



## Overload relay 95-125A



Powering Business Worldwide™

**Part no.** ZB150-125

**Article no.** 278465

### Delivery programme

Product range			Overload relay ZB up to 150 A
Frame size			ZB150
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	95 - 125
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 DILMF80, DILMF95, DILMF115, DILMF150, DIULM80, DIULM95, DIULM115, DIULM150, SDAINLM140, SDAINLM165, SDAINLM200, SDAINLM260
Short-circuit protection			
Type "1" coordination	gG/gL	A	315
Type "2" coordination	gG/gL	A	250

#### 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.



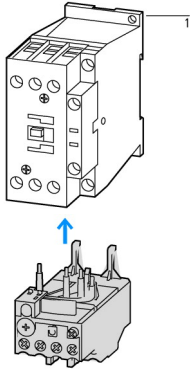
II (2) GD

PTB 10 ATEX 3010

Observe manual MN03407005Z-DE/EN.

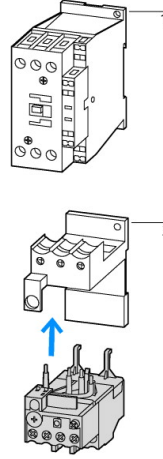
**Notes**

Fitted directly to the contactor



1 Contactor  
2 Bases

Separate mounting



**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: 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
Weight		kg	1.64
Mechanical shock resistance		g	10 Sinusoidal Shock duration 10 ms
Protection type			IP00
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	8000
Overvoltage category/pollution degree			III/3
Rated insulation voltage	$U_i$	V	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			$\frac{\Delta R}{R} = 0.25\%/K$
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

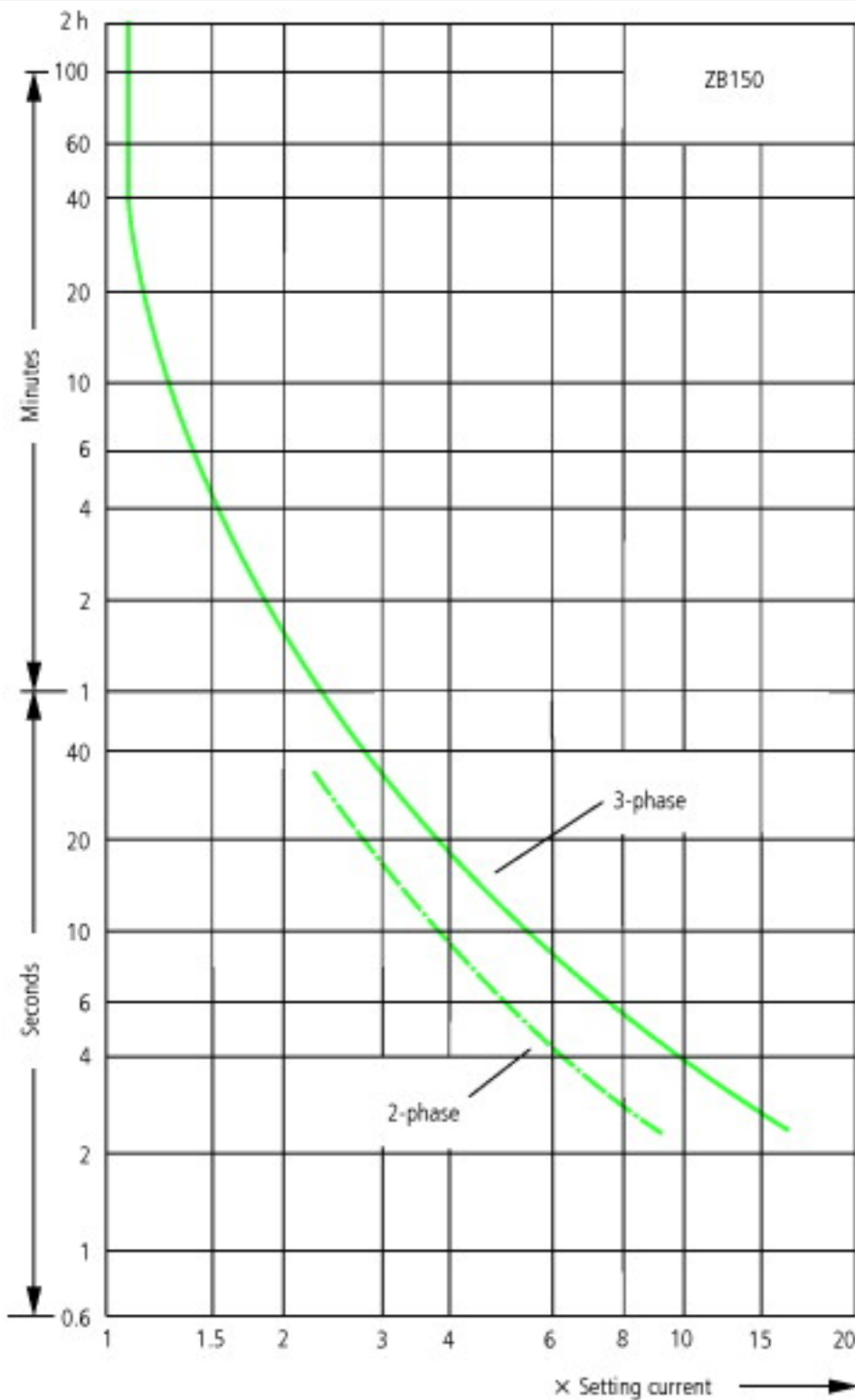
Rated impulse withstand voltage	$U_{imp}$	V	4000
Overvoltage category/pollution degree			III/3
Terminal capacities		mm <sup>2</sup>	
Solid		mm <sup>2</sup>	2 x (0,75 - 4)
Flexible with ferrule		mm <sup>2</sup>	2 x (0.75 - 2.5)
Solid or stranded		AWG	2 x (18 - 12)
Terminal screw			M3.5
Tightening torque		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** Umgebungstemperatur: Arbeitsbereich nach IEC/EN 60947, PTB: -5 °C bis +55°C  
 Bemessungsbetriebsstrom: Ein- und Ausschaltbedingungen nach DC-13, L/R konstant nach Angabe  
 Anschlussquerschnitte Hauptstrombahnen eindrätig und feindrätig mit Aderendhülse: Bei Verwendung von 2 Leitern gleichen Querschnitt verwenden  
 Kurzschlussfestigkeit: Zeit-/Strom-Kennlinien nach Auflegeblatt "Schmelzsicherungen" (auf Anfrage)  
 6 mm<sup>2</sup> feindrätig mit Aderendhülse nach DIN 46228  
 Bemessungsbetriebsstrom DC-13, 60 V: Hilfsschließer 0.6 A

