

STARTERS EXB70 SERIES



EXB70

Empty Enclosure

NEC / CEC Certifications

Class I, Groups B, C & D

Class I, Zone 1 IIB+H2

Class II, Groups E, F & G

Class III

Type 3, 4, 4X

Ta = -0°C to +50°C (UL & CSA)

Files E83969

File LR11716 - 1723354

ATEX Certificate

II 2 G D CE 2813

Ex d IIB+H2 T6

Ex tD A21 IP66 T80°C

Ta = -0°C to +50°C

PTB 07ATEX 1024

IEC Ex Certificate

Ex db IIB+H2 Gb

Ex tb IIIC Db IP66 T85°C

Ta = -0°C to +50°C

IECEx QPS 17.0014X

FEATURES-SPECIFICATIONS

The EXB70 Series is offered with the ABB brand AF contactor / TF overload relay, XT circuit breakers and motor circuit protectors.

Features

- Copper free cast aluminum construction. High in strength, lighter in weight, corrosion resistant
- Stainless steel metric cover bolts
- Cover o-ring supplied as standard for TYPE 4X and IP66 applications.
- Starters supplied with hinged covers as standard
- Bi-directional bolt on mounting lugs made from a ductile aluminum alloy which will adjust to irregular surfaces without causing damage to the casting.
- Starter only supplied as standard with a manual reset button and two future control operator openings with plugs.
- Combination starter supplied as standard with a manual reset button, through the door circuit breaker handle and two future control operator openings with plugs.
- Each starter comes with three NPT conduit openings in both the top and in the bottom allowing for power, control and drain/breathers.
- The EXB70 can be ordered with custom sizes and quantity of holes both in NPT and metric.
- Additional control operators can be supplied along with addition future operator openings.

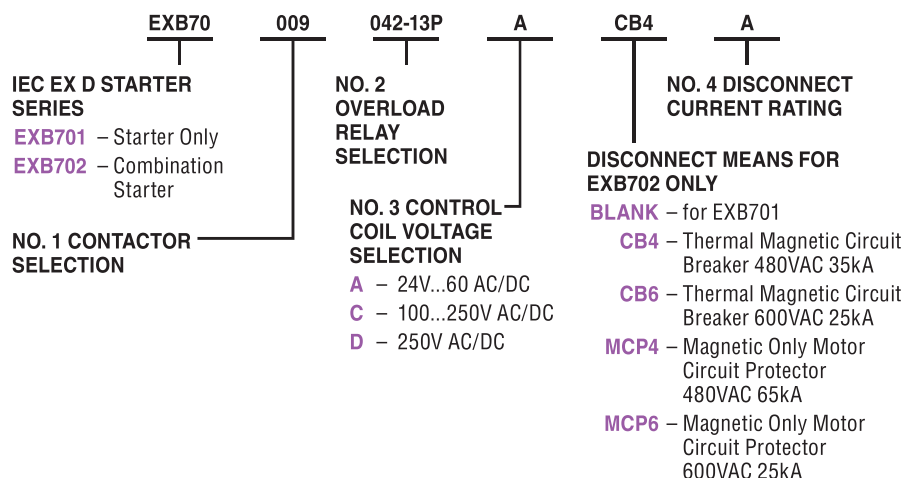
Materials

- **BOX & COVER:** Cooper free aluminum (less than 1% of 1%)
- **FINISH:** Aluminum lacquer paint – Grey
- **O-RING GASKET MATERIAL:** Nitrile (BUNA-N) compound
- Stainless steel, A2, cover screw.
- **CB/MCP HANDLE** – Copper free aluminum
- **RESET OPERATOR** – Thermoplastic polyester button molded onto stainless steel shaft. Aluminum shroud, black anodized.

