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ZEB32-1,65-GF/KK - Overload relay, Separate mounting, Earth-fault protection: with, Ir= 0.33 - 1.65 A, 1 N/O, 1 N/C



136498 ZEB32-1,65-GF/KK

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136498 ZEB32-1,65-GF/KK

Overload relay, Separate mounting, Earth-fault protection: with, Ir= 0.33 - 1.65 A, 1 N/O, 1 N/C

Alternate Catalog No.

XTOE1P6CGSS

EL-Nummer (Norway)

0004137367

Overload relay, 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 in the case of starting under load (class 10 to class 20), Mounting type: Separate mounting, Auxiliary contacts N/O = Normally open: 1 N/O, Auxiliary contacts N/C = Normally closed: 1 N/C, For use with: DILM17, DILM25, DILM32, DILM38, DIULM17, DIULM25, DIULM32, SDAINLM30, SDAINLM45, SDAINLM55, Standards: IEC/EN 60947, VDE 0660, UL, CSA, Degree of Protection: IP20

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Delivery program

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 in the case of starting under load (class 10 to class 20)

Mounting type

Separate mounting

Earth-fault protection

Earth-fault protection

with

Trip at approx.

> 0.5 x I_n in 2 s

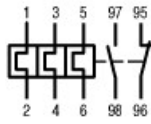
> 1.5 x I_n in 1 s

Setting range

Overload releases  [I]

0.33 - 1.65 A

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

SDA INLM30

SDA INLM45

SDA INLM55

Conformity, Approval

Explosion protection (according to ATEX 94/9/EC)

II(2)GD [Ex d] [Ex e] [Ex tb]

EC-prototype test certification

SIRA 13 ATEX 9348X

Technical data

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 temperatureOpen

-25 - +65 °C

Ambient temperatureAmbient temperature open max.

65 °C

Ambient temperatureEnclosedAmbient temperature enclosed max.

65 °C

Mechanical shock resistance

15

Shock duration 10 ms

according to IEC 60068-2-27 g

Degree of Protection

IP20

Protection against direct contact when actuated from front (EN 50274)

Finger and back-of-hand proof

Altitude

Max. 2000 m

Main conducting paths

Rated impulse withstand voltage [U_{imp}]

6000 V AC

Overvoltage category/pollution degree

III/3

Rated insulation voltage [U_i]

690 V AC

Rated operational voltage [U_e]

690 V AC

Rated frequency [f]

50/60 Hz

Safe isolation to EN 61140Between auxiliary contacts and main contacts

600 V AC

Safe isolation to EN 61140Between main circuits

600 V AC

Terminal capacitiesSolid

1 x 1.5 - 16 mm²

Terminal capacitiesSolid or stranded

1 x 14 - 4 AWG

Stripping length
 13 mm
 Auxiliary and control circuits
 Rated impulse withstand voltage [U_{imp}]
 6000 V
 Overvoltage category/pollution degree
 III/3
 Terminal capacitiesSolid
 2 x (0.75 - 4) mm²
 Terminal capacitiesFlexible with ferrule
 2 x (0.75 - 2.5) mm²
 Terminal capacitiesSolid or stranded
 2 x (18 - 12) AWG
 Terminal screw
 M3.5
 Tightening torque
 0.8 - 1.2 Nm
 Tightening torque
 7 lb-in
 Stripping length
 8 mm
 ToolsPozidriv screw driver
 2 Size
 ToolsStandard screw driver
 1 x 6 mm
 Rated insulation voltage [U_i]
 500 V AC
 Rated operational voltage [U_o]
 500 V AC
 Safe isolation to EN 61140between the auxiliary contacts
 240 V AC
 Conventional thermal current [I_{th}]
 5 A
 Rated operational current [I_e] AC-15Make contact120 V [I_e]
 1.5 A
 Rated operational current [I_e] AC-15Make contact220 V 230 V 240 V [I_e]
 1.5 A
 Rated operational current [I_e] AC-15Make contact380 V 400 V 415 V [I_e]
 0.5 A
 Rated operational current [I_e] AC-15Make contact500 V [I_e]
 0.5 A
 Rated operational current [I_e] AC-15Break contact120 V [I_e]
 1.5 A
 Rated operational current [I_e] AC-15Break contact220 V 230 V 240 V [I_e]
 1.5 A
 Rated operational current [I_e] AC-15Break contact380 V 400 V 415 V [I_e]
 0.9 A
 Rated operational current [I_e] AC-15Break contact500 V [I_e]
 0.8 A
 Rated operational current [I_e] DC L/R □ 15 ms
 Switch-on and switch-off conditions based on DC-13, time constant as specified.
 Rated operational current [I_e] DC L/R □ 15 ms24 V [I_e]
 0.9 A
 Rated operational current [I_e] DC L/R □ 15 ms60 V [I_e]
 0.75 A
 Rated operational current [I_e] DC L/R □ 15 ms110 V [I_e]
 0.4 A
 Rated operational current [I_e] DC L/R □ 15 ms220 V [I_e]
 0.2 A
 Short-circuit rating without weldingmax. fuse
 6 A gG/gL
 Rating data for approved types
 Auxiliary contactsPilot DutyAC operated
 B600
 Auxiliary contactsPilot DutyDC operated
 R300
 Short Circuit Current RatingBasic RatingSCCR
 1 kA
 Short Circuit Current RatingBasic Ratingmax. Fuse

