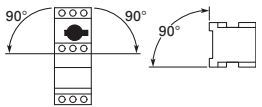
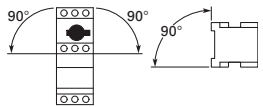
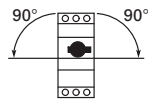


Technical Data and Specifications

XT Manual Motor Protectors

Description	XTPBP16B– XTPB025B	XTPRP16B– XTPR032B	XTPR016D– XTPR063D
General			
Standards	IEC/EN 60947, VDE 0660, UL 508, CSA C22.2 No. 14	IEC/EN 60947, VDE 0660, UL 508, CSA C22.2 No. 14	IEC/EN 60947, VDE 0660, UL 508, CSA C22.2 No. 14
Climatic proofing	①	①	①
Ambient temperature, °C			
Storage	–25/80	–25/80	–25/70
Open	–25/55	–25/55	–25/55
Enclosed	–25/40	–25/40	–25/40
Mounting position			
Direction of incoming supply	As required	As required	As required
Degree of protection			
Device	IP20	IP20	IP20
Terminals	IP00	IP00	IP00
Protection against direct contact	Finger and back-of-hand proof	Finger and back-of-hand proof	Finger and back-of-hand proof
Shock resistance half-sinusoidal shock 10 ms to IEC 60068-2-27 (g)	25	25	15
Altitude (m), maximum	2000	2000	2000
Terminal capacity			
Solid (mm ²)	1 x (1–6) 2 x (1–6)	1 x (1–6) 2 x (1–6)	1 x (1–50) 2 x (1–35)
Flexible with ferrule to DIN 46228, (mm ²)	1 x (1–6) 2 x (1–6)	1 x (1–6) 2 x (1–6)	1 x (1–35) 2 x (1–35)
Solid or stranded (AWG)	18–10	18–10	14–2
Terminal screw tightening torque			
Main cable, Nm	1.7	1.	3
Main cable, lb-in	15.0	15.0	26.6
Control circuit cable, Nm	1	1	1
Control circuit cable, lb-in	8.9	8.9	8.9
Main Contacts			
Rated impulse withstand voltage (U_{imp}), Vac	6000	6000	6000
Overvoltage category/pollution degree	III/3	III/3	III/3
Rated operational voltage (U_e), Vac	690	690	690
Rated uninterrupted current = rated operational current ($I_u = I_e$) in amperes	25 or current setting of the overcurrent release	25 or current setting of the overcurrent release	25 or current setting of the overcurrent release
Rated frequency, Hz	40–60	40–60	40–60
Current heat loss (three-pole at operating temperature), W	6	6	22
Lifespan, mechanical (ops)	50,000	100,000	30,000
Lifespan, electrical (AC-3 at 400V) (ops)	50,000	100,000	30,000
Maximum operating frequency, operations/hr	25	40	40
Short-circuit rating			
AC	See Page 183	See Page 183	See Page 183
DC (kA)	60	60 (up to XTPR016B) 40 (XTPR020B–XTPR032B)	60
Motor switching capacity			
AC-3 (up to 690V) in amperes	25	32	65
DC-5 (up to 250V) in amperes	25	25 (3 contacts in series)	63 (3 contacts in series)

Note

① Damp heat, constant, to IEC 60068-2-78; damp heat, cyclic, to IEC 60068-2-30.

XT Manual Motor Protectors, continued

Description	XTPBP16B– XTPB025B	XTPRP16B– XTPR032B	XTPR016D– XTPR063D
Releases			
Overload release setting range ($\times I_U$)	0.6–1.0	0.6–1.0	0.6–1.0
Fixed short-circuit release ($\times I_U$)	14	14	14
Short-circuit release tolerance	$\pm 20\%$	$\pm 20\%$	$\pm 20\%$
Phase-failure sensitivity	IEC/EN 60947-1-1, VDE 0660 Part 102	IEC/EN 60947-1-1, VDE 0660 Part 102	IEC/EN 60947-1-1, VDE 0660 Part 102
Temperature compensation to IEC/EN 60947, VDE 0660, °C	–5/40	–5/40	–5/40
operating range, °C	–25/55	–25/55	–25/55
Temperature compensation residual error for $T > 20^\circ\text{C}$, %/K	≤ 0.25	≤ 0.25	≤ 0.25

