

TruONE ATS

Withstand and Closing Ratings (WCR)

The Purpose of Testing and Unit Ratings

ABB automatic transfer switches (ATS) have been subjected to an extensive test program to show that they comply with and exceed UL 1008 standards as well as the various performance specifications used by most government agencies and major electrical engineers throughout the world. The primary test to assure the dependability of an automatic transfer switch is its ability to close into and withstand high fault currents. The purpose of this publication is to provide basic information on withstand ratings and to document the ratings that ABB ATS currently holds under UL 1008

NFPA 110 Standard for Emergency and Standby Power Systems, Section 6.3.2, requires that the capacity and rating of automatic transfer switches be adequate to withstand the thermal and electromagnetic effects of short circuit currents that may arise in the electrical system. It is important to be able to compare properly the withstand close rating (WCR) of the switch to the available short circuit (fault) current of the system until the protective device clears the fault

If a transfer switch does not have adequate withstand capability—system failure, fire, injury to personnel or equipment damage may result. A clear understanding of the interrelationship between the protective device, transfer switch and system needs is necessary for a well designed installation. Some basic information on withstand rating terms and calculations follows the enclosed rating charts.

Underwriters Laboratories (UL) is the independent testing body that has developed the standard UL 1008 which all major transfer switch manufacturers test to. UL lists products which have successfully passed a battery of witnessed tests including the withstand and close into fault tests described herein. Manufacturers that complete these tests are then permitted to label their products with the UL mark.

UL made changes in April of 1989 regarding the labeling requirements of transfer switches. UL clarified the labeling procedure and allows for three rating categories.

- Current limiting fuse
- Specific class (trip time) of molded case breaker
- “Umbrella” or “Any Breaker” ratings that take into account all types of molded, insulated case and power circuit breakers; these tests are performed for a duration of 50ms (3 cycles) on units 225 amps and greater, and for 25ms (1.5 cycles) on 40-150 amp units (with an optional 50ms (3 cycles) duration for units up to 150 amps; note the 50ms (3 cycles) rating on 150 amp and below units is optional as UL has determined that all breakers in this size clear in less than 25ms (1.5 cycles). The “Umbrella” or “Any Breaker” rating is therefore the actual UL requirement and definition of the ATS industry 50ms (3 cycles) (or 25ms (1.5 cycles) as noted) withstand and closing rating, and should not to be confused with additional, non UL 1008 labeled “withstand only” tests.

As per UL 1008 7th edition which became effective from Nov 1st, 2014, “Any Circuit Breaker” rating is replaced by “time based” rating and marking will shows in second instead of # of cycles.

Another major change was implemented in UL 7th edition for Specific Breaker Certification. Per the new requirement, the circuit breaker must be tested with a transfer switch in order to be added to the approved breaker list. The new breaker can also be added to the approved breaker list if the fault clearing time from the published trip curve indicates that the new breaker will clear a fault in the same amount or less time than the time required to clear a fault using the breaker that was tested with the transfer switch successfully.

TruONE ATS Product Ratings

The ABB family of transfer switches have maintained an industry-leading role in ratings from the time of its introduction. Today all TruONE products are labeled with a list of specific breaker ratings giving the consultant a free hand with system design. The following pages include the UL certified ratings and specific breaker coordination charts, withstand rating data and additional specific information.

The consulting engineer must review the time and rating to specify the breaker, care must be taken to assure that the breaker specified for the installation have an equal or shorter trip time when compared to the listed devices. This would limit the application of the switch to projects within the scope of its specific breaker listing.

In addition to this factor, many transfer switch manufacturers perform additional withstand tests on selected products. These additional tests may be either for a higher current value or a longer duration than their standard UL listed ratings. The consultant must determine the applicability of these tests and take careful note if these levels are normally not UL labeled ratings.

TruONE ATS
Automatic transfer switches 30 - 1200 amps

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- **TruONE Level 2** types with open and delayed transition
- **TruONE Level 3** types with open and delayed transition
- **TruONE Level 4** types with open and delayed transition



Definitions & Calculations

Purpose

Many questions arise when comparing WCR to the system fault current rating. Too often a switch is rated by a manufacturer in one set of WCR terms and the available system fault currents described with a different set of terms. The purpose of this paper is to outline the different ways switches may be rated (WCR) and systems are measured.

Basic Definitions

- RMS Current – The Root Mean Square which is the effective value of an alternating current. It is equal to .707 of the peak current for a sine wave. This is the value referred to when people say “current.”
- Peak Current – The instantaneous maximum value of current—the peak current of a sine wave is 1.414 times its RMS value.
- Symmetrical Current – The alternating current which is symmetrical around the zero axis of the sine wave.
- Asymmetrical Current – The alternating current which is not symmetrical around the zero axis.
- Peak Fault Current – The instantaneous maximum current value that occurs after the start of a fault in any phase.
- Available Peak Current – Maximum possible short circuit current that may exist in a system without protective devices.
- Peak Let Through Current – Maximum instantaneous current through the protective device during the total clearing time.
- Withstand Current Rating – The rating that defines the ability of the switch to withstand the thermal and electromagnetic effects of short circuit currents for a set period of time.
- Withstand and Closing Rating (WCR) – UL 1008 test for a transfer switch’s ability to close into and withstand a fault current. These are the ratings which will actually appear on the UL label of the product.
- Short-Time current rating (STR) - UL 1008 test similar to withstand and closing rating but for a time period up to 0.5 seconds and provides for the requirement that the switch be capable of carrying full load current after the withstand and close-on short-circuit events.

Test Documents

As fault currents can occur at any level, a transfer switch must be capable of withstanding any fault current up to its maximum rating. This rating is based on the rating of the protective device in front of the unit and must be considered on that basis.

ABB tests show results based on various current values and time durations, and include additional high current tests with fuses. By considering this range of values, it is possible to predict performance with different fuse characteristics or specific circuit breaker current-time curves with a given available short circuit current.

Interrupting Ratings

Some manufacturers of circuit breaker type automatic transfer switches list interrupting current (IC) ratings in lieu of WCR. These switches will then open on faults instead of withstanding the fault until the external protective device clears. As the transfer switch is then used to open the fault current in place of a protective device—this may leave the transfer switch with both normal and emergency open which then requires manual resetting of the breakers within the transfer switch enclosure. The circuit breakers may require factory inspection after high current interruption in accordance with common circuit breaker procedures. WCR ratings, as opposed to IC ratings appear to offer a better choice to the system designer as he attempts to coordinate the protection of the entire system. Knowing the maximum amount and duration of fault current a switch will withstand gives the designer the information necessary for complete coordinated system design.