Electrical Rating

- Single Speed Full Voltage Non-Reversing
- 3 Phase 600VAC/690VAC 50/60Hz Coil Voltage
- 24V AC/DC through 500V AC/DC

CATALOG LOGIC





STARTERS

EXB70 SERIES

No. 1 – Contactor Selection

	009		012		016		026		030		040		052		065		096		116		140	
UL / CSA RATINGS	HP	AMPS	HP	AMPS	HP	AMPS	HP	AMPS	HP	AMPS	HP	AMPS	HP	AMPS	HP	AMPS	HP	AMPS	HP	AMPS	HP	AMPS
120 VAC - 1Phase	0.75	13.8	1	16	1.5	20	2	24	2	24	3	34										
240 VAC - 1Phase	1.5	10	2	12	3	17	3	17	5	28	7.5	40										
200 - 208 VAC - 3Phase	2	7.8	3	11	5	17.5	7.5	25.3	10	32.2	10	32.2	15	48.3	20	62.1	30	92	30	92	40	120
220 - 240 VAC - 3Phase	2	6.8	3	9.6	5	15.2	7.5	22	10	28	15	42	20	54	25	68	30	80	40	104	50	130
440 - 480 VAC - 3Phase	5	7.6	7.5	11	10	14	15	21	20	27	30	40	40	52	50	65	60	77	75	96	100	124
550 - 600 VAC - 3Phase	7.5	9	10	11	10	17	20	22	25	27	40	41	50	52	60	62	75	77	100	99	125	125
IEC RATINGS	KW	AMPS	KW	AMPS	KW	AMPS	KW	AMPS	KW	AMPS	KW	AMPS	KW	AMPS	KW	AMPS	KW	AMPS	KW	AMPS	KW	AMPS
220 - 240 VAC - 3Phase	2.2	9	3	12	4	18	6.5	26	9	33	11	40	15	53	18.5	65	25	96	30	116	37	140
380 - 400 VAC - 3Phase	4	9	5.5	12	7.5	18	11	26	15	32	18.5	40	22	53	30	65	45	96	55	116	75	140
415 VAC - 3Phase	4	9	5.5	12	9	18	11	26	15	32	22	40	30	53	37	65	55	96	55	116	75	140
440 VAC - 3Phase	4	9	5.5	12	9	18	15	26	18.5	32	22	40	30	53	37	65	55	96	75	116	90	140
500 VAC - 3Phase	5.5	9.5	7.5	12.5	9	15	15	23	18.5	28	22	35	30	45	37	55	55	80	75	110	90	130
690 VAC - 3Phase	5.5	7	7.5	9	9	10.5	15	17	18.5	21	22	25	30	35	37	39	55	57	55	65	75	80
See Overload Relay Selection Chart	042-											065-					096-		140-			

No. 2 – Overload Relay Selection

042-				065-			
SELECTION	AMP SETTING RANGE			SELECTION	AMP SETTING RANGE		
042- .13	0.10	to	0.13	065- 28	22.0	to	28.0
042- .17	0.13	to	0.17	065- 33	25.0	to	33.0
042- .23	0.17	to	0.23	065- 40	30.0	to	40.0
042- .31	0.23	to	0.31	065- 47	36.0	to	47.0
042- .41	0.31	to	0.41	065- 53	44.0	to	53.0
042- .55	0.41	to	0.55	065- 60	50.0	to	60.0
042- .74	0.55	to	0.74	065- 67	57.0	to	67.0
042- 1.0	0.74	to	1.00	096-			
042- 1.3	1.00	to	1.30	SELECTION AMP SETTING RANGE			
042- 1.7	1.30	to	1.70	096- 51	40.0	to	51.0
042- 2.3	1.70	to	2.30	096- 60	48.0	to	60.0
042- 3.1	2.30	to	3.10	096- 68	57.0	to	68.0
042- 4.2	3.10	to	4.20	096- 78	65.0	to	78.0
042- 5.7	4.20	to	5.70	096- 87	75.0	to	87.0
042- 7.6	5.70	to	7.60	096- 96	84.0	to	96.0
042- 10	7.60	to	10.0	140-			
042- 13.0	10.0	to	13.0	SELECTION AMP SETTING RANGE			
042- 16.0	13.0	to	16.0	140- 90.0	66.0	to	90.0
042- 20.0	16.0	to	20.0	140- 110.0	80.0	to	110.0
042- 24.0	20.0	to	24.0	140- 135.0	100.0	to	135.0
042- 29.0	24.0	to	29.0	140- 142.0	110.0	to	142.0
042- 35.0	29.0	to	35.0				