Auxiliary Contacts

Description	XTPAXSA__	XTPAXFA__	XTPA(B)XFAEM__	XTPAXSATR__
Rated impulse withstand voltage, U_{imp} (Vac)	6000	4000	4000	6000
Overvoltage category/pollution degree	III/3	III/3	III/3	III/3
Rated operational voltage				
U_g (Vac)	500	440	440	500
U_g (Vdc)	250	250	250	250
Safe isolation to VDE 0106 Part 101 and Part 101/A1 between auxiliary contacts and main contacts (Vac)	690	690	690	690
Rated operational current				
AC-15				
220–240 V, I_g (A)	3.5	1	1	3.5
380–415 V, I_g (A)	2	—	—	2
440–500 V, I_g (A)	1	—	—	1
DC-13 L/R <100 ms				
24 V, I_g (A)	2	2	2	2
60 V, I_g (A)	1.5	—	—	1.5
110 V, I_g (A)	1	—	—	1
220 V, I_g (A)	0.25	—	—	0.25
Lifespan				
Mechanical, operations ($\times 10^6$)	0.1	0.1	0.1	0.01
Electrical, operations ($\times 10^6$)	0.05	0.1	0.1	0.005
Contact reliability (at $U_g = 24$ Vdc, $U_{min} = 17$ V, $I_{min} = 5.4$ mA, fault probability)	$<10^{-8} < 1$ fault at 1×10^8 operations	$<10^{-8} < 1$ fault at 1×10^8 operations	$<10^{-8} < 1$ fault at 1×10^8 operations	$<10^{-8} < 1$ fault at 1×10^8 operations
Positively driven contacts to ZH 1/457	Yes	—	—	—
Short-Circuit Rating without Welding				
Fuseless	FAZ-B4/1-HI	—	—	FAZ-B4/1-HI
Fuse (A gG/gL)	10	10	10	10
Terminal Capacity				
Solid or flexible conductor with ferrule (mm ²)	0.75–2.5	0.75–1.5	0.75–1.5	0.75–2.5
Solid or stranded (AWG)	18–14	18–16	18–16	18–14

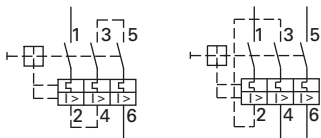
Undervoltage Release

Description	XTPAXUVR_
Cross-Section	
Solid or flexible conductor with ferrule (mm ²)	1 x (0.75–2.5) 2 x (0.75–2.5)
Solid or stranded (AWG)	1 x (18–14) 2 x (18–14)
Main Contact	
Rated operational voltage, U _θ (Vac)	42–480
Rated operational voltage, U _θ (Vdc)	24–250
Pickup voltage, x U _s	0.85–1.1
Dropout voltage, x U _s	0.7–0.35
Power Consumption	
Pickup AC (VA)	5
Sealing AC (VA)	3

Current Limiter

Description	XTPAXCL
Rated impulse withstand voltage (U _{imp}), Vac	6000
Overvoltage category/pollution degree	III/3
Rated operational voltage, U _θ (Vac)	690
Rated interrupted current = Rated operational current (I _u = I _θ) in amperes	63

XTPB, XTPR Single- and Two-Pole Circuits with DC and AC Current



Protection of PVC Insulated Cables Against Thermal Overload at Short-Circuit

Min. Cross-Section Protected 380-415V, 50 Hz, Cu mm ²					Device Type	
4	2.5	1.5	1	0.75		
					XTPRP16BC1	
						⋮
						XTPR6P3BC1
						XTPR010BC1
						XTPR016BC1
						XTPR020BC1
						XTPR025BC1
						XTPR016DC1
						XTPR025DC1
						XTPR032DC1
						XTPR040DC1
						XTPR050DC1
					XTPR058DC1	
					XTPR063DC1	

The chart above indicates which minimum cable cross-sections are protected by XTPR motor protective circuit breakers up to their rated conditional short-circuit current I_q.

