

MOTOR STARTER

XCBS: Explosionproof Combination Motor Starter Enclosures/Assemblies

FEATURES

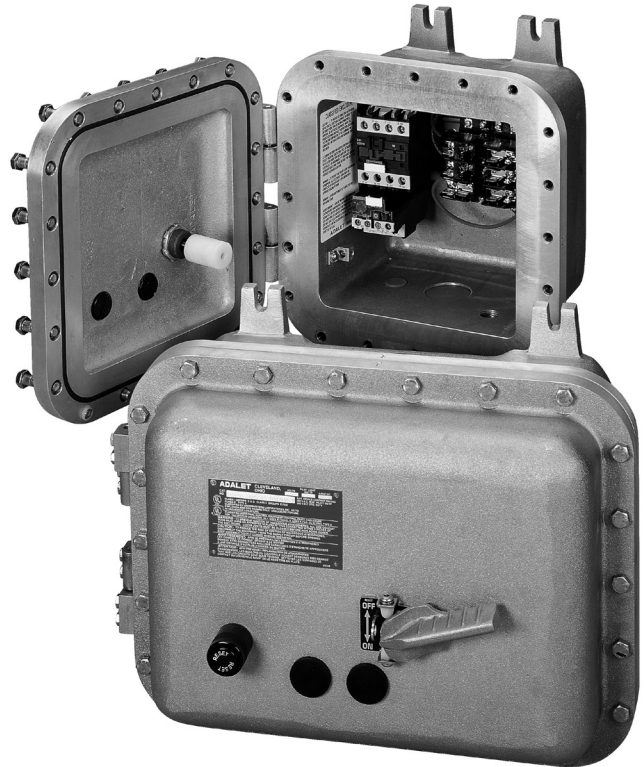
- Motor starters are reversing or non-reversing and are rated 5HP to 200HP
- Circuit breakers are thermal magnetic type and are rated from 15A to 800A
- Through the door mechanical reset button and circuit breaker handle
- Aluminum hinge with stainless steel hardware
- Padlockable handle
- Galvanized steel inner mounting panel
- One-piece, NEMA 4 water-tight gasket
- Premium, high-strength stainless steel captive cover bolts
- Internal grounding provisions
- Cast-on mounting feet
- Tumbblast surface preparation for uniform, natural, aluminum finish
- Standard drilled & tapped conduit configurations

DESIGN OPTIONS

- Aluminum (XSA) inner mounting panels
- Non-removable hinges
- Customer specified drilling and tapping
- Installation of operators and auxiliary devices
- Custom machining – milling, counter-boring, spot-facing, blind-tapped holes, e
- Installation and wiring of internal terminal blocks and control components
- UL Listed NNNY populated / wired control panels
- Multiple coating options for additional corrosion resistance
- Captive cover bolts
- Quad-lead cover bolts
- Auxiliary switches, breather/drain, shunt trip, under-voltage release

MATERIAL

- Enclosures cast from proprietary 359 aluminum alloy
- Standard stainless steel cover bolts are 316L
- XSM panels are #12 gauge galvanized steel (.108" thick)
- XSA panels are #10 gauge aluminum (.100 thick)
- Hinge blocks are 359 aluminum, pins and hardware are 303 stainless steel



Certifications

Class I, Divisions 1 and 2, Groups B*, C, and D
 Class II, Divisions 1 and 2, Groups E, F, and G
 Class III
 NEMA Type 4X, 7, and 9

UL 1203/CSA C22.2 No. 30
 UL50
 UL1604



*Group B available without N4 option, consult factory if gas Group B is required.

Explosionproof Combination Motor Starters

(Enclosure only - does not include breaker or starter)

*COMBINATION FULL VOLTAGE NON-REVERSING STARTERS

Max Starter NEMA Size	Std. Breaker Frame Size	Enclosure
0 & 1	100	XCBSAQ-N4
2	100	XCBSBQ-N4
3	100	XCBSLQ-N4
4	225/250	XCBSMQ-N4
5	400	XCBSN-N4

*COMBINATION FULL VOLTAGE FULL REVERSING STARTERS

Max Starter NEMA Size	Std. Breaker Frame Size	Enclosure
0 & 1	100	XCMRSG-N4
2	100	XCMRSK-N4
3	100	XCMRSP-N4