No. 3 – Coil Voltage Code

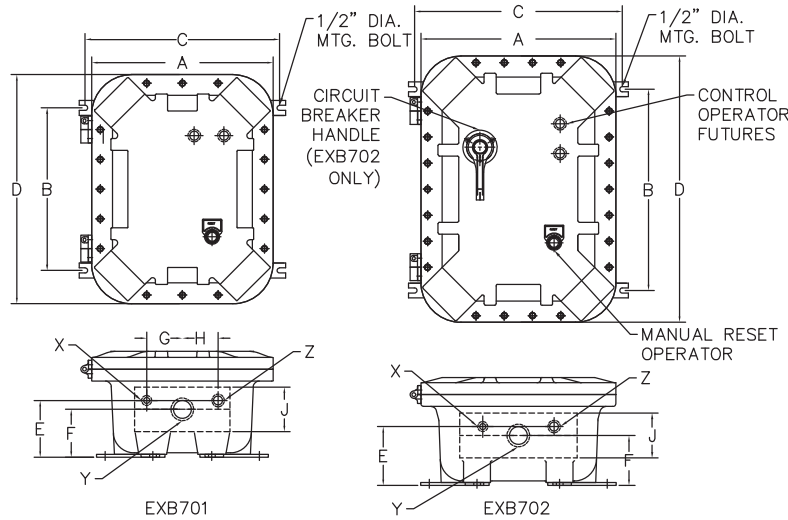
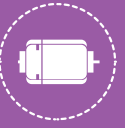
SELECTION	VAC	VDC
A	24 .. 60	24 .. 60
B	48 .. 130	48 .. 130
C	100 .. 250	100 .. 250
D	250 .. 500	250 .. 500

When contactors 009 through 030 are being used with a 24 to 60 VDC control supply voltage add suffix "-DC" to the end of the catalog logic.

No. 4 – BREAKER CODE – EXB702 ONLY

CIRCUIT BREAKER		MOTOR CIRCUIT PROTECTOR	
SELECTION	AMP	SELECTION	AMP
A	15	003	3
B	20	007	7
C	25	015	15
D	30	030	30
E	40	050	50
F	50	070	70
G	60	100	100
H	70	125	125
I	80	150	150
J	90	175	175
K	100	200	200
L	125	225	225
M	150	250	250
N	175		
O	200		
T	250		

STARTERS EXB70 SERIES



EXB70 DIMENSIONS													
CATALOG NUMBER	DIMENSIONS IN. (MM)										CONDUIT OPENINGS TOP & BOTTOM		
	TYPE	A	B	C	D	E	F	G	H	J	X	Y	Z
EXB701009 TO EXB701030	Starter Only	12.38 (314)	8 (203)	9.88 (251)	14.32 (364)	5.04 (128)	3.64 (92)	2.38 (60)	2.38 (60)	9.82 (249)	1/2 NPT	1-1/2 NPT	3/4 NPT
EXB701040 TO EXB701096	Starter Only	15.25 (387)	8.94 (227)	12.94 (329)	19.25 (489)	4.92 (125)	4.04 (103)	3 (76)	3 (76)	10.4 (264)	1/2 NPT	2 NPT	3/4 NPT
EXB701140	Starter Only	16.38 (416)	18.88 (479)	14.94 (379)	28.38 (721)	7.1 (180)	5.19 (132)	3.94 (100)	3.94 (100)	12.82 (325)	1/2 NPT	3 NPT	3/4 NPT
EXB702009 TO EXB702030	Combination	15.25 (387)	8.94 (227)	12.94 (329)	19.25 (489)	4.92 (125)	4.04 (103)	3 (76)	3 (76)	10.9 (277)	1/2 NPT	1-1/2 NPT	3/4 NPT
EXB702065	Combination	16.38 (416)	12.88 (327)	14.94 (379)	22.38 (568)	5 (127)	4.13 (105)	3.94 (100)	3.94 (100)	11.06 (280)	1/2 NPT	2 NPT	3/4 NPT
EXB702096 TO EXB702140	Combination	21.25 (540)	19.38 (492)	19.38 (492)	29.25 (743)	7.34 (186)	5.47 (139)	6 (152)	6 (152)	14 (355)	1/2 NPT	3 NPT	3/4 NPT

