## **DATASHEET - ZB12-1**



Overload relay, ZB12, Ir= 0.6 - 1 A, 1 N/O, 1 N/C, Direct mounting, IP20



Part no. ZB12-1 Catalog No. 278435 Alternate Catalog XTOB001BC1 No. EL-Nummer 0004131830 (Norway)

Similar to illustration

#### **Delivery program**

Product rangeDeefload relay 2B up to 150 AProduct rangeAccessoriesAccessoriesOurload relay 2B up to 150 AAccessoriesDurload relay 2B up to 150 AAccessoriesOurload relay 2B up to 150 AAccessoriesDurload relay 2B up to 150 APhase-failur sensitivityEUC/FN 6967, VDE 0660 Part 102DescriptionEUC/FN 6967, VDE 0660 Part 102Mounting typeDirect mountingContact sequenceIVC = Normality contactsINO = Normality costadINO = Normality costadIFor use withIType "1" coordinationGrigfuType "1" coordinationGrigfuType "2" coordinationGrigfuType "2" coordinationGrigfuType "2" coordinationGrigfuType "2" coordinationGrigfuType "2" coordinationGrigfuAutomaticAIAIAIIIAIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII <th>Dontor, program</th> <th></th> <th></th> <th></th>	Dontor, program			
AccessoriesImage: Constraint of the sector of	Product range			Overload relay ZB up to 150 A
Frame size 2812   Phase-failure sensitivity EC/EN 60947, VDE 0660 Part 102   Description Test/off button Restription anaua/auto Trip-free releases   Mounting type Direct mounting   Contact sequence Ir A   Auxiliary contacts Ir Ir   NO = Normally closed IrVC IrVC   For use with IrVC IrVC   Short-circuit protection IrVC IrVC   Type "1" coordination IrVC IrVC   Type "1" coordination IrVC IrVC	Product range			Accessories
Phase-failure sensitivity Image: CPU Note Observed Note	Accessories			Overload relays
Description Instruction Test/off button   Mounting type Direct mounting   Mounting type Info   Image: Second secon	Frame size			ZB12
Mounting type Reset pushbutton manual/auto Trip-free release   Mounting type If and an automation   Orient mounting Direct mounting   Contact sequence If and an automation   Auxiliary contacts If and a bit and automation   N/O = Normally open If and a bit and automation   N/C = Normally closed If and a bit and automation   For use with If and a bit and automation   Short-circuit protection If and a bit and automation   Type "1" coordination If and a bit and automation   If and a bit and automation If and a bit and automation   If and a bit and automation If and a bit and automation   If and a bit and automation If and a bit and automation   If and a bit and automation If and a bit and automation   If and a bit and automation If and a bit and automation   If and a bit and automation If and a bit and automation   If and a bit and automation If and a bit and automation   If and a bit and automation If and a bit and automation   If and a bit and automation If and a bit and automation   If and a bit and automation If and a bit and automation   If and a bit and automation If and a bit and automation   If and a bit and automation <thif and="" automation<="" th="">   If and a bi</thif>	Phase-failure sensitivity			IEC/EN 60947, VDE 0660 Part 102
Image: Problem sequenceImage: Problem sequenceImage: Problem sequenceImage: Problem sequenceAuxiliary contactsImage: Problem sequenceImage: Problem sequenceImage: Problem sequenceN/0 = Normally openImage: Problem sequenceImage: Problem sequenceImage: Problem sequenceN/0 = Normally closedImage: Problem sequenceImage: Problem sequenceImage: Problem sequenceFor use withImage: Problem sequenceImage: Problem sequenceImage: Problem sequenceShort-circuit protectionImage: Problem sequenceImage: Problem sequenceType "I" coordinationProblem sequenceProblem sequence <tr< td=""><td>Description</td><td></td><td></td><td>Reset pushbutton manual/auto</td></tr<>	Description			Reset pushbutton manual/auto
Contact sequence   Image: Contact sequence     Contact sequence   Image: Contact sequence     Auxiliary contacts   Image: Contact sequence     N/0 = Normally open   Image: Normally closed     N/C = Normally closed   Image: Normally closed     For use with   Image: Normally closed     Short-circuit protection   Image: Normally closed     Type "1" coordination   gG/gL   A     25   Solution	Mounting type			Direct mounting
Auxiliary contacts Index   N/0 = Normally open Index   N/C = Normally closed Index   For use with Index   Short-circuit protection Index   Type "1" coordination gG/gL A	с‡	l <sub>r</sub>	А	0.6 - 1
N/O = Normally openIN/ON/C = Normally closedIN/CFor use withIN/CShort-circuit protectionIN/CType "1" coordinationIN/CImage: Solution of the section of the	Contact sequence			
N/C = Normally closed   I/C     For use with   I/LM7, DILM9, DILM12, DILM15, DILM15, DILM12, DILM12, SDAINLM12, SDAINLM12, SDAINLM12, SDAINLM12, SDAINLM12, SDAINLM12, SDAINLM22     Short-circuit protection   I/IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII	Auxiliary contacts			
For use with Image: I	N/O = Normally open			1 N/O
Short-circuit protection gG/gL A 25	N/C = Normally closed			1 N/C
Type "1" coordination gG/gL A 25	For use with			DIULM7, DIULM9, DIULM12, SDAINLM12, SDAINLM16,
ф	Short-circuit protection			
Type "2" coordination gG/gL A 4		gG/gL	А	25
	Type "2" coordination	gG/gL	A	4