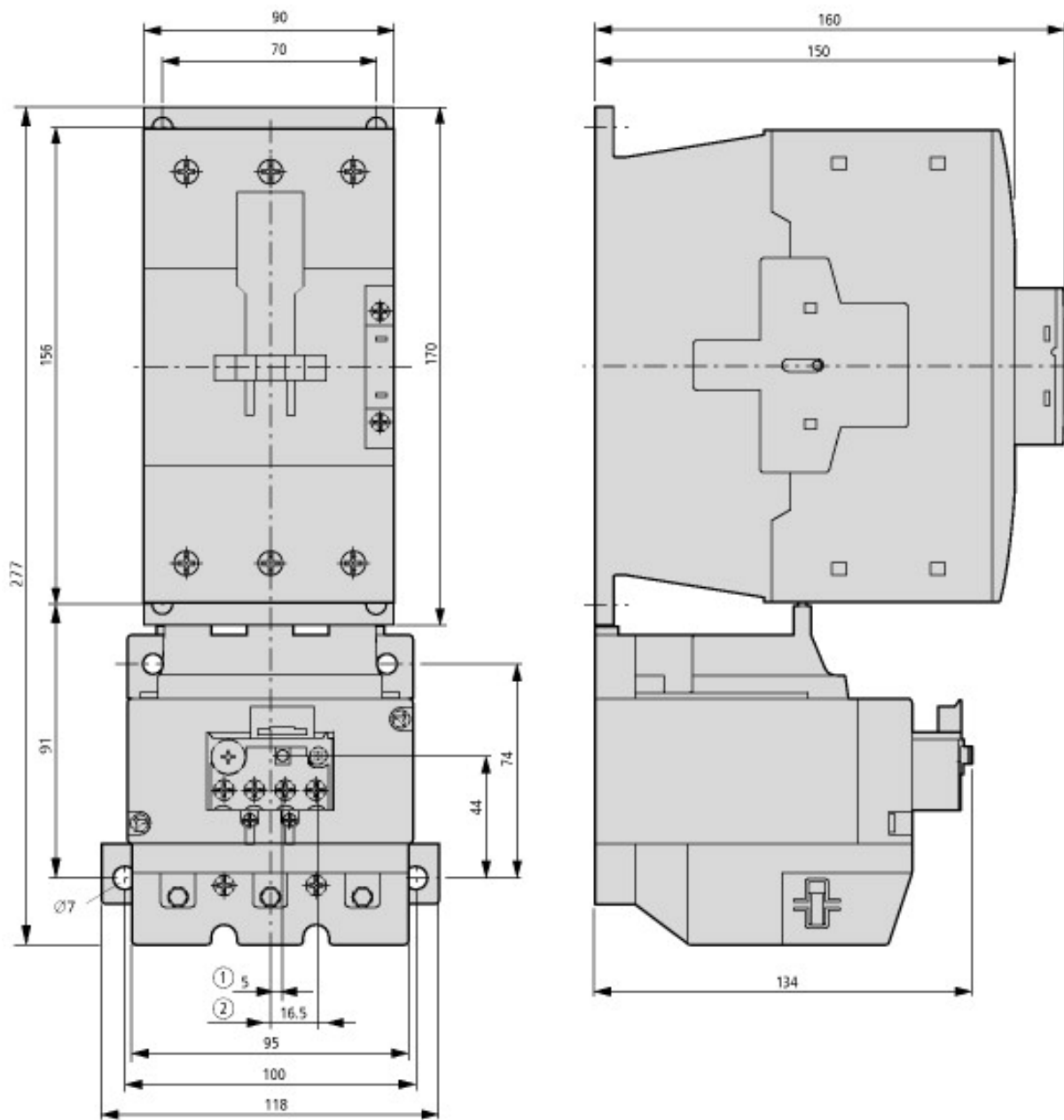
Number of auxiliary contacts as N/Cs			1
Number of auxiliary contacts as N/Os			1
Mounting type			Direct mounting
Adjustable current range		A	125
Connection type main circuit			Screw connection
Tripping class			CLASS 10
Number of auxiliary contacts as changeover contacts			0

## 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)

IL03407006Z (AWA2300-1276) Overload relay

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[ftp://ftp.moeller.net/DOCUMENTATION/AWA\\_INSTRUCTIONS/IL03407006Z2010\\_10.pdf](ftp://ftp.moeller.net/DOCUMENTATION/AWA_INSTRUCTIONS/IL03407006Z2010_10.pdf)