

# Specifications

## Eaton 278425

Eaton Moeller® series DILM Auxiliary contact module, 2 pole, Ith= 10 A, 1 N/O, 1 NC, Side mounted, Screw terminals, DILM40 - DILM225A, -SI

### General specifications

<b>PRODUCT NAME</b>	Eaton Moeller® series DILM auxiliary contact module
<b>CATALOG NUMBER</b>	278425
<b>MODEL CODE</b>	DILM1000-XHI11-SI
<b>UPC</b>	782116355303
<b>EAN</b>	4015082784256
<b>PRODUCT LENGTH/DEPTH</b>	77 mm
<b>PRODUCT HEIGHT</b>	77 mm
<b>PRODUCT WIDTH</b>	15 mm
<b>PRODUCT WEIGHT</b>	0.041 kg
<b>CERTIFICATIONS</b>	CE IEC/EN 60947 UL CSA CSA Class No.: 3211-04 CSA File No.: 012528 CSA-C22.2 No. 14-05 IEC/EN 60947-4-1 UL Category Control No.: NKCR UL 508 UL File No.: E29184 VDE 0660
<b>PRODUCT TYPE</b>	Accessory



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## Features Functions

<b>FEATURES</b>	Interlocked opposing contacts within an auxiliary contact module (according to IEC 60947-5-1 Annex L)
<b>FUNCTIONS</b>	For standard applications
<b>FITTED WITH:</b>	Interlocked opposing contacts
<b>NUMBER OF POLES</b>	Two-pole
<b>ELECTRIC CONNECTION TYPE</b>	Screw connection

## Climatic environmental conditions

<b>AMBIENT OPERATING TEMPERATURE - MIN</b>	-25 °C
<b>AMBIENT OPERATING TEMPERATURE - MAX</b>	60 °C
<b>AMBIENT OPERATING TEMPERATURE (ENCLOSED) - MIN</b>	-25 °C
<b>AMBIENT OPERATING TEMPERATURE (ENCLOSED) - MAX</b>	40 °C
<b>AMBIENT STORAGE TEMPERATURE - MIN</b>	-40 °C
<b>AMBIENT STORAGE TEMPERATURE - MAX</b>	80 °C
<b>CLIMATIC PROOFING</b>	Damp heat, cyclic, to IEC 60068-2-30 Damp heat, constant, to IEC 60068-2-78

## General

<b>DEGREE OF PROTECTION</b>	IP20
<b>LIFESPAN, ELECTRICAL</b>	1,300,000 Operations (at 230 V, AC-15, 3 A)
<b>MODEL</b>	Top mounting
<b>MOUNTING METHOD</b>	Side mounting
<b>CONNECTION</b>	Screw terminals
<b>OVERVOLTAGE CATEGORY</b>	III
<b>POLLUTION DEGREE</b>	3
<b>PROTECTION</b>	Finger and back-of-hand proof, Protection against direct contact when actuated from front (EN 50274)
<b>RATED IMPULSE WITHSTAND VOLTAGE (UIMP)</b>	6000 V 6000 V AC
<b>TYPE</b>	Side-mounting auxiliary contacts

## Terminal capacities

<b>TERMINAL CAPACITY (FLEXIBLE WITH FERRULE)</b>	2 x (0.75 - 2.5) mm <sup>2</sup> 1 x (0.75 - 2.5) mm <sup>2</sup>
<b>TERMINAL CAPACITY (SOLID)</b>	2 x (0.75 - 2.5) mm <sup>2</sup> 1 x (0.75 - 2.5) mm <sup>2</sup>
<b>TERMINAL CAPACITY (SOLID/STRANDED AWG)</b>	18 - 14
<b>SCREW SIZE</b>	M3.5, Terminal screw
<b>SCREWDRIVER SIZE</b>	0.8 x 5.5/1 x 6 mm, Terminal screw, Standard screwdriver 2, Terminal screw, Pozidriv screwdriver
<b>TIGHTENING TORQUE</b>	1.2 Nm, Screw terminals