Notes

Overload release: tripping class 10 A

short-circuit protective device: Observe the maximum permissible fuse of the contactor with direct device mounting.

Suitable for protection of Ex e-motors.

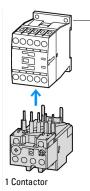


II(2)G [Ex d] [Ex e] [Ex px], II(2)D [Ex p] [Ex t]

PTB 10 ATEX 3010

Observe manual MN03407005Z-DE/EN.

Notes Fitted directly to the contactor



1

# Technical data

StandsFirst Part (PARADA)First Part (PARADA) <th< th=""><th>General</th><th></th><th></th><th></th></th<>	General			
Ambient Ampositor     Ambient Ampositor     Ambient Ampositor     Ambient Ampositor       Ambient Memositor     Bane hask cyclic in US BOOR-240     Main Sector       Bignen     C     Bane hask cyclic in US BOOR-240       Bignen     C     Bane hask cyclic in US BOOR-240       Bignen     C     Solar Sector       Bignen     Solar Sector     Solar Sector       Bignen     Sol	Standards			IEC/EN 60947, VDE 0660, UL, CSA
Image: Proceed of the source of the	Climatic proofing			
Open     File. 5 <sup>4</sup> C <sup>2</sup> - 5 <sup>4</sup> C <sup>2</sup> Gene     File. 5 <sup>4</sup> C <sup>2</sup> - 5 <sup>4</sup> C <sup>2</sup> Temperature compensation     File. 5 <sup>4</sup> C <sup>2</sup> Weight     Controus       Weight     File. 5 <sup>4</sup> C <sup>2</sup> Marchelistick resistance     File. 5 <sup>4</sup> C <sup>2</sup> Degree of Protection     File. 5 <sup>4</sup> C <sup>2</sup> Reade moles weither orbit of the file. 5 <sup>4</sup> C <sup>2</sup> File. 5 <sup>4</sup> C <sup>2</sup> Reade moles weither orbit of the file. 5 <sup>4</sup> C <sup>2</sup> File. 5 <sup>4</sup> C <sup>2</sup> Reade moles weither orbit of the file. 5 <sup>4</sup> C <sup>2</sup> File. 5 <sup>4</sup> C <sup>2</sup> Between main circiati     File. 5 <sup>4</sup> C <sup>2</sup> Between the setting rugs     File. 5 <sup>4</sup> C <sup>2</sup> Solid     File. 5 <sup>4</sup> C <sup>2</sup> Solid     Fi	Ambient temperature			
Enclosed     "C     3c - 4 Continuous       Tampersture compensation     K     Ganamous       Weight     K     10       Weight     Sinus/adial Sinus/adia Sinus/adial Sinus/adial Sinus/adia Sinus/adia Sinus/adia				
Tenperature compensation initial second se	Open		°C	-25 - +55
WeightkgkgNatMechanical shock resistancenn	Enclosed		°C	- 25 - 40
Muchanical abok resistance     Note of Matching Information Informatio Information Information Information Informatin Informat	Temperature compensation			Continuous
initial street of the stree	Weight		kg	0.141
Protection against direct contact when actualted from from t(EM 50274)Image and back-of-hand prodeAiture do analysis of contact integrationsNameNameMain contact integrationsNameNameNameReted insultation voltageNameNameNameReted insultation voltageNameNameNameReted operational voltageNameNameNameSelect operational voltageNameNameNameSelect operational voltageNameNameNameSelect operational voltageNameNameNameBetween auxiliary contacts and main contactsNameNameNameBetween auxiliary contacts and main contactsNameNameNameInversale of the setting rangeNameNameNameSolidScloanderNameNameNameSolid or strandedNameNameNameNameSolid or strandedNameNameNameNameSolid or strandedNameNameNameNameSolid or strandedNameNameNameNameSolid or strandedNameNameNameNameSolid or strandedName <td>Mechanical shock resistance</td> <td></td> <td>g</td> <td>Sinusoidal</td>	Mechanical shock resistance		g	Sinusoidal
Altide n Max 200   Handem Control trip parts 500   Read involtation degree 600   Set involtation trip degree 600   Set involtation trip degree 600   Between main circuits 600   Between main circuits and main contacts 740   Between main circuits 740   Current heat loss f3 conductors) 620   Current heat loss f3 conductors) 740   Set information residual error > 00°C 740   Read main setting range 740   Set information residual error > 00°C 740	Degree of Protection			IP20
Anic onducting pathsVame Vame Nam	Protection against direct contact when actuated from front (EN 50274)			Finger and back-of-hand proof
Rated impulse withstand voltageVac600Qerorlage category/pollution degreeIIIIIIIRated operational voltageVacVacSoldRated operational voltageVacVacSoldBetween autin contacts and main contactsVacVac400Between autin contacts and main contactsVacSoldSoldInterest contage station of Sold autors > 40 °CVac400SoldInterest contage station of Sold autors > 40 °CVacSoldSoldInterest contage station of Sold autors > 40 °CSold > 40 °CSold > 40 °CInterest contage station of Sold autors > 40 °CSold > 40 °CSold > 40 °CInterest contage station of Sold autors > 40 °CSold > 40 °CSold > 40 °CInterest contage station of Sold autors > 40 °CSold > 40 °CSold > 40 °CInterest contage station of Sold autors > 40 °CSold > 40 °CSold > 40 °CInterest contage station of Sold autors > 40 °CSold > 40 °C			m	Max. 2000
