DATASHEET - ZB12-4



Overload relay, ZB12, Ir= 2.4 - 4 A, 1 N/O, 1 N/C, Direct mounting, IP20



Part no. ZB12-4 Catalog No. 278438 Alternate Catalog XTOB004BC1

No.

EL-Nummer 4131833

(Norway)

Similar to illustration

Delivery program			
Product range			Overload relay ZB up to 150 A
Product range			Accessories
Accessories			Overload relays
Frame size			ZB12
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	Α	2.4 - 4
Contact sequence			97 95 1 14/ 2 4 6 98 96 A2 14/ 22
Auxiliary contacts			
N/O = Normally open			1 N/0
N/C = Normally closed			1 N/C
For use with			DILM7, DILM9, DILM12, DILM15, DIULM7, DIULM9, DIULM12, SDAINLM12, SDAINLM16, SDAINLM22 DS7-34SX004
Short-circuit protection			
Type "1" coordination	gG/gL	А	25
Type "2" coordination	gG/gL	A	16

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 $\ensuremath{\mathsf{Ex}}$ e-motors.



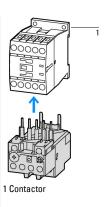
II(2)G [Ex d] [Ex e] [Ex px], II(2)D [Ex p] [Ex t]

PTB 10 ATEX 3010

Observe manual MN03407005Z-DE/EN.