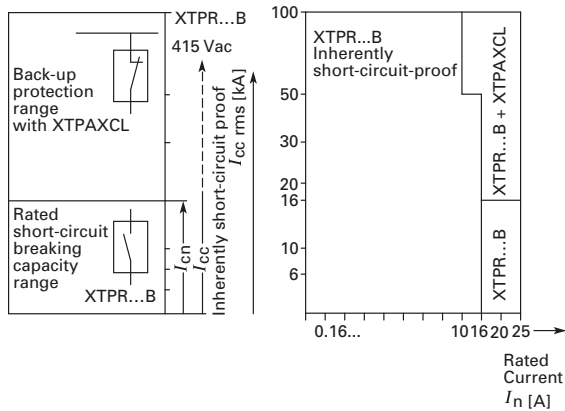
Shunt Release

Description	XTPAXSR_
Cross-Section	
Solid or flexible conductor with ferrule (mm ²)	1 x (0.75–2.5) 2 x (0.75–2.5)
Solid or stranded (AWG)	1 x (18–14) 2 x (18–14)
Main Contact	
Rated operational voltage, U _θ (Vac)	42–480
Rated operational voltage, U _θ (Vdc)	24–250
AC operating range, x U _s	0.7–1.1
DC operating range, x U _s (intermittent operation 5s)	0.7–1.1
Power Consumption	
Pickup AC (VA)	5
Sealing AC (VA)	3
Pickup DC (VA)	3
Sealing DC (VA)	3

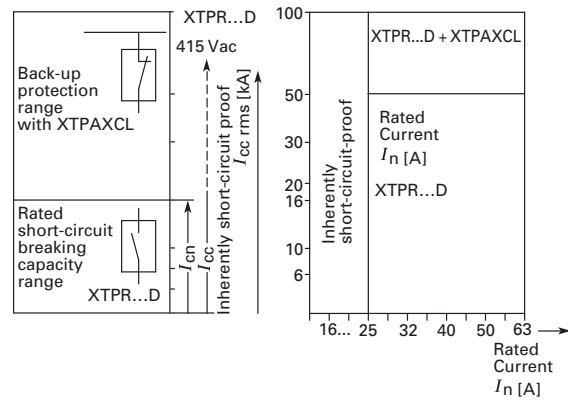
Wiring Diagrams

Fuseless Installation with XTPR

Backup Protection Diagram—XTPR...B



Backup Protection Diagram—XTPR...D



Time/Current Curves

Characteristics

The time/current characteristic, the current limiting characteristics and the I^2t characteristics were determined in accordance with DIN VDE 0660 and IEC 60 947.

The tripping characteristic of the **inverse-time delayed overload releases** (thermal overload releases or "a" releases) for DC and AC with a frequency of 0 to 400 Hz also apply to the time/current characteristic.

The characteristics apply to the cold state. At operating temperature, the tripping times of the thermal releases are reduced to approximately 25%.

Under normal operating conditions, all three-poles of the device must be loaded. The three main conducting paths must be connected in series in order to protect single-phase or DC loads.

With three-pole loading, the maximum deviation in the tripping time for 3 times the setting current and upwards is $\pm 20\%$ and thus in accordance with DIN VDE 0165.

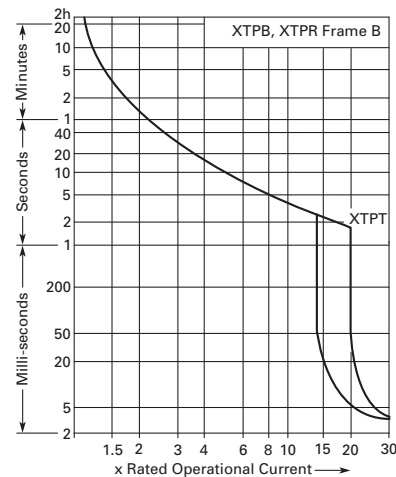
The tripping characteristics for the instantaneous, electromagnetic overcurrent releases (short-circuit releases or "n" releases) are based on the rated current I_n , which is also the maximum value of the setting range for circuit breakers with adjustable overload releases. If the current is set to a lower value, the tripping current of the "n" release is increased by a corresponding factor.