Design verification as per IEC/EN 61439

Technical data for design verification

Rated operational current for specified heat dissipation [I_r]

1.65 A

Heat dissipation per pole, current-dependent [P_{id}]

0.17 W

Equipment heat dissipation, current-dependent [P_{id}]

0.5 W

Static heat dissipation, non-current-dependent [P_{vs}]

0 W

Heat dissipation capacity [P_{diss}]

0 W

Operating ambient temperature min.

-25 °C

Operating ambient temperature max.

+65 °C

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 Strength of materials and parts 10.2.3.1 Verification of thermal stability of enclosures

Meets the product standard's requirements.

10.2 Strength of materials and parts 10.2.3.2 Verification of resistance of insulating materials to normal heat

Meets the product standard's requirements.

10.2 Strength of materials and parts 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 Strength of materials and parts 10.2.4 Resistance to ultra-violet (UV) radiation

Meets the product standard's requirements.

10.2 Strength of materials and parts 10.2.5 Lifting

Does not apply, since the entire switchgear needs to be evaluated.

10.2 Strength of materials and parts 10.2.6 Mechanical impact

Does not apply, since the entire switchgear needs to be evaluated.

10.2 Strength of materials and parts 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 Insulation properties 10.9.3 Impulse withstand voltage

Is the panel builder's responsibility.

10.9 Insulation properties 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) / Electronic overload relay (EC001080)

Electric engineering, automation, process control engineering / Low-voltage switch technology / Overload protection device / Electronic overload relay (ec1@ss10.0.1-27-37-15-02 [AKF076014])

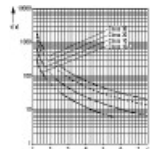
Adjustable current range
 0.33 - 1.65 A
 Mounting method
 Separate positioning
 Type of electrical connection of main circuit
 Screw connection
 Number of auxiliary contacts as normally closed contact
 1
 Number of auxiliary contacts as normally open contact
 1
 Number of auxiliary contacts as change-over contact
 0
 Rated control supply voltage U_s at AC 50Hz
 0 - 0 V
 Rated control supply voltage U_s at AC 60Hz
 0 - 0 V
 Rated control supply voltage U_s at DC
 0 - 0 V
 Release class
 Adjustable
 Voltage type for actuating
 Self powered
 Reset function automatic
 Yes
 Reset function input
 No
 Reset function push-button
 Yes

Approvals

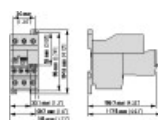
Product Standards
 UL 508; CSA-C22.2 No. 14; IEC/EN 60947-4-1; CE marking
 UL File No.
 E1230
 UL Category Control No.
 NKOR
 CSA File No.
 2290956
 CSA Class No.
 3211-03
 North America Certification
 UL listed, CSA certified
 Specially designed for North America
 No
 Suitable for
 Branch circuits
 Max. Voltage Rating
 600 V AC
 Degree of Protection
 IEC: IP20, UL/CSA Type: -

Characteristics

Characteristic curve



Dimensions



- [Product-specific CAD data](#)
(Web)
- [3D Preview](#)
(Web)

DWG files

- [DA-CD-zeb32_kk](#)
File
(Web)

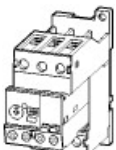
edz files

- [DA-CE-ETN.ZEB32-1,65-GF_KK](#)
File
(Web)

Step files

- [DA-CS-zeb32_kk](#)
File
(Web)


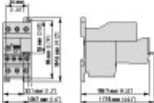
3D drawing

- 
[2327DRV-7](#)
Line drawing
electronic overload relays

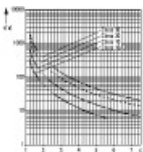
Product photo

- 
[2327PIC-23](#)
Photo
Electronic overload relays



Dimensions single product

- 
[2327DIM-2](#)
Line drawing
- 
[2327DIM-4](#)
Line drawing
electronic overload relays

Characteristic curve

- 
[2327DIA-5](#)
Coordinate visualization

Wiring diagram

-  [000S015](#)
Line drawing
Overload release symbol
-  [230S005](#)
Line drawing
Overload relay circuit symbol

Instruction Leaflet

- [Solid-state motor protection relay \(IL04210002E\)](#)
Asset
(PDF, multilingual)

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