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Worldwide English



ZBT12-0,16 - Overload relay, ZBT12, Ir= 0.1 - 0.16 A, 1 NO, 1 NC, Direct mounting, IP20



190959 ZBT12-0,16

[Overview](#) [Specifications](#) [Resources](#)




190959 ZBT12-0,16

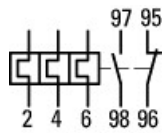
Overload relay, ZBT12, Ir= 0.1 - 0.16 A, 1 NO, 1 NC, Direct mounting, IP20

Overload relay, Product range: Overload relay ZBT up to 97 A, Accessories, Accessories: Overload relays, Frame size: ZBT12, 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, Auxiliary contacts N/O = Normally open: 1 N/O, Auxiliary contacts N/C = Normally closed: 1 N/C, For use with: DILMT7, DILMT9, DILMT12, DILMT17, DILMT25, DILMT32, Standards: IEC/EN 60947, GB14048, Degree of Protection: IP20

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Delivery program

Product range
Overload relay ZBT up to 97 A
Product range
Accessories
Accessories
Overload relays
Frame size
ZBT12
Phase-failure sensitivity
IEC/EN 60947, VDE 0660 Part 102
Description
Test/off button
Reset pushbutton manual/auto
Trip-free release
Overload trigger: tripping class 10 A
Mounting type
Direct mounting
 [4]
0.1 - 0.16 A
Contact sequence



Auxiliary contacts

NO = Normally open

1 NO

NC = Normally closed

1 NC

For use with

DILMT7

DILMT9

DILMT12

DILMT17

DILMT25

DILMT32

Technical data

General

Standards

IEC/EN 60947, GB14048

Climatic proofing

Damp heat, constant, to IEC 60068-2-78

Damp heat, cyclic, to IEC 60068-2-30

Ambient temperature

Operating range to IEC/EN 60947: -5 - +40 °C

Ambient temperatureOpen

-25 - +55 °C

Ambient temperatureEnclosed

- 25 - 40 °C

Temperature compensation

Continuous

Weight

0.104 kg

Mechanical shock resistance

10

Sinusoidal

Shock duration 10 ms g

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}]

6000 V AC

Overvoltage category/pollution degree

III/3

Rated insulation voltage [U_i]

690 V

Rated operational voltage [U_e]

690 V AC

Safe isolation to EN 61140Between auxiliary contacts and main contacts

440 V AC

Safe isolation to EN 61140Between main circuits

440 V AC

Terminal capacitiesSolid

1 x (1 - 6) mm²

Terminal capacitiesFlexible with ferrule

1 x (1 - 6) mm²

Terminal capacitiesStranded

1 x (1 - 6) mm²

Terminal screw

M3.5

Tightening torque

1.2 Nm

Stripping length

8 mm

ToolsPozidriv screw driver

2 Size
 Auxiliary and control circuits
 Rated impulse withstand voltage [U_{imp}]
 4000 V
 Overvoltage category/pollution degree
 III/3
 Terminal capacities Solid
 1 x (0.75 - 2.5) mm²
 Terminal capacities Flexible with ferrule
 1 x (0.75 - 2.5) mm²
 Terminal screw
 M3
 Tightening torque
 0.8 Nm
 Stripping length
 6 mm
 Tools Pozidriv screw driver
 2 Size
 Tools Standard screw driver
 1 x 6 mm
 Rated insulation voltage [U_i]
 690 V AC
 Rated operational voltage [U_e]
 690 V AC
 Conventional thermal current [I_{th}]
 10 A
 Rated operational current [I_e] AC-15 Make contact 120 V [I_e]
 1.5 A
 Rated operational current [I_e] AC-15 Make contact 220 V 230 V 240 V [I_e]
 1.4 A
 Rated operational current [I_e] AC-15 Make contact 380 V 400 V 415 V [I_e]
 1.9 A
 Rated operational current [I_e] AC-15 Make contact 500 V [I_e]
 0.5 A
 Rated operational current [I_e] AC-15 Break contact 120 V [I_e]
 1.5 A
 Rated operational current [I_e] AC-15 Break contact 220 V 230 V 240 V [I_e]
 1.5 A
 Rated operational current [I_e] AC-15 Break contact 380 V 400 V 415 V [I_e]
 1.9 A
 Rated operational current [I_e] AC-15 Break contact 500 V [I_e]
 1.4 A
 Rated operational current [I_e] DC L/R \square 15 ms
 Switch-on and switch-off conditions based on DC-13, time constant as specified.
 Rated operational current [I_e] DC L/R \square 15 ms 24 V [I_e]
 0.9 A
 Rated operational current [I_e] DC L/R \square 15 ms 60 V [I_e]
 0.75 A
 Rated operational current [I_e] DC L/R \square 15 ms 110 V [I_e]
 0.55 A
 Rated operational current [I_e] DC L/R \square 15 ms 220 V [I_e]
 0.27 A
 Short-circuit rating without welding max. fuse
 6 A gG/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.

Design verification as per IEC/EN 61439

Operating ambient temperature min.

-25 °C

Operating ambient temperature max.

+55 °C

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

0.1 - 0.16 A

Max. rated operation voltage Ue

690 V

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

Other

Reset function input

No

Reset function automatic

Yes

Reset function push-button

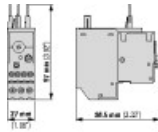
Yes

Approvals

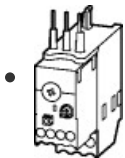
Specially designed for North America

No

Dimensions



3D drawing



2300DRW-61

Line drawing

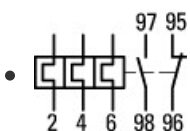
Product photo



2300PIC-17

Photo

Wiring diagram

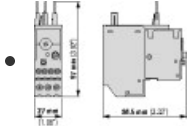


230S002

Line drawing

Overload relay circuit symbol

Dimensions single product



2300DIM-16

Line drawing

Standards

- [000Z153](#)
Logo
xStart logo

Declaration of Conformity

EU

- [Eaton-AC Contactors; Control Relay; Auxiliary Contact \(DA-DC-00003681\)](#)
Asset
(PDF)

Instruction Leaflet

- [ZBT12, ZBT32 Overload relay \(IL026002ZU\)](#)
Asset
Internal packing pressure for overload relays up to 32 A
(PDF, 03/2018, multilingual)

CAD data

edz files

- [DA-CE-ETN.ZBT12-0,16](#)
File
(Web)

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