
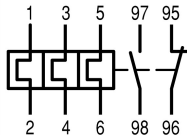




## Overload relay, electronic, 1-5A, separate mounting

**Part no.** ZEB32-5/KK  
**Article no.** 136495  
**Catalog No.** XTOE005CCSS

### Delivery programme

Product range			Electronic overload relays ZEB
Phase-failure sensitivity			IEC/EN 60947, VDE 0660 Part 102
Description			Test/off button Reset pushbutton Manual/auto reset selectable Protection with heavy starting duty (Class 10A-30)
Mounting type			Separate mounting
Earth-fault protection			
Earth-fault protection			none
<b>Setting range</b>			
Overload releases	$I_r$	A	1 - 5
			
Contact sequence			
Auxiliary contacts			
N/O = Normally open			1 N/O
N/C = Normally closed			1 N/C
For use with			DILM17 DILM25 DILM32 DILM38 DIULM17 DIULM25 DIULM32 SDAINLM30 SDAINLM45 SDAINLM55

### Approvals

Product Standards	UL 508; CSA-C22.2 No. 14; IEC/EN 60947-4-1; CE marking
UL File No.	E1230
UL Category Control No.	NKCR
CSA File No.	2290956
CSA Class No.	3211-03
North America Certification	UL listed, CSA certified
Specially designed for North America	No
Suitable for	Branch circuits
Max. Voltage Rating	600 V AC
Degree of Protection	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	
Open		°C	-25 - 65
Mechanical shock resistance		g	15 Shock duration 10 ms according to IEC 60068-2-27
Degree of Protection			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 AC	690
Rated operational voltage	$U_e$	V AC	690
Rated frequency	f	Hz	50/60
Safe isolation to EN 61140			
Between auxiliary contacts and main contacts		V AC	600
Between main circuits		V AC	600
Terminal capacities		mm <sup>2</sup>	
Solid		mm <sup>2</sup>	1 x 1.5 - 16
Solid or stranded		AWG	1 x 14 - 4

## 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
Tightening torque		lb-in	7
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	5
Rated operational current	$I_e$	A	
AC-15			
Make contact			
120 V	$I_e$	A	1.5
220 V 230 V 240 V	$I_e$	A	1.5
380 V 400 V 415 V	$I_e$	A	0.5
500 V	$I_e$	A	0.5
Break contact			
120 V	$I_e$	A	1.5
220 V 230 V 240 V	$I_e$	A	1.5
380 V 400 V 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

## Bauartnachweis nach IEC/EN 61439

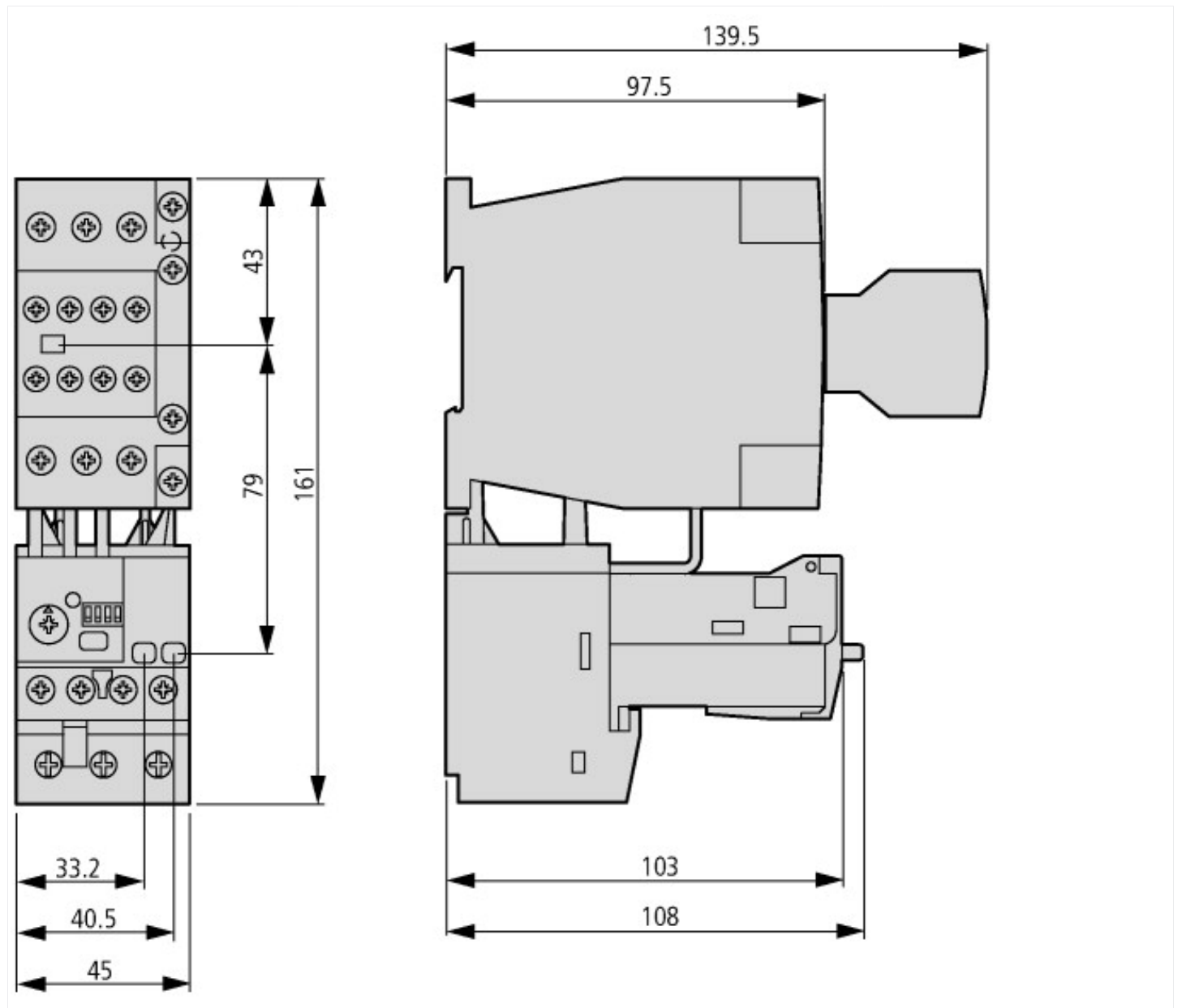
Technical data for design verification			
Rated operational current at 24 V	$I_e$	A	0.9

