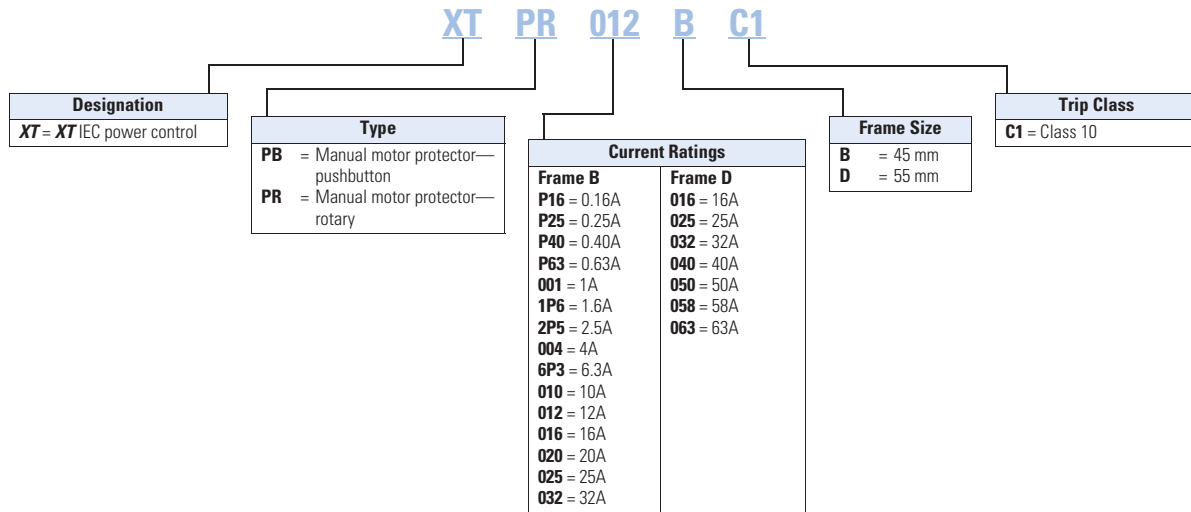


1

Catalog Number Selection

XT Manual Motor Protectors



Product Selection

Product Selection for Manual Motor Starter Applications

When ordering, specify catalog numbers according to the following stipulations:

XT manual motor protectors are selected based on the overload current range required for a given motor. This current range is determined from the motor full load ampere rating and motor service factor usually found on the motor nameplate.

For motors with service factors less than 1.15, multiply the motor FLA by 0.90 to select appropriate MMP.

Example: For motor having FLA of 6.4A and service factor of 1.0 ($6.4A \times 0.90 = 5.76A$) select catalog number XTPB6P3B01.

See Application Note—
AP03402001E.

For motor with service factor of 1.15 or greater, use motor nameplate full load amperes to select the appropriate MMP.

Example: For motor having FLA of 11A and service factor of 1.15, select catalog number XTPR012BC1.

Frame B



XTPB Pushbutton Manual Motor Protectors—Global and North American Ratings—Frame B

Type 1 and Type 2 Coordination Motor Protective Device with Thermal and Magnetic Trip

Rated Uninterrupted Current— $I_u = I_o$ (Amps)	FLA Adjustment Range/ Overload Release— I_r (Amps)	Short Circuit Release— I_m (Amps)	Maximum Motor Ratings ^①							Maximum hp Rating—P (hp) UL 508/CSA C22.2 No. 14				Screw Terminal Catalog Number
			Maximum kW Rating AC-3—P (kW)			Three-Phase				Three-Phase				
			220– 240V	380– 415V	440V	500V	660– 690V	200V	240V	480V	600V			
0.16	0.1–0.16	2.2	—	—	—	—	0.06	②	②	②	②		XTPBP16BC1	
0.25	0.16–0.25	3.5	—	0.06	0.06	0.06	0.12	②	②	②	②		XTPBP25BC1	
0.4	0.25–0.4	5.6	0.06	0.09	0.12	0.12	0.18	②	②	②	②		XTPBP40BC1	
0.63	0.4–0.63	8.8	0.09	0.12	0.18	0.25	0.25	②	②	②	②		XTPBP63BC1	
1	0.63–1	14	0.12	0.25	0.25	0.37	0.55	②	②	2	1/2		XTPB001BC1	
1.6	1–1.6	22	0.25	0.55	0.55	0.75	1.1	②	②	3/4	3/4		XTPB1P6BC1	
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		XTPB2P5BC1	
4	2.5–4	56	0.75	1.5	1.5	2.2	3	3/4	3/4	2	3		XTPB004BC1	
6.3	4–6.3	88	1.1	2.2	3	3	4	1	1-1/2	3	5		XTPB6P3BC1	
10	6.3–10	140	2.2	4	4	4	7.5	3	3	7-1/2	10		XTPB010BC1	
12	8–12	168	3	5.5	5.5	5.5	11	3	3	7-1/2	10		XTPB012BC1	
16	10–16	224	4	7.5	9	9	12.5	3	5	10	10		XTPB016BC1	
20	16–20	280	5.5	9	11	12.5	15	5	—	—	15		XTPB020BC1	
25	20–25	350	5.5	12.5	12.5	15	22	—	7-1/2	15	20		XTPB025BC1	