Devolution degreeImage: solution volution outsideImage: solution volution				
Red insultion voltageI I<	Rated impulse withstand voltage	U <sub>imp</sub>	V AC	6000
Reted operational voltage U VAC 860   Safe isolation to EN 61140 Image: Safe isolation to EN 61140 Image: Safe isolation to EN 61140   Between auxiliary contacts and main contacts VAC 40   Between main circuits VAC 40   Temperatur compensation residual error > 40 °C Image: Safe isolation to EN 61140 Image: Safe isolation to EN 61140   Current heat loss (3 conductors) Image: Safe isolation to EN 61140 Image: Safe isolation to EN 61140   Current heat loss (3 conductors) Image: Safe isolation to EN 61140 Image: Safe isolation to EN 61140   Current heat loss (3 conductors) Image: Safe isolation to EN 61140 Image: Safe isolation to EN 61140   Current heat loss (3 conductors) Image: Safe isolation to EN 61140 Image: Safe isolation to EN 61140   Maxware setting range Image: Safe isolation to EN 61140 Image: Safe isolation to EN 61140   Safe isolation to EN 61140 Image: Safe isolation to EN 61140 Image: Safe isolation to EN 61140   Safe isolation to EN 61140 Image: Safe isolation to EN 61140 Image: Safe isolation to EN 61140   Safe isolation to EN 61140 Image: Safe isolation to EN 61140 Image: Safe isolation to EN 61140   Safe isolation to EN 61140 Image: Safe isolation to EN 61140 Image: Safe isolation to EN 61140   Safe isolation to EN 61140 Image: Safe isolati				111/3
Safe isolation to EN 61140 Value 440   Between main circuits Value 440   Temperatur compensation residual error > 40 °C Value 400   Current heat loss (3 conductors) Value 525 %/K   Lower value of the satting range Value 69   Maximum setting Value 69   Terminal capacities Value 700   Solid Marin 825 %/K   Terminal capacities Value 700   Solid or stranded Value 700   Terminal carsew Value 700   Solid or stranded Value 700   Tightening torque Nm 8.1   Stripping length Value 700   Todifvi screwdriver Stripping length 700   Todifvi screwdriver Yampet 700   Stripping length Value 700   Terminal capacities Yampet 700   Readingulate withstand voltage Yampet 700   Overvoltage category/pollution degree Yampet 700   Terminal capacities Yampet 700   Terminal capacities Yampet 700   Terminal capacities Yampet 700   Terminal capacities	Rated insulation voltage	Ui	V	690
Between auxiliary contacts and main contacts     VAC     40       Between main circuits     VAC     40       Temperatur compensation residual error > 40 °C     VAC     40       Current heat loss (3 conductors)     VAC     800       Lower value of the setting range     VAC     800       Maximum setting     VAC     80       Terminal capacities     VAC     80       Solid     VAC     800       Solid or stranded     VAC     80       Terminal capacities     VAC     80       Solid or stranded     VAC     800       Terminal screw     VAC     80       Tightening torque     VAC     80       Stripping length     VAC     80       Totadrd screwdriver     Size     Size       Stripping length     Vampet     Yampet       Terminal capacities     Yampet     Yampet       Variation screwdriver     Size     Size       Totadrd screwdriver     Yampet     Yampet       Straign accouncil circuits     Yampet     Yampet	Rated operational voltage	U <sub>e</sub>	V AC	690
Between main circuits     VAC     40       Temperatur compensation residual error > 40 °C     525 %/K       Current heat loss (3 conductors)     VM     5.0       Lower value of the setting range     VM     5.0       Maximum setting     VM     5.0       Terminal capacities     mar2     5.0       Solid     mar2     1.1 · 1.0       Solid or stranded     MM     8.0       Terminal screw     MV     8.0       Tegeting torque     MM     8.0       Solid or stranded     MM     8.0       Terminal screw     MM     8.0       Totage     MM     8.0       Strapping length     Mm     8.1       Pozidriv screwdriver     Size     Size       Strapping length     Mm     1.6       Auxiliary and control circuits     Mm     1.6       Auxiliary and control circuits     Mm     1.0       Coveroltage category/pollution degree     Mm     1.0       Generoltage category/pollution degree     Mm     1.0	Safe isolation to EN 61140			
Imperatur compensation residual error > 40 °C     Imperature residual error > 40 °C     Imperatureroror > 40 °C     Imperatureror > 40 °C </td <td>Between auxiliary contacts and main contacts</td> <td></td> <td>V AC</td> <td>440</td>	Between auxiliary contacts and main contacts		V AC	440
