DATASHEET - ZE-4



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



Part no. ZE-4
Catalog No. 014518
Alternate Catalog XTOM004AC1

No.

EL-Nummer 4130481

(Norway)

Delivery program

| Delivery program | | | |
|---------------------------|----------------|---|--|
| Product range | | | ZE overload relays for mini contactor relays |
| 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 |
| Setting range | | | |
| Overload releases | I _r | А | 2.4 - 4 |
| Contact sequence | | | 97 95 |
| Auxiliary contacts | | | |
| N/O = Normally open | | | 1 N/0 |
| N/C = Normally closed | | | 1 N/C |
| For use with | | | DILEM DIULEM/21/MV |
| Short-circuit protection | | | |
| Type "1" coordination | gG/gL | A | 35 |
| Type "2" coordination | gG/gL | A | 10 |

Notes

Overload trigger: 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)G [Ex d] [Ex e] [Ex px]

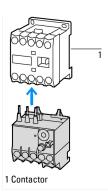
II(2)D [Ex p] [Ex t]

PTB 10 ATEX 3014

Observe manual MN03407003Z-DE/EN.

Notes

When fitted directly to the contactor a clearance of at least 5 mm is required between the overload relays.



Technical data General

| Climatic propriating Figure 1 (a) (a) (b) (b) (b) (c) (c) (c) (c) (c) (c) (c) (c) (c) (c | Standards | | | IEC/EN 60947, VDE 0660, UL, CSA |
|--|---|------------------|-----------------|---------------------------------|
| Ambient temperature | | | | |
| Containing and cont | Cimitato proving | | | |
| PIES - 5°C - 50°C Copen | Ambient temperature | | | |
| Enclosed | | | | |
| Temperature compensation Weight Mechanical shock resistance Degree of Protection Protection Protection papiral direct contact when actuated from front [KN 50274) Altitude Menin conducting paths Rated impulsion of larger Rated | Open | | °C | -25 - +50 |
| Weight kg 1007 Machanical shock resistance kg 007 Begree of Protection Fore of Protection against direct contact when actuated from front [EN 50274) Kg 70 Protection against direct contact when actuated from front [EN 50274) Kg Tolega and back-of-hand proof Actual Wain VAC 500 Rated impulse withstand voltage Ump VAC 600 Rated operational voltage Up VAC 800 Rated operational voltage Up VAC 800 Between audilary contacts and main contacts Up VAC 800 Between audilary contacts and main contacts VAC 300 400 Temperatur compensation residual error > 40°C VAC 300 400 400 Temperatur compensation residual error > 40°C Wa 25 XK 200 | Enclosed | | °C | - 25 - 40 |
| Mechanical shock resistance Feet Bissocial Shock duration 10 ms Degree of Protection 1 P20 Potenction against direct contact when actuated from front (EN 50274) 1 P20 Altitude m Mxx. 2000 Martitude m Mxx. 2000 Tested insplict withstand voltage Upp Y AC 800 Pated inspliction voltage Upp Y AC 800 Rated orientaction voltage Upp Y AC 800 Safe isolation to EN 81414 80 30 Bestiveon auxiliary contacts and main contacts V Y AC 800 Between main circuits V X 30 Current hear Loss (3 conductors) V Y 25 Maximum setting V 25 25 Solid V 25 25 Solid or strended V 1 × 0.5 - 5.5 Institute of the setting range V 2 × 0.5 - 5.5 Solid or strended V 1 × 0.5 - 5.5 Terminal capacities V 1 × 0.5 - 5.5 | Temperature compensation | | | Continuous |
| Degree of Protection Fine A time of Protection against direct contact when actuated from front [EN 50274) Image: The Protection against direct contact when actuated front front [EN 50274) Image: The Protection against direct contact when actuated front front [EN 50274) Image: The Protection against direct contact when actuated front front [EN 50274) Image: The Protection and proof proof protection against direct contact when actuated front front [EN 50274) Image: The Protection and proof proof protection against direct contact when a city and proof proof protection and proof proof proof proof protection and proof pro | Weight | | kg | 0.077 |