*ACROSS THE LINE FULL VOLTAGE NON-REVERSING STARTERS

Max Starter NEMA Size	Enclosure
0 & 1	XMSB-N4
2	XMSD-N4
3 & 4	XMSH-N4
5	XMSQ-N4

*ACROSS THE LINE FULL VOLTAGE REVERSING STARTERS

Starter NEMA Size	Enclosure
0 & 1	XMRSC-N4
2	XMRSF-N4
3 & 4	XMRSO-N4

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Combination Motor Starter Enclosures

Full Voltage Non-Reversing (includes breaker and starter)

240 VOLT AC MOTOR - Thermal Magnetic Breaker*/120V AC Coil

Maximum HP	Nema Size	Catalog Number
2	0	XCBSAQ-N4-2015
3	0	XCBSAQ-N4-2020
5	1	XCBSAQ-N4-2130
7 ½	1	XCBSAQ-N4-2150
10	2	XCBSBQ-N4-2270
15	2	XCBSBQ-N4-22100
20	3	XCBSLQ-N4-23100
30	3	XCBSLQ-N4-23125
40	4	XCBSMQ-N4-24175
50	4	XCBSMQ-N4-24200
60	5	XCBSN-N4-25225
75	5	XCBSN-N4-25300
100	5	XCBSN-N4-25400

480 VOLT AC MOTOR - Thermal Magnetic Breaker*/120V AC Coil

Maximum HP	Nema Size	Catalog Number
2	0	XCBSAQ-N4-4015
5	0	XCBSAQ-N4-4020
10	1	XCBSAQ-N4-4130
25	2	XCBSBQ-N4-4270
30	3	XCBSLQ-N4-4370
50	3	XCBSLQ-N4-43100
75	4	XCBSMQ-N4-44175
100	4	XCBSMQ-N4-44200
125	5	XCBSN-N4-45225
150	5	XCBSN-N4-45300
200	5	XCBSN-N4-45400

600 VOLT AC MOTOR - Thermal Magnetic Breaker*/120V AC Coil

Maximum HP	Nema Size	Catalog Number
2	0	XCBSAQ-N4-6015
5	0	XCBSAQ-N4-6020
10	1	XCBSAQ-N4-6130
25	2	XCBSBQ-N4-6250
30	3	XCBSLQ-N4-6370
50	3	XCBSLQ-N4-63100
75	4	XCBSMQ-N4-64125
100	4	XCBSMQ-N4-64175
125	5	XCBSN-N4-65200
150	5	XCBSN-N4-65225
200	5	XCBSN-N4-65400

480/600 VOLT AC MOTOR - MCP*/120V AC Coil

Maximum HP	Nema Size	Catalog Number
1	0	XCBSAQ-N4-M6003
2	0	XCBSAQ-N4-M6007
5	0	XCBSAQ-N4-M6015
10	1	XCBSAQ-N4-M6130
25	2	XCBSBQ-N4-M6250
50	3	XCBSLQ-N4-M63100
100	4	XCBSMQ-N4-M64150
200	5	XCBSN-N4-M65400

* Trip rating is last 2-3 digits of catalog number

NOTE Overload Heaters Not Included. See Options.

Combination Motor Starter Enclosures

Full Voltage Reversing (includes breaker and starter)

240 VOLT AC MOTOR - Thermal Magnetic Breaker*/120V AC Coil

Maximum HP	Nema Size	Catalog Number
2	0	XCMRSG-N4-2015
3	0	XCMRSG-N4-2020
5	1	XCMRSG-N4-2130
7 ½	1	XCMRSG-N4-2150
10	2	XCMRSK-N4-2270
15	2	XCMRSK-N4-22100
20	3	XCMRSP-N4-23100
30	3	XCMRSP-N4-23125

480 VOLT AC MOTOR - Thermal Magnetic Breaker*/120V AC Coil

Maximum HP	Nema Size	Catalog Number
2	0	XCMRSG-N4-4015
5	0	XCMRSG-N4-4020
10	1	XCMRSG-N4-4130
25	2	XCMRSK-N4-4270
40	3	XCMRSP-N4-43100
50	3	XCMRSP-N4-43125

600 VOLT AC MOTOR - Thermal Magnetic Breaker*/120V AC Coil

Maximum HP	Nema Size	Catalog Number
2	0	XCMRSG-N4-6015
5	0	XCMRSG-N4-6020
10	1	XCMRSG-N4-6130
25	2	XCMRSK-N4-6250
50	3	XCMRSP-N4-63100

