

# Eaton 277946

Catalog Number: 277946

Eaton Moeller® series DILM Auxiliary contact module, 2 pole, Ith= 16 A, 1 N/O, 1 NC, Front fixing, Screw terminals, DILM40 - DILM170

## General specifications

<b>Product Name</b>	<b>Catalog Number</b>
Eaton Moeller® series DILM auxiliary contact module	277946
	<b>EAN</b>
	4015082779467
<b>UPC</b>	<b>Product Length/Depth</b>
782116354771	39 mm
<b>Product Height</b>	<b>Product Width</b>
46 mm	24 mm
<b>Product Weight</b>	<b>Certifications</b>
0.03 kg	IEC/EN 60947-4-1
	CE
	CSA
	UL Category Control No.: NKCR
	CSA-C22.2 No. 14-05
	VDE 0660
	UL
	CSA File No.: 012528
	IEC/EN 60947
	CSA Class No.: 3211-03
	UL 508
	UL File No.: E29184

**Model Code**  
DILM150-XH11

## Features Functions

### Features

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

### Functions

For standard applications

### Fitted with:

Interlocked opposing contacts

### Number of poles

Two-pole

### Electric connection type

Screw connection

## General

### Degree of protection

IP20

### Lifespan, electrical

1,300,000 Operations (at 230 V, AC-15, 3 A)

### Model

Top mounting

### Mounting method

Front fastening

### Overvoltage category

III

### Pollution degree

3

### 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

### Type

Front mounting auxiliary contact

## Ambient conditions, mechanical

### Shock resistance

5 g, N/C auxiliary contact, Mechanical, according to IEC/EN 60068-2-27, Half-sinusoidal shock 10 ms

7 g, N/O auxiliary contact, Mechanical, according to IEC/EN 60068-2-27, Half-sinusoidal shock 10 ms

## 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

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

## Electrical rating

### Rated operational current (I<sub>e</sub>)

6 A at 60 V, DC L/R ≤ 15 ms (with 1 contact in series)

3 A at 110 V, DC L/R ≤ 15 ms (with 1 contact in series)

1 A at 220 V, DC L/R ≤ 15 ms (with 1 contact in series)

10 A at 24 V, DC L/R ≤ 15 ms (with 1 contact in series)

Rated operational current (I<sub>e</sub>) at AC-15, 220 V, 230 V, 240 V  
6 A

Rated operational current (I<sub>e</sub>) at AC-15, 380 V, 400 V, 415 V  
4 A

Rated operational current (I<sub>e</sub>) at AC-15, 500 V  
1.5 A

Rated insulation voltage (U<sub>i</sub>)  
690 V

Rated operational voltage (U<sub>e</sub>) at AC - max  
500 V

## Terminal capacities

### Terminal capacity (flexible with ferrule)

1 x (0.75 - 2.5) mm<sup>2</sup>

2 x (0.75 - 2.5) mm<sup>2</sup>

### Terminal capacity (solid)

1 x (0.75 - 2.5) mm<sup>2</sup>

2 x (0.75 - 2.5) mm<sup>2</sup>

### Terminal capacity (solid/stranded AWG)

18 - 14

### Screwdriver size

0.8 x 5.5/1 x 6 mm, Terminal screw, Standard screwdriver  
2, Terminal screw, Pozidriv screwdriver

### Tightening torque

1.2 Nm, Screw terminals

## Short-circuit rating

### Short-circuit protection rating

Max. 16 A gG/gL, Fuse, Without welding, Auxiliary contacts

### Short-circuit protection rating without welding

16 A gG/gL, 500 V, Max. Fuse, Contacts

## Conventional thermal current I<sub>th</sub>

### Conventional thermal current I<sub>th</sub> at 60°C (3-pole, open)

16 A

## Switching capacity

### Switching capacity (auxiliary contacts, general use)

15 A, 600 V AC, (UL/CSA)

1 A, 250 V DC, (UL/CSA)

### Switching capacity (auxiliary contacts, pilot duty)

P300, DC operated (UL/CSA)

A600, AC operated (UL/CSA)

## Communication

## Connection

Screw terminals

## Contacts

### Control circuit reliability

$\lambda < 5 \times 1/10^7$  (1 failure at 2,000,000 operations for  $U_e = 24$  V DC,  $U_{min} = 17$  V,  $I_{min} = 5.4$  mA)

### Number of contacts (change-over contacts)

0

### Number of contacts (normally closed contacts)

1

### Number of contacts (normally open contacts)

1

## Safety

### Safe isolation

440 V AC, Between auxiliary contacts, According to EN 61140

440 V AC, Between coil and auxiliary contacts, According to EN 61140

## Design verification

### Equipment heat dissipation, current-dependent $P_{vid}$

0 W

### Heat dissipation capacity $P_{diss}$

0 W

### Heat dissipation per pole, current-dependent $P_{vid}$

0.23 W

### Rated operational current for specified heat dissipation ( $I_n$ )

4 A

### Static heat dissipation, non-current-dependent $P_{vs}$

0 W

### 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

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

### 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.

## Resurse

### Desene

[eaton-contactors-contact-dilm-accessory-3d-drawing-003.eps](#)

### Instrucțiuni de instalare

[IL03407034Z](#)

### mCAD model

[dil\\_m150\\_xhi\\_2.stp](#)

### Rapoarte de certificare

[DA-DC-00004229.pdf](#)

[DA-DC-00004070.pdf](#)



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