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ZBT12-1 - Overload relay, ZBT12, Ir=0.6 - 1 A, 1 NO, 1 NC, Direct mounting, IP20



#### 190963 ZBT12-1 Overview Specifications Resources 요요모



- Delivery program
- Technical data

Design verification as per IEC/EN 61439

- Technical data ETIM 7.0
- Approvals
- Dimensions

# 190963 ZBT12-1

Overload relay, ZBT12, Ir= 0.6 - 1 A, 1 NO, 1 NC, Direct mounting, IP20 EL-Nummer (Norway) 4301185

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, DILMT12, DILMT17, DILMT25, DILMT32, Standards: IEC/EN 60947, GB14048, Degree of Protection: IP20

### **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 亡[4] 0.6 - 1 A Contact sequence



Auxiliary contacts N/O = Normally open 1 N/O N/C = Normally closed 1 N/C 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 [Uim] 6000 V AC Overvoltage category/pollution degree Ⅲ/3 Rated insulation voltage [U] 690 V Rated operational voltage [Ue] 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) mm<sup>2</sup> Terminal capacities Flexible with ferrule 1 x (1 - 6) mm<sup>2</sup> Terminal capacitiesStranded 1 x (1 - 6) mm<sup>2</sup> Terminal screw MB.5 Tightening torque 1.2 Nm Stripping length 8 mm ToolsPozidriv screw driver

2 Size Auxiliary and control circuits Rated impulse withstand voltage [U<sub>mp</sub>] 4000 V Overvoltage category/pollution degree III/3 Terminal capacitiesSolid 1 x (0.75 - 2.5) mm<sup>2</sup> Terminal capacities Flexible with ferrule 1 x (0.75 - 2.5) mm<sup>2</sup> Terminal screw MB Tightening torque 0.8 Nm Stripping length 6 mm ToolsPozidriv screw driver 2 Size ToolsStandard screw driver 1 x 6 mm Rated insulation voltage [U] 690 V AC Rated operational voltage [U<sub>e</sub>] 690 V AC Conventional thermal current [Ith] 10 A Rated operational current [le]AC-15Make contact120 V [le] 1.5 A Rated operational current [le]AC-15Vake contact220 V 230 V 240 V [le] 1.4 A Rated operational current [le]AC-15Vake contact380 V 400 V 415 V [le] 1.9 A Rated operational current [le]AC-15Make contact500 V [le] 0.5 A Rated operational current [le]AC-15Break contact120 V [le] 1.5 A Rated operational current [le]AC-15Break contact220 V 230 V 240 V [le] 1.5 A Rated operational current [le]AC-15Break contact380 V 400 V 415 V [le] 1.9 A Rated operational current [le]AC-15Break contact500 V [le] 1.4 A Rated operational current [le ]DC L/R 🗆 15 ms Switch-on and switch-off conditions based on DC-13, time constant as specified. Rated operational current [Ie ]DC L/R  $\square$  15 ms24 V [Ie ] 0.9 A Rated operational current [le ]DC L/R 

15 ms60 V [le ] 0.75 A Rated operational current [le ]DC L/R 🗆 15 ms110 V [le ] 0.55 A Rated operational current [le ]DC L/R 🗆 15 ms220 V [le ] 0.27 A Short-circuit rating without weldingmax. 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 crosssections

### 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 0.6 - 1 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



## Product photo



## Wiring diagram

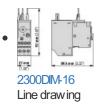


230S002 Line drawing Overload relay circuit symbol

### 3D drawing



### Dimensions single product



## **Declaration of Conformity**

#### EU

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

### **Standards**



## CAD data

### edz files

• DA-CE-ETN.ZBT12-1 File (Web)

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