Definitions & Calculations

Advantage of RMS Symmetrical Ratings

- Date is consistently reported based on UL test procedures.
- Where time beyond the first ½ cycle is given suitable decisions can be made to use circuit breakers or fuses.
- Misleading reporting is eliminated

Blow-On Effects on Short Circuit Current in Contacts

Some switch designers analyze “blow-on” and “blow-off” effects and force vectors (due to electromagnetic repulsion) to claim increased WCR capability of their product. Such calculations are very rough approximations because of inherent errors in estimating “domain” size and number, current “pinch” effect and the problem of complex geometry of actual contact structures when compared to idealized models. The only proof of a successful design are tests, uniformly performed and consistently reported all to the same criterion such as UL 1008.

Note when using this table:
For TruONE Level 4 only, time-based rating values override lower ratings present in coordination tables below.

TruONE Level 4 withstand and Close-on Ratings (WCR) and Short-time Ratings (STR)

ABB TruONE ATS	ATS rating	Coordinated fuse ratings			Coordinated breaker ratings				Time-based ratings[2,3]		Short-time ratings[2]	
		480V Max withstand	Class	Max fuse size	240V Max withstand	Max breaker size	480V Max withstand	Max breaker size	480V Max withstand	Time-period	480V Max withstand	Time-period
OXA, OXB (TruONE Level 2, 3, 4 controller)	30-200A	200kA	RK5	100A	200kA	250A	200kA	125A	18kA	0.1 sec	18kA[1]	0.3 sec
		50kA	RK5	200A								
		200kA	Class J or T	200A			100kA	250A				
		100kA	Class J or T	400A								
	260A	200kA	RK5	100A	200kA	600A	200kA	250A	25kA	0.1 sec	25kA[1]	0.3 sec
		100kA	RK5	200A								
		200kA	Class J or T	200A			100kA	600A				
		100kA	Class J or T	400A								
		50kA	Class J or T	600A								
	400A	200kA	Class J or T	400A	200kA	600A	200kA	250A	35kA	0.1 sec	30kA[1]	0.3 sec
		100kA	Class J or T	600A			100kA	600A				
		200kA[1]	Class J or T	600A			150kA[1]	600A				
	600A	200kA	Class J or T	400A	200kA	600A	100kA	600A	42kA	0.1 sec	30kA[1]	0.3 sec
		100kA	Class J or T	600A								
		200kA[1]	Class J or T	800A			200kA[1]	600A				
		200kA[1]	Class L	800A			65kA[1]	800A				
	800A	200kA[1]	Class L	1200A	85kA	1200A	85kA	1200A	65kA	0.1 sec	50kA[1]	0.5 sec
	1000-1200A	100kA[1]	Class L	2000A	200kA[1]	1600A	100kA[1]	1200A	50kA	0.1 sec	50kA[1]	0.5 sec
		200kA[1]	Class J or T	800A			65kA[1]	1600A	65kA	0.05 sec		
		200kA[1]	Class L	1200A								

[1] 3 phase applications only
[2] Time-based WCR and STR do not apply to TruONE Level 2 or Level 3 products
[3] Time-based ratings are also known as any-breaker ratings

Specific Breaker Model Types

30-200A 2-pole TruONE ATS transfer switches

ABB TruONE ATS	Max. Rated Voltage	Breaker Manufacturer	Max. Coordinated Breaker Rating (kA)	Max. Breaker Amp.	Breaker Type
OXA, OXB (TruONE Level 2, 3, 4 controller)	240V 1-phase	ABB	25	600A	T5V, T5L, T5H, T5S, T5N
			42	600A	XT5V, XT5L, XT5H, XT5S, XT5N
			50	125A	XT1N
				250A	T4V, T4L, T4H, T4S, T4N
			65	100A	T2S
				125A	XT2N, XT1S
				250A	XT4N
			100	125A	XT2S, XT1H
				250A	XT4S
			150	100A	T2H
				125A	XT2H
				250A	XT4H
			200	125A	XT2V, XT2L
				250A	XT4V, XT4L
		General Electric	18	150A	SED
			30	600A	SGP, SGL, SGH
			65	60A	SEH
				150A	SEH
				250A	SFH
			85	250A	SFP, SFL
			100	60A	SEL
				150A	SEL, SEP
			200	60A	SEP
		Allen Bradley	200	125A	140G-H
		Schneider	25	125A	BD
				150A	HD
				250A	JD
				600A	LD
			50	600A	LR, LL, LJ, LG
			65	125A	BG
				150A	HG
				250A	JG
			100	125A	BJ
				150A	HJ
				250A	JJ
			125	150A	HL
				250A	JL
			200	150A	HR
				250A	JR
		Eaton	30	400A	KDC, HKD, CHKD, KD, CKD
			35	600A	PDG3
			42	600A	LGX, LGU, LGC, LGH, LGS
			50	250A	JDC, HJD, JD, JDB
			65	225A	FD, FDE
			85	125A	EGS
				250A	JGS
			100	125A	EGH
				225A	HFD, HFDE
				250A	JGH
			200	125A	EGC, PDG1
				150A	PDG2
				225A	FDC, FDCE, PDG2
				250A	JGX, JGU, JGC
		Siemens	65	125A	ED6, ED4
				250A	FD6A, FXD6A
				400A	SCJD6, SHJD6, SJD6
				600A	SCLD6, SHLD6, SLD6
			100	125A	HHED4, HED4
				250A	HFD6, HFXD6
			150	125A	3VA51
			200	125A	CED6
				150A	3VA61
				250A	CFD6, HHFD6, HHFXD6, 3VA52, 3VA62
		Fused	50	600A	300V Class T fuses
			100	400A	300V Class T fuses
			200	200A	300V Class T fuses

