
NLDX.E29096

Magnetic

Magnetic

See General Information for Magnetic

MOELLER GMBH

E29096

HEIN-MOELLER-STRASSE 7-11

53115 BONN, GERMANY

Across-the-line starters: Open, Cat. Nos. DIL0M, DIL0AM may be followed by 01, 4 or 10, may be followed by 02, 04, 11, 11D, 13, 20, 22, 22D, 31, 31D or 40, may be followed by C, may be followed by 01SDILM, 10SDILM or 11SDILM; Cat. Nos. DIL0M-G, DIL0AM-G may be followed by 01, 4 or 10, may be followed by 02, 04, 11, 11D, 13, 20, 22, 22D, 31, 31D or 40, may be followed by C, may be followed by 01SDILM, 10SDILM or 11SDILM; Cat. No. DIL0M-GI-11; Cat. No. DIL0M-G/22-SOND 659; Cat. Nos. DIL00M, DIL00AM may be followed by 01, 4 or 10, may be followed by 02, 04, 11, 13, 20, 22, 31 or 40, may be followed by 10SDILM or 11SDILM, Cat. Nos. DIL00M-G, DIL00AM-G may be followed by 01, 4 or 10, may be followed by 02, 04, 11, 13, 20, 22, 31 or 40, may be followed by 10SDILM or 11SDILM; Cat. No. DIL00M-G/22-SOND 658; Cat. Nos. DIL1M, DIL1AM may be followed by 01, 4 or 10, may be followed by 02, 04, 11, 11D, 13, 20, 22, 22D, 31, 31D or 40, may be followed by 01SDILM, 10SDILM or 11SDILM; Cat. Nos. DIL1M-G, DIL1AM-G may be followed by 01, 4 or 10, may be followed by 02, 04, 11, 11D, 13, 20, 22, 22D, 31, 31D or 40, may be followed by 01SDILM, 10SDILM or 11SDILM; Cat. Nos. DIL2M, DIL2AM may be followed by 01, 4 or 10, may be followed by 02, 04, 11, 11D, 13, 20, 22, 22D, 31, 31D or 40, may be followed by 01SDILM, 10SDILM or 11SDILM; Cat. Nos. DIL2M-G, DIL2AM-G may be followed by 01, 4 or 10, may be followed by 02, 04, 11, 11D, 13, 20, 22, 22D, 31, 31D or 40, may be followed by 01SDILM, 10SDILM or 11SDILM; Cat. Nos. DIL3AM, DIL3AM-G, DIL3H, DIL3H-G, DIL3M, DIL3M-G may be followed by KI-DILM, SA-DILM, SI-DILM or SID-DILM; Cat. Nos. DIL3AM85, DIL3AM85-G, DIL3M80, DIL3M80-G; Cat. Nos. DIL4AM-G, DIL4H, DIL4H-G, DIL4LM-G, DIL4M or DIL4M-G followed by 02, 04, 11, 13, 20, 22, 31 or 40, may be followed by KI-DILM, SA-DILM, SI-DILM, SID-DILM, WV-DILM or ZK-DILM; Cat. Nos. DIL4AM145, DIL4AM145-G, DIL4M115, DIL4M115-G; Cat. Nos. DIL4-22, -22d, DIL6-22, with or without suffixes -G, -DC; Cat. No. DIL1-22; Cat. Nos. N-DIL0M, -DIL1M, -DIL2M.

Bridge connector, Cat. No. P1, followed by DILEM, D1L00M, D1L0M, D1L1M, D1L2M, DILM12 or DILM32, followed by -XP1.

Magnetic motor controllers, Cat. Nos. DIL1MK-10, DILEM, followed by 01, 4 or 10, may or may not be followed by G or GI, may be followed by C; Cat. No. DILEM followed by 01, 4 or 10, followed by F, may be followed by C; Cat. No. DILEEM followed by 01, 10, may or may not be followed by G; Cat. No. DILM, may be followed by C, followed by 185, 225 or 250; Cat. No. DILM, followed by 300, 400 or 500; Cat. No. DILM, followed by 580, 650, 720, 820 or 1000; Cat. Nos. DIL00MK-02, DIL00MK-11, DIL0MK-10, DIL3MK72/22; Cat. Nos. DILM17(C)-, DIL25(C)-, DILM32(C)- followed by 10 or 01.