Notes

Fitted directly to the contactor



Technical data General

Sandards	General			
Methoda to temperature	Standards			IEC/EN 60947, VDE 0660, UL, CSA
	Climatic proofing			
PFID - 1°C - 1,55°C	Ambient temperature			
Finciple and Protection P				Operating range to IEC/EN 60947 PTB: -5 °C - +55 °C
Temperature compensation Weight Mechanical abock resistance Degree of Protection Protection against direct contact when actuated from front [EN 50214) Retained impulse withstand voltage Overouting paths Safed impulse withstand voltage Overouting contagory/pollution degree Rated impulse withstand voltage Overouting paths Safed insulation voltage Alfa isolation vol	0pen		°C	-25 - +55
Weight kg lad 142 Machanical shock resistance 5 8 132 132 Degree of Protection Foregree of Protection against direct contact when actuated from front [EN 50274) Foregree of Protection against direct contact when actuated from front [EN 50274) Foregree of Protection against direct contact when actuated from front [EN 50274) Foregree of Protection against direct contact when actuated from front [EN 50274) Foregree of Protection against direct contact when actuated from front [EN 50274) Image: pand back-of-hand proof Maint conducting Wash 2000 Sound Sound <td>Enclosed</td> <td></td> <td>°C</td> <td>- 25 - 40</td>	Enclosed		°C	- 25 - 40
Mechanical shock resistance Degree of Protection Protection against direct contact when actuated from front (EN 50274) Attitude Main conducting paths Rated impulse withstand voltage Ourevoltage acting projection audition to take the state of the	Temperature compensation			Continuous
Degree of Protection Degree of Protection Protection against direct contact when actuated from front (EN 50274) Altitude Main conducting paths Rated impulse withstand voltage Overnottage category/pollution degree Rated perational voltage Altitude Main conducting paths Rated perational voltage Overnottage category/pollution degree Rated perational voltage Altitude Main conducting paths Rated perational voltage Overnottage category/pollution degree Altitude Main conducting paths Rated perational voltage V AC Selection to EN 61140 Between auxiliary contacts and main contacts W 40 440 2.2 440 2.2 440 2.2 440 440	Weight		kg	0.142
Protection against direct contact when actuated from front [EN 50274) Image and back-of-hand proof Altitude Max. 2000 Main conducting paths VAC 6000 Rated impulse withstand voltage U _{ling} VAC 6000 Rated impulse withstand voltage U _i V 690 Rated insulation voltage U _i V 690 Safe isolation to EN 61140 VAC 490 Between auxiliary contacts and main contacts VAC 440 Between namic circuits VAC 440 Current heat loss (3 conductors) VAC 40 Lower value of the setting range W 2.2 Maximum setting Mm² 1 x (1 - 6) Solid mm² 1 x (1 - 6) Solid or stranded Mm² 2 x (1 - 6) Solid or stranded M 1 x (1 - 4) Terminal carew M 8 Terminal serew M 8 Pozidiri v screwdriver M 1 x (1 - 4) Pozidiri v screwdriver M 1 x (1 - 4)	Mechanical shock resistance		g	Sinusoidal
Abitutude main Main zoonductring paths Rated impulse withstand voltage vac 8000 Overvoltage category/pollution degree III3 III3 Rated on sultand voltage Up VAC 800 Rated operational voltage Up VAC 800 Safe isolation to EN 61140 VAC 440 Between auxilian contacts and main contacts VAC 440 Between main circuits VAC 440 Temperatur compensation residual error > 40 °C VAC 440 Current heat loss (3 conductors) VAC 22 Lower value of the setting range WAC 22 Maximum setting WAC 2x1 ° 6) Solid xx1 ° 6) 2x1 ° 6) Flexible with ferrule WAC 3x1 ° 6) Solid or stranded WAC 4x8 Terminal screw WAC 4x8 Terminal screw WAC 4x8 Pozidriv screwdriver WAC 4x8 Auximanded WAC 4x8 <t< td=""><td>Degree of Protection</td><td></td><td></td><td>IP20</td></t<>	Degree of Protection			IP20
Main conducting paths Rated impulse withstand voltage Ump VAC 6000 Overvoltage category/polituion degree III/3 III/3 Rated insulation voltage Ui VAC 690 Rated deperational voltage VAC 690 Safe isolation to EN 81140 VAC 440 Between auxiliary contacts and main contacts VAC 440 Between main circuits VAC 440 Temperatur compensation residual error > 40°C VAC 440 Current heat loss (3 conductors) VAC 22 Lower value of the setting range W 2 Maximum setting W 5 Solid Maximum setting W 6 Flexible with ferrule mm² 1x(1 - 6) 2x(1 - 6) Solid or stranded MAC MAC 1x(1 - 4) 2x(1 - 4) Solid or stranded MAC MAC 1x(1 - 4) 2x(1 - 4) 1x(1 - 4) 1x	Protection against direct contact when actuated from front (EN 50274)			Finger and back-of-hand proof
Rated impulse withstand voltage Ump V AC 6000 Overvoltage category/pollution degree Ui V AC 690 Rated operational voltage V AC 690 Sate isolation to R61140 V AC 690 Between auxiliary contacts and main contacts V AC 440 Between namic circuits V AC 440 Between namic circuits V AC 440 Current heat loss (3 conductors) V AC 40 Current heat loss (3 conductors) W 2 Assimum setting W 2 Solid Imm² Imm² Solid Imm² Imm² Flexible with ferrule Imm² Imm² Solid or stranded Imm² Imm² Solid or stranded Imm² Imm² Typing length Imm² Imm² Typing length Imm² Imm² Tools Imm² Imm² Positivi screwdriver Imm² Imm² Sandard screwdriver Imm² Imm²	Altitude		m	Max. 2000