| Protection against direct contact when actuated from front (EN 500214) Image and back-of-hand proof Aixtude Max. 2000 Main conducting paths VAC 6000 Rated impulsa with stand voltage Ump VAC 6000 Overvoltage category/pollution degree Ui VAC 900 Rated origulation voltage Uj VAC 900 Rated operational voltage VAC 900 Selo isolation to EN 61140 VAC 300 Between assailary contacts and main contacts VAC 300 Eetweel main circuits VAC 300 Current heat loss IS conductors] VAC 300 Lower value of the stering range VAC 57 Maximum setting W 5.7 Elexible with ferrule Mm² XVAC 300 Solid Mm² 5.1 3.1 Taylibring longth Mm² XVAC 3.2 Stripping longth Mm² XVAC 3.2 Toloriny screwdriver XVAC XVAC 3.2 </td <td>Mechanical shock resistance</td> <td></td> <td>g</td> <td>Sinusoidal</td> | Mechanical shock resistance | | g | Sinusoidal |
| Ait blade (International Conducting paths Max. 2000 Main conducting paths VAC 6000 Oxevoluage category/pollusion degree III/3 18.0 Rated insulation voltage U ₁ VAC 800 Rated operational voltage VAC 800 Sele isolation to EN 61140 VAC 300 Between namic crictus VAC 300 Temperatur compensation residual error > 40°C VAC 302 Current heat loss (3 conductors) VAC 302 5%K Current heat loss (3 conductors) VAC 5.7 Terminal capacities VW 5.7 Terminal capacities VW 5.7 Solid VM 5.7 Solid or stranded VW 5.7 Solid or stranded VW 1.0 (3.5 - 1.5) Time in al capacities VW 3.3 Tipping length VW 3.5 Total VW 3.5 Tipping length VW 3.5 Total VW 3.5 <tr< td=""><td>Degree of Protection</td><td></td><td></td><td>IP20</td></tr<> | Degree of Protection | | | IP20 |
| Main conducting paths Vac 6000 Rated inpulse withstand votage Uimp V AC 6000 Overvoltage category/pollution degree Uimp V AC 690 Rated insulation votage Ue V AC 690 Rated operational voltage Ue V AC 690 Salfo isolation to EN 61140 V AC 300 Between naind circuits 2 V AC 300 Temperatur compensation residual error > 40 °C 2 255 W.K Current heat loss (3 conductors) V AC 225 W.K Maximum setting W 2.5 Rewise with ferrule mm² 1 x (0.75 - 2.5) Riexible with ferrule mm² 1 x (0.75 - 2.5) Solid or strended mm² 1 x (0.5 - 1.5) Solid or strended mm² 1 x (0.5 - 1.5) Tipthening torque mm² 1 x (0.5 - 1.5) Stripping length mm² 1 x (0.5 - 1.5) Tools mm² 2 x (0.5 - 1.5) Tipthening torque mm² 8 x 5. Pozidriv screwdriver <td>Protection against direct contact when actuated from front (EN 50274)</td> <td></td> <td></td> <td>Finger and back-of-hand proof</td> | Protection against direct contact when actuated from front (EN 50274) | | | Finger and back-of-hand proof |
| Rated impulse withstand voltage Umm VAC 0000 Overvoltage category/pollution degree Ui VAC 600 Rated operational voltage Ue VAC 600 Safe isolation to EN 61140 VAC 800 Between auxiliary contacts and main contacts VAC 300 Remperatur compensation residual error > 40 °C VAC 300 Current heat loss IS conductors) VAC 25 %/K Lover value of the setting range W 25 Maximum setting W 25 Terminal capacities mm² 1 × 10.75 · 2.5) Flexible with ferrule mm² 1 × 10.75 · 2.5) Solid or stranded mm² 1 × 10.75 · 2.5) Tipping length mm² 1 × 10.75 · 2.5) Tipping length mm² 1 × 10.75 · 2.5 Tools mm² 2 × 10.75 · 2.5 Tipping length mm² 1 × 10.75 · 2.5 Tool or stranded mm² 1 × 10.75 · 2.5 Tool or stranded mm² 2 × 10.75 · 2.5 Tool o | | | m | Max. 2000 |
| Overvoltage category/pollution degree U _i V 830 Rated insulation voltage U _e VAC 890 Rated operational voltage VAC 990 Safe isolation to EN 61140 VAC 300 Between auxiliary contacts and main contacts VAC 300 Between main circuits VAC 300 Temperatur compensation residual error > 40 °C VAC 300 Current heat loss (3 conductors) VAC 302 Lower value of the setting range W 2.5 Maximum setting m° 1 m° 1 <td< td=""><td></td><td></td><td></td><td></td></td<> | | | | |
| Rated insulation voltage U _I V AC 690 Rated operational voltage U _B V AC 690 Sate isolation to EN 61140 V AC 300 Between nauxiliary contacts and main contacts V AC 300 Temperatur compensation residual error > 40 °C V AC 300 Current heat loss (3 conductors) V AC 25 **/K Lower value of the setting range W 2.5 5.0 Maximum setting Mm² 5.0 Solid mm² 1 x (0.75 - 2.5) Flexible with ferrule mm² 1 x (0.75 - 2.5) Solid or stranded Mm² 1 x (0.75 - 2.5) Tightening torque Mm² 1 x (0.75 - 2.5) Stripping length Mm² 1 x (0.75 - 2.5) Tools Mm² 2 x (0.75 - 2.5) Pozidiri s crewdriver mm² 8 x 2 Pozidiri s crewdriver mm² 8 x 2 Auxiliary and control circuits mm² 8 x 5 Terminal capacities mm² 1 x (0.75 - 2.5) Solid 1 x (0.7 | | U _{imp} | V AC | |