Notes

Single-phasing sensitivity to IEC/EN 60947-4-1, VDE 0660 Part 102.

Can be snap-fit to IEC/EN 60715 top-hat (DIN) with 7.5 or 15 mm height.

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

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

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

For manual motor protective circuit breaker switching capacity, see **Page V5-T1-181**.

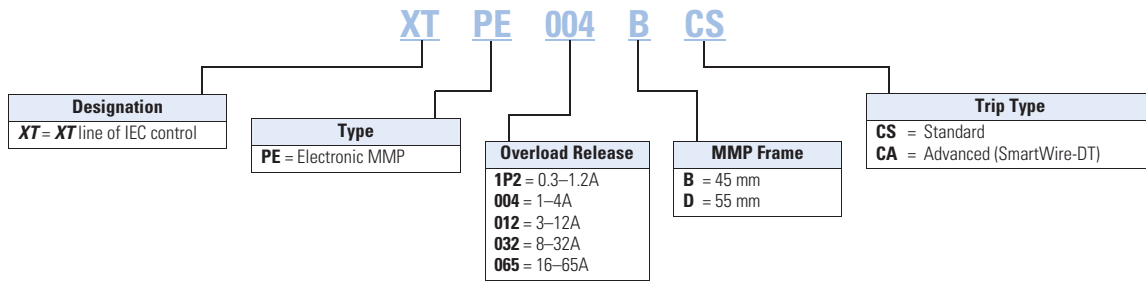
① Select manual motor protectors by full load amperes. Maximum motor ratings (kW, hp) are for reference only.

