

Circuit & Motor Protection

Manual Motor Protectors & Controllers

PRODUCT SELECTION

XTIEC Manual Motor Protectors

XTPR Rotary Manual Motor Protectors with Screw Terminals — Global Ratings and North American Ratings

Motor Protective Device with Thermal and Magnetic Trip

Rated Uninterrupted Current — $I_u = I_n$ (Amps)	FLA Adjustment Range / Overload Release — I_r (Amps)	Short Circuit Release — I_{rm} (Amps)	Maximum Motor Ratings ①										Catalog Number — Screw Terminals ③
			Maximum kW Rating AC-3 — P (kW)					Maximum hp Rating — P (hp) UL 508 / CSA C 22.2 No. 14					
			3-Phase					3-Phase					
			220 – 240V	380 – 415V	440V	500V	660 – 690V	200V	240V	480V	600V		

Frame B

0.16	0.1 – 0.16	2.2	—	—	—	—	0.06	②	②	②	②	XTPRP16BC1
0.25	0.16 – 0.25	3.5	—	0.06	0.06	0.06	0.12	②	②	②	②	XTPRP25BC1
0.4	0.25 – 0.4	5.6	0.06	0.09	0.12	0.12	0.18	②	②	②	②	XTPRP40BC1
0.63	0.4 – 0.63	8.8	0.09	0.12	0.18	0.25	0.25	②	②	②	②	XTPRP63BC1
1	0.63 – 1	14	0.12	0.25	0.25	0.37	0.55	②	②	1/2	1/2	XTPR001BC1
1.6	1 – 1.6	22	0.25	0.55	0.55	0.75	1.1	②	②	3/4	1	XTPR1P6BC1
2.5	1.6 – 2.5	35	0.37	0.75	1.1	1.1	1.5	1/2	1/2	1	1-1/2	XTPR2P5BC1
4	2.5 – 4	56	0.75	1.5	1.5	2.2	3	1	1	2	3	XTPR004BC1
6.3	4 – 6.3	88	1.1	2.2	3	3	4	1-1/2	1-1/2	3	5	XTPR6P3BC1
10	6.3 – 10	140	2.2	4	4	4	7.5	3	3	7-1/2	10	XTPR010BC1
12	8 – 12	168	3	5.5	5.5	5.5	11	3	3	7-1/2	10	XTPR012BC1
16	10 – 16	224	4	7.5	9	9	12.5	3	5	10	10	XTPR016BC1
20	16 – 20	280	5.5	9	11	12.5	15	5	5	10	15	XTPR020BC1
25	20 – 25	350	5.5	12.5	12.5	15	22	5	7-1/2	15	20	XTPR025BC1
32	25 – 32	448	7.5	15	15	22	30	7-1/2	10	25	30	XTPR032BC1

Frame D

16	10 – 16	224	4	7.5	9	9	12.5	3	5	10	15	XTPR016DC1
25	16 – 25	350	5.5	12.5	12.5	15	22	7-1/2	7-1/2	20	25	XTPR025DC1
32	25 – 32	448	7.5	15	17.5	22	22	10	10	25	30	XTPR032DC1
40	32 – 40	560	11	20	22	24	30	10	15	30	40	XTPR040DC1
50	40 – 50	700	14	25	30	30	45	10	15	30	40	XTPR050DC1
58	50 – 58	812	17	30	37	37	55	—	—	40	—	XTPR058DC1
65	55 – 65	882	18.5	34	37	45	55	—	—	—	—	XTPR063DC1

① Select manual motor protectors by full load amperes. Maximum motor ratings (kW, hp) are for reference only.

② In this range, calculate motor rating according to rated current. Specified values to NEC 430.6(A)(1).

③ Catalog number shown comes with screw terminals. For Frame B devices up to 16A, spring cage terminals are available.

For spring cage terminals on line and load sides, insert a "C" into the catalog number in the 5th position — Example: XTPRC_CBC1.

For spring cage terminals on the load side only, insert an "SC" into the catalog number in the 5th and 6th positions — Example: XTPRSC_CBC1.