Specific Breaker Model Types

30-200A 3 or 4 pole TruONE ATS transfer switches

ABB TruONE ATS	Max. Rated Voltage	Breaker Manufacturer	Max. Coordinated Breaker Rating (kA)	Max. Breaker Amp.	Breaker Type
OXA, OXB (TruONE Level 2, 3, 4 controller)	240V 1 or 3-phase	ABB	42	600A	XT5V, XT5L, XT5H, XT5S, XT5N
			50	125A	XT1N
				250A	T4V, T4L, T4H, T4S, T4N
				600A	T5N, T5S, T5V, T5L, T5H
			65	100A	T2S
				125A	XT2N, XT1S
				250A	XT4N
			100	125A	XT2S, XT1H
				250A	XT4S
			150	100A	T2H
				125A	XT2H
				250A	XT4H
			200	125A	XT2V, XT2L
				250A	XT4V, XT4L
		General Electric	18	150A	SED
			30	600A	SGP, SGL, SGH
			42	250A	PEC
			50	600A	PGE, PGN, PGH, PGL, PGP
			65	100A	TEY
				125A	TEYF, TEYD, TEYH
				150A	SEH
				250A	SFH, PEE
			85	250A	SFP, SFL
			100	125A	TEYL
				150A	SEP, SEL
				250A	PEN
			150	250A	PEH
			200	60A	SEP
				250A	PEL
		Allen Bradley	200	125A	140G-H
		Schneider	25	125A	BD
				150A	HD
				250A	JD
				600A	LD
			30	125A	BG, BJ
			50	600A	LR, LL, LJ, LG
			65	150A	HG
				250A	JG
			100	150A	HJ
				250A	JJ
			125	150A	HL
				250A	JL
			200	150A	HR
				250A	JR
		Eaton	30	400A	KDC, HKD, CHKD, KD, CKD
			35	225A	FD, FDE
				600A	PDG3
			42	600A	LGX, LGU, LGC, LGH, LGS
			50	225A	HFD, HFDE, FDCE
				250A	JDC, HJD, JD, JDB
			65	225A	FD, FDE
			85	125A	EGS
				250A	JGS
			100	125A	EGH
				250A	JGH
			200	125A	EGC, PDG1
				150A	PDG2
				225A	FDC, PDG2
				250A	JGX, JGU, JGC
		Siemens	65	125A	ED4, ED6
				250A	FD6A, FXD6A
				400A	SCJD6, SHJD6, SJD6
				600A	SCLD6, SHLD6, SLD6
			100	125A	HHED6, HED4
				250A	HFD6, HFXD6, HHFD6, HHFXD6
			150	125A	3VA51

Specific Breaker Model Types

30-200A 3 or 4 pole TruONE ATS transfer switches

ABB TruONE ATS	Max. Rated Voltage	Breaker Manufacturer	Max. Coordinated Breaker Rating (kA)	Max. Breaker Amp.	Breaker Type
OXA, OXB (TruONE Level 2, 3, 4 controller)	240V 1 or 3-phase	**Siemens**	200	125A	CED6
				150A	3VA61
				250A	CFD6, 3VA52, 3VA62
		Fused	50	600A	300V Class T fuses
			100	400A	300V Class T fuses
			200	200A	300V Class T fuses
OXA, OXB (TruONE Level 2, 3, 4 controller)	480V 1 or 3-phase	ABB	25	125A	XT2N, XT1N
				250A	T4N, XT4N
				600A	T5N
			35	100A	T2S
				125A	XT2S, XT1S
				250A	T4S, XT4S
				600A	XT5N, T5S
			42	600A	XT5V, XT5L, XT5H, XT5S
			50	250A	T4V, T4L, T4H
				600A	T5H, T5L, T5V
			65	100A	T2H
				125A	XT2H, XT1H
				250A	XT4H
			100	125A	XT2L
				250A	XT4L
			150	125A	XT2V, XT4V
		General Electric	14	100A	TEY
			18	125A	TEYF
				150A	SED
			25	150A	SEH
				250A	PEC
			30	600A	SGH, SGL, SGP, PGE, PGN, PGH, PGL, PGP
			35	125A	TEYH
				250A	SFH, PEE
			42	250A	SFP, SFL
			50	150A	SEP, SEL
			65	60A	SEP, SEL
				125A	TEYL
				250A	PEN
			100	250A	PEH, PEL
		Allen Bradley	200	125A	140G-H
		Schneider	18	125A	EDB, BD
				150A	HD
				250A	JD
				600A	LD
			25	600A	LR, LL, LJ, LG
			30	125A	EGB, EJB, BG, BJ
			35	150A	HG
				250A	JG
			65	150A	HJ
				250A	JJ
			100	150A	HR, HL
				250A	JR, JL
		Eaton	30	400A	KD, CKD, HKD, CHKD, KDC
			35	125A	EGS, EGH
				225A	FD, FDE
				250A	JGS, JDB, JD, HJD, JGH
			42	250A	JDC
			50	150A	PDG2
				225A	FDC, FDCE, HFD, HFDE, PDG2
			65	250A	JGX, JGU, JGC, JGH
			100	125A	EGC, PDG1
			150	100A	EGC+CL
		Siemens	18	125A	ED4
			25	125A	ED6
			35	250A	FD6, FXD6A
				400A	SCJD6, SHJD6, SJD6
				600A	SCLD6, SLD6, SHLD6
			42	125A	HED4
			65	125A	HHED6, 3VA51
				150A	3VA61
				250A	CFD6, HHFD6, HHFXD6, HFD6, HFXD6, JGH+CL, 3VA52, 3VA62

Specific Breaker Model Types

30-200A 3 or 4 pole TruONE ATS transfer switches

ABB TruONE ATS	Max. Rated Voltage	Breaker Manufacturer	Max. Coordinated Breaker Rating (kA)	Max. Breaker Amp.	Breaker Type
OXA, OXB (TruONE Level 2, 3, 4 controller)	480V 1 or 3-phase	Siemens	150	150A	3VA61
				250A	3VA62
			200	125A	CED6
		Fused	50	200A	Class RK5 fuses
			100	400A	Class J & T fuses
			200	100A	Class RK5 fuses
				200A	Class J & T fuses

