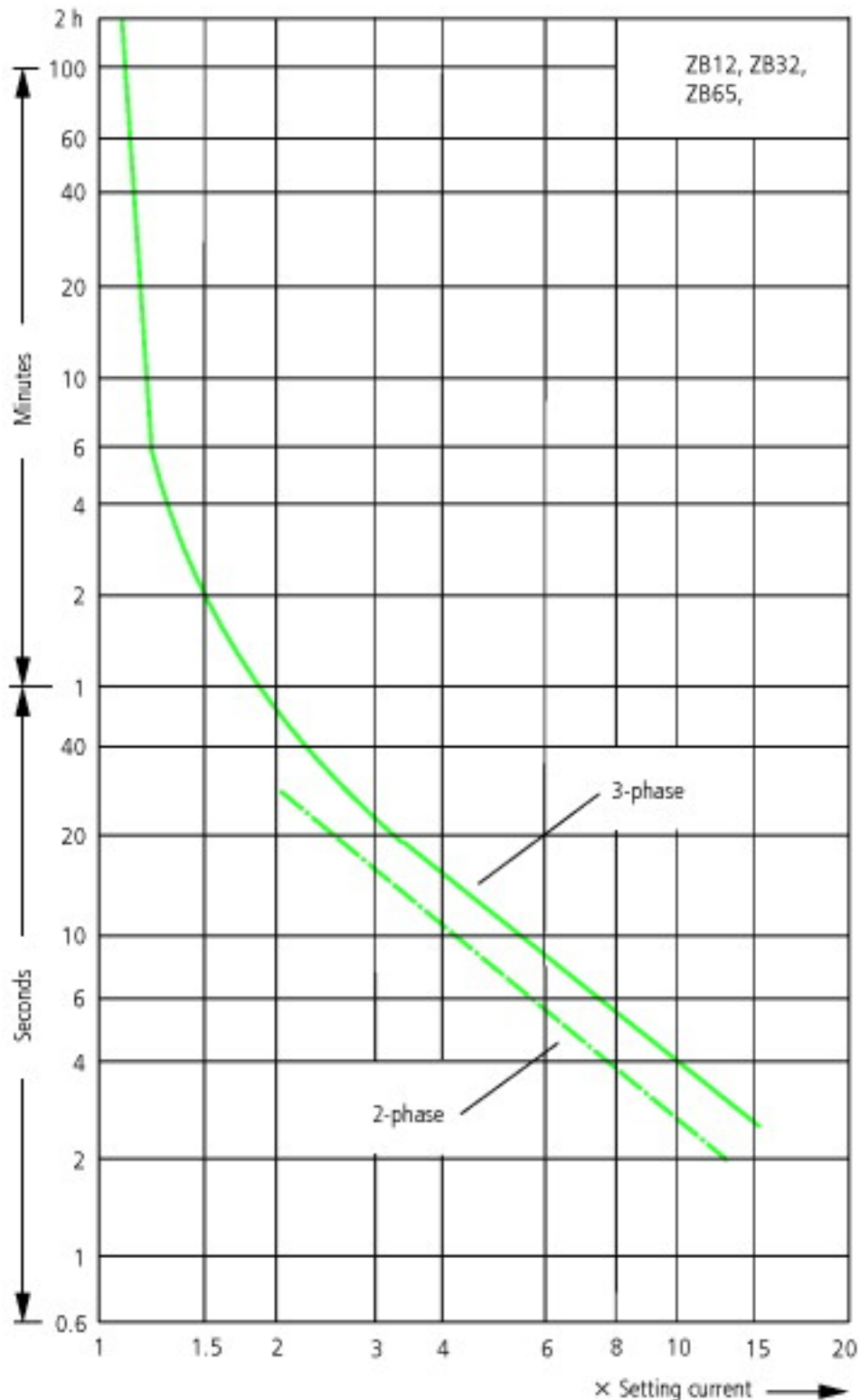
Notes

Notes Ambient temperature: Operating range to IEC/EN 60947, PTB: -5°C to +55°C
Rated operational current: Making and breaking conditions to DC-13, L/R constant as stated
Main contacts terminal capacity solid and stranded conductors with ferrules: When using 2 conductors use identical cross-section
See overlay "Fuses" for short-circuit rating 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
at ZB65-XEZ max 1 x (1...16)

