



Overview

Specifications

Resources









DELIVERY PROGRAM

Delivery program

Technical data

Accessories Auxiliary contact modules

Design verification as per IEC/EN 61439

Description with interlocked opposing contacts

Technical data ETIM7.0

Function for standard applications

Approvals

Number of poles 4 pole

Dimensions

Connection technique Screw terminals

Rated operational current

Conventional free air thermal current, 1 pole Open at 60 $^{\circ}\text{C}\left[I_{\text{th}}\right]$ 16 A

AC-15 220 V 230 V 240 V [L] 4 A

AC-15 380 V 400 V 415 V [l_e] 4 A

Contacts

N/O = Normally open 2 N/O

N/C = Normally closed 2 N/C

Mounting type Front fixing

For use with DILM(C)7-10... DILM(C)9-10... DILM(C)12-10... DILM(C)15-10... DILM(C)17-10... DILM(C)25-10... DILM(C)32-10... DILM38-10... DILMP20... DILMP32-10... DILMP45-10... DILL... DILMF8-10... DILMF11-10... DILMF14-10... DILMF17-10... DILMF25-10... DILMF32-10...

Type

Front mounting auxiliary contact

Instructions

Interlocked opposing contacts according to IEC/EN 60947-5-1 appendix L, inside the auxiliary contact

modules, also for the integrated auxiliary contacts of the DILM7 - DILM32

Auxiliary contacts used as mirror contacts according to IEC/EN 60947-4-1 Appendix F (not N/C late open)

TECHNICAL DATA

General

Standards IEC/EN 60947, VDE 0660, UL, CSA

Component lifespan at U_e = 230 V, AC-15, 3 A [Operations] 1.3×10^6

Climatic proofing
Damp heat, constant, to IEC 60068-2-78
Damp heat, cyclic, to IEC 60068-2-30

Ambient temperature Open -25 - +60 °C

Ambient temperature Enclosed - 25 - 40 °C

Ambient temperature, storage - 40 - 80 °C

Mechanical shock resistance (IEC/EN 60068-2-27) Half-sinusoidal shock, 10 ms Basic unit with auxiliary contact module N/O contact 7 g

Mechanical shock resistance (IEC/EN 60068-2-27)
Half-sinusoidal shock, 10 ms
Basic unit with auxiliary contact module
N/C contact
5 g

Protection against direct contact when actuated from front (EN 50274)
Finger and back-of-hand proof

Weight 0.048 kg

Terminal capacities Screw terminals Solid 1 x (0.75 - 2.5) 2 x (0.75 - 2.5) mm²

Terminal capacities Screw terminals Flexible with ferrule 1 x (0.75 - 2.5) 2 x (0.75 - 2.5) mm²

Terminal capacities Screw terminals Solid or stranded 18 – 14 AWG

Terminal capacities Screw terminals Pozidriv screwdriver 2 Size

Terminal capacities Screw terminals Standard screwdriver 0.8 x 5.5 1 x 6 mm

Terminal capacities Screw terminals Max. tightening torque 1.2 Nm

Contacts

Interlocked opposing contacts within an auxiliary contact module (to IEC 60947-5-1 Annex L) Yes

N/C contact (not late-break contact) suitable as a mirror contact (to IEC/EN 60947-4-1 Annex F)
DILM7 - DILM38

Rated impulse withstand voltage [U_{mp}] 6000 V AC

Overvoltage category/pollution degree III/3

Rated insulation voltage [U] 690 V AC

Rated operational voltage $[U_e]$ 500 V AC

Safe isolation to EN 61140 between coil and auxiliary contacts 400 V AC

Safe isolation to EN 61140 between the auxiliary contacts 400 V AC

Rated operational current
Conventional free air thermal current, 1 pole at 60 °C [I_{th}]
16 A

Rated operational current AC-15 220 V 230 V 240 V [l_e] 4 A

Rated operational current AC-15 380 V 400 V 415 V [le] 4 A

Rated operational current AC-15 500 V [l_e] 1.5 A

Rated operational current DC current Switch-on and switch-off conditions based on Rated operational current DC current DC L/R \(\square 15 \) ms Contacts in series: 1 [24 V] 10 A