260A 2 pole TruONE ATS transfer switches

ABB TruONE ATS	Max. Rated Voltage	Breaker Manufacturer	Max. Coordinated Breaker Rating (kA)	Max. Breaker Amp.	Breaker Type
OXA, OXB (TruONE Level 2, 3, 4 controller)	240V 1-phase	ABB	50	125A	XT1N
			65	100A	T2S
				125A	XT2N, XT1S
				250A	T4N, XT4N
				600A	XT5N
			100	125A	XT2S, XT1H
				250A	T4S, XT4S
				600A	XT5S
			150	100A	T2H
				125A	XT2H
				250A	T4H, XT4H
				600A	XT5H
			200	125A	XT2V, XT2L
				250A	T4V, T4L, XT4V, XT4L
				600A	XT5V, XT5L
		General Electric	18	150A	SED
			50	600A	SGP, SGL, SGH
			65	150A	SEH
				250A	SFH
			100	150A	SEL
				250A	SFP, SFL
			200	150A	SEP
		Allen Bradley	200	125A	140G-H
		Schneider	25	125A	BD
				150A	HD
				250A	JD
				600A	LD
			65	125A	BG
				150A	HG
				250A	JG
				600A	LG
			100	125A	BJ
				150A	HJ
				250A	JJ
				600A	LR, LL, LJ
			125	150A	HL
				250A	JL
			200	150A	HR
				250A	JR
		Eaton	42	600A	LDC, CLDC, HLD, CHLD, LD, CLD
			65	225A	FD, FDE
				250A	JD, JDB
				400A	KDC, HKD, CHKD, KD, CKD, PDG3G
			85	125A	EGS
				250A	JGS
				600A	LGX, LGU, LGC, LGH, LGS
			100	125A	EGH
				225A	HFD, HFDE
				250A	JGH, JDC, HJD

Specific Breaker Model Types

260A 2 pole TruONE ATS transfer switches

ABB TruONE ATS	Max. Rated Voltage	Breaker Manufacturer	Max. Coordinated Breaker Rating (kA)	Max. Breaker Amp.	Breaker Type
OXA, OXB (TruONE Level 2, 3, 4 controller)	240V 1-phase	Eaton	200	125A	EGC, PDG1
				150A	PDG2
				225A	FDC, FDCE, PDG2
				250A	JGX, JGU, JGC
		Siemens	65	125A	ED4, ED6
				250A	FD6A, FXD6A
				400A	JD6A, JXD6A, SJD6
				600A	LD6, LXD6, SLD6
			85	400A	CJD6, HHJD6A, HHJXD6A, HJD6A, HJXD6A
				600A	CLD6, HHLD6, HHLXD6, HLD6, HLXD6
			100	125A	HHED6, HED4
				250A	HFD6, HFXD6
				400A	SHJD6, 3VA63, 3VA53
				600A	SHLD6, 3VA64, 3VA54
			150	125A	3VA51
			200	125A	CED6
				150A	3VA61
				250A	CFD6, HHFD6, HHFXD6, 3VA52, 3VA62
				400A	SCJD6
				600A	SCLD6
		Fused	50	800A	300V Class T fuses
			100	600A	300V Class T fuses
			200	400A	300V Class T fuses

Specific Breaker Model Types

260A 3 or 4 pole TruONE ATS transfer switches

ABB TruONE ATS	Max. Rated Voltage	Breaker Manufacturer	Max. Coordinated Breaker Rating (kA)	Max. Breaker Amp.	Breaker Type
OXA, OXB (TruONE Level 2, 3, 4 controller)	240V 1 or 3-phase	ABB	35	600A	T5S
			50	125A	XT1N
				600A	T5H, T5V, T5L
			65	100A	T2S
				125A	XT2N, XT1S
				250A	T4N, XT4N
				600A	XT5N
			100	125A	XT2S, XT2H, XT1H
				250A	T4S, XT4S
				600A	XT5S
			150	100	T2H
				250	T4H, XT4H
				600	XT5H
			200	125	XT2V, XT2L
				250	T4V, T4L, XT4V, XT4L
				600	XT5V, XT5L
		General Electric	18	150A	SED
			42	250A	PEC
			50	600A	SGP, SGL, SGH
			65	100A	TEY
				125A	TEYF, TEYD, TEYH
				150A	SFH
				600A	PEE
			100	125A	TEYL
				150A	SEL
				250A	SFP, SFL
				600A	PEN, PEH, PEL, PEP
			150	250A	PEH
			200	150A	SEP
				250A	PEL
		Allen Bradley	200	125A	140G-H
		Schneider	25	125A	BD
				150A	HD
				250A	JD
				600A	LD
			35	125A	BG
			50	125A	BJ
			65	150A	HG
				250A	JG
				600A	LG
			100	150A	HJ
				250A	JJ
				600A	LR, LL, LJ
			125	150A	HL
				250A	JL
			200	150A	HR
				250A	JR
		Eaton	42	600A	LDC, CLDC, HLD, CHLD, LD, CLD
			65	225A	FD, FDE
				250A	JD, JDB, HJD
				400A	KDC, HKD, CHKD, KD, CKD, PDG3G
				600A	LGX, LGU, LGC, LGH, LGS
			85	125A	EGS
				250A	JGS
			100	125A	EGH
				225A	HFD, HFDE, FDCE
				250A	JGH, JDC
			200	125A	EGC, PDG1
				150A	PDG2
				225A	FDC, PDG2
				250A	JGX, JGU, JGC

Specific Breaker Model Types

260A 3 or 4 pole TruONE ATS transfer switches

ABB TruONE ATS	Max. Rated Voltage	Breaker Manufacturer	Max. Coordinated Breaker Rating (kA)	Max. Breaker Amp.	Breaker Type
OXA, OXB (TruONE Level 2, 3, 4 controller)	240V 1 or 3-phase	Siemens	65	125A	ED4, ED6
				250A	FD6A, FXD6A
				400A	JD6A, JXD6A, SJD6
				600A	LD6, LXD6, SLD6
			85	400A	CJD6, HHJD6A, HHJXD6A, HJD6A, HJXD6A
				600A	CLD6, HHLD6, HHLXD6, HLD6, HLXD6
			100	125A	HHED6, HED4
				250A	HFD6, HFXD6, HHFD6, HHFXD6
				400A	SHJD6, 3VA63, 3VA53
				600A	SHLD6, 3VA64, 3VA54
			150	125A	3VA51
			200	125A	CED6
				150A	3VA61
				250A	CFD6, 3VA52, 3VA62
				400A	SCJD6
				600A	SCLD6
		Fused	50	800A	300V Class T fuses
			100	600A	300V Class T fuses
			200	400A	300V Class T fuses
				200A	300V Class T fuses
	480V 1 or 3-phase	ABB	25	125A	XT2N, XT1N
				250A	T4N, XT4N
				600A	T5N
			35	100A	T2S
				125A	XT2S, XT1S
				250A	T4S, XT4S
				600A	T5S, XT5N
			50	600A	T5H, T5L, T5V, XT5S
			65	100A	T2H
				125A	XT2H, XT1H
				250A	T4H, XT4H
				600A	XT5H
			100	125A	XT2L
				250A	T4V, T4L, XT4L
				600A	XT5L, XT5V
			150	125A	XT2V
				250A	XT4V
		General Electric	14	100A	TEY
			18	125A	TEYF
				150A	SED
			25	125A	TEYD
				150A	SEH
				250A	PEC
			35	125A	TEYH
				250A	SFH, PEE
				600A	SGH, PGE
			50	600A	SGL, SGP, PGN, PGH, PGL, PGP
			65	125A	TEYL
				150A	SEL
				250A	SFL
				600A	PEN
			85	250A	SFP
			100	150A	SEP
				250A	PEH
			150	250A	PEL
		Allen Bradley	150	125A	140G-H
			65	400A	140G-K

