

DIL CONTACTORS
278161


Overview


Specifications


Resources

How to

278161

Eaton Moeller® series DIUL Reversing contactor c
kW, 230 V 50 Hz, 240 V 60 Hz, AC operation



 WIN-WIN with Push-in Terminals


 How to improve wiring

Photo is representative

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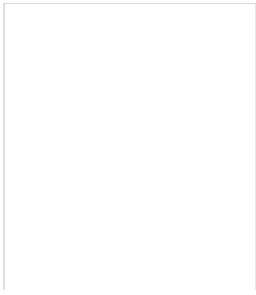


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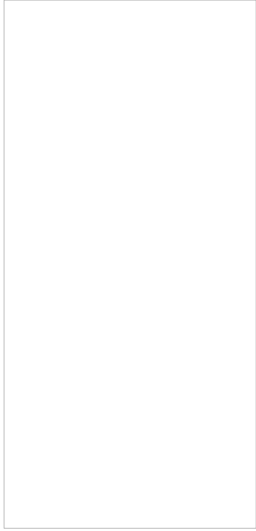


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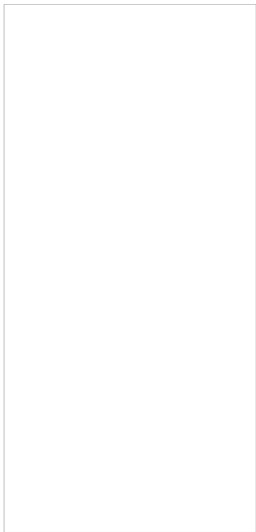


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Designed to work together

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278452

Eaton Moeller® series ZB Overload relay, ZB32, Ir= 10 - 16 A, 1 N/O, 1 N/C, Direct mounting, IP20

278453

Eaton Moeller® series ZB Overload relay, ZB32, Ir= 16 - 24 A, 1 N/O, 1 N/C, Direct mounting, IP20

278458

Eaton Moeller® series ZB Overload relay, ZB65, Ir= 24 - 40 A, 1 N/O, 1 N/C, Direct mounting, IP00

278454

Eaton Moeller® series ZB Overload relay, ZB32, Ir= 24 - 32 A, 1 N/O, 1 N/C, Direct mounting, IP20

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GENERAL SPECIFICATIONS

General specifications

>

PRODUCT NAME Eaton Moeller® series DIUL contactor combination

CATALOG NUMBER 278161

Product specifications

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MODEL CODE DIULM25/21(230V50HZ,240V60HZ)

EAN 4015082781613

PRODUCT LENGTH/DEPTH 138 mm

PRODUCT HEIGHT 85 mm

PRODUCT WIDTH 90 mm

PRODUCT WEIGHT 1.088 kg

WARRANTY Not Applicable

COMPLIANCES CE Marked
RoHS Compliant

CERTIFICATIONS

CSA Certified
UL Listed
IEC 60947-4-1
EN 60947-4-1
CE
CSA-C22.2 No. 60947-4-1-14
UL 60947-4-1
UL
UL Category Control No.: NLDX
CSA
UL File No.: E29096
IEC/EN 60947-4-1

PRODUCT SPECIFICATIONS

RATED OPERATIONAL CURRENT FOR SPECIFIED HEAT DISSIPATION (IN)	25 A
10.11 SHORT-CIRCUIT RATING	Is the panel builder's responsibility. The specifications must be observed.
RATED OPERATIONAL POWER AT AC-3, 380/400 V, 50 HZ	11 kW
OPERATING VOLTAGE AT AC, 50 HZ - MAX	690 V
RATED CONTROL SUPPLY VOLTAGE (US) AT AC, 50 HZ - MIN	230 V
10.4 CLEARANCES AND CREEPAGE DISTANCES	Meets the product standard's requirements.
10.12 ELECTROMAGNETIC COMPATIBILITY	Is the panel builder's responsibility. The specifications must be observed.
NUMBER OF CONTACTS (NORMALLY CLOSED) AS MAIN CONTACT	0
AMPERAGE RATING	25A
10.2.5 LIFTING	Does not apply, since the entire switchgear needs to be lifted.
RATED OPERATIONAL POWER (NEMA)	11 kW
OPERATING VOLTAGE AT DC - MAX	0 V
10.2.3.1 VERIFICATION OF THERMAL STABILITY OF ENCLOSURES	Meets the product standard's requirements.
RATED CONTROL SUPPLY VOLTAGE (US) AT DC - MIN	0 V
RATED CONTROL SUPPLY VOLTAGE (US) AT AC, 50 HZ - MAX	230 V
FREQUENCY RATING	60 Hz
10.8 CONNECTIONS FOR EXTERNAL CONDUCTORS	Is the panel builder's responsibility.
NUMBER OF MAIN CONTACTS (NORMALLY OPEN CONTACT)	6
OPERATING TEMPERATURE	-25° to 60°C
TERMINALS	Screw terminals
OPERATING VOLTAGE AT DC - MIN	0 V
HP RATING - MAX	2, 3/5, 5, 10, 15 hp (1/3PH @120, 240/208, 240, 480)
AMBIENT OPERATING TEMPERATURE - MAX	60 °C