Current heat los (3 conductors)     Image:	Between main circuits		V AC	440
Lover value of the setting range Image: Setting range Image: Set im	Temperatur compensation residual error > 40 °C			≦ 0.25 %/K
Maximum setting   V   6     Terrinal capacities   ma <sup>2</sup> x11 - 6)     Solid   ma <sup>2</sup> x11 - 6)     Flexible with ferrule   ma <sup>2</sup> x11 - 4)     Solid or stranded   AWG   8-8     Terrinal screw   AWG   8-8     Terrinal screw   Ma   8-8     Toting ing length   Ma   8-8     Toting screwdriver   Ma   8-8     Poidriv screwdriver   Ma   8-8     Total   Ma   8-8     Marcal screwdriver   Ma   8-8     Total screwdriver   Ma   8-8     Total screwdriver   Ma   9-8     Red impulse withstand voltage   Ma   9-8     Auxilizery and screwdriver   Stange   16     Stand screwdriver   Ma   8-9     Red impulse withstand voltage   Map   9-9     Overvoltage category/pollution degree   Map   1/3     Terrinal capacities   Map   1/3	Current heat loss (3 conductors)			
Terminal capacities   mm <sup>2</sup> Solid   mm <sup>2</sup> Solid   mm <sup>2</sup> Flexible with ferrule   mm <sup>2</sup> Solid or stranded   mm <sup>2</sup> Solid or stranded   Mm <sup>2</sup> Solid or stranded   MMG     Terminal screw   MMG     Tightening torque   MMG     Stripping length   MM     Tots   MM     Pozidriv screwdriver   State     Standard screwdriver   State     Ret impulse withstand voltage   Mmp     Overvoltage category/pollution degree   Mmp     Impulse withstand voltage   Mmp     Impulse Mmp   Mmp	Lower value of the setting range		W	2.5
Solid     mm     mm <sup>2</sup> x (1 - 6) x (1 - 6)       Flexible with ferrule     mm <sup>2</sup> x (1 - 4) x (1 - 4)     x (1 - 4) x (1 - 4)       Solid or stranded     AWG     8 - 8       Terminal screw     MM     8 - 8       Tightening torque     MM     18       Stripping length     Mm     10       Tools     Mm     10       Pozidriv screwdriver     Size     2       Standard screwdriver     Mm     1x (1 - 4)       Attalitary and control circuits     mm     10       Attalitary and control circuits     mm     1x (1 - 4)       Overvoltage category/pollution degree     Mm     8       Iterminal capacities     Mm     1x (1 - 4)	Maximum setting		W	6.9
Image: Preside and the second seco	Terminal capacities		mm <sup>2</sup>	
Solid or stranded AWG 3e 3   Terminal screw AWG 3e 3   Tightening torque Ma Ma   Tightening torque Mm 18   Stripping length mm 10   Tools mm 10   Pozidriv screwdriver Size Size   Standard screwdriver Jung Van   AuxLilary and control circuits Vimp 400   Overvoltage category/pollution degree Man IIV3	Solid		mm <sup>2</sup>	
Terminal screwMetMetTightening torqueNm1.8Stripping lengthmm0ToolsNm1.8Pozidriv screwdriverSize2Standard screwdrivermm1.46Auxiliary and control circuitsJimpMetVervoltage category/pollution degreeJimpMetTerminal capacitiesmm²III/3	Flexible with ferrule		mm <sup>2</sup>	
Tightening torqueNm1.8Stripping lengthnm0Toolsnm10Pozidriv screwdriversizeSizeStandard screwdrivermm1x6Auxiliary and control circuitsRated impulse withstand voltageVimpVOvervoltage category/pollution degreeVimpNmTerminal capacitiesmm211/3	Solid or stranded		AWG	18 - 8
Stripping length Imm Imm   Tools Mm Imm   Pozidriv screwdriver Size Size   Standard screwdriver mm 1x6   Auxiliary and control circuits Imm Imm   Overvoltage category/pollution degree Imm Imm   Terminal capacities Imm Imm	Terminal screw			M4
Tools Image: Marcine Size Size Size Size Size Size Size Siz	Tightening torque		Nm	1.8
Pozidriv screwdriver Size Size   Standard screwdriver mm 1 × 6   Auxiliary and control circuits Vimp V 400   Overvoltage category/pollution degree III/3 III/3	Stripping length		mm	10
Standard screwdriver mm 1 x 6   Auxiliary and control circuits   Rated impulse withstand voltage Vimp V 4000   Overvoltage category/pollution degree III/3 III/3	Tools			
Auxiliary and control circuits   Rated impulse withstand voltage Uimp V 4000   Overvoltage category/pollution degree III/3 III/3   Terminal capacities mm <sup>2</sup> III/3	Pozidriv screwdriver		Size	2
Rated impulse withstand voltage Uimp V 4000   Overvoltage category/pollution degree III/3 III/3   Terminal capacities mm <sup>2</sup> III/3			mm	1 x 6
Overvoltage category/pollution degree III/3   Terminal capacities mm <sup>2</sup>	Auxiliary and control circuits			
Terminal capacities mm <sup>2</sup>	Rated impulse withstand voltage	U <sub>imp</sub>	V	4000
	Overvoltage category/pollution degree			111/3
Solid mm <sup>2</sup> 1 x (0.75 - 4)	Terminal capacities		mm <sup>2</sup>	
	Solid		mm <sup>2</sup>	1 x (0.75 - 4)