Specific Breaker Model Types

260A 3 or 4 pole TruONE ATS transfer switches

ABB TruONE ATS	Max. Rated Voltage	Breaker Manufacturer	Max. Coordinated Breaker Rating (kA)	Max. Breaker Amp.	Breaker Type
OXA, OXB (TruONE Level 2, 3, 4 controller)	480V 1 or 3-phase	Schneider	18	125A	EDB, BD
				150A	HD
				250A	JD
				600A	LD
			35	125A	EGB, BG
				150A	HG
				250A	JG
				600A	LG
			50	125A	LJ, LL, LR
				600A	EJB, BJ
			65	150A	HJ
				250A	JJ
			100	150A	HL
				250A	JL
			200	150A	HR
				250A	JR
		Eaton	35	125A	EGS
				225A	FD, FDE
				250A	JDB, JD, JGS
				400A	KD, CKD
				600A	LD, CLD, HLD, CHLD, LDC, CLDC
			50	225A	HFD, HFDE, FDCE
				250A	HJD
				400A	HKD, CHKD, KDC
				600A	LGC, LGU, LGX, LGH, LGS
			65	125A	EGH
				250A	JGH
			85	225A	PDG2
			100	125A	EGC, PDG1
				150A	PDG2
				225A	FDC
				250A	JGC, JDC, JGH+CL
			150	125A	EGC+CL
				250A	JGU
			200	250A	JGX
		Siemens	18	125A	ED4
			25	125A	ED6
			35	250A	FD6A, FXD6A
				400A	JD6-A, JXD6-A, HJD6-A, HJXD6-A, HHJD6-A, HHJXD6-A, CJD6-A, SJD6, 3VA63, 3VA53
				600A	CLD6, HHLD6, HHLXD6, HLD6, HLXD6, LD6, LXD6, SLD6, 3VA64, 3VA54
			42	125A	HED4
			50	400A	SCJD6, SHJD6
				600A	SCLD6, SHLD6
			65	125A	HHED6, 3VA51
				250A	HFD6, HFXD6
			100	250A	CFD6, HHFD6, HHFXD6, 3VA52, 3VA62
			150	150A	3VA61
				250A	3VA62
			200	125A	CED6
		Fused	50	600A	Class J & T fuses
			100	200A	Class RK5 fuses
				400A	Class J & T fuses
			200	100A	Class RK5 fuses
				200A	Class J & T fuses
	480V 3-phase only	ABB	100	600A	XT5V, XT5L
		Eaton	100	225A	PDG2
		Siemens	65	400A	3VA63
				600A	3VA64

Specific Breaker Model Types

400A 2 pole TruONE ATS transfer switches

ABB TruONE ATS	Max. Rated Voltage	Breaker Manufacturer	Max. Coordinated Breaker Rating (kA)	Max. Breaker Amp.	Breaker Type
OXA, OXB (TruONE Level 2, 3, 4 controller)	240V 1-phase	ABB	50	125A	XT1N
			65	100A	T2S
				125A	XT2N, XT1S
				250A	T4N, XT4N
				600A	XT5N
			100	125A	XT2S, XT1H
				250A	T4S, XT4S
				600A	XT5S
			150	100A	T2H
				125A	XT2H
				250A	T4H, XT4H
				600A	XT5H
			200	125A	XT2V, XT2L
				250A	T4V, T4L, XT4V, XT4L
				600A	XT5V, XT5L
		General Electric	18	60A	SED
				150A	SED
			42	250A	PEC
			50	600A	SGP, SGL, SGH
			65	60A	SEH
				150A	SEH
				250A	SFH, PEE
				600A	PGE
			100	60A	SEL
				150A	SEL
				250A	SFP, SFL, PEN
				600A	PGN, PGH, PGL, PGP
			150	250A	PEH
			200	60A	SEP
			200	150A	SEP
			200	250A	PEL
		Allen Bradley	200	125A	140G-H
		Schneider	25	125A	BD
				150A	HD
				250A	JD
				600A	LD
			30	125A	BG, BJ
			65	150A	HG
				250A	JG
				600A	LG
			100	125A	BJ
				150A	HJ
				250A	JJ
				600A	LR, LL, LJ
			125	150A	HL
				250A	JL
			200	150A	HR
				250A	JR

Specific Breaker Model Types

400A 2 pole TruONE ATS transfer switches

ABB TruONE ATS	Max. Rated Voltage	Breaker Manufacturer	Max. Coordinated Breaker Rating (kA)	Max. Breaker Amp.	Breaker Type
OXA, OXB (TruONE Level 2, 3, 4 controller)	240V 1-phase	Eaton	42	600A	LDC, CLDC, HLD, CHLD
			65	225A	FD, FDE
				250A	JD, JDB
				400A	KDC, HKD, CHKD, KD, CKD
			85	125A	EGS
				250A	JGS
				600A	LGS
			100	125A	EGH
				225A	HFD, HFDE
				250A	JGH, JDC, HJD
				600A	LGX, LGU, LGC, LGH
			200	125A	EGC, PDG1
				150A	PDG2
				225A	FDC, FDCE, PDG2
				250A	JGX, JGU, JGC
		Siemens	65	125A	ED6, ED4
				250A	FD6A, FXD6A
				400A	JD6A, JXD6A, SJD6
				600A	LD6, LXD6, SLD6
			100	125A	HHED4, HED4
				250A	HFD6, HFXD6
				400A	CJD6A, HHJD6A, HHJXD6A, HJD6A, HJXD6A, SHJD6, 3VA63, 3VA53
				600A	CLD6, HHLD6, HHLXD6, HLD6, HLXD6, SHLD6, 3VA64, 3VA54
			150	125A	3VA51
			200	125A	CED6
				150A	3VA61
				250A	CFD6, HHFD6, HHFXD6, 3VA52, 3VA62
				400A	SCJD6
				600A	SCLD6
		Fused	50	800A	300V T-Fuses
			100	600A	300V T-Fuses
			200	400A	300V T-Fuses