| Rated operational voltage Ue V AC 690 Safe isolation to EN 61140 VAC 300 Between auxiliary contacts and main contacts VAC 300 Between main circuits VAC 300 Temperatur compensation residual error > 40 °C 25 %/K Current heat loss (3 conductors) VAC 25 %/K Lower value of the setting range VAC 5.7 Maximum setting VAC 5.7 Solid mm² 1 x (0.5 - 2.5) Flexible with ferrule mm² 1 x (0.5 - 1.5) Solid or stranded AWG 18 - 14 Terminal screw M3.5 12 Tightening torque Nm 1.2 Stripping length mm 8 Pozidriv screwdriver Size 2 Strandard screwdriver Size 2 Standard screwdriver Wm 08 × 5.5 Auxiliary and control circuits Wm² 4000 Rated impulse with stand voltage Imm² 1 x (0.75 - 2.5) Overvoltage category/ | | | | 111/3 |
| Safe isolation to EN 61140 VAC 300 Between auxiliary contacts and main contacts VAC 300 Temperatur compensation residual error > 40 °C ✓ AC 300 Current heat loss (3 conductors) VAC 25 %/K Lower value of the setting range W 2.5 Maximum setting W 5.7 Terminal capacities mm² 1 x (0.75 - 2.5) Flexible with ferrule mm² 1 x (0.5 - 1.5) Solid or stranded AWG 18 - 14 Terminal screw M3.5 12 Tightening torque Nm 1.2 Stripping length mm 8 Tools mm 8 Pozidriv screwdriver Size 2 Standard screwdriver mm 0.8 x 5.5 Auxiliary and control circuits mm 0.8 x 5.5 Rated impulse withstand voltage Vac 400 Overvoltage category/pollution degree III/3 1 x (0.75 - 2.5) 2 x (0.75 - 2.5) Solid mm² 1 x (0.75 - 2.5) | 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 Tightening torque Stripping length Tools Paidriv screwdriver Standard screwdr | 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 Solid or stranded Terminal screw Tightening torque Stripping length Tools Pozifri screwdriver Standard screwdriver Standard screwdriver Standard screwdriver Standard screwdriver Standard screwdriver Standard screwdriver Standard screwdriver Standard screwdr | Safe isolation to EN 61140 | | | |
| 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 Tightening torque Stripping length Tools Pozidriv screwdriver Standard screwdriver Standard screwdriver Attailiary and control circuits Rated impulse withstand voltage Overvoltage category/pollution degree Terminal capacities Solid | Between auxiliary contacts and main contacts | | V AC | 300 |
| Current heat loss (3 conductors) W 25 Lower value of the setting range W 5.7 Maximum setting mm² 1x (0.75 - 2.5) Terminal capacities mm² 1x (0.5 - 1.5) Solid mm² 1x (0.5 - 1.5) Flexible with ferrule AWG 18 - 14 Solid or stranded Nm 1.2 Terminal screw Nm 1.2 Stripping length mm 8 Tools mm 8 Pozidriv screwdriver Size 2 Standard screwdriver mm 0.8 x 5.5 Auxiliary and control circuits mm 0.8 x 5.5 Rated impulse withstand voltage V imp V d000 Overvoltage category/pollution degree III/3 1x (0.75 - 2.5) Solid mm² 1x (0.75 - 2.5) Rated impulse withstand voltage mm² 2 x (0.75 - 2.5) Overvoltage category/pollution degree mm² 1x (0.75 - 2.5) Solid mm² 2 x (0.75 - 2.5) | Between main circuits | | V AC | 300 |
| Lower value of the setting range W 2.5 Maximum setting W 5.7 Terminal capacities mm² *** Solid mm² 1 x (0.75 - 2.5) Flexible with ferrule mm² 1 x (0.5 - 1.5) Solid or stranded AWG 18 - 14 Terminal screw M3.5 *** Tightening torque Nm 1.2 Stripping length mm 8 Pozidriv screwdriver Size 2 Standard screwdriver mm 0.8 x 5.5 Auxiliary and control circuits *** 4000 Overvoltage category/pollution degree III/3 Terminal capacities mm² 1 x (0.75 - 2.5) 2 x (0.75 - 2.5) Solid mm² 1 x (0.75 - 2.5) 2 x (0.75 - 2.5) | Temperatur compensation residual error > 40 $^{\circ}\text{C}$ | | | ≦ 0.25 %/K |