NOTE Overload Heaters Not Included. See Options

480/600 VOLT AC MOTOR - MCP*/120V AC Coil

Maximum HP	Nema Size	Catalog Number
1	0	XCMRSG-N4-M6003
2	0	XCMRSG-N4-M6007
5	0	XCMRSG-N4-M6015
10	1	XCMRSG-N4-M6130
25	2	XCMRSK-N4-M6250
50	3	XCMRSP-N4-M63100
100	4	XCMRSP-N4-M64150

* Trip rating is last 2-3 digits of catalog number

MOTOR STARTER

Options, Dimensions and Ordering Instructions

FUSIBLE DISCONNECT SWITCHES

Description	Suffix	AVAILABLE ON		
		Combination Starter	Non-Comb Starter	Universal Enclosure Only
Start/Stop Dual Pushbutton (1NO Start, 1NC Stop)	A	.	.	.
Green Start Pushbutton (1NO)	A1	.	.	.
Red Stop Pushbutton (1NC)	A2	.	.	.
Red Stop Pushbutton, Mushroom Head (1NC)	A3	.	.	.
Black Pushbutton (1NO, 1NC)	A4	.	.	.
Auxiliary Switch on Breaker (1A and 1B Contacts)	AS1	.	.	.
Auxiliary Switch on Breaker (2A and 2B Contacts)	AS2	.	.	.
Hand-Off-Auto Selector Switch	B	.	.	.
Selector Switch (2-Position) (1NO, 1NC)	B1	.	.	.
Bell Alarm Switch on Breaker (Specify No. of Contacts)	BA	.	.	.
Indicator Light with Guard 120 Volt AC (-See Color Table)	CG1*	.	.	.
Push-to-Test Light 120 Volt AC (1NO, 1NC) (-See Color Table)	CP1*†	.	.	.
Breather/Drain Installed in Bottom	E\$.	.	.
Breather and Drain Installed	EE\$.	.	.
Auxiliary Contacts on Starter (+NO, -NC) (Specify No. of Contacts)	G (+ -)	.	.	.
Time Delay Relay-On Delay (Specify Range)	H1	.	.	.
Time Delay Relay-Off Delay (Specify Range)	H2	.	.	.
8-Point Terminal Strip	K	.	.	.
Epoxy Coating External Only (Specify Color)	L1	.	.	.
Epoxy Coating External and Internal (Specify Color)	L2	.	.	.
Lamacoid Nameplate (Specify Legend)	NP	.	.	.
Overload Heaters (Specify Full Load Amps)	OL	.	.	.
Control Relay (Description Required)	R	.	.	.
Space Heater (Specify Wattage)	S	.	.	.
Shunt Trip on Breaker (Specify Voltage)	ST	.	.	.
50 VA Control Transformer 480V Pri, 120V Sec. W/Fuse Block	T1F	.	.	.
100 VA Control Transformer 480V Pri, 120V Sec. W/Fuse Block	T2F	.	.	.
150 VA Control Transformer 480V Pri, 120V Sec. W/Fuse Block	T3F	.	.	.
200 VA Control Transformer 480V Pri, 120V Sec. W/Fuse Block	T4F	.	.	.
250 VA Control Transformer 480V Pri, 120V Sec. W/Fuse Block	T5F	.	.	.
300 VA Control Transformer 480V Pri, 120V Sec. W/Fuse Block	T6F	.	.	.
Other Control Transformer (Specify VA, Pri. And Sec.)	T7	.	.	.
Undervoltage Release on Breaker (Specify Voltage Rating)	UV	.	.	.
Internal Control Wiring	W	.	.	.
Other (Specify)	Z	.	.	.

COLOR TABLE

R-Red
G-Green
A-Amber
B-Blue
C-Clear
W-White

† Not available in Group B applications.
\$ for Group B applications add 'H' to suffix

ORDERING INSTRUCTIONS

To order any motor control product, use the catalog number followed by the suffix numbers separated by dashes.

Example: XCBSAQ-N4-4130-A-C1R

Combination starter with 480 volt, 30 amp thermal magnetic breaker, NEMA size 1 starter with 120 volt AC coil, start/stop dual pushbutton installed in cover, red 120 volt pilot light installed in cover.