The characteristics of the electromagnetic overcurrent releases apply to frequencies of 50/60 Hz. Appropriate correction factors must be used for lower frequencies up to 16-2/3 Hz, for higher frequencies up to 400 Hz and for DC.

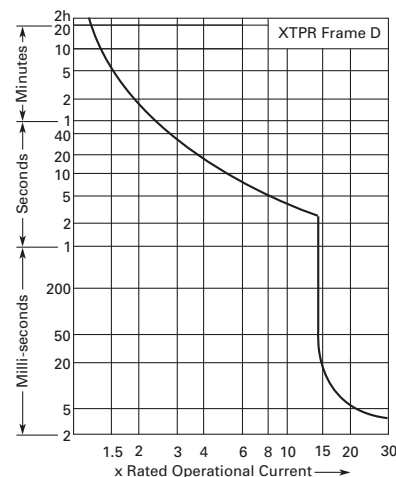
Time/current characteristics, current limiting characteristics and I^2t characteristics are available on request.

MMP Tripping Characteristics

XTPB, XTPR Frame B

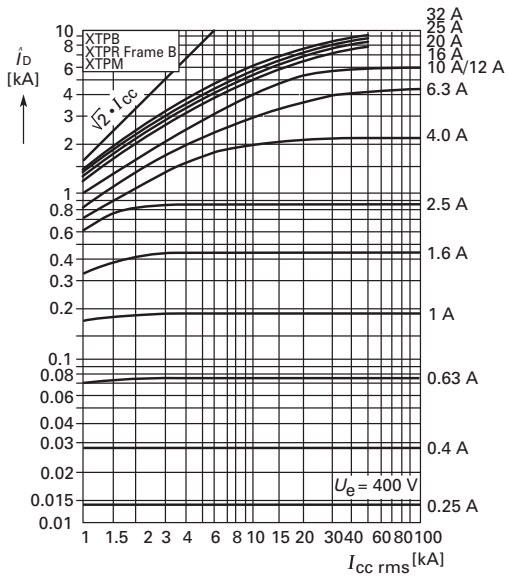


XTPR Frame D

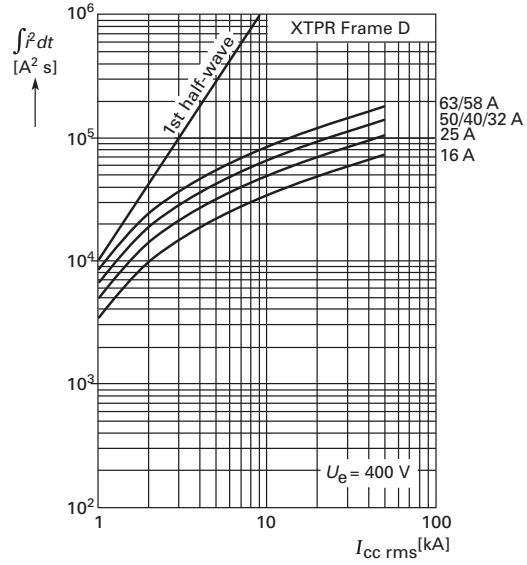


MMP Let-Through Tripping Characteristics

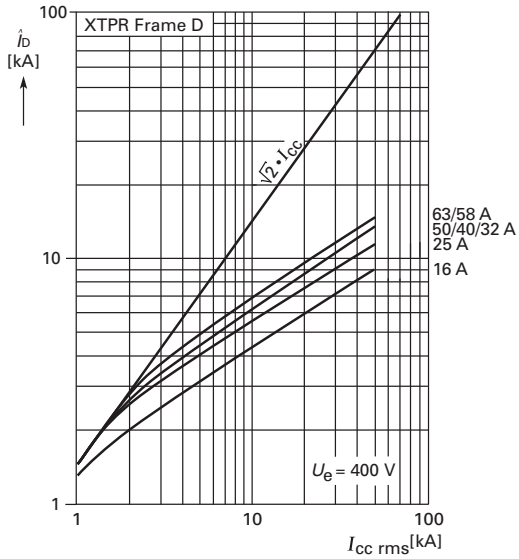
XTPB, XTPR Frame B



XTPR Frame D



XTPR Frame D



Manual Motor Protector Short-Circuit Ratings

Rated uninterrupted current I_u = Rated operational current I_e .

Rated conditional short-circuit current I_q —IEC/EN 60947-4-1.

Rated ultimate short-circuit breaking capacity I_{cu} — IEC/EN 60947-2.

Rated operational short-circuit breaking capacity I_{cs} — IEC/EN 60947-2.

Global Use, IEC/EN 60947—XTPB with Classification Type “1” and Type “2”

I_u A	230V				400V				440V				500V				690V			
	I_q kA	I_{cu} kA	I_{cs} kA	Fuse ^{①②} A	I_q kA	I_{cu} kA	I_{cs} kA	Fuse ^{①②} A	I_q kA	I_{cu} kA	I_{cs} kA	Fuse ^{①②} A	I_q kA	I_{cu} kA	I_{cs} kA	Fuse ^{①②} A	I_q kA	I_{cu} kA	I_{cs} kA	Fuse ^{①②} A
0.16–1	50	50	50	50	50	50	50	50	50	50	50	50	—	—	—	—	—	—	—	—
1.6	50	50	50	50	50	50	50	50	50	50	50	50	—	—	—	—	—	—	—	—
2.5	50	50	50	50	50	50	50	50	50	50	50	50	—	—	—	—	—	—	—	—
