

XTFC and XTFR Combination Motor Controllers (CMC), UL 508 Type F

Frame B MMP + Two
Frame B ContactorsFactory-Assembled Type F Combination Motor Controller—Frame B MMP + Frame B Contactor—
Maximum UL Ratings ^①FLA Adjustment
Range/Overload
Release— I_r
(Amps)

FLA Adjustment Range/Overload Release— I_r (Amps)	Short-Circuit Release— I_m (Amps)	Three-Phase				Assembled Manual Motor Controller ^②	
		200V	240V	480V	600V	Non-Reversing Catalog Number	Reversing Catalog Number
0.16–0.25	3.5	③	③	1/2	1/2	XTFCP25BB_	XTFRP25BB_
0.25–0.4	5.6	③	③	1/2	1/2	XTFCP40BB_	XTFRP40BB_
0.4–0.63	8.82	③	③	1/2	1/2	XTFCP63BB_	XTFRP63BB_
0.63–1	14	③	③	1/2	1/2	XTFC001BB_	XTFR001BB_
1–1.6	22.4	③	③	3/4	1	XTFC1P6BB_	XTFR1P6BB_
1.6–2.5	35	1/2	1/2	1	1-1/2	XTFC2P5BB_	XTFR2P5BB_
2.5–4	56	1	1	2	3	XTFC004BB_	XTFR004BB_
4–6.3	88.2	1-1/2	1-1/2	3	5	XTFC6P3BB_	XTFR6P3BB_
6.3–10	140	3	3	7-1/2	7.5	XTFC010BB_	XTFR010BB_
8–12	168	3	3	7-1/2	—	XTFC012BB_	XTFR012BB_
10–16	224	3	5	10	—	XTFC016BB_	—

Factory-Assembled Type F Combination Motor Controller—Frame B MMP + Frame B Contactor—
Maximum IEC Ratings ^①FLA Adjustment
Range/Overload
Release— I_r
(Amps)

FLA Adjustment Range/Overload Release— I_r (Amps)	Short-Circuit Release— I_m (Amps)	Three-Phase				Assembled Manual Motor Controller ^②	
		220– 240V	380– 415V	500V	660– 690V	Non-Reversing Catalog Number	Reversing Catalog Number
0.1–0.16	2.2	—	—	—	0.06	XTFCP16BB_	XTFRP16BB_
0.16–0.25	3.5	—	0.06	0.06	0.12	XTFCP25BB_	XTFRP25BB_
0.25–0.4	5.6	0.06	0.09	0.12	0.18	XTFCP40BB_	XTFRP40BB_
0.4–0.63	8.82	0.09	0.18	0.25	0.25	XTFCP63BB_	XTFRP63BB_
0.63–1	14	0.12	0.25	0.37	0.55	XTFC001BB_	XTFR001BB_
1–1.6	22.4	0.25	0.55	0.75	1.1	XTFC1P6BB_	XTFR1P6BB_
1.6–2.5	35	0.37	0.75	1.1	1.5	XTFC2P5BB_	XTFR2P5BB_
2.5–4	56	0.75	1.5	2.2	3	XTFC004BB_	XTFR004BB_
4–6.3	88.2	1.1	2.2	3	4	XTFC6P3BB_	XTFR6P3BB_
6.3–10	140	2.2	4	4	7.5	XTFC010BB_	XTFR010BB_
8–12	168	3	5.5	5.5	11	XTFC012BB_	XTFR012BB_
10–16	224	4	7.5	9	12.5	XTFC016BB_	—

Notes

- ① Select combination motor controllers by full load amperes. Maximum motor ratings (kW, hp) are for reference only.
 ② Underscore (_) indicates magnetic coil suffix required. See Page V5-T1-202.
 ③ In this range, calculate motor rating according to rated current. Specified values to NEC 430.6(A)(1).