			2 x (0.75 - 4)
Flexible with ferrule		mm <sup>2</sup>	1 x (0.75 - 2.5) 2 x (0.75 - 2.5)
Solid or stranded		AWG	2 x (18 - 14)
Terminal screw			M3.5
Tightening torque		Nm	1.2
Stripping length		mm	8
Tools			
Pozidriv screwdriver		Size	2
Standard screwdriver		mm	1 x 6
Rated insulation voltage	Ui	V AC	500
Rated operational voltage	U <sub>e</sub>	V AC	500
Safe isolation to EN 61140			
between the auxiliary contacts		V AC	240
Conventional thermal current	I <sub>th</sub>	А	6
Rated operational current	le	А	
AC-15			
Make contact			
120 V	Ι <sub>e</sub>	А	1.5
220 V 230 V 240 V	Ie	А	1.5
380 V 400 V 415 V	I <sub>e</sub>	А	0.5
500 V	I <sub>e</sub>	А	0.5
Break contact			
120 V	۱ <sub>e</sub>	A	1.5
220 V 230 V 240 V	I <sub>e</sub>	A	1.5
380 V 400 V 415 V	I <sub>e</sub>	A	0.9
500 V	l <sub>e</sub>	A	0.8
DC L/R ≦ 15 ms			
			Switch-on and switch-off conditions based on DC-13, time constant as specified.
24 V	le	A	0.9
60 V	Ι <sub>e</sub>	A	0.75
110 V	l <sub>e</sub>	A	0.4
220 V	l <sub>e</sub>	A	0.2
Short-circuit rating without welding	·		
max. fuse		A gG/gL	6
Notes		0-70-	