Specific Breaker Model Types

400A 3 or 4 pole TruONE ATS transfer switches

ABB TruONE ATS	Max. Rated Voltage	Breaker Manufacturer	Max. Coordinated Breaker Rating (kA)	Max. Breaker Amp.	Breaker Type
OXA, OXB (TruONE Level 2, 3, 4 controller)	480V, 3-phase only	ABB	25	125A	XT2N
				250A	T4N, XT4N
				600A	T5N
			35	100A	T2S
				125A	XT2S
				250A	T4S, XT4S
			35	600A	T5S, XT5N
				600A	XT5S
				100A	T2H
			65	125A	XT2H
				250A	XT4H, T4H
				600A	T5H, XT5H
			100	125A	XT2L
				250A	XT4L, T4L
				600A	T5L, XT5V, XT5L
			150	125A	XT2V
				250A	XT4V, T4V
				600A	T5V
		General Electric	18	60A	SED
				150A	SED
			25	60A	SEH
				150A	SEH
				250A	PEC
			35	250A	SFH, PEE
				600A	SGH, PGE
			50	600A	SGP, SGL, PGN, PGH, PGL, PGP
			65	60A	SEL
				150A	SEL
				250A	SFL, PEN
			100	60A	SEP
				150A	SEP
				250A	SFP, PEH
			150	250A	PEL
		Schneider	18	125A	EDB, BD
				150A	HD
				250A	JD
				600A	LD
			30	125A	EGB, BG, EJB, BJ
			35	150A	HG
				250A	JG
				600A	LG
			50	600A	LR, LL, LJ
			65	150A	HJ
				250A	JJ
			100	150A	HL
				250A	JL
			200	150A	HR
				250A	JR

Specific Breaker Model Types

400A 3 or 4 pole TruONE ATS transfer switches

ABB TruONE ATS	Max. Rated Voltage	Breaker Manufacturer	Max. Coordinated Breaker Rating (kA)	Max. Breaker Amp.	Breaker Type
OXA, OXB (TruONE Level 2, 3, 4 controller)	480V, 3-phase only	Eaton	35	125A	EGS
				225A	FD, FDE
				250A	JGS, JD, JDB
				400A	KD, CKD
				600A	LDC, CLDC, HLD, CHLD, LD, CLD
			50	400A	HKD, CHKD
				600A	LGX, LGU, LGC, LGH, LGS
			65	125A	EGH
				225A	HFD, HFDE
				250A	JGH, HJD
				400A	KDC, PDG3, PDG3
			100	125A	EGC, PDG1
				225A	FDC, FDCE, PDG2
				250A	JGC, JDC
			150	125A	EGC+CL
				250A	JGU
			200	250A	JGX, JGH+CL
		Siemens	18	125A	ED4
			25	125A	ED6
			35	400A	CJD6A, HHJD6A, HHJXD6A, HJD6A, HJXD6A, JD6A, JXD6A, SJD6, 3VA63, 3VA53
				600A	CLD6, HHLD6, HHLXD6, HLD6, HLXD6, LD6, LXD6, SCLD6, 3VA64, 3VA54
			42	125A	HED4
			65	125A	HHED6, 3VA51
				400A	SCJD6, SHJD6, 3VA63
				600A	SCLD6, 3VA64
			100	250A	HHFD6, HHFXD6, HFD6, HFXD6, FD6A, FXD6A, 3VA52, 3VA62
			150	150A	3VA61
				250A	3VA62
			200	125A	CED6
				250A	CFD6
		Fused	200	200A	CLASS RK5 FUSES
				600A	CLASS J & T FUSES
	480V, 3 and 1-phase	ABB	25	125A	XT2N, XT1N
				250A	T4N, XT4N
				600A	T5N
			35	100A	T2S
				125A	XT2S, XT1S
				250A	XT4S, T4S
				600A	T5S, XT5N
			50	600A	T5H, T5L, T5V, XT5S
			65	100A	T2H
				125A	XT2H, XT1H
				250A	T4H, XT4H
				600A	XT5H
			100	125A	XT2L
				250A	T4V, T4L, XT4L
				600A	XT5V, XT5L
			150	125A	XT2V
				250A	XT4V
		General Electric	18	60A	SED
				150A	SED
			25	60A	SEH
				150A	SEH
				250A	PEC
			35	250A	SFH, PEE
				600A	SGH
			50	600A	SGL, SGP
			65	60A	SEL
				150A	SEL
				250A	SFL, PEN
			85	250A	SFP
			100	60A	SEP
				150A	SEP
				250A	PEH
			150	250A	PEL

