

XT UL short-circuit current ratings

Changes to UL® 508A and the NEC® in recent years have brought a focus to control panel safety with regard to short-circuit current ratings (SCCR). Eaton's **XT** line of IEC power control has a wide variety of SCCR solutions for a variety of applications and SCCR needs. The SCCR data provided in this document reflects the latest information as of January 2010.

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Table 1. Summary

Components	240V SCCR	480V SCCR	600V SCCR
Fuse–contactor	Up to 100 kA	Up to 100 kA	Up to 100 kA
Breaker–contactor	Up to 65 kA	Up to 65 kA	Up to 30 kA
Fuse–contactor–thermal overload relay	Up to 100 kA	Up to 100 kA	Up to 100 kA
Breaker–contactor–thermal overload relay	Up to 65 kA	Up to 65 kA	—
Manual motor controller	Up to 50 kA	Up to 50 kA	Up to 50 kA
Combination motor controllers	Up to 65 kA	Up to 65 kA	Up to 50 kA
Motor protective circuit breaker–contactor	Up to 65 kA	Up to 65 kA	—



Powering Business Worldwide

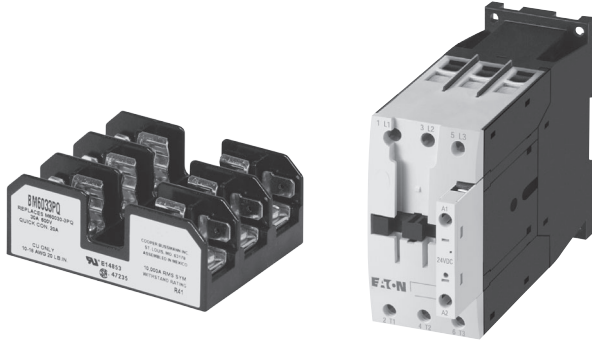


Table 2. Fuse-Contactor High Fault

XT Part Number	kA (600 Vac)	Class	Max. Upstream Fuse Ampere Rating
XTCE007B	100	J	20
XTCE009B	100	J	20
XTCE012B	100	J	45
XTCE015B	100	J	60
XTCE018C	100	J	70
XTCE025C	100	J	100
XTCE032C	100	J	125
XTCE040D	100	J	150
XTCE050D	100	J	150
XTCE065D	100	J	150
XTCE080F	100	J	300
XTCE095F	100	J	300
XTCE115G	100	J	300
XTCE150G	100	J	300
XTCE170G	100	J	300
XTCE(S)185L	18	L	700
XTCE(S)225L	18	L	700
XTCE(S)250L	18	L	700
XTCE(S)300M	30	L	800
XTCE(S)400M	30	L	800
XTCE(S)500M	30	L	800
XTCS570M	30	L	800

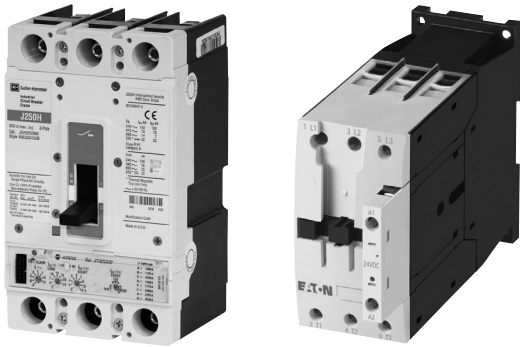


Table 3. Breaker-Contactor High Fault

XT Part Number	kA (480 Vac)	Max. Upstream Breaker Ampere Rating	kA (600 Vac)	Max. Upstream Breaker Ampere Rating
XTCE007B				
XTCE009B				
XTCE012B				
XTCE015B				
XTCE018C				
XTCE025C				
XTCE032C				
XTCE040D	65	100		
XTCE050D	65	100		
XTCE065D	65	100		
XTCE080F	65	250		
XTCE095F	65	250		
XTCE115G	65	250		
XTCE150G	65	250		
XTCE170G	65	250		
XTCE(S)185L	65	250	18	600
XTCE(S)225L	65	250	18	600
XTCE(S)250L	65	250	18	600
XTCE(S)300M	42	600	30	600
XTCE(S)400M	42	600	30	600
XTCE(S)500M	42	600	30	600
XTCS570M	42	600	30	600

