

Type: **ZB150–150** Article No.: **278466** 

Sales text Overload relay 120-150

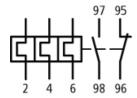


Phase failure sensitivity to IEC/EN 60947, VDE 0660 Part 102

# For direct mounting

Ordering information			
Description			Direct fitting
Overload releases	<i>I</i> <sub>r</sub>	Α	120150
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	Α	315
Type "2" coordination	gG/gL	Α	250

# **Contact sequence**



# Note concerning the product

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 EEx e-motors.



### PTB 04 ATEX 3022

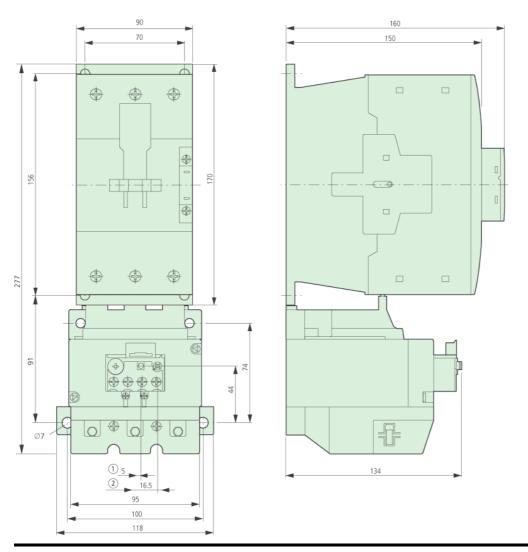
Observe manual AWB2300-1545D/GB.

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				
Open		°C	-2555	
Enclosed		°C	-2540	
Temperature compensation			Continuous	
Mounting position			Engineering selection data	
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 (IEC 536)			Finger– and back–of–hand proof	
Main conducting paths				
Rated impulse withstand voltage	<i>U</i> <sub>imp</sub>	V AC	8000	
Overvoltage category/pollution degree			III/3	
Rated insulation voltage				

AC	<i>U</i> i	V AC	
Rated operational voltage	<i>U</i> 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
Overload release setting range		Α	25150
Temperature compensation residual error > 40°C		%/K	0.25
Short-circuit protection Maximum fuse			278462
Current heat loss (3 conductors)			
Lower value of the setting range		W	16
Maximum setting		W	18
Terminal capacities			
Solid		mm <sup>2</sup>	2 × (4 – 16)
Flexible with ferrule		mm <sup>2</sup>	$1 \times (4 - 70)$ $2 \times (4 - 50)$
Stranded		mm <sup>2</sup>	1 x (1650) 2 x (1650)
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	$U_{\rm imp}$	V	6000
Overvoltage category/pollution degree			III/3
Terminal capacities			
Solid		$mm^2$	$2 \times (0.75 - 2.5)$
Flexible with ferrule		$mm^2$	2 × (0.52.5)
Solid or stranded		AWG	2 × (18 – 12)
Terminal screw			M3.5
Tightening torque		Nm	0.8 – 1.2
Tools			
Pozidriv screwdriver		Size	2
Standard screwdriver		mm	1 × 6
Rated insulation voltage	<i>U</i> i	V AC	500
Rated operational voltage	<i>U</i> e	V AC	500

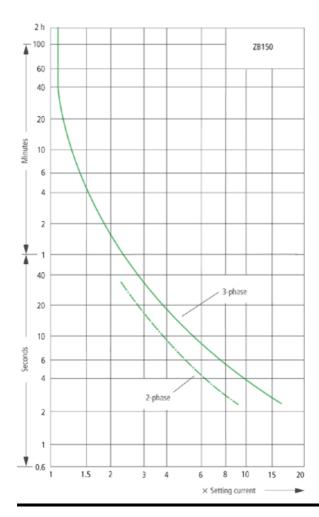
Safe isolation to VDE 0106 Part 101 and Part 101/A1			
between the auxiliary contacts		V AC	240
Conventional thermal current	<i>I</i> th	Α	6
Rated operational current			
AC-15			
Make contact			
120 V	<i>l</i> e	Α	1,5
240 V	<i>l</i> e	Α	1,5
415 V	<i>l</i> e	Α	0,5
500 V	<i>l</i> e	Α	0,5
Break contact			
120 V	<i>l</i> e	Α	1,5
240 V	<i>l</i> e	Α	1,5
415 V	<i>l</i> e	Α	0,9
500 V	<i>l</i> e	Α	0,8
DC-13 L/R - 15 ms			
24 V	<i>l</i> e	Α	0,9
60 V	<i>l</i> e	Α	0,75
110 V	<i>l</i> e	Α	0,4
220 V	<i>l</i> e	Α	0,2
Short-circuit rating without welding			
max. fuse		Α	6
		gG/gL	O .
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

## **Dimensions**



OFF Reset/ON

## **Characteristic curve**



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.

Moeller GmbH, Hein-Moeller-Str. 7-11, D-53115 Bonn E-Mail: catalog@moeller.net, Internet: www.moeller.net, http://catalog.moeller.net Copyright 2006 by Moeller GmbH. HPL-C2007G V2.1