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

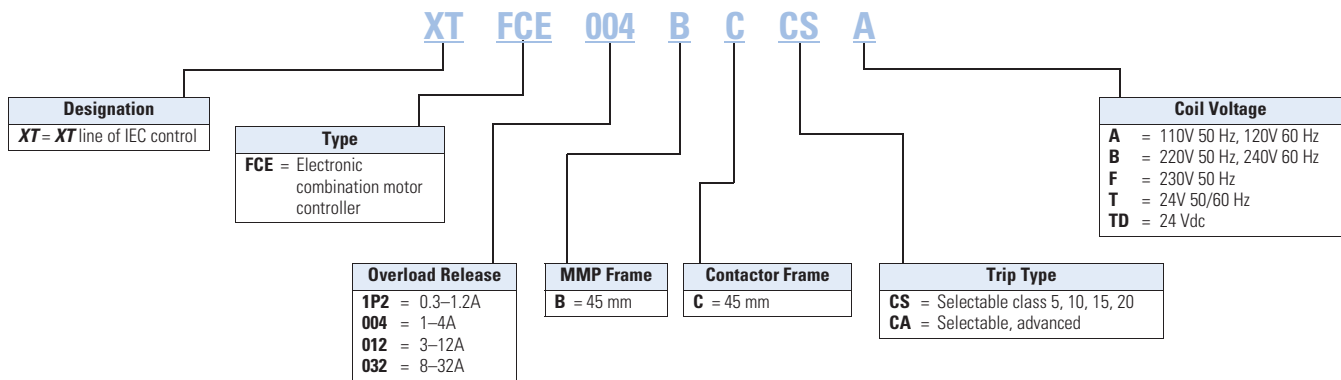
1

Catalog Number Selection

XT—Manual Motor Protector



XT—Combinations



Product Selection

XT Electronic Manual Motor Protector

B Frame



MMP Base

Maximum Amperage	UL/CSA Maximum Three-Phase hp Ratings				IEC Maximum Motor kW Ratings						Base Unit	
	200V	240V	480V	600V	220V 230V 240V	380V 400V 415V	440V	500V	600V 690V	Type Number	Catalog Number	
	12	3	3	7.5	10	3	5.5	5.5	5.5	7.5	PKE12	XTPE012B
32	5	7.5	15	20	7.5	15	15	18.5	30	PKE32	XTPE032B	
65	15	15	40	40	18.5	30	37	45	55	PKE65	XTPE065D	

B Frame



MMP Trip Units

Overload Release Setting Amp Range	For Use with Base Catalog Number	UL/CSA Maximum Three-Phase hp Ratings				IEC Maximum Motor kW Ratings					Trip Unit	
		200V	240V	480V	600V	220V 230V 240V	380V 400V 415V	440V	500V	600V 690V	Type Number	Catalog Number
		0.3–1.2	XTPE012B	①	①	0.5	0.5	0.18	0.37	0.37	0.37	0.75
1–4	XTPE012B	0.75	0.75	2	3	0.75	1.5	1.5	2.2	3	PKE-XTU-4	XTPEXT004B
3–12	XTPE012B XTPE032B	3	3	7.5	10	3	5.5	5.5	5.5	7.5	PKE-XTU-12	XTPEXT012B
8–32	XTPE032B	5	7.5	15	20	7.5	15	15	18.5	30	PKE-XTU-32	XTPEXT032B
8–32	XTPE065D	7.5	7.5	20	25	7.5	15	15	18.5	30	PKE-XTUW-32	XTPEXT032D
16–65	XTPE065D	15	15	40	40	18.5	30	37	45	55	PKE-XTU-65	XTPEXT065D

B Frame



MMP Advanced Trip Units Used with SmartWire-DT

Overload Release Setting Amp Range	For Use with Base Catalog Number	UL/CSA Maximum Three-Phase hp Ratings				IEC Maximum Motor kW Ratings					Trip Unit	
		200V	240V	480V	600V	220V 230V 240V	380V 400V 415V	440V	500V	600V 690V	Type Number	Catalog Number
		0.3–1.2	XTPE012B	①	①	0.5	0.5	0.18	0.37	0.37	0.37	0.75
1–4	XTPE012B	0.75	0.75	2	3	0.75	1.5	1.5	2.2	3	PKE-XTUA-4	XTPEXTA004B
3–12	XTPE012B XTPE032B	3	3	7.5	10	3	5.5	5.5	5.5	7.5	PKE-XTUA-12	XTPEXTA012B
8–32	XTPE032B	5	7.5	15	20	7.5	15	15	18.5	30	PKE-XTUA-32	XTPEXTA032B
8–32	XTPE065D	7.5	7.5	20	25	7.5	15	15	18.5	30	PKE-XTUWA-32	XTPEXTA032D
16–65	XTPE065D	15	15	40	40	18.5	30	37	45	55	PKE-XTUA-65	XTPEXTA065D

D Frame



MMP Complete Assembly

Overload Release Setting Amp Range	UL/CSA Maximum Three-Phase hp Ratings				IEC Maximum Motor kW Ratings					Complete Manual Motor Protector	
	200V	240V	480V	600V	220V 230V 240V	380V 400V 415V	440V	500V	600V 690V	Type Number	Catalog Number
	0.3–1.2	①	①	0.5	0.5	0.18	0.37	0.37	0.37	0.75	PKE12/XTU-1,2
1–4	0.75	0.75	2	3	0.75	1.5	1.5	2.2	3	PKE12/XTU-4	XTPE004BCS
3–12	3	3	7.5	10	3	5.5	5.5	5.5	7.5	PKE12/XTU-12	XTPE012BCS
8–32	5	7.5	15	20	7.5	15	15	18.5	30	PKE32/XTU-32	XTPE032BCS
8–32	7.5	7.5	20	25	7.5	15	15	18.5	30	PKE65/XTUW-32	XTPE032DCS
16–65	15	15	40	40	18.5	30	37	45	55	PKE65/XTU-65	XTPE065DCS

Note

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