

## Eaton 278186

Eaton Moeller® series DIUL Reversing contactor combination, 380 V 400 V: 15 kW, 230 V 50 Hz, 240 V 60 Hz, AC operation

<b>PRODUCT NAME</b>	Eaton Moeller® series DIUL contactor combination
<b>CATALOG NUMBER</b>	278186
<b>PRODUCT LENGTH/DEPTH</b>	138 mm
<b>PRODUCT HEIGHT</b>	85 mm
<b>PRODUCT WIDTH</b>	90 mm
<b>PRODUCT WEIGHT</b>	1.055 kg
<b>COMPLIANCES</b>	CE Marked RoHS Compliant
<b>CERTIFICATIONS</b>	CSA Certified UL Listed IEC 60947-4-1 EN 60947-4-1 IEC/EN 60947-4-1 CSA-C22.2 No. 60947-4-1- 14 CSA Class No.: 2411-03, 3211-04 UL Category Control No.: NLDX CSA UL CE CSA File No.: 012528 UL 60947-4-1 UL File No.: E29096

**ELECTRICAL  
CONNECTION TYPE FOR  
AUXILIARY- AND  
CONTROL-CURRENT  
CIRCUIT**

Screw connection

**AMPERAGE RATING**

32A

**HP RATING - MAX**

3, 5/10, 10, 20, 25 hp  
(1/3PH @120, 240/208,  
240, 480, 600 V)

**NUMBER OF POLES**

Three-pole

**TYPE**

Full voltage reversing  
contactor

**VOLTAGE RATING**

400 V

**FEATURES**

Mechanical interlock

**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.

**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.

**MCAD MODEL**

[diulm17\\_25\\_32.dwg](#)

[diulm17\\_25\\_32.stp](#)

[IL03407030Z](#) [IL03407044Z](#)

<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.
<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>FREQUENCY RATING</b>	50-60 Hz
<b>POLLUTION DEGREE</b>	3
<b>UTILIZATION CATEGORY</b>	AC-3: Normal AC induction motors: starting, switch off during running AC-4: Normal AC induction motors: starting, plugging, reversing, inching
<b>CONNECTION</b>	Screw terminals
<b>FRAME SIZE</b>	45 mm
<b>AMBIENT OPERATING TEMPERATURE - MAX</b>	60 °C
<b>AMBIENT OPERATING TEMPERATURE - MIN</b>	-25 °C

<b>AMBIENT OPERATING TEMPERATURE (ENCLOSED) - MAX</b>	40 °C
<b>AMBIENT OPERATING TEMPERATURE (ENCLOSED) - MIN</b>	-25 °C
<b>AMBIENT STORAGE TEMPERATURE - MAX</b>	80 °C
<b>AMBIENT STORAGE TEMPERATURE - MIN</b>	-40 °C
<b>EQUIPMENT HEAT DISSIPATION, CURRENT-DEPENDENT PVID</b>	8.7 W
<b>HEAT DISSIPATION CAPACITY PDISS</b>	0 W
<b>HEAT DISSIPATION PER POLE, CURRENT-DEPENDENT PVID</b>	2.9 W
<b>APPLICATION</b>	Contactors combinations for starting motors with two directions of rotation
<b>PRODUCT CATEGORY</b>	Contactors combinations
<b>TERMINALS</b>	Screw terminals
<b>ELECTRICAL CONNECTION TYPE OF MAIN CIRCUIT</b>	Screw connection
<b>VOLTAGE TYPE</b>	AC
<b>DEGREE OF PROTECTION</b>	IP00 NEMA Other
<b>NUMBER OF AUXILIARY CONTACTS (NORMALLY CLOSED CONTACTS)</b>	0
<b>NUMBER OF AUXILIARY CONTACTS (NORMALLY OPEN CONTACTS)</b>	2
<b>NUMBER OF CONTACTS (NORMALLY CLOSED) AS MAIN CONTACT</b>	0
<b>NUMBER OF MAIN CONTACTS (NORMALLY OPEN CONTACT)</b>	6
<b>OPERATING TEMPERATURE - MAX</b>	60 °C
<b>OPERATING TEMPERATURE - MIN</b>	-25 °C
<b>RATED CONTROL SUPPLY VOLTAGE (US) AT AC, 50 HZ - MAX</b>	230 V

<b>RATED CONTROL SUPPLY VOLTAGE (US) AT AC, 50 HZ - MIN</b>	230 V
<b>RATED CONTROL SUPPLY VOLTAGE (US) AT AC, 60 HZ - MAX</b>	240 V
<b>RATED CONTROL SUPPLY VOLTAGE (US) AT AC, 60 HZ - MIN</b>	240 V
<b>COIL VOLTAGE</b>	230-240 Vac, 50/60 Hz
<b>CONTINUOUS AMPERE RATING</b>	32 A
<b>SERIES</b>	XT IEC
<b>OVERVOLTAGE CATEGORY</b>	III
<b>DUTY FACTOR</b>	100 %
<b>NUMBER OF CONTACTS</b>	2 NO 1 NC
<b>OPERATION</b>	Reversing contactor
<b>INTERFERENCE IMMUNITY</b>	According to EN 60947-1
<b>FUNCTIONS</b>	Reversing safety
<b>POWER CONSUMPTION</b>	15 kW
<b>RATED CONTROL SUPPLY VOLTAGE (US) AT DC - MAX</b>	0 V
<b>RATED CONTROL SUPPLY VOLTAGE (US) AT DC - MIN</b>	0 V
<b>RATED INSULATION VOLTAGE (UI)</b>	690 V
<b>RATED OPERATIONAL CURRENT (IE) AT AC-1, 380 V, 400 V, 415 V</b>	32 A
<b>RATED OPERATIONAL CURRENT (IE) AT AC-3, 380 V, 400 V, 415 V</b>	32 A
<b>RATED OPERATIONAL CURRENT FOR SPECIFIED HEAT DISSIPATION (IN)</b>	32 A
<b>RATED OPERATIONAL POWER AT AC-3, 380/400 V, 50 HZ</b>	15 kW
<b>RATED OPERATIONAL POWER AT AC-4, 220/230 V, 50 HZ</b>	4 kW
<b>RATED OPERATIONAL POWER AT AC-4, 660/690 V, 50 HZ</b>	10 kW

<b>RATED OPERATIONAL POWER (NEMA)</b>	14.9 kW
<b>STATIC HEAT DISSIPATION, NON-CURRENT-DEPENDENT PVS</b>	2.1 W
<b>SUITABLE FOR</b>	Also motors with efficiency class IE3
<b>OPERATING TEMPERATURE</b>	-25° to 60°C
<b>RATED OPERATIONAL POWER AT AC-3, 690 V, 50 HZ</b>	17 kW
<b>ACTUATING VOLTAGE</b>	230 V 50 Hz, 240 V 60 Hz
<b>NUMBER OF AUXILIARY CONTACTS (CHANGE-OVER CONTACTS)</b>	0
<b>VOLTAGE TYPE OF OPERATING VOLTAGE</b>	AC
<b>OPERATING VOLTAGE AT AC, 50 HZ - MIN</b>	24 V
<b>OPERATING VOLTAGE AT AC, 50 HZ - MAX</b>	690 V
<b>OPERATING VOLTAGE AT AC, 60 HZ - MIN</b>	24 V
<b>OPERATING VOLTAGE AT AC, 60 HZ - MAX</b>	690 V
<b>OPERATING VOLTAGE AT DC - MIN</b>	0 V
<b>OPERATING VOLTAGE AT DC - MAX</b>	0 V

PROJECT NAME:

PROJECT NUMBER:

PREPARED BY:

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