

Features

- Prevents accidental application of power.
- Provides positive manual control for opening contacts.
- Provides magnetic control for remote opening of contacts.
- Trip-free opening of power contacts.
- Available in a wide range of ampere ratings.
- Contacts are silver-faced.
- Utilized Euclid standard high quality magnetic contactors.
- Totally front connected.
- Flange type operating handle has positive “On” and “Off” position.
- Provides for “Off” position padlocking.
- Housed in NEMA Type 12 or 3R enclosures.
- JIC Door interlock.

Description

The Manual-Magnetic Disconnect Switches are combination manually and magnetically operated contactors enclosed in a NEMA Type wall-mounted or floor-mounted enclosure.

The contactors for the disconnect switches are the same as the contactors used on Euclid’s crane and mill type magnetic controllers. Silver faced contacts are standard.

All external connections to the contactor panel are made on the front of the panel. The incoming line terminals are located at the top and the load terminals are located on the bottom of the contactor mounting panel. Control circuit wiring connections are made on the side of the panel.

Auxiliary contacts give a choice of two indicating light circuits.

NEMA type 12 enclosures are standard. NEMA Type 3R (weather resistant) enclosures are also available. Both AC and DC type switches range from 100 to 2700 amperes, 8 hour open rating.

Application

Crane specifications usually call for two disconnect switches, one mounted where the operator enters and leaves the crane and the other installed in the cab itself allowing for the disconnecting in an emergency.

Euclid™ Type 4245 manual-magnetic disconnect switches combine the two features into one unit mounted on the foot walk with a remote “On-Off” pushbutton station permitting control from the cab. With the manual operating lever in the “Off” position, the power contacts cannot be made to close electrically or forced closed manually, thus providing reliable power isolation.

Manual-magnetic disconnect switches are used to disconnect AC or DC power from crane motors or other motor drives under loaded conditions in the case of emergency or as a general disconnect switch.

NOTE: When applied to cranes or other intermittent service applications, the continuous ampere rating shall not be less than 50% of the total current required by all motors, nor less than 75% of the current required by any single motion.



Specifications

Manual-Magnetic DC disconnect switches have two normally open main power contacts; the AC type has three normally open main power contacts.

The power contacts are silver-faced for reliable operation.

The disconnect switch operates as a remote mainline contactor with manual disconnect feature. For either the AC or DC type switch, the contactor coil circuit is arranged for remote closing and opening of the main power contacts once the operating handle has been placed in the “On” position.

Three padlocks can be applied with the manual operator in the “Off” position. This prevents accidental applications of power to the crane.

AVAILABLE OPTIONS

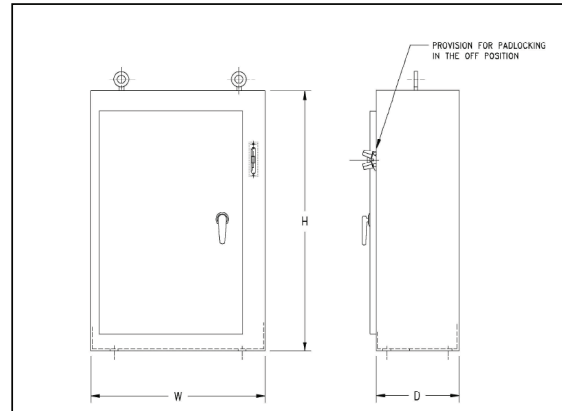
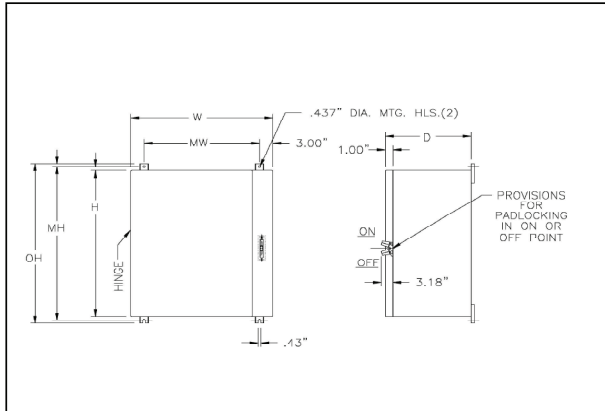
- Overload relays
- Power fuses
- Flange mounted pushbuttons and/ or indicating lights
- Arc suppressors
- NEMA Type 4 or 4X enclosures
- Interface relay

Hubbell Industrial Controls, Inc.
**EUCLID™ MANUAL-MAGNETIC
DISCONNECT SWITCH**
AC AND DC 100 AMP TO 2700 AMP

SPECIFICATIONS

4245

March 2008
Replaces January 2001



APPROXIMATE DIMENSIONS FOR STD. DISCONNECTS							
AC AND DC MANUAL-MAGNETIC		H	W	D	MH	MW	OH
3	100 AMP	35"	29"	15"	36.25"	23"	37.75
4	150 AMP	35"	29"	15"	36.25"	23"	37.75
5	300 AMP	50"	33"	15"	51.25"	27"	52.75
5A	400 AMP	50"	33"	15"	51.25"	27"	52.75
6	600 AMP	70"	44"	24"	Floor Mounted		
7	900 AMP	70"	44"	24"	Floor Mounted		
8	1350 AMP	70"	44"	24"	Floor Mounted		
77	1800 AMP	74"	72"	25"	Floor Mounted		
88	2700 AMP	74"	72"	25"	Floor Mounted		

Note: options may change height dimensions

DC Manual Magnetic Disconnect Switch
Typical circuit for 230/250 V DC

AC Manual Magnetic Disconnect Switch
Typical circuit for 240/480V AC, 3Ph