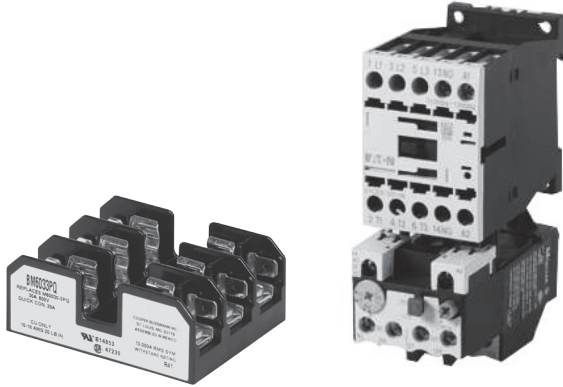


Table 4. Fuse-Contactor-Thermal Overload Relay High Fault

Contactor Catalog Number	Overload Relay Catalog Number	High Fault Current		
		kA (600 Vac)	Class J Fuse Size	Class CC Fuse Size
XTCE007B	XTOBP40BC1	100	1	1
XTCE007B	XTOBP60BC1	100	1	1
XTCE007B	XTOB001BC1	100	1	1
XTCE007B	XTOB001BC1	100	1	1
XTCE007B	XTOB1P6BC1	100	3	3
XTCE007B	XTOB2P4BC1	100	3	3
XTCE007B	XTOB004BC1	100	3	3
XTCE007B	XTOB004BC1	100	6	6
XTCE007B	XTOB006BC1	100	10	10
XTCE009B	XTOB010BC1	100	15	15
XTCE015B	XTOB016BC1	100	30	30
XTCE018C	XTOB016CC1	100	35	
XTCE025C	XTOB024CC1	100	45	
XTCE032C	XTOB032CC1	100	60	
XTCE040D	XTOB040DC1	100	60	
XTCE050D	XTOB057DC1	100	90	
XTCE050D	XTOB057DC1	100	110	
XTCE065D	XTOB065DC1	100	125	
XTCE080F	XTOB100GC1	100	150	
XTCE095F	XTOB100GC1	100	200	
XTCE150G	XTOB125GC1	100	250	
XTCE150G	XTOB150GC1	100	300	



Table 5. Breaker–Contactor–Thermal Overload Relay High Fault

Contactor	Overload	Breaker Type	UL 508 High Fault Rating ①			Max. Breaker Size
			208 Vac	240 Vac	480 Vac	
XTCE...C...	XTOB...CC1	EGB	25 kA	25 kA	18 kA	50A
XTCE...C...	XTOB...CC1	EGE	35 kA	35 kA	25 kA	50A
XTCE...C...	XTOB...CC1	EGS	43 kA	42 kA	35 kA	50A
XTCE...C...	XTOB...CC1	EGH	50 kA	50 kA	65 kA	50A
XTCE...D...	XTOB...DC1	EGB	25 kA	25 kA	18 kA	100A
XTCE...D...	XTOB...DC1	EGE	35 kA	35 kA	25 kA	100A
XTCE...D...	XTOB...DC1	EGS	43 kA	42 kA	35 kA	100A
XTCE...D...	XTOB...DC1	EGH	50 kA	50 kA	65 kA	100A
XTCE...F...	XTOB...GC1	JGE	65 kA	65 kA	25 kA	250A
XTCE...F...	XTOB...GC1	JGS	65 kA	65 kA	35 kA	250A
XTCE...F...	XTOB...GC1	JGH	65 kA	65 kA	65 kA	250A
XTCE...G...	XTOB...GC1	JGE	65 kA	65 kA	25 kA	250A
XTCE...G...	XTOB...GC1	JGS	65 kA	65 kA	35 kA	250A
XTCE...G...	XTOB...GC1	JGH	65 kA	65 kA	65 kA	250A
XTCS...L...	XTOB...LC1	LGE	42 kA	42 kA	35 kA	400A
XTCS...L...	XTOB...LC1	LGS	42 kA	42 kA	42 kA	400A
XTCE...L...	XTOB...LC1	LGE	42 kA	42 kA	35 kA	400A
XTCE...L...	XTOB...LC1	LGS	42 kA	42 kA	42 kA	400A

① Pending UL approval.



Table 6. Manual Motor Controllers (Manual Motor Protector + Contactor) for Use in Group Motor Applications

XTSC and XTSR Manual Motor Controllers (MMC)/Starter Combinations

Assembled Controller ①		FLA Adjustment Range/Overload Release— (Amperes) ^r	Short-Circuit Release— (Amperes) ^{rm}	Group Installation, UL/CSA			Max. Upstream Protective Device (A/A with Current Limiter)	
				Max. rms Symmetrical Short-Circuit Ratings (kA/kA with Current Limiter)			Max. Fuse 600V	Max. Circuit Breaker 600V
Non-Reversing	Reversing			240V	480V	600V		
XTSC and XTSR Frame B MMP + Frame B Contactor								
XTSCP16BB_	XTSRP16BB_	0.1–0.16	2.2	50	50	50	600	600
XTSCP25BB_	XTSRP25BB_	0.16–0.25	3.5	50	50	50	600	600
XTSCP40BB_	XTSRP40BB_	0.25–0.4	5.6	50	50	50	600	600
XTSCP63BB_	XTSRP63BB_	0.4–0.36	8.82	50	50	50	600	600
XTSC001BB_	XTSR001BB_	0.36–1	14.0	50	50	50	600	600
XTSC1P6BB_	XTSR1P6BB_	1–1.6	22.4	50	50	50	600	600
XTSC2P5BB_	XTSR2P5BB_	1.6–2.5	35	50	50	50	600	600
XTSC004BB_	XTSR004BB_	2.5–4	56	50	50	50	600	600
XTSC6P3BB_	XTSR6P3BB_	4–6.3	88.2	50	50	50	600	600
XTSC010BB_	XTSR010BB_	6.3–10	140	22	22	22	150/600	125/600
XTSC012BB_	XTSR012BB_	8–12	168	10/50	10/50	10/50	150/600	125/600
XTSC016BB_	—	10–16	224	10/50	10/50	10/50	150/600	125/600
XTSC and XTSR Frame B MMP + Frame C Contactor								
XTSC016BC_	XTSR016BC_	10–16	224	10/50	10/50	10/50	150/600	120/600
XTSC020BC_	XTSR020BC_	16–20	280	10/18	10/18	10/18	150/600	125/600
XTSC025BC_	XTSR025BC_	20–25	350	10/18	10/18	10/18	150/600	125/600
XTSC032BC_	XTSR032BC_	25–32	448	5/18	5/18	5/18	150/600	125/600
XTSC and XTSR Frame D MMP + Frame C Contactor								
XTSC016DC_	XTSR016DC_	10–16	224	50	50	10	600	600
XTSC025DC_	XTSR025DC_	16–25	350	50	50	10	600	600
XTSC032DC_	XTSR032DC_	25–32	448	50	50	10	600	600
XTSC and XTSR Frame D MMP + Frame D Contactor								
XTSC040DD_	XTSR040DD_	32–40	560	50	50	10	600	600
XTSC050DD_	XTSR050DD_	40–50	700	50	50	10	600	600
XTSC058DD_	XTSR058DD_	50–58	812	50	50			
XTSC063DD_	XTSR063DD_	58–63	882	50	50			