Model DILM may be followed by 40, 50 or 65, may be followed by 10.

Magnetic motor controllers, Cat. Nos. DILM(C) 7-..., DILM(C) 9-..., DILM(C) 12-..., DILM (C) 15-... followed by -10 or -01.

Mechanical interlocks, Cat. Nos. DILM32-XMV, WVDILM.

Reversing across-the-line contactors, Cat. Nos. DIL6AM, -H, -M, -8AM, -H, -M, -10AM, -10H, -10M, -12AM, -14AM; Cat. No. DIULM followed by 25 or 32, may be followed by -10 or -01.

Reversing contactors, Cat. No. DILULEM followed by blank or (-6) followed by 02, 04, 31, 13, 11, 20, 22, 40 followed by MV; Cat Nos. DIULM7/..., DIULM9/..., DIULM12/....

Surge suppressor, Cat. No. VG DILE.

Vacuum contactors , Models DILH 1400, DILH 2000.

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NLDX.GuideInfo Magnetic

[Industrial Control Equipment] (Motor Controllers) Magnetic

See General Information for Motor Controllers

This listing covers the following devices:

Across-the-line starters

Across-the-line starters with motor circuit switches

Reduced voltage starters such as Autotransformer, part-winding wye-delta, reactance and resistant type

Speed regulators

Combined starters and speed regulators

Magnetic switches for controlling other than motor loads are listed under Industrial Control Equipment — Switches, Magnetically Operated.

Magnetic motor controllers have been tested to determine their acceptability for continuous operation at their marked rated load.

The basic standard used to investigate products in this category is UL 508, "Electric Industrial Control Equipment".

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NJOT.GuideInfo Motor Controllers

[Industrial Control Equipment] Motor Controllers

See General Information for Industrial Control Equipment

This listing covers the following devices rated 600 v or less, and those rated 701-1500 v:

Auxiliary Devices

Combination Motor Controllers.

Float- and Pressure-Operated Motor Controllers

Magnetic Motor Controllers

Manual Motor Controllers

Miscellaneous Motor Controllers

Power Conversion Equipment

Some Motor Controllers are open type (without enclosures). This means that such devices are for use as parts of Listed equipment where the acceptability of the combination has been determined by Underwriters Laboratories Inc. or where open type devices are acceptable.

This Listing also covers enclosures for housing open type devices. Such enclosures are marked to identify the open type devices which may be suitably installed therein.

Motor Controllers intended for across-the-line starting and for making and breaking the circuit when the motor is stalled are tested at rated voltage and at six times motor full load running current for a-c ratings and at ten times motor full load running current for d-c ratings.

Motor Controllers incorporating thermal cutouts, thermal overload relays or other devices for motor running overcurrent protection are considered to be suitably protected against overcurrent due to short circuits or grounds by motor branch circuit, short circuit and ground fault protective devices selected in accordance with the National Electrical Code and any additional information marked on the product. Motor Controllers may specify that protection is to be provided by fuses or by an inverse time circuit breaker. If there is no marking on protective device type, controllers are considered suitably protected by either type of device. Motor Controllers may specify a maximum rating of protective device. If not marked with a rating, the controllers are considered suitably protected by a protective device of the maximum rating permitted by the National Electrical Code.

Unless otherwise marked, motor controllers incorporating thermal cutouts or overload relays are considered suitable for use on circuits having available fault currents not greater than:

Rating HP (600 V) Max)	Full Load Current Amps (701-1500v)	RMS Symmetrical Amps
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1 or less	—	1,000
1-1/2 to 50	0-50	5,000
51 to 200	51-200	10,000
201 to 400	201-400	18,000
401 to 600	401-600	30,000
601 to 900	601-850	42,000
901 to 1600	851-1500	85,000

Motor Controllers which are marked "Suitable For Use On A Circuit Capable Of Delivering Not More Than _____ RMS Symmetrical Amps, _____ Volts Maximum" have been investigated for the additional rating indicated.

Motor Controllers for group installations are marked with a maximum rating of fuse which is considered to suitably protect the controller for the group installation. Such fuse ratings may be in excess of the values given above.

Controllers for Electric Motor Drive Fire Pumps are listed in the Fire Protection Equipment List under the Pump Controller section.