Overvoltage category/pollution degree U ₁ V 690 Rated insulation voltage U ₆ V AC 690 Rated operational voltage V AC 690 Safe isolation to EN 61140 V AC 440 Between auxiliary contacts and main contacts V AC 440 Temperatur compensation residual error > 40 °C V AC 440 Current heat Ibss (3 conductors) V 22 Lower value of the setting range W 2 Maximum setting W 6 Terminal capacities mm² 1 x(1 - 6) 2 x(1 - 4) 2				
Rated insulation voltage Ui V 699 Rated operational voltage Ue V AC 699 Safe isolation to EN 61140 VAC 440 Between auxiliary contacts and main contacts V AC 440 Between main circuits VAC 440 Temperatur compensation residual error > 40 °C VAC 440 Current heat loss (3 conductors) VAC 2.2 Lower value of the setting range VAC 6 Maximum setting VAC 6 Terminal capacities mm² 1 x (1 - 6) 2 x (1 - 6) Flexible with ferrule mm² 1 x (1 - 6) 2 x (1 - 6) Solid or stranded AWG 18 - 8 Terminal screw M4 1.8 Triping length mm 10 Tools Size 2 Pozidriv screwdriver size 2 Standard screwdriver mm 1 x 6 Standard screwdriver mm 1 x 6 Standard screwdriver mm 1 x 6 Standard	Rated impulse withstand voltage	U _{imp}	V AC	6000
Rated operational voltage Ue V AC 690 Safe isolation to EN 61140 V AC 440 Between auxiliary contacts and main contacts V AC 440 Between main circuits V AC 440 Temperatur compensation residual error > 40 °C V AC 440 Current heat loss (3 conductors) V AC 2.2 Lower value of the setting range W 6 2.2 Maximum setting mm² 1 x (1 - 6) Solid mm² 1 x (1 - 6) Solid vith ferrule mm² 1 x (1 - 4) Solid or stranded AWG 18 - 8 Terminal screw M4 4 Tightening torque Nm 1.8 Stripping length mm 10 Tools Size 2 Pozidriv screwdriver min 1.5 Standard screwdriver min 1.6 Standard screwdriver min 1.6 Standard screwdriver min 1.6 Standard screwdriver min 1.6	Overvoltage category/pollution degree			III/3
Safe isolation to EN 61140 Between auxiliary contacts and main contacts Between main circuits Temperatur compensation residual error > 40 °C Current heat loss (3 conductors) Lower value of the setting range Maximum setting Terminal capacities Solid Flexible with ferrule Solid or stranded Terminal screw Flexible with ferrule Solid or stranded Terminal screw Tightening torque Pozidriv screwdriver Pozidriv screwdriver Standard screwdriver Standard screwdriver Reted impulse withstand voltage Overvoltage category/pollution degree Terminal capacities V AC 440 440 440 440 400 400 400 400	Rated insulation voltage	Ui	V	690
Between auxiliary contacts and main contacts Between main circuits Temperatur compensation residual error > 40 °C Current heat loss (3 conductors) Lower value of the setting range Maximum setting Terminal capacities Solid Flexible with ferrule Solid or stranded Terminal screw Terminal screw Terminal screw Flexible with ferrule Solid or stranded Terminal screw Terminal screw Terminal screw Terminal capacities Wa (1 - 6) Terminal screw Maximum setting Maximum setting Terminal capacities Solid or stranded Terminal screw Terminal screw Terminal screw Terminal capacities Pozidriv screwdriver Pozidriv screwdriver Standard screwdriver Standard screwdriver Rated impulse withstand voltage Uump V 4000 Overvoltage category/pollution degree Ill/3 Irminal capacities Maximum setting VAC 440 440 440 440 440 440 440 4	Rated operational voltage	U _e	V AC	690
Between main circuits Temperatur compensation residual error > 40 °C Current heat loss (3 conductors) Lower value of the setting range Maximum setting Terminal capacities Solid Flexible with ferrule Flexible with ferrule Solid or stranded Terminal screw Tightening torque Stripping length Tools Pozidriv screwdriver Standard screwdriver Standard screwdriver Standard screwdriver Rated impulse withstand voltage Overvoltage category/pollution degree Terminal capacities V AC 440 400 2 2 2 W 6 mm² 1 x (1 - 6) 2 x (1 - 6) 2 x (1 - 4) 2 x (1 - 4) AWG 18 - 8 W M4 1.8 Min 1.0 1.0 4.0 4.0 4.0 4.0 4.0 4.0	Safe isolation to EN 61140			
Temperatur compensation residual error > 40 °C Current heat loss (3 conductors) Lower value of the setting range Maximum setting Maximum setting Flexible with ferrule Solid Flexible with ferrule Solid or stranded Flexible with ferrule Solid or stranded Flexible with ferrule Flexible with ferrule Solid or stranded AWG 18 - 8 Terminal screw M4 Tightening torque Nm 1.8 Stripping length Tools Pozidriv screwdriver Standard screwdriver Rated impulse withstand voltage Vimp V 4000 Overvoltage category/pollution degree Terminal capacities Maximum 2 2.2 Auxiliary and Control circuits Flexible with ferrule Solid Overvoltage category/pollution degree Ill/3 Ferminal capacities	Between auxiliary contacts and main contacts		V AC	440