FEATURES	Mechanical interlock
STATIC HEAT DISSIPATION, NON-CURRENT-DEPENDENT PVS	2.1 W
ELECTRICAL CONNECTION TYPE FOR AUXILIARY-AND CONTROL-CURRENT CIRCUIT	Screw connection
ELECTRICAL CONNECTION TYPE OF MAIN CIRCUIT	Screw connection
RATED CONTROL SUPPLY VOLTAGE (US) AT DC - MAX	0 V
NUMBER OF POLES	Three-pole
10.9.3 IMPULSE WITHSTAND VOLTAGE	Is the panel builder's responsibility.
UTILIZATION CATEGORY	AC-3: Normal AC induction motors: starting, switching AC-4: Normal AC induction motors: starting, plugging, inching
AMBIENT OPERATING TEMPERATURE - MIN	-25 °C
COIL VOLTAGE	240 Vac, 60 Hz
10.6 INCORPORATION OF SWITCHING DEVICES AND COMPONENTS	Does not apply, since the entire switchgear needs to be tested.
10.5 PROTECTION AGAINST ELECTRIC SHOCK	Does not apply, since the entire switchgear needs to be tested.
OPERATING VOLTAGE AT AC, 50 HZ - MIN	24 V
10.13 MECHANICAL FUNCTION	The device meets the requirements, provided the instructions in the instruction leaflet (IL) is observed.
10.2.6 MECHANICAL IMPACT	Does not apply, since the entire switchgear needs to be tested.
10.9.4 TESTING OF ENCLOSURES MADE OF INSULATING MATERIAL	Is the panel builder's responsibility.
10.3 DEGREE OF PROTECTION OF ASSEMBLIES	Does not apply, since the entire switchgear needs to be tested.
HEAT DISSIPATION PER POLE, CURRENT-DEPENDENT PVID	1.8 W
APPLICATION	Contactors combinations for starting motors with two rotation
ACTUATING VOLTAGE	230 V 50 Hz, 240 V 60 Hz
VOLTAGE TYPE	AC
PRODUCT CATEGORY	Contactors combinations
OPERATING TEMPERATURE - MIN	-25 °C
RATED OPERATIONAL POWER AT AC-3, 690 V, 50 HZ	14 kW
EQUIPMENT HEAT DISSIPATION, CURRENT-DEPENDENT PVID	5.3 W
HEAT DISSIPATION CAPACITY PDISS	0 W
SUITABLE FOR	Also motors with efficiency class IE3

OPERATION	Reversing contactor
NUMBER OF AUXILIARY CONTACTS (NORMALLY CLOSED CONTACTS)	0
CONTINUOUS AMPERE RATING	25 A
POWER CONSUMPTION	11 kW
10.2.3.2 VERIFICATION OF RESISTANCE OF INSULATING MATERIALS TO NORMAL HEAT	Meets the product standard's requirements.
OPERATING TEMPERATURE - MAX	60 °C
10.2.3.3 RESIST. OF INSUL. MAT. TO ABNORMAL HEAT/FIRE BY INTERNAL ELECT. EFFECTS	Meets the product standard's requirements.
VOLTAGE RATING	400 V
OPERATING VOLTAGE AT AC, 60 HZ - MAX	690 V
NUMBER OF CONTACTS	2 NO 1 NC
10.9.2 POWER-FREQUENCY ELECTRIC STRENGTH	Is the panel builder's responsibility.
DEGREE OF PROTECTION	IP00 NEMA Other
RATED OPERATIONAL POWER AT AC-4, 220/230 V, 50 HZ	3.5 kW
NUMBER OF AUXILIARY CONTACTS (CHANGE-OVER CONTACTS)	0
VOLTAGE TYPE OF OPERATING VOLTAGE	AC
RATED CONTROL SUPPLY VOLTAGE (US) AT AC, 60 HZ - MIN	240 V
RATED OPERATIONAL CURRENT (IE) AT AC-1, 380 V, 400 V, 415 V	25 A
10.7 INTERNAL ELECTRICAL CIRCUITS AND CONNECTIONS	Is the panel builder's responsibility.
CONNECTION	Screw terminals
10.10 TEMPERATURE RISE	The panel builder is responsible for the temperature Eaton will provide heat dissipation data for the devi
FUNCTIONS	Reversing safety
OPERATING VOLTAGE AT AC, 60 HZ - MIN	24 V
RATED OPERATIONAL POWER AT AC-4, 660/690 V, 50 HZ	8.5 kW
FRAME SIZE	45 mm
SERIES	XT IEC
DUTY FACTOR	100 %

TYPE	Full voltage reversing contactor
10.2.2 CORROSION RESISTANCE	Meets the product standard's requirements.
10.2.4 RESISTANCE TO ULTRA-VIOLET (UV) RADIATION	Meets the product standard's requirements.
10.2.7 INSCRIPTIONS	Meets the product standard's requirements.
RATED CONTROL SUPPLY VOLTAGE (US) AT AC, 60 HZ - MAX	240 V
RATED OPERATIONAL CURRENT (IE) AT AC-3, 380 V, 400 V, 415 V	25 A
NUMBER OF AUXILIARY CONTACTS (NORMALLY OPEN CONTACTS)	2

Catalogs

Declarations of conformity

Drawings

eCAD model

Installation instructions

Installation videos

mCAD model

System overview

Wiring diagrams

Eaton is an intelligent power management company dedicated to improving the quality of life and protecting the environment for people everywhere. We are guided by our commitment to do business right, to operate sustainably and to help our customers manage power — today and well into the future. By capitalizing on the global growth trends of electrification and digitalization, we're accelerating the planet's transition to renewable energy and helping to solve the world's most urgent power management challenges.