Rated operational current for specified heat dissipation	$I_n$	A	5
IEC/EN 61439 design verification			
10.2 Strength of materials and parts			
10.2.2 Corrosion resistance			Anforderungen der Produktnorm sind erfüllt.
10.2.3.1 Verification of thermal stability of enclosures			Anforderungen der Produktnorm sind erfüllt.
10.2.3.2 Verification of resistance of insulating materials to normal heat			Anforderungen der Produktnorm sind erfüllt.
10.2.3.3 Verification of resistance of insulating materials to abnormal heat and fire due to internal electric effects			Anforderungen der Produktnorm sind erfüllt.
10.2.4 Resistance to ultra-violet (UV) radiation			Anforderungen der Produktnorm sind erfüllt.
10.2.5 Lifting			Nicht zutreffend, da die gesamte Schaltanlage bewertet werden muss.
10.2.6 Mechanical impact			Nicht zutreffend, da die gesamte Schaltanlage bewertet werden muss.
10.2.7 Inscriptions			Anforderungen der Produktnorm sind erfüllt.
10.3 Degree of protection of ASSEMBLIES			Nicht zutreffend, da die gesamte Schaltanlage bewertet werden muss.
10.4 Clearances and creepage distances			Anforderungen der Produktnorm sind erfüllt.
10.5 Protection against electric shock			Nicht zutreffend, da die gesamte Schaltanlage bewertet werden muss.
10.6 Incorporation of switching devices and components			Nicht zutreffend, da die gesamte Schaltanlage bewertet werden muss.
10.7 Internal electrical circuits and connections			Liegt in der Verantwortung des Schaltanlagenbauers.
10.8 Connections for external conductors			Liegt in der Verantwortung des Schaltanlagenbauers.
10.9 Insulation properties			
10.9.2 Power-frequency electric strength			Liegt in der Verantwortung des Schaltanlagenbauers.
10.9.3 Impulse withstand voltage			Liegt in der Verantwortung des Schaltanlagenbauers.
10.9.4 Testing of enclosures made of insulating material			Liegt in der Verantwortung des Schaltanlagenbauers.
10.10 Temperature rise			Erwärmungsberechnung liegt in der Verantwortung des Schaltanlagenbauers. Eaton liefert die Daten zur Verlustleistung der Geräte.
10.11 Short-circuit rating			Liegt in der Verantwortung des Schaltanlagenbauers. Die Vorgaben der Schaltgeräte sind einzuhalten.
10.12 Electromagnetic compatibility			Liegt in der Verantwortung des Schaltanlagenbauers. Die Vorgaben der Schaltgeräte sind einzuhalten.
10.13 Mechanical function			Für das Gerät sind die Anforderungen erfüllt, sofern Angaben der Montageanweisung (IL) beachtet werden.

## Technical data ETIM 5.0

Low-voltage industrial components (EG000017) / Electronic overload relay (EC001080)			
Electric engineering, automation, process control engineering / Low-voltage switch technology / Overload protection device / Electronic overload relay (ecl@ss8-27-37-15-02 [AKF076010])			
Adjustable current range		A	1 - 5
Mounting method			Separate positioning
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
Rated control supply voltage $U_s$ at AC 50HZ		V	0 - 0
Rated control supply voltage $U_s$ at AC 60HZ		V	0 - 0
Rated control supply voltage $U_s$ at DC		V	0 - 0
Release class			Adjustable
Voltage type for actuating			Selfsupplied

## Dimensions



## Additional product information (links)

**IL04210002E Solid-state motor protection relay**

IL04210002E Solid-state motor protection relay [ftp://ftp.moeller.net/DOCUMENTATION/AWA\\_INSTRUCTIONS/IL04210002E2012\\_06.pdf](ftp://ftp.moeller.net/DOCUMENTATION/AWA_INSTRUCTIONS/IL04210002E2012_06.pdf)