| Maximum setting W 5.7 Terminal capacities mm² 1 x (0.75 - 2.5) Solid mm² 1 x (0.75 - 2.5) Flexible with ferrule mm² 1 x (0.5 - 1.5) Solid or stranded AWG 18 - 14 Terminal screw M3.5 Tightening torque Nm 1.2 Stripping length mm 8 Pozidriv screwdriver Size 2 Standard screwdriver mm 0.8 x 5.5 Auxiliary and control circuits mm 0.8 x 5.5 Rated impulse withstand voltage Uimp V 4000 Overvoltage category/pollution degree III/3 IIII/3 Terminal capacities mm² 2 x (0.75 - 2.5) x (0.75 - 2.5) x (0.75 - 2.5) | Current heat loss (3 conductors) | | | |
| Terminal capacities | Lower value of the setting range | | W | 2.5 |
| Solid mm² 1 x (0.75 - 2.5) | Maximum setting | | W | 5.7 |
| Flexible with ferrule Solid or stranded AWG 18 - 14 Terminal screw M3.5 Tightening torque Stripping length Tools Pozidriv screwdriver Standard screwdriver Standard screwdriver Auxiliary and control circuits Rated impulse withstand voltage Overvoltage category/pollution degree Terminal capacities Solid MWG 18 - 14 MM3.5 Nm 1.2 Nm 8 8 4 4 4 4 4 4 4 4 4 4 4 4 | Terminal capacities | | mm^2 | |
| Solid or stranded AWG 18-14 Terminal screw M3.5 Tightening torque Nm 1.2 Stripping length Tools Pozidriv screwdriver Size 2 Standard screwdriver mm 0.8 x 5.5 Auxiliary and control circuits Rated impulse withstand voltage Uimp V 4000 Overvoltage category/pollution degree Terminal capacities mm² 1 x (0.75 - 2.5) 2 x (0.75 - 2.5) 2 x (0.75 - 2.5) | Solid | | mm^2 | 1 x (0.75 - 2.5) |
| Terminal screw Tightening torque Nm 1.2 Stripping length mm 8 Tools Pozidriv screwdriver Standard screwdriver Standard screwdriver Uimp V 4000 Overvoltage category/pollution degree Uimp Terminal capacities mm² 1 x (0.75 - 2.5) 2 x (0.775 - 2.5) | Flexible with ferrule | | mm ² | 1 x (0.5 - 1.5) |
| Tightening torque Stripping length mm 8 Tools Pozidriv screwdriver Size Standard screwdriver Mm 0.8 x 5.5 Auxiliary and control circuits Rated impulse withstand voltage Overvoltage category/pollution degree Terminal capacities Solid Nm 1.2 Mm 8 4 4 4 4 4 4 4 4 4 4 4 4 | Solid or stranded | | AWG | 18 - 14 |
| Stripping length Tools Pozidriv screwdriver Size 2 Standard screwdriver mm 0.8 x 5.5 Auxiliary and control circuits Rated impulse withstand voltage Uimp V 4000 Overvoltage category/pollution degree III/3 Terminal capacities mm² Solid mm² 1 x (0.75 - 2.5) 2 x (0.75 - 2.5) 2 x (0.75 - 2.5) | Terminal screw | | | M3.5 |
| Tools Pozidriv screwdriver Size 2 Standard screwdriver mm 0.8 x 5.5 Auxiliary and control circuits Rated impulse withstand voltage Uimp V 4000 Overvoltage category/pollution degree III/3 Terminal capacities mm² Solid mm² 1 x (0.75 - 2.5) 2 x (0.75 - 2.5) | Tightening torque | | Nm | 1.2 |
| Pozidriv screwdriver Size 2 Standard screwdriver mm 0.8 x 5.5 Auxiliary and control circuits Rated impulse withstand voltage Uimp V 4000 Overvoltage category/pollution degree III/3 Terminal capacities mm² 1 x (0.75 - 2.5) 2 x (0.75 - 2.5) | Stripping length | | mm | 8 |
| Standard screwdriver Auxiliary and control circuits Rated impulse withstand voltage Overvoltage category/pollution degree Terminal capacities Solid Mm 0.8 x 5.5 4000 III/3 III/3 Terminal capacities mm² 1 x (0.75 - 2.5) 2 x (0.75 - 2.5) | Tools | | | |
| Auxiliary and control circuits Rated impulse withstand voltage Overvoltage category/pollution degree Terminal capacities Solid Uimp V 4000 III/3 Terminal capacities mm² 1 x (0.75 - 2.5) 2 x (0.75 - 2.5) | Pozidriv screwdriver | | Size | 2 |
| Rated impulse withstand voltage Overvoltage category/pollution degree III/3 Terminal capacities mm² I x (0.75 - 2.5) 2 x (0.75 - 2.5) | Standard screwdriver | | mm | 0.8 x 5.5 |
| Overvoltage category/pollution degree III/3 Terminal capacities mm ² Solid 1 x (0.75 - 2.5) 2 x (0.75 - 2.5) | Auxiliary and control circuits | | | |
| Terminal capacities mm² Solid 1 x (0.75 - 2.5) 2 x (0.75 - 2.5) | Rated impulse withstand voltage | U_{imp} | V | 4000 |
| Solid mm ² 1 x (0.75 - 2.5) 2 x (0.75 - 2.5) | Overvoltage category/pollution degree | | | 111/3 |
| 2 x (0.75 - 2.5) | Terminal capacities | | mm^2 | |
| | Solid | | mm ² | |
| Flexible with ferrule ${\rm mm}^2 = 1 x (0.5 - 1.5)$ | Flexible with ferrule | | mm^2 | 1 x (0.5 - 1.5) |