Current heat loss (3 conductors) W 2.2 Lower value of the setting range W 6 Maximum setting mm² 1 x (1 - 6) 2 x (1 - 6) Terminal capacities mm² 1 x (1 - 6) 2 x (1 - 6) Solid mm² 1 x (1 - 4) 2 x (1 - 4) Solid or stranded AWG 18 - 8 Terminal screw M4 Mm Tightening torque Nm 1.8 Stripping length mm 10 Tools Size 2 Pozidriv screwdriver Size 2 Shadard screwdriver mm 1 x 6 Auxiliary and control circuits mm 4 000 Rated impulse withstand voltage Vimp V 4000 Overvoltage category/pollution degree III/3 III/3	Between main circuits		V AC	440
Lower value of the setting range Maximum setting Terminal capacities Solid Solid Mm² Ix (1 - 6) 2x (1 - 6) 2x (1 - 6) Mm² Ix (1 - 4) 2x (1 - 4) 2x (1 - 4) Solid or stranded AWG 18 - 8 Terminal screw Tightening torque Stripping length Tools Pozidriv screwdriver Standard screwdriver Standard screwdriver Standard screwdriver Maxiliary and control circuits Rated impulse withstand voltage Vimp V 4000 Vervoltage category/pollution degree Terminal capacities W 2.2 M 6 AWG 18-8 M4 I 1.8 Stripping length I 0 V 4000 Maxiliary and control circuits Terminal capacities M 11/3 M 4000	Temperatur compensation residual error > 40 $^{\circ}\text{C}$			≦ 0.25 %/K
Maximum setting Terminal capacities mm² Solid mm² 1 x (1 - 6) 2 x (1 - 6) mm² 1 x (1 - 4) 2 x (1 - 4) x (1 - 4) 2 x (1 - 4) x (1 - 4) 2 x (1 - 4) x (1 - 4) 2 x (1 - 4) x (1 - 4) 2 x (1 - 4) x (1 - 4) 2 x (1 - 4) x (1 - 4) 2 x (1 - 4) x (1 - 4) 2 x (1 - 4) x (1 - 4) 2 x (1 - 4) x (1 - 6) x (1 - 4) x (1 - 6) x (1 - 4) x (Current heat loss (3 conductors)			
Terminal capacities mm² mm² 1 x (1 - 6) 2 x (1 - 6) Flexible with ferrule mm² 1 x (1 - 4) 2 x (1 - 4) Solid or stranded AWG 18 - 8 Terminal screw M4 Tightening torque M7 M8 1.8 Stripping length mm 10 Tools Pozidriv screwdriver Size 2 Standard screwdriver mm 1 x 6 Auxiliary and control circuits Rated impulse withstand voltage U _{imp} V 4000 Overvoltage category/pollution degree III/3 Terminal capacities mm²	Lower value of the setting range		W	2.2
Solid mm² 1x(1-6) 2x(1-6) Flexible with ferrule mm² 1x(1-4) 2x(1-4) Solid or stranded AWG 18-8 Terminal screw M4 Tightening torque Nm 1.8 Stripping length Tools Pozidriv screwdriver Size 2 Standard screwdriver Standard screwdriver May 1x 6 Auxiliary and control circuits Rated impulse withstand voltage Overvoltage category/pollution degree Terminal capacities mm² 1 x (1-6) 2x (1-6) M4 1-8 4-8 4-9 M4 1-8 M4 4-9 M4 Auxiliary and control circuits Rated impulse withstand voltage Uimp V 4000 Uimp V 4000 Ill/3 Terminal capacities	Maximum setting		W	6
Flexible with ferrule	Terminal capacities		mm^2	
Solid or stranded AWG 18 - 8 Terminal screw M4 Tightening torque Nm 1.8 Stripping length Tools Pozidriv screwdriver Standard screwdriver Standard screwdriver Auxiliary and control circuits Rated impulse withstand voltage Overvoltage category/pollution degree Terminal capacities Terminal capacities Auxiliary and control circuits Terminal capacities Terminal capacities Auxiliary and control circuits Terminal capacities Terminal capacities	Solid		mm ²	
Terminal screw Tightening torque Nm 1.8 Stripping length mm 10 Tools Pozidriv screwdriver Size 2 Standard screwdriver mm 1 x 6 Auxiliary and control circuits Rated impulse withstand voltage Uimp V 4000 Overvoltage category/pollution degree Terminal capacities M4 Nm 1.8 Nm 10 Vimp V 4000 III/3	Flexible with ferrule		mm ²	
Tightening torque Nm 1.8 Stripping length mm 10 Tools Pozidriv screwdriver Size 2 Standard screwdriver mm 1 x 6 Auxiliary and control circuits Rated impulse withstand voltage Uimp V 4000 Overvoltage category/pollution degree Terminal capacities mm²	Solid or stranded		AWG	18 - 8
Stripping length Tools Pozidriv screwdriver Size Standard screwdriver Muxiliary and control circuits Rated impulse withstand voltage Uimp V 4000 Overvoltage category/pollution degree Terminal capacities mm 10 1 x 6 4 x 6 4 x 7 x 6 1 x 6 1 x 6 1 x 7 x 7 x 7 x 7 x 7 x 7 x 7 x 7 x 7 x	Terminal screw			M4
Tools Pozidriv screwdriver Size 2 Standard screwdriver mm 1 x 6 Auxiliary and control circuits Rated impulse withstand voltage Uimp V 4000 Overvoltage category/pollution degree III/3 Terminal capacities III/3	Tightening torque		Nm	1.8
Pozidriv screwdriver Size 2 Standard screwdriver mm 1 x 6 Auxiliary and control circuits Rated impulse withstand voltage Uimp V 4000 Overvoltage category/pollution degree III/3 Terminal capacities III/3	Stripping length		mm	10
Standard screwdriver mm 1 x 6 Auxiliary and control circuits Rated impulse withstand voltage U _{imp} V 4000 Overvoltage category/pollution degree III/3 Terminal capacities mm ²	Tools			
Auxiliary and control circuits Rated impulse withstand voltage Uimp V 4000 Overvoltage category/pollution degree III/3 Terminal capacities mm²	Pozidriv screwdriver		Size	2
Rated impulse withstand voltage Overvoltage category/pollution degree Terminal capacities Uimp V 4000 III/3 Terminal capacities	Standard screwdriver		mm	1 x 6
Overvoltage category/pollution degree III/3 Terminal capacities mm ²				
Terminal capacities mm ²	Rated impulse withstand voltage	U _{imp}	V	4000
"""	Overvoltage category/pollution degree			111/3
Solid 2 1 v (0.75 4)	Terminal capacities		mm^2	
Mm ² 1 X (0.75 - 4)	Solid		mm ²	1 x (0.75 - 4)