4	50	50	50	50	50	50	50	50	50	50	50	50	—	—	—	—	—	—	—	—
6.3	50	50	50	50	50	50	50	50	50	50	50	50	—	—	—	—	—	—	—	—
10	50	50	50	50	50	50	50	50	42	42	10	50	—	—	—	—	—	—	—	—
12	50	50	10	50	50	50	10	50	15	15	10	50	—	—	—	—	—	—	—	—
16	50	50	10	50	50	50	10	50	15	15	10	50	—	—	—	—	—	—	—	—
20	50	50	10	50	50	50	10	50	10	10	10	50	—	—	—	—	—	—	—	—
25	50	50	10	50	50	50	10	50	10	10	10	50	—	—	—	—	—	—	—	—

Global Use, IEC/EN 60947—XTPR...BC1 with Classification Type “1” and Type “2”

I_u A	230V				400V				440V				500V				690V			
	I_q kA	I_{cu} kA	I_{cs} kA	Fuse ^{①②} A	I_q kA	I_{cu} kA	I_{cs} kA	Fuse ^{①②} A	I_q kA	I_{cu} kA	I_{cs} kA	Fuse ^{①②} A	I_q kA	I_{cu} kA	I_{cs} kA	Fuse ^{①②} A	I_q kA	I_{cu} kA	I_{cs} kA	Fuse ^{①②} A
0.16–1	150 ^③	150 ^③	150 ^③	N	150 ^③	150 ^③	150 ^③	N	③	③	③	N	③	③	③	N	③	③	③	N
1.6	150 ^③	150 ^③	150 ^③	N	150 ^③	150 ^③	150 ^③	N	③	③	③	N	③	③	③	N	③	③	③	N
2.5	150 ^③	150 ^③	150 ^③	N	150 ^③	150 ^③	150 ^③	N	③	③	③	N	③	③	③	N	5	5	5	50
4	150 ^③	150 ^③	150 ^③	N	150 ^③	150 ^③	150 ^③	N	③	③	③	N	③	③	③	N	3	3	3	50
6.3	150 ^③	150 ^③	150 ^③	N	150 ^③	150 ^③	150 ^③	N	③	③	③	N	42	42	6	50	3	3	2	50
10	150 ^③	150 ^③	150 ^③	N	150 ^③	150 ^③	150 ^③	N	42	42	10	50	42	42	6	50	3	3	2	50
12	50	50	10	50	50	50	10	50	15	15	10	50	15	15	6	50	3	3	2	50
16	50	50	10	50	50	50	10	50	15	15	10	50	15	15	6	50	3	3	2	50
20	50	50	10	50	50	50	10	50	15	15	10	50	6	6	6	50	3	3	2	50
25	50	50	10	50	50	50	10	50	10	10	10	50	6	6	6	50	3	3	2	50
32	50	50	10	50	50	50	10	50	10	10	10	50	6	6	6	50	3	3	2	50

