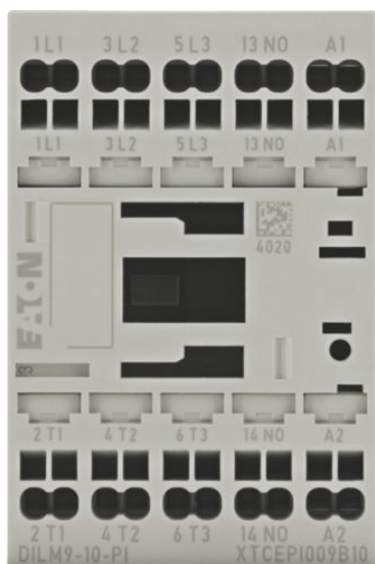


Eaton EP-400154

Catalog Number: EP-400154

DILM9-10(24VDC)-PI-GVP



General specifications

Product Name	Catalog Number
Eaton Moeller® series DILM contactor	EP-400154

Model Code	EAN
DILM9-10(24VDC)-PI-GVP	4015082953270

Product Length/Depth	Product Height
75 mm	68 mm

Product Width	Product Weight
45 mm	0.285 kg

Certifications	Catalog Notes
CSA Class No.: 2411-03, 3211-04	Also suitable for motors with efficiency class IE3.
IEC/EN 60947-4-1	
UL File No.: E29096	
CE	
CSA File No.: 012528	
CSA	
UL Category Control No.: NLDX	
IEC/EN 60947	
VDE 0660	
UL 60947-4-1	
CSA-C22.2 No. 60947-4-1-14	
UL	

Features & Functions

Fitted with:

Varistor suppressor circuit

General

Application

Contactors for Motors

Frame size

FS1

Operating frequency

9000 mechanical Operations/h (DC operated)

Overvoltage category

III

Pollution degree

3

Product category

Contactors

Protection

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

Rated impulse withstand voltage (Uimp)

6000 V AC

Voltage type

DC

Climatic environmental conditions

Ambient operating temperature - min

-25 °C

Ambient operating temperature - max

60 °C

Ambient operating temperature (enclosed) - min

25 °C

Ambient operating temperature (enclosed) - max

40 °C

Ambient storage temperature - min

40 °C

Ambient storage temperature - max

80 °C

Climatic proofing

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

Electro Magnetic Compatibility

Emitted interference

According to EN 60947-1

Interference immunity

According to EN 60947-1

Electrical Rating

Rated breaking capacity at 220/230 V

90 A

Rated breaking capacity at 380/400 V

90 A

Rated breaking capacity at 500 V

90 A

Rated breaking capacity at 660/690 V

Damp heat, constant, to IEC 60068-2-3

50 A

Rated operational current (Ie) at AC-1, 380 V, 400 V, 415 V
22 A

Rated operational current (Ie) at AC-3, 220 V, 230 V, 240 V
9 A

Rated operational current (Ie) at AC-3, 380 V, 400 V, 415 V
9 A

Rated operational current (Ie) at AC-3, 440 V
9 A

Rated operational current (Ie) at AC-3, 500 V
9 A

Rated operational current (Ie) at AC-4, 400 V
6 A

Rated insulation voltage (Ui)
690 V

Rated operational current (Ie) at AC-1, 380 V, 400 V, 415 V
22 A

Rated operational power at AC-3, 380/400 V, 50 Hz
4 kW

Conventional thermal current

Switching time

Conventional thermal current ith (1-pole, enclosed)
45 A

Arcing time
10 ms

Conventional thermal current ith (3-pole, enclosed)
18 A

Conventional thermal current ith of main contacts (1-pole, open)
50 A

Magnet system

Drop-out voltage
0.2 - 0.6 x UC, DC operated

Duty factor
100 %

Pick-up voltage
0.7 - 1.2 V DC x Uc
0.85 - 1.1 V AC/DC x Us

Power consumption (pick-up) at DC
4.5 W

Power consumption (sealing) at DC
4.5 W

Rated control supply voltage (Us) at AC, 50 Hz - min
0 V

Rated control supply voltage (Us) at AC, 50 Hz - max
0 V

Rated control supply voltage (Us) at AC, 60 Hz - min
0 V

Rated control supply voltage (Us) at AC, 60 Hz - max
0 V

Rated control supply voltage (Us) at DC - min
0 V

Rated control supply voltage (Us) at DC - max
24 V

Motor Rating

Assigned motor power at 115/120 V, 60 Hz, 1-phase
0.5 HP

Assigned motor power at 200/208 V, 60 Hz, 3-phase
3 HP

Assigned motor power at 230/240 V, 60 Hz, 1-phase
1.5 HP

Assigned motor power at 230/240 V, 60 Hz, 3-phase
3 HP

Assigned motor power at 460/480 V, 60 Hz, 3-phase
5 HP

Assigned motor power at 575/600 V, 60 Hz, 3-phase
7.5 HP

Communication

Connection

Push in terminals

Contacts

Number of contacts (normally open contacts)

1

Number of auxiliary contacts (normally closed contacts)

0

Number of auxiliary contacts (normally open contacts)

1

Design verification

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 Resist. of insul. mat. to abnormal heat/fire by internal elect. 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

Resources

Catalogues

Switching and protecting motors - catalog

SmartWire-DT Catalog

Product Range Catalog Switching and protecting motors

Drawings

eaton-contactors-dimensions-007.eps

eCAD model

ETN.DILM9-10(24VDC)-PI.edz

Installation instructions

IL034107ZU

Installation videos

WIN-WIN with push-in technology

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

mCAD model

dil_m7_15_pi.dwg

dil_m7_15_pi.stp

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.

10.9.2 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 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.



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Eaton House
30 Pembroke Road
Dublin 4, Ireland
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