Specific Breaker Model Types

400A 3 or 4 pole TruONE ATS transfer switches

ABB TruONE ATS	Max. Rated Voltage	Breaker Manufacturer	Max. Coordinated Breaker Rating (kA)	Max. Breaker Amp.	Breaker Type
OXA, OXB (TruONE Level 2, 3, 4 controller)	480V, 3 and 1-phase	Allen Bradley	65	400A	140G-K
			150	125A	140G-H
		Schneider	18	125A	EDB, BD
				150A	HD
				250A	JD
				600A	LD
			30	125A	EGB, BG, EJB, BJ
			35	150A	HG
				250A	JG
				600A	LG
			50	600A	LJ, LL, LR
			65	150A	HJ
				250A	JJ
			100	150A	HL
				250A	JL
			200	150A	HR
				250A	JR
		Eaton	35	125A	EGS
				225A	FD, FDE
				250A	JDB, JD, JGS
				400A	KD, CKD
				600A	LD, CLD, HLD, CHLD, LDC, CLDC
			50	400A	HKD, CHKD, KDC
				600A	LGC, LGU, LGX, LGH, LGS
			65	125A	EGH
				225A	HFD, HFDE
				250A	JGH, HJD
			100	125A	EGC, PDG1
				225A	FDC, FDCE, PDG2
				250A	JGC, JGH, JDC
			150	125A	EGC+CL
				250A	JGU
			200	250A	JGX
		Siemens	18	125A	ED4
			25	125A	ED6, 3VA51
				250A	3VA52
			35	125A	3VA51
				150A	3VA61
				250A	FD6A, FXD6A, 3VA52, 3VA62
				400A	CJD6-A, HHJD6A, HHJXD6A, HJD6A, HJXD6A, JD6A, JXD6A, SJD6, 3VA63, 3VA53
				600A	CLD6, HHLD6, HHLXD6, HLD6, HLXD6, LD6, LXD6, SCLD6, 3VA64, 3VA54
			42	125A	HED4
			65	125A	HHED4, 3VA51
				400A	SCJD6, SHJD6, 3VA63
				600A	SCLD6, SCLD6, 3VA64
			100	250A	CFD6, HHFD6, HHFXD6, HFD6, HFXD6, FD6A, FXD6A, 3VA52, 3VA62
			150	150A	3VA61
				250A	3VA62
			200	125A	CED6
		Fused	100	600A	CLASS J & T FUSES
				200A	CLASS RK5 FUSES
			200	400A	CLASS J & T FUSES
				100A	CLASS RK5 FUSES

Specific Breaker Model Types

400A 3 or 4 pole TruONE ATS transfer switches

ABB TruONE ATS	Max. Rated Voltage	Breaker Manufacturer	Max. Coordinated Breaker Rating (kA)	Max. Breaker Amp.	Breaker Type
OXA, OXB (TruONE Level 2, 3, 4 controller)	240V, 3-phase only	ABB	65	100A	T2S
				125A	XT2N
				250A	T4N, XT4N
				600A	T5N, XT5N
			100	125A	XT2S
				250A	T4S, XT4S
				600A	T5S, XT5S
			150	100A	T2H
				125A	XT2H
				250A	T4H, XT4H
				600A	T5H, XT5H
			200	125A	XT2V, XT2L
				250A	T4V, T4L, XT4V, XT4L
				600A	T5V, T5L, XT5V, XT5L
		General Electric	18	60A	SED
				150A	SED
			42	250A	PEC
			50	600A	SGP, SGL, SGH
			65	60A	SEH
				150A	SEH
				250A	SFH, PEE
				600A	PGE
			100	60A	SEL
				150A	SEL
				250A	SFL, PEN
				600A	PGN, PGH, PGL, PGP
			150	250A	PEH
			200	60A	SEP
				150A	SEP
				250A	SFP, PEL
		Schneider	25	125A	BD
				150A	HD
				250A	JD
				600A	LD
			30	125A	BG, BJ
			65	150A	HG
				250A	JG
				600A	LG
			100	150A	HJ
				250A	JJ
				600A	LL, LJ
			125	150A	HL
				250A	JL
			200	150A	HR
				250A	JR
				600A	C
		Eaton	42	600A	LDC, CLDC, HLD, CHLD, LD, CLD
			65	225A	FD, FDE
				250A	JD, JDB
				400A	KD, CKD, HKD, CHKD, KDC
			85	125A	EGS
				250A	JGS
				600A	LGS
			100	125A	EGH
				225A	HFD, HFDE
				250A	JGH
				600A	LGH
			150	600A	LGX, LGU, LGC
			200	125A	EGC, PDG1
				150A	PDG2
				225A	FDC, FDCE, PDG2
				250A	JGX, JGU, JGC, JDC, PDG2

Specific Breaker Model Types

400A 3 or 4 pole TruONE ATS transfer switches

ABB TruONE ATS	Max. Rated Voltage	Breaker Manufacturer	Max. Coordinated Breaker Rating (kA)	Max. Breaker Amp.	Breaker Type
OXA, OXB (TruONE Level 2, 3, 4 controller)	240V, 3-phase only	Siemens	65	125A	ED6, ED4
				250A	FD6A, FXD6A
				400A	JD6A, JXD6A, SCJD6
				600A	LD6, LXD6, SLD6
			100	125A	HHED6, HED4
				250A	HFD6, HFXD6
				400A	CJD6A, HHJD6A, HHJXD6A, HJD6A, HJXD6A, SHJD6, 3VA63, 3VA53
				600A	CLD6, HHLD6, HHLXD6, HLD6, HLXD6, SHLD6, 3VA64, 3VA54
			150	125A	3VA51
			200	125A	CED6
				150A	3VA61
				250A	CFD6, HHFD6, HHFXD6, 3VA52, 3VA62
				400A	SCJD6
				600A	SCLD6
		Fused	100	800A	300V Class T- fuses
			200	600A	300V Class T- fuses
	240V, 3 and 1-phase	ABB	50	125A	XT1N
			65	100A	T2S
				125A	XT2N, XT1S
				250A	T4N, XT4N
				600A	XT5N
			100	125A	XT2S, XT1H
				250A	T4S, XT4S
				600A	XT5S
			150	100A	T2H
				125A	XT2H
				250A	T4H, XT4H
				600A	XT5H
			200	125A	XT2V, XT2L
				250A	T4V, T4L, XT4V, XT4L
				600A	XT5V, XT5L
		General Electric	18	60A	SED
				150A	SED
			50	600A	SGP, SGL, SGH
			65	60A	SEH
				150A	SEH
				250A	SFH
			100	60A	SEL
				150A	SEL
				250A	SFP, SFL
			200	60A	SEP
				150A	SEP
		Allen Bradley	200	125A	140G-H
		Schneider	25	125A	BD
				150A	HD
				250A	JD
				600A	LD
			65	125A	BG
				150A	HG
				250A	JG
				600A	LG
			100	125A	BJ
				150A	HJ
				250A	JJ
				600A	LR, LL, LJ
			125	150A	HL
				250A	JL
			200	150A	HR
				250A	JR