Notes

① N = Not required.

② XTPR...BC1, XTPT, XTPM—Required back-up fuse if the short-circuit current exceeds the rated conditional short-circuit current ($I_{cc} > I_q$); XTPB, XTPR...DC1—Fuse (A gG/gL) for enhancing the switching capacity of the motor protective circuit breaker to 100 kA.

③ No upstream protective device required, as it is the auto-protected range (100/150 kA—Frame B, 150 kA—Frame D).

Global Use, IEC/EN 60947—XTPR...DC1 with Classification Type "1" and Type "2"

I _u A	230V				400V				440V				500V				690V			
	I _q kA	I _{cu} kA	I _{cs} kA	Fuse ^{①②} A	I _q kA	I _{cu} kA	I _{cs} kA	Fuse ^{①②} A	I _q kA	I _{cu} kA	I _{cs} kA	Fuse ^{①②} A	I _q kA	I _{cu} kA	I _{cs} kA	Fuse ^{①②} A	I _q kA	I _{cu} kA	I _{cs} kA	Fuse ^{①②} A
16	150 ^③	150 ^③	25	N	150 ^③	150 ^③	25	N	45	45	25	100	15	15	100	8	8	2.5	100	
25	150 ^③	150 ^③	25	N	150 ^③	150 ^③	25	N	45	45	25	100	15	15	100	8	8	2.5	100	
32	50	50	25	100	50	50	25	100	45	45	25	100	15	15	100	5	5	2.5	100	
40	50	50	25	100	50	50	25	100	45	45	25	100	15	15	100	5	5	2.5	100	
50	50	50	25	100	50	50	25	100	45	45	25	100	15	15	100	5	5	2.5	100	
58	50	50	25	160	50	50	25	160	45	45	25	160	15	15	160	5	5	2.5	160	
63	50	50	25	160	50	50	25	160	45	45	25	160	15	15	160	5	5	2.5	160	

Ratings for Group Motor Applications

UL 508/CSA C22.2 No. 14—XTPB—Frame B, Manual Motor Protector with Thermal and Magnetic Trip

Catalog Number	Rated Uninterrupted Current— I _u (Amps)	FLA Adjustment Range/Overload Release— I _r (Amps)	Short Circuit Release— I _m (Amps)	Maximum Protective Device for UL/CSA Group Protection					
				Maximum rms Sym Current— 480V (kA)	w/Current Limiter— XTPAXCL	Maximum Fuse Rating (A)	w/Current Limiter— XTPAXCL	Circuit Breaker Maximum (A)	w/Current Limiter— XTPAXCL
XTPBP16BC1	0.16	0.1–0.16	2.2	50	—	600	—	600	—
XTPBP25BC1	0.25	0.16–0.25	3.5	50	—	600	—	600	—
XTPBP40BC1	0.4	0.25–0.4	5.6	50	—	600	—	600	—
XTPBP63BC1	0.63	0.4–0.63	8.8	50	—	600	—	600	—
XTPB001BC1	1	0.63–1	14	50	—	600	—	600	—
XTPB1P6BC1	1.6	1–1.6	22	50	—	600	—	600	—
XTPB2P5BC1	2.5	1.6–2.5	35	50	—	600	—	600	—
XTPB004BC1	4	2.5–4	56	50	—	600	—	600	—
XTPB6P3BC1	6.3	4–6.3	88	50	—	600	—	600	—
XTPB010BC1	10	6.3–10	140	30	50	600	600	600	600
XTPB012BC1	12	8–12	168	10	50	150	600	125 ^⑤	600
XTPB016BC1	16	10–16	224	10	50	150	600	125 ^⑤	600
XTPB020BC1 ^④	20	16–20	280	10	18	150	600	125	600
XTPB025BC1 ^④	25	20–25	350	10	18	150	600	125	600

