



BULLETIN 500 LINE COMBINATION STARTER

In Nema Type 4X Corrosion Resistant Enclosures

SAMPLE SPECIFICATIONS

1.0 Enclosure

- 1.1 Manufactured of a thermoset, fiberglass-reinforced, corrosion resistant, polyester material (FRP).
 - 1.1.1 Designed to withstand effects of exposure to most commonly found chemicals in industrial processes, moisture, and ultraviolet light.
 - 1.1.2 Low thermal conductivity to minimize internal condensation.
- 1.2 316 grade stainless steel cover screws.
- 1.3 Synthetic rubber gasket between the cover and base.
- 1.4 External reset assembly.
 - 1.4.1 Gasketed.
 - 1.4.2 "O" ring seal plus boot to seal moving assembly.
 - 1.4.3 Non-metallic mounting ring.
- 1.5 FRP door hinges with lift-off design.
- 1.6 Provision for padlocking door.
- 1.7 Door interlock.
 - 1.7.1 Tool required for entry with disconnecting means closed.
 - 1.7.2 Deliberate action needed to close disconnecting means with door open.
- 1.8 Disconnecting means operating mechanism.
 - 1.8.1 FRP handle.
 - 1.8.2 Handle mechanism engagement with disconnecting means not affected by door position.
 - 1.8.3 Handle lockable in "OFF" position with up to three padlocks; may be modified to lock in "ON" position with one padlock.
- 1.9 Corrosion resistant conduit hubs included. Grounding bushings available as standard catalog listed devices.

Starter Size	Hub (conduit connector)	
	Size	No. Included
0-1	3/4"	1
	1"	2
2	1/4"	1
	1 1/4"	2
3	3/4"	1
	1 1/2"	2
4	3/4"	1
	2 1/2"	2
5	3/4"	1
	3"	2

1.10 Ground straps.

- 1.10.1 Provides means to ground starter assembly.
- 1.10.2 Starter assembly can be removed without disconnecting ground wires.

2.0 Disconnecting Means.

2.1 Disconnect Switch.

- 2.1.1 Heavy duty horsepower rated device.
- 2.1.2 Visible blades.
- 2.1.3 Fuse clips available for Class H, J, K or R fuses.
- 2.1.4 Accepts two single circuit auxiliary contacts.
- 2.1.5 Line terminal guard.
- 2.1.6 Direct acting mechanical linkage between handle and switch.

2.2 Circuit Breaker.

- 2.2.1 Molded case instantaneous type magnetic trip standard.
- 2.2.2 Thermal-magnetic, inverse timer breakers optional.
- 2.2.3 Current limiter attachments optional.

3.0 Magnetic Motor Starters.

3.1 Contactor.

- 3.1.1 Vertical Lift — Gravity Dropout.
- 3.1.2 Double-Break cadmium oxide silver contacts.
- 3.1.3 Prominent "ON-OFF" indicator on front.
- 3.1.4 Accepts up to 8 auxiliary contacts including hold-in contact.

3.2 Overload Relays.

- 3.2.1 Three pole block style relay.
- 3.2.2 Eutectic alloy type.
- 3.2.3 Manual Reset with "trip-free" operation.
- 3.2.4 Tamper-proof provisions: Non-adjustable and not convertible from manual to automatic reset.
- 3.2.5 Optical trip indicator.
- 3.2.6 Test module to allow opening of N.C. contact.
- 3.2.7 N.O. alarm circuit contact may be field added.

4.0 Accessories — Factory of Field Mounted.

4.1 Pilot devices.

- 4.1.1 Mount in cover or flange.
- 4.1.2 NEMA Type 4X rated.
- 4.1.3 Catalog listed for separate control stations and custom panels.
- 4.1.4 Use same contact blocks as standard NEMA Type 13 "oiltight" units.

4.2 Control Circuit Transformers.

4.2.1	Starter Size	Standard Transformer Size
	0-1-2	75 V.A.
	3	200 V.A.
	4	250 V.A.
	5	350 V.A.

4.2.2 Tapped holes standard for field installation of either standard or 100 watt extra capacity.

5.0 Industry Standards Compliances.

5.1 Disconnect Switch Type.

5.1.1 U.L. listed with Class R fuse clips for use on systems having 100,000 amperes available.

5.2 Circuit Breaker Type.

5.2.1 U.L. listed with standard magnetic trip breaker for use on systems having 22,000 amperes available.

5.2.2 U.L. listed with optional current limiters for use on systems having 100,000 amperes available — sizes 0 through 3.