## Electrical rating

<b>RATED OPERATIONAL CURRENT (IE)</b>	6 A at 60 V, DC L/R $\leq$ 15 ms (with 1 contact in series) 1 A at 220 V, DC L/R $\leq$ 15 ms (with 1 contact in series) 10 A at 24 V, DC L/R $\leq$ 15 ms (with 1 contact in series) 3 A at 110 V, DC L/R $\leq$ 15 ms (with 1 contact in series)
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<b>RATED OPERATIONAL CURRENT (IE) AT AC-15, 220 V, 230 V, 240 V</b>	6 A
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<b>RATED OPERATIONAL CURRENT (IE) AT AC-15, 380 V, 400 V, 415 V</b>	4 A
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<b>RATED OPERATIONAL CURRENT (IE) AT AC-15, 500 V</b>	1.5 A
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<b>RATED OPERATIONAL CURRENT (IE) AT DC-13, 24 V</b>	2 A
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<b>RATED OPERATIONAL CURRENT (IE) AT DC-13, 60 V</b>	1.5 A
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<b>RATED OPERATIONAL CURRENT (IE) AT DC-13, 110 V</b>	0.8 A
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<b>RATED OPERATIONAL CURRENT (IE) AT DC-13, 220 V, 230 V</b>	0.3 A
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<b>RATED INSULATION VOLTAGE (UI)</b>	690 V
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<b>RATED OPERATIONAL VOLTAGE (UE) AT AC - MAX</b>	500 V
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## Conventional thermal current I<sub>th</sub>

<b>CONVENTIONAL THERMAL CURRENT I<sub>TH</sub> AT 60°C (3-POLE, OPEN)</b>	10 A
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## Short-circuit rating

<b>RATED CONDITIONAL SHORT-CIRCUIT CURRENT (IQ)</b>	1 kA at 500 V
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<b>SHORT-CIRCUIT PROTECTION RATING</b>	Max. 16 A gG/gL, Fuse, Without welding, Auxiliary contacts
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<b>SHORT-CIRCUIT PROTECTION RATING WITHOUT WELDING</b>	16 A gG/gL, 500 V, Max. Fuse, Contacts
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## Switching capacity

<b>SWITCHING CAPACITY (AUXILIARY CONTACTS, GENERAL USE)</b>	1 A, 250 V DC, (UL/CSA) 15 A, 600 V AC, (UL/CSA)
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<b>SWITCHING CAPACITY (AUXILIARY CONTACTS, PILOT DUTY)</b>	A600, AC operated (UL/CSA) P300, DC operated (UL/CSA)
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## 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)

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**NUMBER OF CONTACTS (CHANGE-OVER CONTACTS)** 0

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**NUMBER OF CONTACTS (NORMALLY CLOSED CONTACTS)** 1

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**NUMBER OF CONTACTS (NORMALLY OPEN CONTACTS)** 1

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## Safety

**SAFE ISOLATION** 440 V AC, Between coil and auxiliary contacts, According to EN 61140  
440 V AC, Between auxiliary contacts and main contacts, According to EN 61140  
440 V AC, Between auxiliary contacts, According to EN 61140