| | | | 2 x (0.5 - 1.5) |
|--------------------------------------|-----------------|---------|---|
| Solid or stranded | | AWG | 2 x (18 - 12) |
| Terminal screw | | | M3.5 |
| Tightening torque | | Nm | 1.2 |
| Stripping length | | mm | 8 |
| Tools | | | |
| Pozidriv screwdriver | | Size | 2 |
| Standard screwdriver | | mm | 0.8 x 5.5 |
| 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 | 250 |
| Conventional thermal current | I _{th} | Α | 6 |
| Rated operational current | l _e | Α | |
| AC-15 | | | |
| Make contact | | | |
| 120 V | l _e | Α | 1.5 |
| 220 V 230 V 240 V | I _e | Α | 1.5 |
| 380 V 400 V 415 V | I _e | Α | 0.7 |
| 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 | 0.7 |
| 500 V | I _e | Α | 0.5 |
| 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 | l _e | Α | 0.75 |
| 110 V | I _e | Α | 0.4 |
| 220 V | I _e | Α | 0.2 |
| Short-circuit rating without welding | | | |
| max. fuse | | A gG/gL | 4 |

Notes

Notes Ambient air temperature: Operating range to IEC/EN 60947, PTB: -5°C to +50°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 | | D300 |
| DC operated | | R300 |
| General Use | | |
| AC | V | 240 V/1,5 A 600 V/0,6 A |
| Short Circuit Current Rating | SCCR | |
| Basic Rating | | |
| Notes | | CB for max. 480 V |
| SCCR | kA | 5 |
| max. Fuse | Α | 15 |
| max. CB | Α | 15 |

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 | 1.9 |

| Equipment heat dissipation, current-dependent | P_{vid} | W | 5.7 |
|--|-------------------|----|--|
| 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 | 50 |
| 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. $\label{eq:constraint}$ |
| 10.12 Electromagnetic compatibility | | | Is the panel builder's responsibility. The specifications for the switch gear must be observed. $\label{eq:constraint}$ |
| 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 Α 2.4 - 4 690 Max. rated operation voltage Ue Direct attachment Mounting method 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

