

## 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	<b>XTPE012B</b>
32	5	7.5	15	20	7.5	15	15	18.5	30	PKE32	<b>XTPE032B</b>	
65	15	15	40	40	18.5	30	37	45	55	PKE65	<b>XTPE065D</b>	

#### 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	<b>XTPEXT004B</b>
3–12	XTPE012B XTPE032B	3	3	7.5	10	3	5.5	5.5	5.5	7.5	PKE-XTU-12	<b>XTPEXT012B</b>
8–32	XTPE032B	5	7.5	15	20	7.5	15	15	18.5	30	PKE-XTU-32	<b>XTPEXT032B</b>
8–32	XTPE065D	7.5	7.5	20	25	7.5	15	15	18.5	30	PKE-XTUW-32	<b>XTPEXT032D</b>
16–65	XTPE065D	15	15	40	40	18.5	30	37	45	55	PKE-XTU-65	<b>XTPEXT065D</b>

#### 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	<b>XTPEXTA004B</b>
3–12	XTPE012B XTPE032B	3	3	7.5	10	3	5.5	5.5	5.5	7.5	PKE-XTUA-12	<b>XTPEXTA012B</b>
8–32	XTPE032B	5	7.5	15	20	7.5	15	15	18.5	30	PKE-XTUA-32	<b>XTPEXTA032B</b>
8–32	XTPE065D	7.5	7.5	20	25	7.5	15	15	18.5	30	PKE-XTUWA-32	<b>XTPEXTA032D</b>
16–65	XTPE065D	15	15	40	40	18.5	30	37	45	55	PKE-XTUA-65	<b>XTPEXTA065D</b>

#### 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	<b>XTPE004BCS</b>
3–12	3	3	7.5	10	3	5.5	5.5	5.5	7.5	PKE12/XTU-12	<b>XTPE012BCS</b>
8–32	5	7.5	15	20	7.5	15	15	18.5	30	PKE32/XTU-32	<b>XTPE032BCS</b>
8–32	7.5	7.5	20	25	7.5	15	15	18.5	30	PKE65/XTUW-32	<b>XTPE032DCS</b>
16–65	15	15	40	40	18.5	30	37	45	55	PKE65/XTU-65	<b>XTPE065DCS</b>

#### Note

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

## Technical Data and Specifications

### XT Electronic Manual Motor Controllers

Description	Specification	XTPE012B	XTPE032B	XTPE065D
<b>General</b>				
Standards and regulations		IEC/EN 60947-4-1, VDE 0600, UL 508, CSA C 22.2 No. 14		
Climatic proofing		Damp heat, constant, to IEC 60068-2-78		
		Damp heat, cyclic, to IEC 60068-2-30		
Ambient temperature				
Storage		−40° to 80°C	−40° to 80°C	−40° to 80°C
Open		−25° to 55°C	−25° to 55°C	−25° to 55°C
Enclosed		−25° to 40°C	−25° to 40°C	−25° to 40°C
Direction of incoming supply		Any	Any	Any
Degree of protection	Device	IP20	IP20	IP20
	Terminals	IP00	IP00	IP00
Touch protection				
Mechanical shock resistance half-sinusoidal shock, 10 ms to IEC 60068-2-27		25g	25g	25g
Altitude		Max. 2000m	Max. 2000m	Max. 2000m
<b>Conductor Cross-Sections</b>				
Screw terminals	Solid	1 x (1–6) mm <sup>2</sup>	1 x (1–6) mm <sup>2</sup>	1 x (0.75–16) mm <sup>2</sup>
		2 x (1–6) mm <sup>2</sup>	2 x (1–6) mm <sup>2</sup>	2 x (0.75–16) mm <sup>2</sup>
	Stranded with ferrule to DIN 46228	1 x (1–6) mm <sup>2</sup>	1 x (1–6) mm <sup>2</sup>	1 x (0.75–35) mm <sup>2</sup>
		2 x (1–6) mm <sup>2</sup>	2 x (1–6) mm <sup>2</sup>	2 x (0.75–25) mm <sup>2</sup>
Solid or stranded	18–10 AWG	18–10 AWG	14–2 AWG	
<b>Screw Terminal Tightening Torque</b>				
Main conductor		1.7 Nm	1.7 Nm	3.3 Nm
Auxiliary conductor		1 Nm	1 Nm	1 Nm
<b>Main Circuit</b>				
Rated impulse withstand voltage	$U_{mp}$	6,000 Vac	6,000 Vac	6,000 Vac
Overvoltage category/pollution degree		III/3	III/3	III/3
Rated operational voltage	$U_e$	690V	690V	690V
Rated uninterrupted current = rated output current	$I_u = I_e$	12A	32A	65A
Rated frequency		40–60 Hz	40–60 Hz	40–60 Hz
Current heating losses (three-pole at operating temperature)		6W	6W	6W
Lifespan, mechanical	Operations	$0.05 \times 10^6$	$0.05 \times 10^6$	$0.05 \times 10^6$
Lifespan, electrical (AC-3 at 400V)	Operations	$0.05 \times 10^6$	$0.05 \times 10^6$	$0.05 \times 10^6$
Maximum operating frequency	Operations/h	60	60	60
<b>Short-Circuit Rating</b>				
Motor switching capacity AC	AC-3 up to 690V	12A	32A	65A
<b>Trip Unit</b>				
Temperature compensation to IEC/EN 60947, VDE 0660		−5° to 40°C	−5° to 40°C	−5° to 40°C
Operating range		−25° to 55°C	−25° to 55°C	−25° to 55°C
Temperature compensation residual error for $T > 40^\circ\text{C}$		$\leq 0.1\%/K$	$\leq 0.1\%/K$	$\leq 0.1\%/K$
Overload release setting range		$0.25-1 \times I_u$	$0.25-1 \times I_u$	$0.25-1 \times I_u$
Fixed short-circuit trip setting		$12 \times I_r$ (trip unit), $14 \times I_u$ (base)	$12 \times I_r$ (trip unit), $14 \times I_u$ (base)	$12 \times I_r$ (trip unit), $14 \times I_u$ (base)
Short circuit release tolerance		$\pm 20\%$	$\pm 20\%$	$\pm 20\%$
Phase failure sensitivity		Yes	Yes	Yes