EXB70 MODIFICATION AND ACCESSORIES					
OPTIONS	DESCRIPTIONS	OPTIONS	DESCRIPTIONS		
EXB7RPL-120	Pilot light 120V - Red	EXB7DBP	Double pushbutton Start - Stop	EXB7CT100-24	Control transformer 100VA 240/480VAC to 24VAC
EXB7GPL-120	Pilot light 120V - Green	EXB72SS	2 position selector switch On-Off	EXB7CT150-24	Control transformer 150VA 240/480VAC to 24VAC
EXB7APL-120	Pilot light 120V - Amber	EXB7SSH0A	3 position selector switch Hand-Off-Auto	EXB7CT200-24	Control transformer 200VA 240/480VAC to 24VAC
EXB7RPL-24	Pilot light 24V - Red	KB1BCEN	Breather installed	EXB7CT250-24	Control transformer 250VA 240/480VAC to 24VAC
EXB7GPL-24	Pilot light 24V - Green	KB1DCEN	Drain installed	EXB7CT300-24	Control transformer 300VA 240/480VAC to 24VAC
EXB7APL-24	Pilot light 24V - Amber	AUX	Auxiliary contact 1NO & 1NC	EXB72SH251	Space heater 25 watts 120 volts
EXB7LPBR	Illuminated pushbutton 120V - Red	EXB7TB	6 point terminal block	EXB72SH252	Space heater 25 watts 240 volts
EXB7LPBG	Illuminated pushbutton 120V - Green	EXB7SF	Epoxy powder paint	EXB72SH254	Space heater 25 watts 480 volts
EXB7LPBA	Illuminated pushbutton 120V - Amber	EXB7CT50	Control transformer 50 VA 240/480VAC to 120VAC	EXB72SH501	Space heater 50 watts 120 volts
EXB7LPBR-24	Illuminated pushbutton 24V - Red	EXB7CT75	Control transformer 75VA 240/480VAC to 120VAC	EXB72SH502	Space heater 50 watts 240 volts
EXB7LPBG-24	Illuminated pushbutton 24V - Green	EXB7CT100	Control transformer 100VA 240/480VAC to 120VAC	EXB72SH504	Space heater 50 watts 480 volts
EXB7LPBA-24	Illuminated pushbutton 24V - Amber	EXB7CT150	Control transformer 150VA 240/480VAC to 120VAC		
EXB7PLR220	Pilot light resistor 220/120V	EXB7CT200	Control transformer 200VA 240/480VAC to 120VAC		
EXB7PLR440	Pilot light resistor 440/120V	EXB7CT250	Control transformer 250VA 240/480VAC to 120VAC		
EXB7PLR550	Pilot light resistor 550/120V	EXB7CT300	Control transformer 300VA 240/480VAC to 120VAC		
EXB7PLXF220	Pilot transformer 220/120V	EXB7CT50-24	Control transformer 50 VA 240/480VAC to 24VAC		
EXB7PLXF440	Pilot transformer 440/120V	EXB7CT75-24	Control transformer 75VA 240/480VAC to 24VAC		