Yes

Yes

Approvals

Reset function input

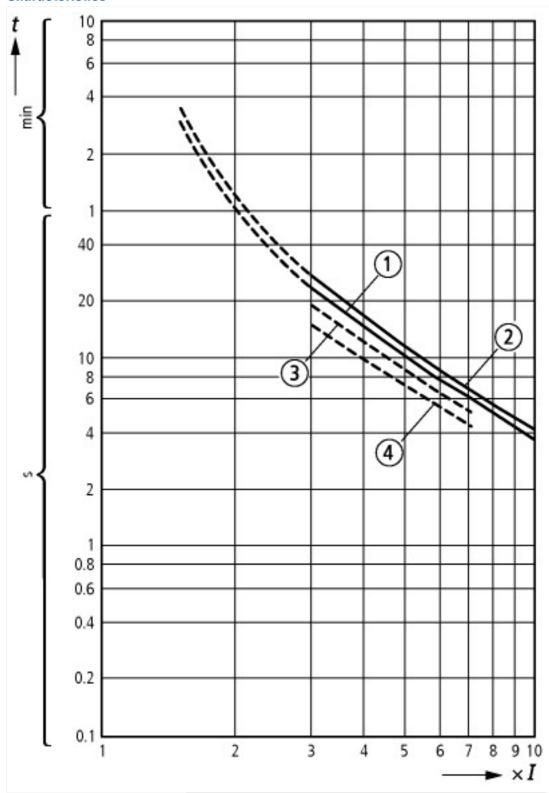
Reset function automatic

Reset function push-button

| Product Standards | UL 508; CSA-C22.2 No. 14; IEC/EN 60947-4-1; IEC/EN 60947-5-1; 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



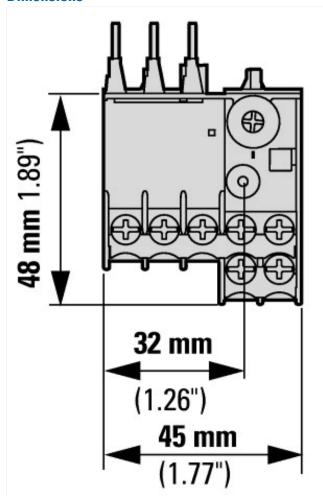
These tripping characteristics are mean values of the spreads at 20 °C ambient air temperature in a cold state.

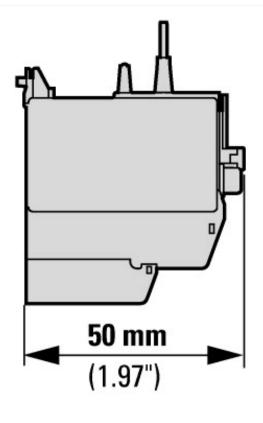
Tripping time depends on response current.

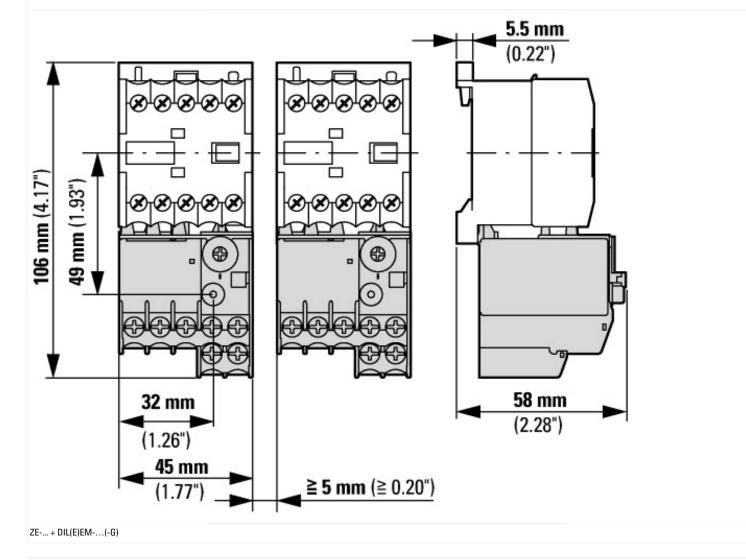
When the devices are at operational temperature the tripping time of the overload relay falls to approx. 25 % of the read off value.

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

Dimensions







Assets (links)

Declaration of CE Conformity

00002849

Instruction Leaflets

IL03407007Z2018_03

Manuals

MN03407003Z_DE_EN (English)