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## Design verification

<b>EQUIPMENT HEAT DISSIPATION, CURRENT-DEPENDENT PVID</b>	0 W
<b>HEAT DISSIPATION CAPACITY PDISS</b>	0 W
<b>HEAT DISSIPATION PER POLE, CURRENT-DEPENDENT PVID</b>	0.11 W
<b>RATED OPERATIONAL CURRENT FOR SPECIFIED HEAT DISSIPATION (IN)</b>	4 A
<b>STATIC HEAT DISSIPATION, NON-CURRENT-DEPENDENT PVS</b>	0 W
<b>10.2.2 CORROSION RESISTANCE</b>	Meets the product standard's requirements.
<b>10.2.3.1 VERIFICATION OF THERMAL STABILITY OF ENCLOSURES</b>	Meets the product standard's requirements.
<b>10.2.3.2 VERIFICATION OF RESISTANCE OF INSULATING MATERIALS TO NORMAL HEAT</b>	Meets the product standard's requirements.
<b>10.2.3.3 RESIST. OF INSUL. MAT. TO ABNORMAL HEAT/FIRE BY INTERNAL ELECT. EFFECTS</b>	Meets the product standard's requirements.
<b>10.2.4 RESISTANCE TO ULTRA-VIOLET (UV) RADIATION</b>	Meets the product standard's requirements.
<b>10.2.5 LIFTING</b>	Does not apply, since the entire switchgear needs to be evaluated.
<b>10.2.6 MECHANICAL IMPACT</b>	Does not apply, since the entire switchgear needs to be evaluated.
<b>10.2.7 INSCRIPTIONS</b>	Meets the product standard's requirements.
<b>10.3 DEGREE OF PROTECTION OF ASSEMBLIES</b>	Does not apply, since the entire switchgear needs to be evaluated.
<b>10.4 CLEARANCES AND CREEPAGE DISTANCES</b>	Meets the product standard's requirements.
<b>10.5 PROTECTION AGAINST ELECTRIC SHOCK</b>	Does not apply, since the entire switchgear needs to be evaluated.
<b>10.6 INCORPORATION OF SWITCHING DEVICES AND COMPONENTS</b>	Does not apply, since the entire switchgear needs to be evaluated.

## Resources

	<a href="#">Product Range Catalog Switching and protecting motors</a>
CATALOGS	<a href="#">eaton-product-overview-for-machinery-catalogue-ca08103003zen-en-us.pdf</a> <a href="#">SmartWire-DT Catalog</a>
DECLARATIONS OF CONFORMITY	<a href="#">eaton-accessory-declaration-of-conformity-uk251276en.pdf</a> <a href="#">eaton-accessory-declaration-of-conformity-eu250793en.pdf</a>
DRAWINGS	<a href="#">eaton-contactors-contact-dilm-accessory-3d-drawing-006.eps</a>
ECAD MODEL	<a href="#">ETN.278425.edz</a>
INSTALLATION INSTRUCTIONS	<a href="#">IL03407034Z</a>
INSTALLATION VIDEOS	<a href="#">WIN-WIN with push-in technology</a>
MCAD MODEL	<a href="#">dil_m32_xhi11_s</a> <a href="#">dil_m32_xhi11_s.stp</a>
WIRING DIAGRAMS	<a href="#">2100SWI-122</a>

<b>10.7 INTERNAL ELECTRICAL CIRCUITS AND CONNECTIONS</b>	Is the panel builder's responsibility.
<b>10.8 CONNECTIONS FOR EXTERNAL CONDUCTORS</b>	Is the panel builder's responsibility.
<b>10.9.2 POWER-FREQUENCY ELECTRIC STRENGTH</b>	Is the panel builder's responsibility.
<b>10.9.3 IMPULSE WITHSTAND VOLTAGE</b>	Is the panel builder's responsibility.
<b>10.9.4 TESTING OF ENCLOSURES MADE OF INSULATING MATERIAL</b>	Is the panel builder's responsibility.
<b>10.10 TEMPERATURE RISE</b>	The panel builder is responsible for the temperature rise calculation. Eaton will provide heat dissipation data for the devices.
<b>10.11 SHORT-CIRCUIT RATING</b>	Is the panel builder's responsibility. The specifications for the switchgear must be observed.
<b>10.12 ELECTROMAGNETIC COMPATIBILITY</b>	Is the panel builder's responsibility. The specifications for the switchgear must be observed.
<b>10.13 MECHANICAL FUNCTION</b>	The device meets the requirements, provided the information in the instruction leaflet (IL) is observed.

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**PROJECT NAME:**

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**PROJECT NUMBER:**

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**PREPARED BY:**

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**DATE:**

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