Note: Service Factor (SF) — Setting I_r of current scale in dependence of load factor:

$$SF = 1.15 \rightarrow I_r = 1 \times I_n \text{ mot}$$

$$SF = 1 \rightarrow I_r = 0.9 \times I_n \text{ mot}$$

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Manual Motor Protectors & Controllers

PRODUCT SELECTION

XTIEC Manual Motor Protectors

XTPR Manual Self-Protected Motor Starters — North American Ratings, UL 508 Type E ①

Motor Protective Device with Thermal and Magnetic Trip

Rated Uninterrupted Current — I_r (Amps)	FLA Adjustment Range / Overload Release — I_r (Amps)	Short Circuit Release — I_m (Amps)	Maximum Motor Ratings ②				Rated Short-Circuit Breaking Capacity (kA)			Line Side Adapter ①	Manual Motor Protector — Screw Terminals
			Maximum hp Rating — P (hp)				240V	480/277V	600/347V		
			3-Phase								
			200V	240V	480V/277V	600V/247V					
									Catalog Number	Catalog Number	

Frame B

0.16	0.1 – 0.16	2.2	③	③	1/2	1/2	50	50	50	XTPAXLSA	XTPRP16BC1
0.25	0.16 – 0.25	3.4	③	③	1/2	1/2	50	50	50	XTPAXLSA	XTPRP25BC1
0.4	0.25 – 0.4	5.6	③	③	1/2	1/2	50	50	50	XTPAXLSA	XTPRP40BC1
0.63	0.4 – 0.63	8.8	③	③	1/2	1/2	50	50	50	XTPAXLSA	XTPRP63BC1
1	0.63 – 1	14	③	③	1/2	1/2	50	50	50	XTPAXLSA	XTPR001BC1
1.6	1 – 1.6	22	③	③	3/4	3/4	50	50	50	XTPAXLSA	XTPR1P6BC1
2.5	1.6 – 2.5	35	1/2	1/2	1	1-1/2	50	50	50	XTPAXLSA	XTPR2P5BC1
4	2.5 – 4	56	3/4	1	2	3	50	50	50	XTPAXLSA	XTPR004BC1
6.3	4 – 6.3	88	1	1-1/2	3	5	50	50	50	XTPAXLSA	XTPR6P3BC1
10	6.3 – 11	140	3	3	7-1/2	10	50	50	50	XTPAXLSA	XTPR010BC1
12	8 – 12	168	3	3	7-1/2	—	42	42	—	XTPAXLSA	XTPR012BC1
16	10 – 16	224	3	5	10	—	42	42	—	XTPAXLSA	XTPR016BC1
20	16 – 20	280	5	5	—	—	42	42	—	XTPAXLSA	XTPR020BC1
25	20 – 25	350	5	7-1/2	15	—	18	18	—	XTPAXLSA	XTPR025BC1
32	25 – 32	448	7-1/2	10	25	—	18	18	—	XTPAXLSA	XTPR032BC1

Frame D

16	10 – 16	224	3	5	10	10	50	50	50	XTPAXLSAD	XTPR016DC1
25	16 – 25	350	7-1/2	7-1/2	20	25	50	50	50	XTPAXLSAD	XTPR025DC1
32	25 – 32	448	10	10	25	30	50	50	50	XTPAXLSAD	XTPR032DC1
40	32 – 40	560	10	10	30	40	50	50	50	XTPAXLSAD	XTPR040DC1
50	40 – 50	700	10	15	30	—	65	65	—	XTPAXLSAD	XTPR050DC1
58	50 – 58	812	15	15	40	—	65	65	—	XTPAXLSAD	XTPR058DC1
65	55 – 65	882	15	15	40	—	65	65	—	XTPAXLSAD	XTPR063DC1

① UL 508 Type E starters are assembled from a standard XTPR and a special incoming terminal line side adapter (XTPAXLSA or XTPAXLSAD).

② Select manual motor protectors by full load amperes. Maximum motor ratings (kW, hp) are for reference only.

③ In this range, calculate motor rating according to rated current. Specified values to NEC 430.6(A)(1).

Note: A UL 508 Type E self-protected manual combination starter (XTPR) consists of a manual motor protector (XTPR) and a UL listed line side adapter (e.g., XTPAXLSA). The Type E self-protected manual combination starter alone is a legitimate short-circuit protective device and disconnect means for the downstream motor, while the contactor has been added to provide remote operation of the motor circuit.