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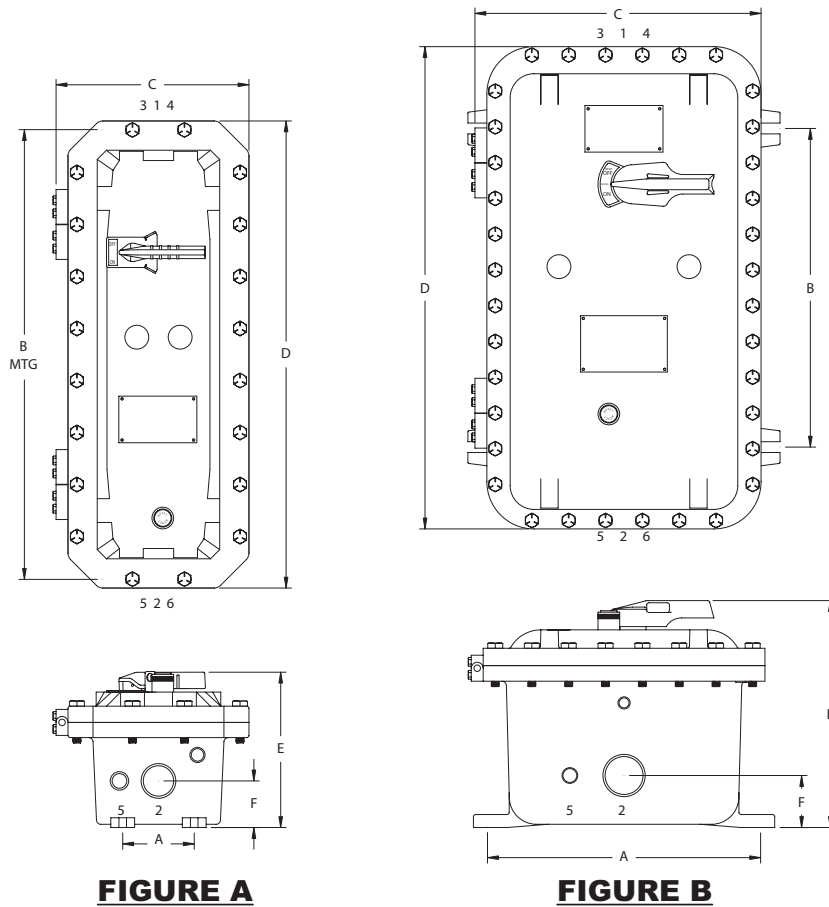


FIGURE A

FIGURE B

EXPLOSIONPROOF
Motor Control

NOMINAL DIMENSIONS													
Enclosure	Fig #	Nominal Inside Dimensions			Nominal Dimensions in Inches							Ship Weight (lbs.)	Conduit Size
		W	L	D	A	B	C	D	E	F	G		
*XCBSAQ-N4	A	6	23	5	4 1/8	25 1/2	11 1/8	26 1/16	9 1/16	2 1/2	3 & 5	61	1 1/2
*XCBSBQ-N4	A	7	27	6	4 3/4	29 7/8	11 13/16	31 1/8	10 1/2	2 13/16	3 & 5	87	1 1/2
XCBSLQ-N4	B	12	24	8	15 3/4	18 3/8	16 15/16	28 1/4	12 5/16	3	3 & 5	160	2
XCBSMQ-N4	B	12	36	8	15 3/4	29	16 15/16	40 1/4	13 3/8	3 5/8	3 & 5	260	2 1/2
XCBSN-N4	B	16	46	10	19 3/4	39	21 3/4	50 7/8	16 7/16	4 7/8	3 & 5	420	4
XCMRSG-N4	B	12	18	8	15 3/4	14 1/8	17	22 1/4	12 5/8	2 13/16	3 & 6	100	1 1/4
XCMRSK-N4	B	12	24	6	15 3/4	18 3/8	17	28 1/4	10 15/16	3 5/16	3 & 5	130	2
XCMRSP-N4	B	18	36	8	21 3/4	29	23 3/4	40 7/8	14 3/4	4 1/8	3 & 5	395	2

Standard conduit openings at locations 1 and 2, control circuit opening 3/4" NPT at locations shown in column "G".
Each housing has one 1/2" NPT top & bottom for breather and drain.

* Mounting feet on top and bottom.