



## Overload relay 70-100

Part no.

ZB150-100/KK

Article no.

278470



### Delivery programme

Product range			Overload relay ZB up to 150 A
Phase-failure sensitivity			IEC/EN 60947, VDE 0660 Part 102
Description			Test/off button Reset pushbutton manual/auto Trip-free release
Mounting type			Separate mounting
Overload releases	$I_r$	A	70 - 100
Contact sequence			
Auxiliary contacts			
N/O = Normally open			1 N/O
N/C = Normally closed			1 N/C
For use with			DILM80, DILM95, DILM115, DILM150, DILM170 DIULM80, DIULM95, DIULM115, DIULM150, SDAINLM140, SDAINLM165, SDAINLM200, SDAINLM260
Short-circuit protection			
Type "1" coordination	gG/gL	A	315
Type "2" coordination	gG/gL	A	200

#### 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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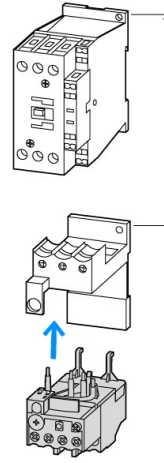
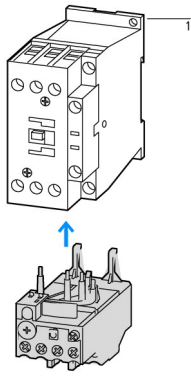
PTB 10 ATEX 3010

Observe manual AWB2300-1527D/GB.

#### Notes

Fitted directly to the contactor

Separate mounting



1 Contactor  
2 Bases

## Approbationen

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; CE marking  
E29184  
NKCR  
12528  
3211-03  
UL Listed, CSA certified  
No  
Branch circuits  
600 V AC  
IEC: IP00, 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
Weights		kg	1.64
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 (EN 90274)			Finger- and back-of-hand proof

## Main conducting paths

Rated impulse withstand voltage	$U_{imp}$	V AC	8000
Overvoltage category/pollution degree			III/3
Rated insulation voltage			
AC	$U_i$	V AC	1000
Rated operational voltage	$U_e$	V AC	1000
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
Temperature compensation residual error > 40°C			$\approx$ 0.25%/K
Current heat loss (3 conductors)			
Lower value of the setting range		W	16
Maximum setting		W	18
Terminal capacities		mm <sup>2</sup>	
Solid		mm <sup>2</sup>	2 x (4 - 16)
Flexible with ferrule		mm <sup>2</sup>	1 x (4 - 70) 2 x (4 - 50)
Stranded		mm <sup>2</sup>	1 x (16...50) 2 x (16...50)

Solid or stranded		AWG	2/0
Terminal screw			M10
Tightening torque		Nm	10
Tools			
Hexagon socket-head spanner	SW	mm	5

### Auxiliary and control circuits

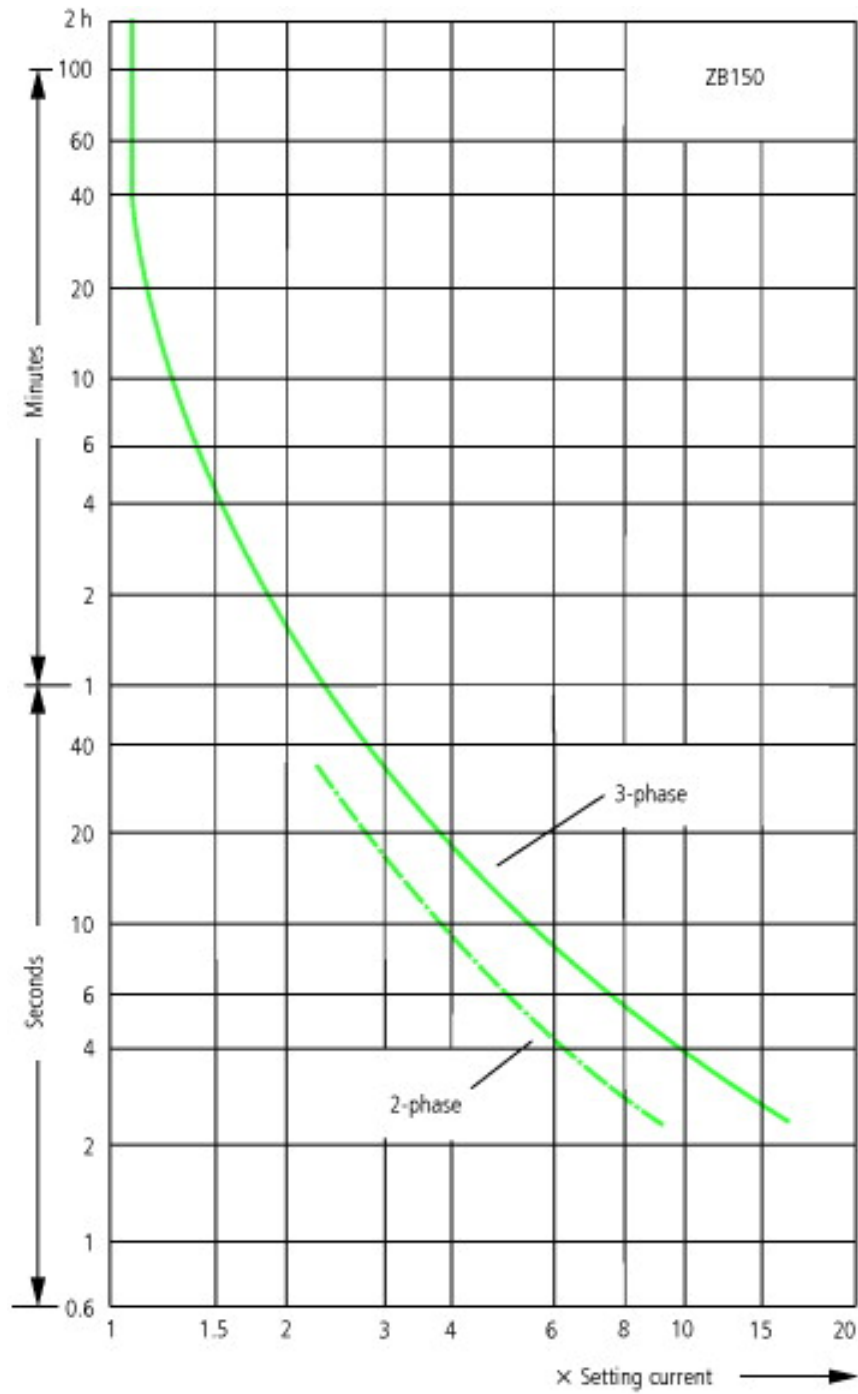
Rated impulse withstand voltage	$U_{imp}$	V	6000
Overvoltage category/pollution degree			III/3
Terminal capacities		mm <sup>2</sup>	
Solid		mm <sup>2</sup>	2 x (0,75 - 4)
Flexible with ferrule		mm <sup>2</sup>	2 x (0.75 - 2.5)
Solid or stranded		AWG	2 x (18 - 12)
Terminal screw			M3.5
Tightening torque		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 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	$I_e$	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	0.5
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