			2 x (0.75 - 4)
Flexible with ferrule		mm ²	1 x (0.75 - 2.5)
TISABLE WITH TOTALE		mm ⁻	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 _e	V AC	500
Safe isolation to EN 61140			
between the auxiliary contacts		V AC	240
Conventional thermal current	I _{th}	Α	6
Rated operational current	I _e	Α	
AC-15			
Make contact			
120 V	I _e	Α	1.5
220 V 230 V 240 V	I _e	Α	1.5
380 V 400 V 415 V	I _e	Α	0.5
500 V	I _e	Α	0.5
Break contact			
120 V	I _e	Α	1.5
220 V 230 V 240 V	I _e	Α	1.5
380 V 400 V 415 V	I _e	Α	0.9
500 V	I _e	Α	0.8
DC L/R ≦ 15 ms			
			Switch-on and switch-off conditions based on DC-13, time constant as specified.
24 V	I _e	Α	0.9
60 V	I _e	Α	0.75
110 V	I _e	Α	0.4
220 V	I _e	A	0.2
Short-circuit rating without welding	e		
max. fuse		A gG/gL	6
mux. ruoo		A go/gL	•

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	Α	6 Class J/CC

Design verification as per IEC/EN 61439

Technical data for design verification			
Rated operational current for specified heat dissipation	In	Α	4
Heat dissipation per pole, current-dependent	P _{vid}	W	2
Equipment heat dissipation, current-dependent	P _{vid}	W	6
Static heat dissipation, non-current-dependent	P_{vs}	W	0

Heat dissipation capacity	P _{diss}	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 switch gear must be observed. $\label{eq:specification}$
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.