#### Notes

Notes Ambient air temperature: Operating range to IEC/EN 60947, PTB: -5°C to +55°C Main circuits terminal capacity solid and flexible conductors with ferrules: When using 2 conductors use equal cross-sections.

#### Rating data for approved types

Auxiliary contacts		
Pilot Duty		
AC operated		B300 at opposite polarity B600 at same polarity
DC operated		R300
Short Circuit Current Rating	SCCR	
600 V High Fault		
SCCR (fuse)	kA	100
max. Fuse	А	1 Class J/CC

# Design verification as per IEC/EN 61439

Fechnical data for design verification			
Rated operational current for specified heat dissipation	In	А	1
Heat dissipation per pole, current-dependent	P <sub>vid</sub>	W	2.3
Equipment heat dissipation, current-dependent	P <sub>vid</sub>	W	6.9
Static heat dissipation, non-current-dependent	P <sub>vs</sub>	W	0
	Heat dissipation per pole, current-dependent Equipment heat dissipation, current-dependent	Rated operational current for specified heat dissipation   In     Heat dissipation per pole, current-dependent   Pvid     Equipment heat dissipation, current-dependent   Pvid     Static heat dissipation per pole, current-dependent   Pvid	Rated operational current for specified heat dissipation   In   A     Heat dissipation per pole, current-dependent   Pvid   W     Equipment heat dissipation, current-dependent   Pvid   W     Static heat dissipation per pole   Pvid   W