**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)

### Technische Daten nach 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	100
Connection type main circuit			Screw connection



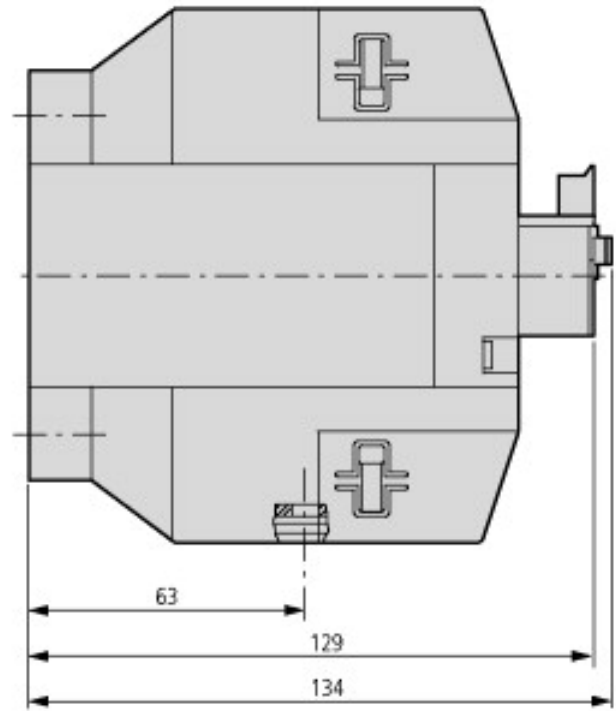
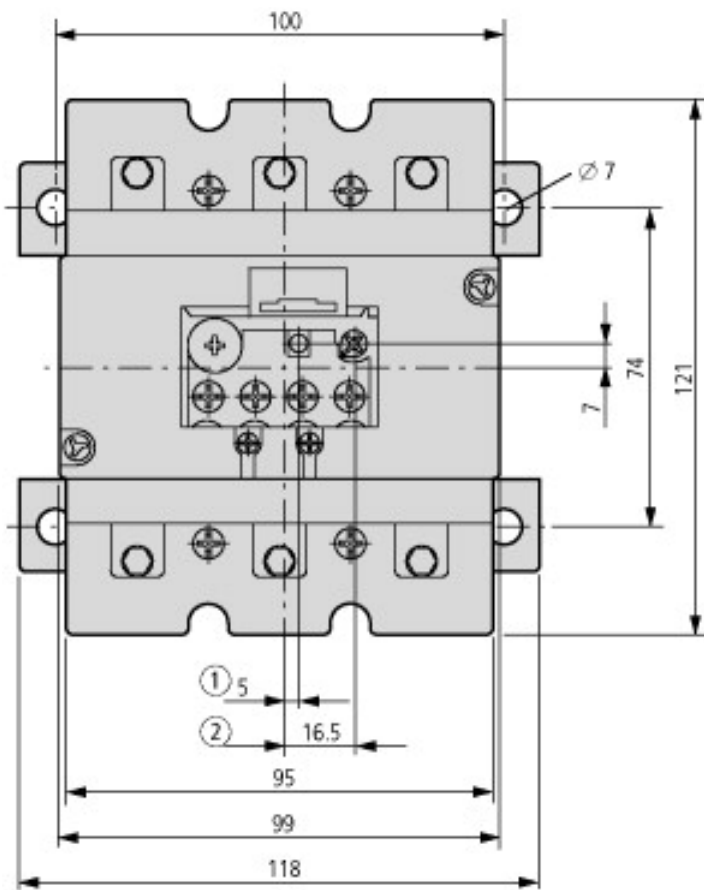
These tripping characteristics are mean values of the spread at 20 °C ambient temperature in a cold state. Tripping time depends on response current. On devices at operating temperature the tripping time of the overload relay drops to approx. 25 % of the read value. Specific characteristics for each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

**CAD-Daten**

Product standards CAD data:

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

**Dimensions**



- ① OFF
- ② Reset/ON

**Additional product information (links)**

AWA2300-2115 (IL03407006Z) Overload relay

[ftp://ftp.moeller.net/DOCUMENTATION/AWA\\_INSTRUCTIONS/21150907.pdf](ftp://ftp.moeller.net/DOCUMENTATION/AWA_INSTRUCTIONS/21150907.pdf)