① Underscore (_) indicates magnetic Coil Suffix required.



Table 7. Combination Motor Controllers (Line Side Adapter + Manual Motor Protector + Contactor) UL 508 Type F Self-Protected

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

Assembled Controller ①		FLA Adjustment Range/Overload Release— I_r (Amperes)	Short-Circuit Release— I_{rm} (Amperes)	UL 508 Type F Application			Max. Upstream Protective Device (A) ②	
				Max. rms Symmetrical Short-Circuit Ratings (kA)			Max. Fuse 600V	Max. Circuit Breaker 600V
Non-Reversing	Reversing			240V	480/277V	600/347V		
XTFC and XTFR Frame B MMP + Frame B Contactor								
XTFCP16BB_	XTFRP16BB_	0.1–0.16	2.2	50	50	30	Not required	Not required
XTFCP25BB_	XTFRP25BB_	0.16–0.25	3.5	50	50	30	Not required	Not required
XTFCP40BB_	XTFRP40BB_	0.25–0.4	5.6	50	50	30	Not required	Not required
XTFCP63BB_	XTFRP40BB_	0.4–0.63	8.82	50	50	30	Not required	Not required
XTFC001BB_	XTFRP63BB_	0.63–1	14	50	50	30	Not required	Not required
XTFC1P6BB_	XTFR1P6BB_	1–1.6	22.4	50	50	30	Not required	Not required
XTFC2P5BB_	XTFR2P5BB_	1.6–2.5	35	50	50	30	Not required	Not required
XTFC001BB_	XTFR004BB_	2.5–4.0	56	50	50	30	Not required	Not required
XTFC6P3BB_	XTFR6P3BB_	4.0–6.3	88.2	50	50	30	Not required	Not required
XTFC010BB_	XTFR010BB_	6.3–10	140	50	50		Not required	Not required
XTFC012BB_	XTFR012BB_	8–12	168	42	42		Not required	Not required
XTFC016BB_	—	10–16	224	42	42		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	50	50	50	Not required	Not required
XTFC025DC_	XTFR025DC_	16–25	350	50	50	50	Not required	Not required
XTFC032DC_	XTFR032DC_	25–32	448	50	50	50	Not required	Not required
XTFC and XTFR Frame D MMP + Frame D Contactor								
XTFC040DD_	XTFR040DD_	32–40	560	50	50	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

① Underscore (_) indicates magnetic Coil Suffix required.

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.



Table 8. Motor Protective Circuit Breaker-Contactor High Fault Ratings

Contactor	Motor Protective Circuit Breaker	UL 508 High Fault Rating		Max. Breaker Size
		240 Vac	480 Vac	
XTCE...D...	FDMP	65kA	35kA	100A
XTCE...D...	HFDMP	65kA	65kA	100A
XTCE...F...	FDMP	65kA	35kA	205A
XTCE...F...	HFDMP	65kA	65kA	205A
XTCE...G...	FDMP	65kA	35kA	205A
XTCE...G...	HFDMP	65kA	65kA	205A
XTCS...L...	FDMP	65kA	35kA	205A
XTCE...L...	FDMP	65kA	35kA	205A
XTCS...L...	HFDMP	65kA	65kA	205A
XTCE...L...	HFDMP	65kA	65kA	205A
XTCS...L...	JGMPS	65kA	35kA	250A
XTCE...L...	JGMPS	65kA	35kA	250A
XTCS...L...	JGMPH	65kA	65kA	250A
XTCE...L...	JGMPH	65kA	65kA	250A
XTCS...M...	LGMPS	42kA	42kA	600A
XTCE...M...	LGMPS	42kA	42kA	600A

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