Heat dissipation capacity	P <sub>diss</sub>	W	0
Operating ambient temperature min.		°C	-25
Operating ambient temperature max.		°C	55
IEC/EN 61439 design verification			
10.2 Strength of materials and parts			
10.2.2 Corrosion resistance			Meets the product standard's requirements.
10.2.3.1 Verification of thermal stability of enclosures			Meets the product standard's requirements.
10.2.3.2 Verification of resistance of insulating materials to normal heat			Meets the product standard's requirements.
10.2.3.3 Verification of resistance of insulating materials to abnormal heat and fire due to internal electric effects			Meets the product standard's requirements.
10.2.4 Resistance to ultra-violet (UV) radiation			Meets the product standard's requirements.
10.2.5 Lifting			Does not apply, since the entire switchgear needs to be evaluated.
10.2.6 Mechanical impact			Does not apply, since the entire switchgear needs to be evaluated.
10.2.7 Inscriptions			Meets the product standard's requirements.
10.3 Degree of protection of ASSEMBLIES			Does not apply, since the entire switchgear needs to be evaluated.
10.4 Clearances and creepage distances			Meets the product standard's requirements.
10.5 Protection against electric shock			Does not apply, since the entire switchgear needs to be evaluated.
10.6 Incorporation of switching devices and components			Does not apply, since the entire switchgear needs to be evaluated.
10.7 Internal electrical circuits and connections			Is the panel builder's responsibility.
10.8 Connections for external conductors			Is the panel builder's responsibility.
10.9 Insulation properties			
10.9.2 Power-frequency electric strength			Is the panel builder's responsibility.
10.9.3 Impulse withstand voltage			Is the panel builder's responsibility.
10.9.4 Testing of enclosures made of insulating material			Is the panel builder's responsibility.
10.10 Temperature rise			The panel builder is responsible for the temperature rise calculation. Eaton will provide heat dissipation data for the devices.
10.11 Short-circuit rating			Is the panel builder's responsibility. The specifications for the switchgear must be observed.
10.12 Electromagnetic compatibility			Is the panel builder's responsibility. The specifications for the switchgear must be observed.
10.13 Mechanical function			The device meets the requirements, provided the information in the instruction leaflet (IL) is observed.

#### **Technical data ETIM 7.0**

Low-voltage industrial components (EG000017) / Thermal overload relay (EC000106)

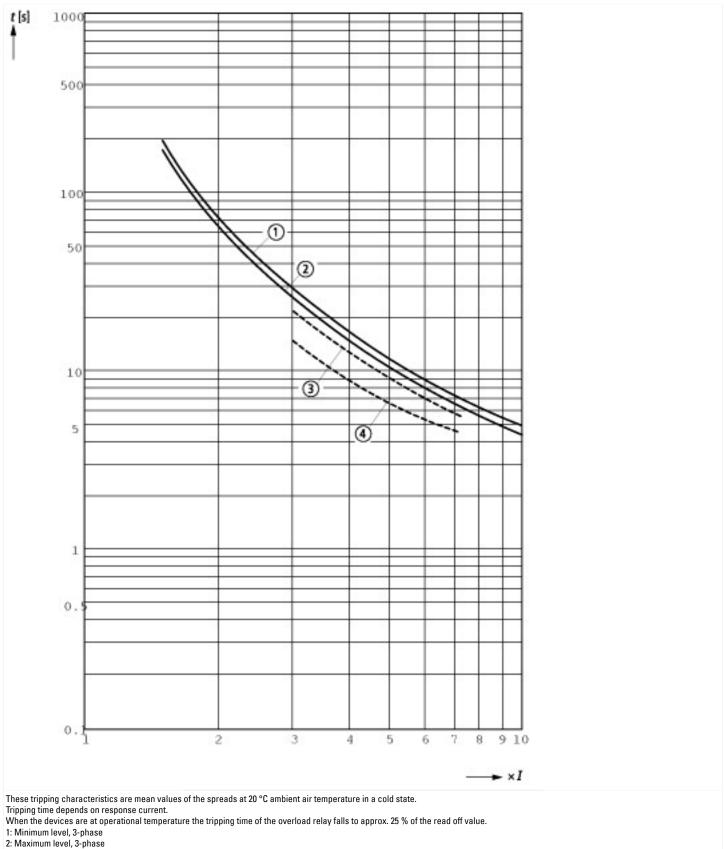
Electric engineering, automation, process control engineering / Low-voltage switch technology / Overload protection device / Thermal overload relay (ecl@ss10.0.1-27-37-15-01 [AKF075014])			
Adjustable current range		А	0.6 - 1
Max. rated operation voltage Ue		V	690
Mounting method			Direct attachment
Type of electrical connection of main 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
Release class			CLASS 10
Reset function input			No
Reset function automatic			Yes
Reset function push-button			Yes