XTFC Non-Reversing Combination Motor Controllers—Component Bill of Material

Factory Assembled Manual Motor Protector + Contactor + Line Side Adapter

Assembled Combination Motor Controller ^①	FLA Adjustment Range/ Overload Release— I_r (Amps)	Component Catalog Numbers			Manual Motor Protector	Combination Connection Kit	Contactor ^①	Manual Motor Protector Auxiliary Contact
		Line Side Adapter	Manual Motor Protector	Combination Connection Kit				
XTFC Frame B MMP + Frame B Contactor								
XTFCP16BB_	0.1–0.16	XTPAXLSA	XTPRP16BC1	XTPAXTPCB	XTCE007B10_	XTPAXFA11		
XTFCP25BB_	0.16–0.25	XTPAXLSA	XTPRP25BC1	XTPAXTPCB	XTCE007B10_	XTPAXFA11		
XTFCP40BB_	0.25–0.4	XTPAXLSA	XTPRP40BC1	XTPAXTPCB	XTCE007B10_	XTPAXFA11		
XTFCP63BB_	0.4–0.63	XTPAXLSA	XTPRP63BC1	XTPAXTPCB	XTCE007B10_	XTPAXFA11		
XTFC001BB_	0.63–1	XTPAXLS	XTPR001BC1	XTPAXTPCB	XTCE007B10_	XTPAXFA11		
XTFC1P6BB_	1–1.6	XTPAXLSA	XTPR1P6BC1	XTPAXTPCB	XTCE007B10_	XTPAXFA11		
XTFC2P5BB_	1.6–2.5	XTPAXLSA	XTPR2P5BC1	XTPAXTPCB	XTCE007B10_	XTPAXFA11		
XTFC004BB_	2.5–4	XTPAXLSA	XTPR004BC1	XTPAXTPCB	XTCE007B10_	XTPAXFA11		
XTFC6P3BB_	4–6.3	XTPAXLSA	XTPR6P3BC1	XTPAXTPCB	XTCE007B10_	XTPAXFA11		
XTFC010BB_	6.3–10	XTPAXLSA	XTPR010BC1	XTPAXTPCB	XTCE009B10_	XTPAXFA11		
XTFC012BB_	8–12	XTPAXLSA	XTPR012BC1	XTPAXTPCB	XTCE012B10_	XTPAXFA11		
XTFC016BB_	10–16	XTPAXLSA	XTPR016BC1	XTPAXTPCB	XTCE015B10_	XTPAXFA11		
XTFC Frame B MMP + Frame C Contactor								
XTFC016BC_	10–16	XTPAXLSA	XTPR016BC1	XTPAXTPCC	XTCE018C10_	XTPAXFA11		
XTFC020BC_	16–20	XTPAXLSA	XTPR020BC1	XTPAXTPCC	XTCE025C10_	XTPAXFA11		
XTFC025BC_	20–25	XTPAXLSA	XTPR025BC1	XTPAXTPCC	XTCE025C10_	XTPAXFA11		
XTFC032BC_	25–32	XTPAXLSA	XTPR032BC1	XTPAXTPCC	XTCE032C10_	XTPAXFA11		
XTFC Frame D MMP + Frame C Contactor								
XTFC016DC_	10–16	XTPAXLSAD	XTPR016DC1	②	XTCE018C10_	XTPAXFA11		
XTFC025DC_	16–25	XTPAXLSAD	XTPR025DC1	②	XTCE025C10_	XTPAXFA11		
XTFC032DC_	25–32	XTPAXLSAD	XTPR032DC1	②	XTCE032C10_	XTPAXFA11		
XTFC Frame D MMP + Frame D Contactor								
XTFC040DD_	32–40	XTPAXLSAD	XTPR040DC1	XTPAXTPCD ^③	XTCE040D00_	XTPAXFA11		
XTFC050DD_	40–50	XTPAXLSAD	XTPR050DC1	XTPAXTPCD ^③	XTCE050D00_	XTPAXFA11		
XTFC058DD_	50–58	XTPAXLSAD	XTPR058DC1	XTPAXTPCD ^③	XTCE065D00_	XTPAXFA11		
XTFC063DD_	55–65	XTPAXLSAD	XTPR063DC1	XTPAXTPCD ^③	XTCE065D00_	XTPAXFA11		

Notes

① Underscore (_) indicates magnetic coil suffix required. See **Page V5-T1-202**.