Notes

- ① N = Not required.
- ② XTPR...BC1, XTPT, XTPM—Required back-up fuse if the short-circuit current exceeds the rated, TTP conditional short-circuit current (I_{cc} > I_q); XTPB, XTPR...DC1—Fuse (A gG/gL) for enhancing the switching capacity of the motor protective circuit breaker to 100 kA.
- ③ No upstream protective device required, as it is the auto-protected range (100/150 kA—Frame B, 150 kA—Frame D).
- ④ IEC/EN 60947-4-1
- ⑤ 22 kA 600 Vac.

UL 508/CSA C22.2 No. 14—XTPR—Frame B (all Screw and Spring Cage Terminal Options), Manual Motor Protector with Thermal and Magnetic Trip

Catalog Number	Rated Uninterrupted Current— I_u (Amps)	FLA Adjustment Range/Overload Release— I_r (Amps)	Short Circuit Release— I_m (Amps)	Maximum Protective Device for UL/CSA Group Protection					
				Maximum rms Sym Current— 480V (kA)	w/Current Limiter— XTPAXCL	Maximum Fuse Rating (A)	w/Current Limiter— XTPAXCL	Circuit Breaker Maximum (A)	w/Current Limiter— XTPAXCL
XTPRP16BC1	0.16	0.1–0.16	2.2	50	—	600	—	600	—
XTPRP25BC1	0.25	0.16–0.25	3.5	50	—	600	—	600	—
XTPRP40BC1	0.4	0.25–0.4	5.6	50	—	600	—	600	—
XTPRP63BC1	0.63	0.4–0.63	8.8	50	—	600	—	600	—
XTPR01BC1	1	0.63–1	14	50	—	600	—	600	—
XTPR1P6BC1	1.6	1–1.6	22	50	—	600	—	600	—
XTPR2P5BC1	2.5	1.6–2.5	35	50	—	600	—	600	—
XTPR004BC1	4	2.5–4	56	50	—	600	—	600	—
XTPR6P3BC1	6.3	4–6.3	88	50	—	600	—	600	—
XTPR010BC1	10	6.3–10	140	30	50	600	600	600	600
XTPR012BC1	12	8–12	168	10	50	150	600	125	600
XTPR016BC1	16	10–16	224	10	50	150	600	125 ^①	600
XTPR032BC1	32	25–32	448	10	18	150	600	125	600
XTPR025BC1	25	20–25	350	10	18	150	600	125	600
XTPR032BC1	32	25–32	448	10	18	150	600	125	600

UL 508/CSA C22.2 No. 14—XTPR—Frame D, Manual Motor Protector with Thermal and Magnetic Trip

Catalog Number	Rated Uninterrupted Current— I_u (Amps)	FLA Adjustment Range/Overload Release— I_r (Amps)	Short Circuit Release— I_m (Amps)	Maximum Protective Device for UL/CSA Group Protection					
				Maximum rms Sym Current— 480V (kA)	w/Current Limiter— XTPAXCL	Maximum Fuse Rating (A)	w/Current Limiter— XTPAXCL	Circuit Breaker Maximum (A)	w/Current Limiter— XTPAXCL
XTPR016DC1	16	10–16	224	65	—	600	—	600	—
XTPR025DC1	25	16–25	350	65	—	600	—	600	—
XTPR032DC1	32	25–32	448	65	—	600	—	600	—
XTPR040DC1	40	32–40	560	65	—	600	—	600	—
XTPR050DC1	50	40–50	700	65	—	600	—	600	—
XTPR058DC1	58	50–58	812	65	—	600	—	600	—
XTPR063DC1	65	55–63	882	65	—	600	—	600	—

Note

① 22 kA 600 Vac.