### **Approvals**

Product Standards	IEC/EN 60947-4-1; UL 60947-4-1; CSA - C22.2 No. 60947-4-1-14; CE marking
UL File No.	E29184
UL Category Control No.	NKCR
CSA File No.	12528
CSA Class No.	3211-03
North America Certification	UL listed, CSA certified
Specially designed for North America	No
Suitable for	Branch circuits

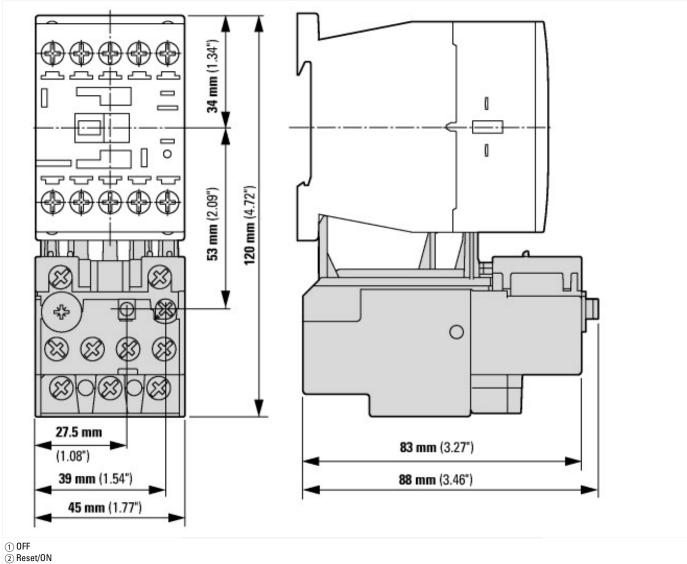
Max. Voltage Rating	600 V AC
Degree of Protection	IEC: IP20, UL/CSA Type: -

### **Characteristics**



3: Minimum marker, 2-phase 4: Highest marker, 2-phase

## **Dimensions**



## Additional product information (links)

IL03407015Z (AWA2300-2114) Overload relay				
IL03407015Z (AWA2300-2114) Overload relay	ftp://ftp.moeller.net/DOCUMENTATION/AWA_INSTRUCTIONS/IL03407015Z2020_06.pdf			
IL03407195Z Sealable shroud				
IL03407195Z Sealable shroud	ftp://ftp.moeller.net/DOCUMENTATION/AWA_INSTRUCTIONS/IL03407195Z2018_06.pdf			
MN03407004Z (AWB2300-1527D/GB) ZB12/XT0BBC1 and ZB32/XT0BCC1 overload relays, overload monitoring of Ex e motors				
MN03407004Z (AWB2300-1527D/GB) ZB12/ XTOBBC1 and ZB32/XTOBCC1 overload relays, overload monitoring of Ex e motors - Deutsch / English	ftp://ftp.moeller.net/DOCUMENTATION/AWB_MANUALS/MN03407004Z_DE_EN.pdf			