② The connection between the XTPR...DC1 and the XTCE...C_ contactor will be made with flexible wire and mounted to the DIN rail adapter plate (XTPAXTPCPD).

③ The reversing connection between the XTPR...DC1 and the (2) XTCE...C_ contactors will be accomplished by using the non-reversing combination connection kit (XTPAXTPCD), Frame D reversing link kit (XTCEXRDL), additional DIN rail adapter plate (XTPAXTPCPD) and DIN adapter connection element (XTPAXCNE).

Combination Motor Controllers Short-Circuit Ratings for UL 508 Type F Application

XTFC and XTFR Combination Motor Controllers (CMC), UL 508 Type F

Assembled Controller ^①		FLA Adjustment Range/Overload Release— I _r (Amps)	Short-Circuit Release— I _{rm} (Amps)	UL 508 Type F Application Max. rms Symmetrical Short-Circuit Ratings (kA)			Maximum Upstream Protective Device (A) ^②	
				240V	480/277V	600/347V	Maximum Fuse 600V	Maximum Circuit Breaker 600V
XTFC and XTFR Frame B MMP + Frame B Contactor								
XTFCP16BB_	XTFRP16BB_	0.1–0.16	2.2	65	65	—	Not required	Not required
XTFCP25BB_	XTFRP25BB_	0.16–0.25	3.5	65	65	—	Not required	Not required
XTFCP40BB_	XTFRP40BB_	0.25–0.4	5.6	65	65	—	Not required	Not required
XTFCP63BB_	XTFRP63BB_	0.4–0.63	8.82	65	65	—	Not required	Not required
XTFC001BB_	XTFR001BB_	0.63–1	14	65	65	—	Not required	Not required
XTFC1P6BB_	XTFR1P6BB_	1–1.6	22.4	65	65	—	Not required	Not required
XTFC2P5BB_	XTFR2P5BB_	1.6–2.5	35	65	65	—	Not required	Not required
XTFC004BB_	XTFR004BB_	2.5–4	56	65	65	—	Not required	Not required
XTFC6P3BB_	XTFR6P3BB_	4–6.3	88.2	65	65	—	Not required	Not required
XTFC010BB_	XTFR010BB_	6.3–10	140	65	65	—	Not required	Not required
XTFC012BB_	XTFR012BB_	8–12	168	50	50	—	Not required	Not required
XTFC016BB_	—	10–16	224	50	50	—	Not required	Not required
XTFC and XTFR Frame B MMP + Frame C Contactor								
XTFC016BC_	XTFR016BC_	10–16	224	18	18	—	Not required	Not required
XTFC020BC_	XTFR020BC_	16–20	280	18	18	—	Not required	Not required
XTFC025BC_	XTFR025BC_	20–25	350	18	18	—	Not required	Not required
XTFC032BC_	XTFR032BC_	25–32	448	18	18	—	Not required	Not required
XTFC and XTFR Frame D MMP + Frame C Contactor								
XTFC016DC_	XTFR016DC_	10–16	224	65	65	50	Not required	Not required
XTFC025DC_	XTFR025DC_	16–25	350	65	65	50	Not required	Not required
XTFC032DC_	XTFR032DC_	25–32	448	65	65	50	Not required	Not required
XTFC and XTFR Frame D MMP + Frame D Contactor								
XTFC040DD_	XTFR040DD_	32–40	560	65	65	50	Not required	Not required
XTFC050DD_	XTFR050DD_	40–50	700	65	65	—	Not required	Not required
XTFC058DD_	XTFR058DD_	50–58	812	65	65	—	Not required	Not required
XTFC063DD_	XTFR063DD_	55–65	882	65	65	—	Not required	Not required

Notes

① Underscore (_) indicates magnetic coil suffix required. See **Page V5-T1-202**.

② For UL 508 Type F applications, the combination motor controller assembly does not require a dedicated upstream protective device in the panel, thus a maximum rating is not required.