Technical data ETIM 4.0

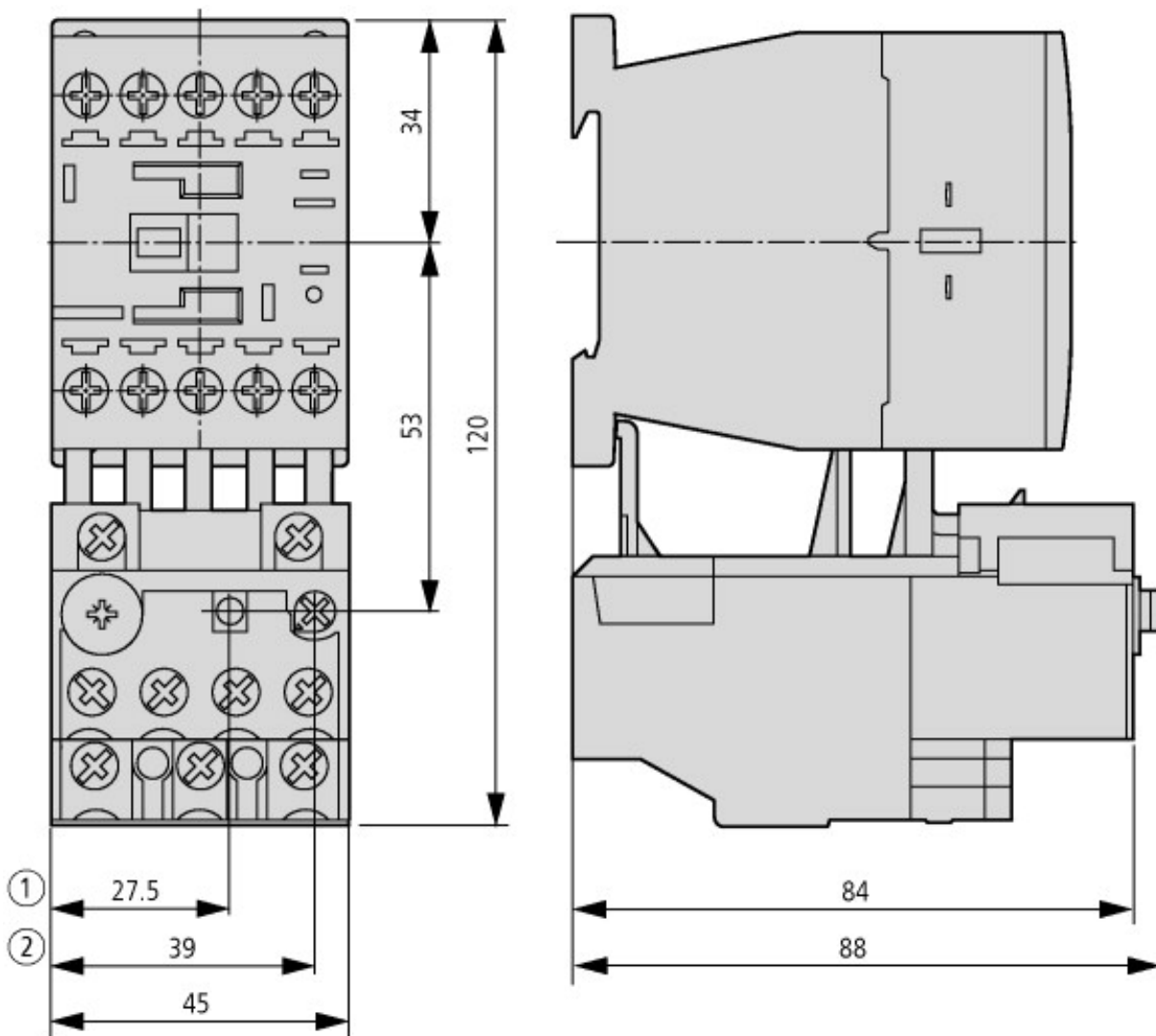
Adjustable current range		A	9 - 12
Mounting method			Direct attachment
Connection type main current circuit			Screw connection
Number of auxiliary contacts as normally closed contact			1
Number of auxiliary contacts as normally open contact			1
Number of auxiliary contacts as change-over contact			0
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



- ① OFF
② Reset/ON

Additional product information (links)

IL03407015Z (AWA2300-2114) Overload relay

IL03407015Z (AWA2300-2114) Overload relay

ftp://ftp.moeller.net/DOCUMENTATION/AWA_INSTRUCTIONS/IL03407015Z2013_01.pdf