Rated operational current DC current DC L/R \(\square\) 15 ms Contacts in series: 1 [60 V] 6 A

Rated operational current DC current DC L/R □ 15 ms Contacts in series: 1 [110 V] 3 A

Rated operational current DC current DC L/R □ 15 ms Contacts in series: 1 [220 V] 1 A

Rated operational current DC current DC-13 (6xP) 24 V [l_e] 2.5 A

Rated operational current DC current DC-13 (6xP) 60 V [l_e] 1 A

Rated operational current DC current DC-13 (6xP) 110 V [l_e] 0.5 A

Rated operational current DC current DC-13 (6xP) 220 V [l_e] 0.25 A Rated operational current Control circuit reliability [Failure rate] $<10^{-8}$, < one failure at 100 million operations (at $U_e = 24$ V DC, $U_{min} = 17$ V, $I_{min} = 5.4$ mA) λ

Short-circuit rating without welding Short-circuit protection maximumfuse 500 V 10 A gG/gL

Ourrent heat loss at I_{th} AC operated 2.6 W

Ourrent heat loss at I_{th} DC operated 2.6 W

Current heat loss at I_{th} Current heat loss per auxiliary circuit at $I_{\rm e}$ (AC-15/230 V) 0.16 CO

Rating data for approved types

Auxiliary contacts Flot Duty AC operated A600

Auxiliary contacts Fllot Duty DC operated P300

Auxiliary contacts General Use AC 600 V

Auxiliary contacts General Use AC 10 A

Auxiliary contacts General Use DC Auxiliary contacts General Use DC 1 A

DESIGN VERIFICATION AS PER IEC/EN 61439

Technical data for design verification

Rated operational current for specified heat dissipation [I_n] 4 A

Heat dissipation per pole, current-dependent $[P_{id}] \\ 0.16~W$

Equipment heat dissipation, current-dependent $[P_{id}] \\ 0 \, W$

Static heat dissipation, non-current-dependent $[P_{\!\scriptscriptstyle V\!S}]$ 0 W

Heat dissipation capacity [P_{diss}] 0 W

Operating ambient temperature min. -25 °C

Operating ambient temperature max. +60 $^{\circ}\text{C}$

IEC/EN 61439 design verification

10.2 Strength of materials and parts10.2.2 Corrosion resistanceMeets 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 parts10.2.3.2 Verification of resistance of insulating materials to normal heatMeets 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 Weets the product standard's requirements.

10.2 Strength of materials and parts10.2.5 LiftingDoes not apply, since the entire switchgear needs to be evaluated.

10.2 Strength of materials and parts10.2.6 Mechanical impactDoes not apply, since the entire switchgear needs to be evaluated.

10.2 Strength of materials and parts10.2.7 InscriptionsMeets the product standard's requirements.

10.3 Degree of protection of ASSEVBLIES 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 properties10.9.3 Impulse withstand voltageIs the panel builder's responsibility.

10.9 Insulation properties10.9.4 Testing of enclosures made of insulating materialIs 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) / Auxiliary contact block (EC000041)

Electric engineering, automation, process control engineering / Low-voltage switch technology / Component for low-voltage switching technology / Auxiliary switch block (ecl@ss10.0.1-27-37-13-02 [AKN342013])

Number of contacts as change-over contact Number of contacts as normally open contact Number of contacts as normally closed contact Number of fault-signal switches Rated operation current le at AC-15, 230 V 6 A Type of electric connection Screw connection Model Top mounting Mounting method Front fastening Lamp holder None **APPROVALS Product Standards** IEC/EN 60947-4-1; UL 508; CSA-C22.2 No. 14-05; **CE** marking UL File No. E29184 UL Category Control No. NKCR CSA File No. 012528

CSA Class No. 3211-03

North America Certification UL listed, CSA certified

Specially designed for North America

DIMENSIONS



Contactor with auxiliary contact module









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