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NIMX.GuideInfo

Industrial Control Equipment

Industrial Control Equipment

Guide Information for Electrical Equipment for Use in Ordinary Locations

The listing covers the following products:

Industrial Control Panels

Motor Control Centers

Motor Controllers

Miscellaneous Apparatus

Programmable Controllers

Industrial Control Switches

Enclosed industrial control equipment identified with an enclosure type designation is intended for use as indicated in the guide information at the front of this directory (**AALZ**).

Industrial Control Equipment, is for use with copper conductors unless marked to indicate which terminals are suitable for use with aluminum conductors. Such marking is independent of any marking on terminal connectors and is on a wiring diagram or other readily visible location.

Industrial Control Equipment, for which accessory kits are available for the field or distributor modification of the basic product or which may be assembled in many forms from separate components are marked to indicate the suitable accessories or separate components which may be used.

Control Panels

If the sealed rating of the operating coil circuit of a magnetically operated industrial control device exceeds 125 volt-amperes, the coil circuit rating is marked on the device.

Overload relays or industrial control equipment incorporating overload relays are identified as to their maximum tripping time at 600 per cent of the overload relay current element trip rating. The designations "Class 10, Class 20, and Class 30" are used to identify the maximum tripping times, with the Class number indicating the maximum tripping time in seconds. Overload relays with maximum tripping times of 10 or 30 seconds are marked Class 10 or Class 30 respectively. Overload relays with a maximum tripping time of 20 seconds may be marked Class 20. Overload relays with tripping times in excess of 30 seconds are marked with their maximum tripping times. All unmarked overload relays have a maximum tripping time of 20 seconds.

There are open, across-the-line starters intended for bolt on mounting to panelboards and dead front switchboards and are so restricted by the Listing Mark. They are provided with a cover or door and the remaining portions of the enclosure are provided by the panel or switchboard enclosure.

Some industrial control equipment is suitable for use as service equipment and may be so marked. Such marking is part of the Listing Mark or is an integral part of other required markings.

Some of the equipment listed in this category has also been investigated for use aboard marine vessels over 65 ft. in length as covered by the Electrical Engineering Regulations of the United States Coast Guard, Subchapter J, CG-259, (46 CFR Parts 110-113).

The Electrical Engineering Regulations of the United States Coast Guard classify marine type equipment as "Non-Watertight," "Drip-proof," or "Watertight."

Some industrial control equipment incorporates neutrals factory bonded to the frame or enclosure. Such units are marked "Suitable Only For Use As Service Equipment."

Open type across-the-line starters designed only for use in panelboards or dead front switchboards employ Listing Marks with the product identity "INDUSTRIAL CONTROL EQUIPMENT FOR USE IN PANELBOARDS AND DEAD FRONT SWITCHBOARDS" or "IND. CONT. EQ. FOR USE IN PANELBOARDS AND DEAD FRONT SWITCHBOARDS."

For other than industrial control panels, and unless indicated otherwise in the general information for the following subcategories, enclosed type product Listing Marks contain the product identity "INDUSTRIAL CONTROL EQUIPMENT" or the abbreviation "IND. CONT. EQ." on the enclosure, or the product identity "INDUSTRIAL CONTROL EQUIPMENT ENCLOSED" on the mechanism mounted within the enclosure. In either case, the Listing Mark indicates that the overall product with its enclosure is Listed.

Enclosures for use with open type products employ Listing Marks with the product identification "Enclosure For Industrial Control Equipment" or "Enclosure For Ind. Cont. Eq." and are marked to specify the Listed open type products to be installed within. Look for a Listing Mark on both the enclosure and the open mechanism.

For industrial control panels, one of the following product identities appears on the Listing Mark: "Open Industrial Control Panel", "Industrial Control Panel Enclosure", "Enclosed Industrial Control Panel".

The "Enclosed Industrial Control Panel" Listing Mark covers both the enclosure and the panel provided with it. Open panels employ the "Open Industrial Control Panel" Listing Mark. The "Industrial Control Panel Enclosure" Listing Mark covers only the enclosure; the compatibility of the enclosure and the installed equipment and associated wiring has not been investigated unless an "Enclosed Industrial Control Panel" Listing Mark is also present.

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