UL 508 Type E Ratings—XTPR Frame B + XTPAXLSA

Manual Motor Protector—Screw Terminal Catalog Number	Line Side Adapter Catalog Number	FLA Adjustment Range/Overload Release— I_r (Amps)	Short Circuit Release— I_{rm} (Amps)	UL 508 Type E Application Maximum rms Symmetrical Short-Circuit Ratings (kA)			Maximum Upstream Protective Device (A) ^①	
				240V	480/277V	600/347V	Maximum Fuse 600V	Maximum Circuit Breaker 600V
XTPRP16BB1	XTPAXLSA	0.1–0.16	2.2	50	50	50	Not required	Not required
XTPRP16BC1	XTPAXLSA	0.16–0.25	3.5	50	50	50	Not required	Not required
XTPRP25BC1	XTPAXLSA	0.25–0.4	5.6	50	50	50	Not required	Not required
XTPRP40BC1	XTPAXLSA	0.4–0.63	8.82	50	50	50	Not required	Not required
XTPRP63BC1	XTPAXLSA	0.63–1	14	50	50	50	Not required	Not required
XTPR01BC1	XTPAXLSA	1–1.6	22.4	50	50	50	Not required	Not required
XTPR1P6BC1	XTPAXLSA	1.6–2.5	35	50	50	50	Not required	Not required
XTPR2P5BC1	XTPAXLSA	2.5–4	56	50	50	50	Not required	Not required
XTPR04BC1	XTPAXLSA	4–6.3	88.2	50	50	50	Not required	Not required
XTPR6P3BC1	XTPAXLSA	6.3–10	140	50	50	50	Not required	Not required
XTPR010BC1	XTPAXLSA	8–12	168	42	42	—	Not required	Not required
XTPR012BC1	XTPAXLSA	10–16	224	42	42	—	Not required	Not required
XTPR016BC1	XTPAXLSA	10–16	224	18	18	—	Not required	Not required
XTPR020BC1	XTPAXLSA	16–20	280	18	18	—	Not required	Not required
XTPR025BC1	XTPAXLSA	20–25	350	18	18	—	Not required	Not required
XTPR032BC1	XTPAXLSA	25–32	448	18	18	—	Not required	Not required

UL 508 Type E Ratings—XTPR Frame D + XTPAXLSAD

Manual Motor Protector—Screw Terminal Catalog Number	Line Side Adapter Catalog Number	FLA Adjustment Range/Overload Release— I_r (Amps)	Short Circuit Release— I_{rm} (Amps)	UL 508 Type E Application Maximum rms Symmetrical Short-Circuit Ratings (kA)			Maximum Upstream Protective Device (A) ^①	
				240V	480/277V	600/347V	Maximum Fuse 600V	Maximum Circuit Breaker 600V
XTPR016DC1	XTPAXLSAD	10–16	224	65	65	25	Not required	Not required
XTPR025DC1	XTPAXLSAD	16–25	350	65	65	25	Not required	Not required
XTPR032DC1	XTPAXLSAD	25–32	448	65	65	25	Not required	Not required
XTPR040DC1	XTPAXLSAD	32–40	560	65	65	25	Not required	Not required
XTPR050DC1	XTPAXLSAD	40–50	700	65	65	—	Not required	Not required
XTPR058DC1	XTPAXLSAD	50–58	812	65	65	—	Not required	Not required
XTPR063DC1	XTPAXLSAD	55–65	882	65	65	—	Not required	Not required

Note

^① For UL 508 Type E applications, the manual motor protector assembly does not require a dedicated upstream protective device in the panel, thus a maximum rating is not required.