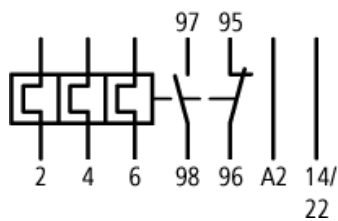


Type: **ZB12-1**  
 Article No.: **278435**



Ordering information			
Overload release, min. – max.	$I_r$	A	0,6 – 1
Auxiliary contacts M = Make			1 M
Auxiliary contacts B = Break			1 B
For use with			DILM7, DILM9, DILM12, DIULM7, DIULM9, DIULM12, SDAINLM12, SDAINLM16, SDAINLM22
Short-circuit protection Type "1" coordination	gG/gL	A	25
Short-circuit protection Type "2" coordination	gG/gL	A	4

### Contact sequence



### Note concerning the product

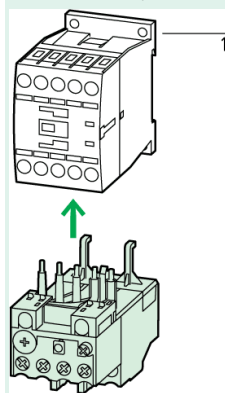
Overload release: tripping class 10 A

Short-circuit protection: Observe the maximum permissible fuse of the contactor with direct device mounting.

Suitable for protection of EEx e-motors. EC prototype test certification on request.

### Notes concerning the product group

Fitted directly to the contactor



1 Contactor



051608

### 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	-25/50
Enclosed		° C	-25/40
Temperature compensation			Continuous
Weight			
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	$U_{imp}$	V AC	6000
Overvoltage category/pollution degree			III/3
Rated insulation voltage			
AC	$U_i$	V AC	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	440
Between main circuits		V AC	440
Overload release setting range		A	0,1 – 32
Temperature compensation residual error > 20°C		%/K	f 0.25
Current heat loss (3 conductors)			
Lower value of the setting range		W	2,5
Maximum setting		W	6
Terminal capacities			
Solid		mm <sup>2</sup>	2 × (1 – 6)
Flexible with ferrule		mm <sup>2</sup>	2 × (1 – 4) 2 × (1 – 6)

Solid or stranded		AWG	14 – 8
Terminal screw			M4
Tightening torque		Nm	1.8
Tools			
Pozidriv screwdriver		Size	2
Standard screwdriver		mm	1 × 6

### Auxiliary and control circuits

Rated impulse withstand voltage	$U_{imp}$	V	6000
Overvoltage category/pollution degree			III/3
Terminal capacities			
Solid		mm <sup>2</sup>	2 × (0.75 – 4)
Flexible with ferrule		mm <sup>2</sup>	2 × (0.75 – 2.5)
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	$U_i$	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			
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 f 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

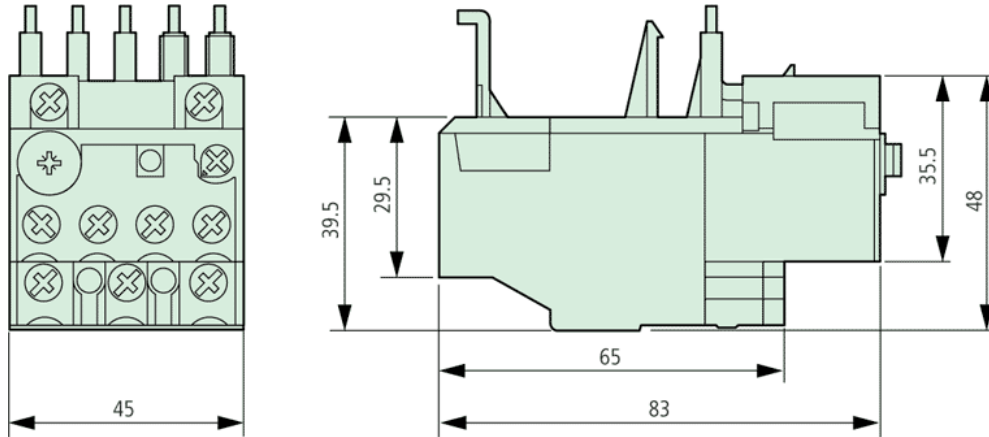
### Notes

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)  
6 mm<sup>2</sup> flexible with ferrules to DIN 46228

## Dimensions

### Dimensions



Moeller GmbH, Hein-Moeller-Str. 7-11, D-53115 Bonn  
E-Mail: [catalog@moeller.net](mailto:catalog@moeller.net), Internet: [www.moeller.net](http://www.moeller.net), <http://catalog.moeller.net>  
Copyright 2005 by Moeller GmbH. Subject to modifications. HPL-C2005GB-INT V3.0