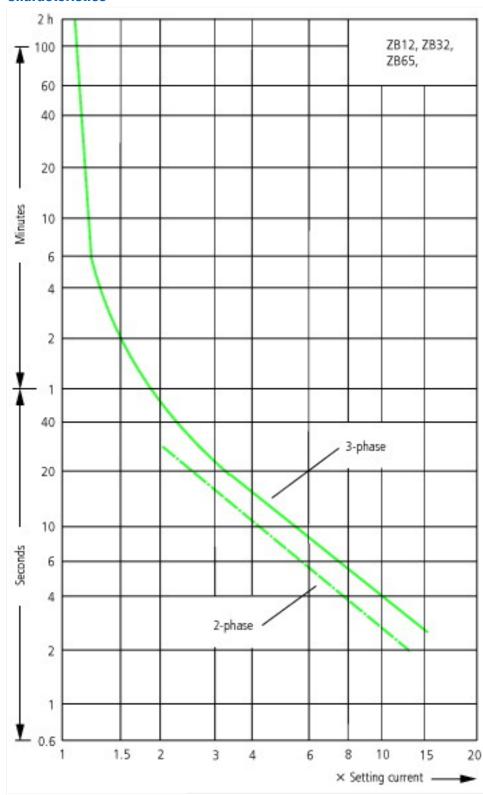
Technical data ETIM 7.0

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]) Α 2.4 - 4 Adjustable current range ٧ 690 Max. rated operation voltage Ue Mounting method Direct attachment Type of electrical connection of main circuit Screw connection Number of auxiliary contacts as normally closed contact Number of auxiliary contacts as normally open contact Number of auxiliary contacts as change-over contact 0 CLASS 10 Release class No Reset function input Yes Reset function automatic 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

Characteristics

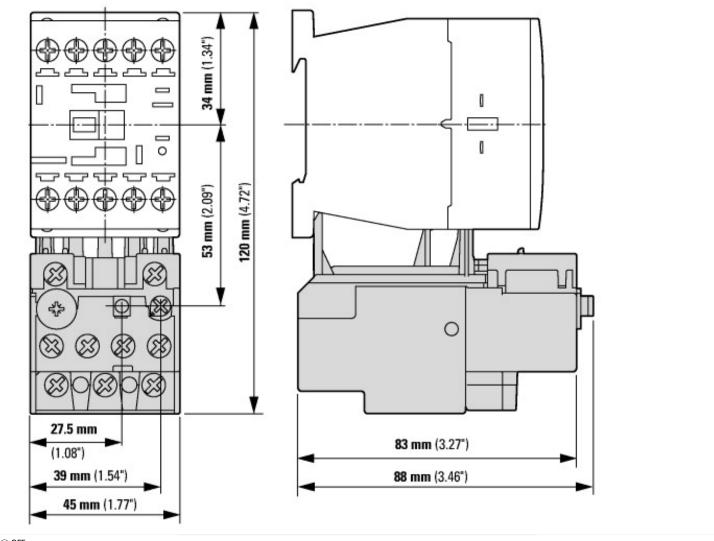


These tripping characteristics are mean values of the spreads at 20 °C ambient air temperature in a cold state. Tripping time depends on response current.

When the devices are at operational temperature the tripping time of the overload relay falls to approx. 25 % of the read off value.

- 1: Minimum level, 3-phase
- 2: Maximum level, 3-phase
- 3: Minimum marker, 2-phase 4: Highest marker, 2-phase

Dimensions



① OFF ② Reset/ON