

Material Handling applications

Material handling applications are comprised of moveable items of machinery such as conveyors, stackers, loaders, hoppers, industrial trucks, and elevators.



**Fast
Facts**

Enclosed Switches

Disconnect Switches in Material Handling Applications

Disconnect Switches are used in a variety of Material Handling applications:

- as branch circuit devices for OSHA Lock Out/Tag Out
- as branch circuit devices for NEC required motor disconnects
- as main disconnects in Material Handling system control panels

The most common application of disconnect switches in the material handling industry is in conveyor systems.

Conveyor systems:

- are powered by multiple motors, typically rated 30kW and below
- require a disconnect means within sight of each motor to comply with NEC
- require Lock Out/Tag Out for maintenance or service as directed by OSHA

Environmental Ratings

ABB's enclosed switches are available in a variety of NEMA ratings in both metallic and polycarbonate plastic enclosures. Of special interest to the material handling industry are the NEMA 1 and NEMA 12 enclosures to protect against limited amounts of falling dirt, circulating dust, or dripping non-corrosive liquids.

OSHA Lock Out/Tag Out

ABB's UL508 non-fusible enclosed switches are suitable for use as OSHA Lock Out Tag Out devices. ABB selector, pistol grip, and optional direct mount handles are padlockable and provide clear position indication—both important features and requirements for Lock Out/Tag Out applications.

Motor Disconnects

ABB's UL508 listed non-fusible switches are designed to meet National Electric Code, Article 430-102, requiring a disconnect means, located within sight from the motor location and the machinery location. Motor rated switches are available as open-style components or as enclosed assemblies in metal or polycarbonate enclosures.

ABB



Metallic

- The metallic line of UL508 disconnects, extending from 16 to 40 amps, offers a 7x5x3 dimensional design to lower profile, reduce footprint, and simplify wiring
- The 60 to 80 amp product is housed in a 10x8x5 enclosure
- Standard product includes a 3 pole switch in a metallic enclosure with black pistol grip handle.

UL general purpose amp rating	Catalog number	Catalog number	Catalog number	Catalog number	Catalog number
	16	NF161-3PB6C	NF163-3PB6C	NF164-3PB6A	NF16X-3PB6C
	25	NF251-3PB6C	NF253-3PB6C	NF254-3PB6A	NF25X-3PB6C
	40	NF321-3PB6C	NF323-3PB6C	NF324-3PB6A	NF32X-3PB6C
	60	NF451-3PB6B	NF453-3PB6B	NF454-3PB6B	NF45X-3PB6B
	80	NF631-3PB6A	NF633-3PB6A	NF634-3PB6A	NF63X-3PB6A

For red/yellow handles, substitute PB with PY. For 4 pole or 6 pole options, substitute 3P with 4P or 6P accordingly

Plastic

- The eOT series of enclosed manual motor controllers are rotary operated, 3 pole, 600VAC HP rated switches, housed in thermoplastic/polycarbonate enclosures.
- Product line includes 16 through 80 amp solutions
- eOTs are available as standard with black or red/yellow handles and with or without 1 N.O. auxiliary contact
- Field installable 4th poles and additional auxiliary contacts are available



NEMA 3R/12					NEMA 4/4X				
Handle Type	Handle Color	Amp Rating	Auxiliary Contacts	Catalog number	Handle Type	Handle Color	Amp Rating	Auxiliary Contacts	Catalog number
Selector	Black	16	--	EOT16U3P3-S	Pistol	Black	16	--	EOT16U3P4-P
Selector	Black	40	--	EOT32U3P3-S	Pistol	Black	40	--	EOT32U3P4-P
Selector	Black	60	--	EOT45U3P3-S	Pistol	Black	60	--	EOT45U3P4-P
Pistol	Black	80	--	EOT63U3P3-P	Pistol	Black	80	--	EOT63U3P4-P
Selector	Black	16	1 NO	EOT16U3P3-1S	Pistol	Black	16	1 NO	EOT16U3P4-1P
Selector	Black	40	1 NO	EOT32U3P3-1S	Pistol	Black	40	1 NO	EOT32U3P4-1P
Selector	Black	60	1 NO	EOT45U3P3-1S	Pistol	Black	60	1 NO	EOT45U3P4-1P
Pistol	Black	80	1 NO	EOT63U3P3-1P	Pistol	Black	80	1 NO	EOT63U3P4-1P
Selector	Red/Yellow	16	--	EOT16U3P3-S1	Pistol	Red/Yellow	16	--	EOT16U3P4-P1
Selector	Red/Yellow	40	--	EOT32U3P3-S1	Pistol	Red/Yellow	40	--	EOT32U3P4-P1
Selector	Red/Yellow	60	--	EOT45U3P3-S1	Pistol	Red/Yellow	60	--	EOT45U3P4-P1
Pistol	Red/Yellow	80	--	EOT63U3P3-P1	Pistol	Red/Yellow	80	--	EOT63U3P4-P1
Selector	Red/Yellow	16	1 NO	EOT16U3P3-1S1	Pistol	Red/Yellow	16	1 NO	EOT16U3P4-1P1
Selector	Red/Yellow	40	1 NO	EOT32U3P3-1S1	Pistol	Red/Yellow	40	1 NO	EOT32U3P4-1P1
Selector	Red/Yellow	60	1 NO	EOT45U3P3-1S1	Pistol	Red/Yellow	60	1 NO	EOT45U3P4-1P1
Pistol	Red/Yellow	80	1 NO	EOT63U3P3-1P1	Pistol	Red/Yellow	80	1 NO	EOT63U3P4-1P1