Specific Breaker Model Types

400A 3 or 4 pole TruONE ATS transfer switches

ABB TruONE ATS	Max. Rated Voltage	Breaker Manufacturer	Max. Coordinated Breaker Rating (kA)	Max. Breaker Amp.	Breaker Type
OXA, OXB (TruONE Level 2, 3, 4 controller)	240V, 3 and 1-phase	Eaton	42	600A	LDC, CLDC, HLD, CHLD
			65	225A	FD, FDE
				250A	JD, JDB
				400A	KDC, HKD, CHKD, KD, CKD
			85	125A	EGS
				250A	JGS
				600A	LGS
			100	125A	EGH
				225A	HFD, HFDE
				250A	JGH, JDC, HJD
				600A	LGX, LGU, LGC, LGH
			200	125A	EGC, PDG1
				150A	PDG2
				225A	FDC, FDCE, PDG2
				250A	JGX, JGU, JGC
		Siemens	65	125A	ED6, ED4
				250A	FD6A, FXD6A
				400A	JD6A, JXD6A, SJD6
				600A	LD6, LXD6, SLD6
			100	125A	HHED4, HED4
				250A	HFD6, HFXD6
				400A	CJD6A, HHJD6A, HHJXD6A, HJD6A, HJXD6A, SHJD6, 3VA63, 3VA53
				600A	CLD6, HHLD6, HHLXD6, HLD6, HLXD6, SHLD6, 3VA64, 3VA54
			150	125A	3VA51
			200	125A	CED6
				150A	3VA61
				250A	CFD6, HHFD6, HHFXD6, 3VA52, 3VA62
				400A	SCJD6
				600A	SCLD6
		Fused	50	800A	300V T-Fuses
			100	600A	300V T-Fuses
			200	400A	300V T-Fuses

Specific Breaker Model Types

600A 2 pole TruONE ATS transfer switches

ABB TruONE ATS	Max. Rated Voltage	Breaker Manufacturer	Max. Coordinated Breaker Rating (kA)	Max. Breaker Amp.	Breaker Type
OXA, OXB (TruONE Level 2, 3, 4 controller)	240V 1-phase	ABB	65	100A	T2S
				125A	XT2N
				250A	T4N, XT4N
				600A	XT5N
			100	125A	XT2S
				250A	T4S, XT4S
				600A	XT5S
			150	100A	T2H
				125A	XT2H
				250A	T4H, XT4H
				600A	XT5H
			200	125A	XT2V, XT2L
				250A	T4V, T4L, XT4V, XT4L
				600A	XT5V, XT5L
		General Electric	18	60A	SED
				150A	SED
			42	250A	PEC
			50	600A	SGP, SGL, SGH
			65	60A	SEH
				150A	SEH
				250A	SFH, PEE
				600A	PGE
			100	60A	SEL
				150A	SEL
				250A	SFP, SFL, PEN
				600A	PGN, PGH, PGL, PGP
			150	250A	PEH
			200	60A	SEP
				150A	SEP
				250A	PEL
		Schneider	25	125A	BD
				150A	HD
				250A	JD
				600A	LD
			65	125A	BG
				150A	HG
				250A	JG
				600A	LG
			100	125A	BJ
				150A	HJ
				250A	JJ
				600A	LR, LL, LJ
			125	150A	HL
				250A	JL
			200	150A	HR
				250A	JR

Specific Breaker Model Types

600A 2 pole TruONE ATS transfer switches

ABB TruONE ATS	Max. Rated Voltage	Breaker Manufacturer	Max. Coordinated Breaker Rating (kA)	Max. Breaker Amp.	Breaker Type
OXA, OXB (TruONE Level 2, 3, 4 controller)	240V 1-phase	Eaton	42	600A	LDC, CLDC, HLD, CHLD, LD, CLD
			65	225A	FD, FDE
				250A	JD, JDB
				400A	KDC, HKD, CHKD, KD, CKD
			85	125A	EGS
				250A	JGS
				600A	LGS
			100	125A	EGH
				225A	HFD, HFDE
				250A	JGH, JDC, HJD
				600A	LGX, LGU, LGC, LGH
			200	125A	EGC
				225A	FDC, FDCE, PDG2
				250A	JGX, JGU, JGC
		Siemens	65	125A	ED6, ED4
				250A	FD6A, FXD6A
				400A	JD6A, JXD6A, SJD6
				600A	LD6, LXD6, SLD6
			85	400A	CJD6A, HHJD6A, HHJXD6A, HJD6A, HJXD6A
				600A	CLD6, HHLD6, HHLXD6, HLD6, HLXD6
			100	125A	HHED4, HED4
				250A	HFD6, HFXD6
				400A	SHJD6, 3VA63, 3VA53
				600A	SHLD6, 3VA64, 3VA54
			200	125A	CED6
				250A	CFD6, HHFD6, HHFXD6, 3VA62, 3VA52
				400A	SCJD6
				600A	SCLD6
		Fused	50	800A	300V Class T-fuses
			100	600A	300V Class T-fuses
			200	400A	300V Class T-fuses

Specific Breaker Model Types

600A 3 or 4 pole TruONE ATS transfer switches

ABB TruONE ATS	Max. Rated Voltage	Breaker Manufacturer	Max. Coordinated Breaker Rating (kA)	Max. Breaker Amp.	Breaker Type
OXA, OXB (TruONE Level 2, 3, 4 controller)	480V, 3-phase only	ABB	20	1200A	XT7L, XT7H, XT7S
			25	125A	XT2N
				250A	T4N, XT4N
				600A	T5N
			35	100A	T2S
				125A	XT2S
				250A	XT4S, T4S
				600A	T5S, XT5N
				800A	T6N, XT6H, XT6S, XT6N
			50	800A	T6S, T6H, T6L, XT5S
			65	100A	T2H
				125A	XT2H
				250A	T4H, XT4H
				600A	T5H, XT5H
			100	125A	XT2L
				250A	XT4L, T4L, T4V
				600A	T5L, XT5L
			150	125A	XT2V
				250A	XT4V
				600A	T5V, XT5V
		General Electric	18	60A	SED
				150A	SED
			25	60A	SEH
				150A	SEH
				250A	PEC
			35	250A	SFH, PEC
				600A	SGH, PGE
			65	60A	SEL
				150A	SEL
				250A	SFL, PEN
				600A	SGL, SGP, PGN
			100	60A	SEP
				150A	SEP
				250A	SFP, PEH
				600A	PGH
			150	250A	PEL
				600A	PGL
			200	600A	PGP
		Schneider	18	125A	EDB, BD
				150A	HD
				250A	JD
				600A	LD
			30	125A	EGB, EJB, BG, BJ
			35	150A	HG
				250A	JG
				600A	LG
			65	150A	HJ
				250A	JJ
				600A	LJ
			100	150A	HL
				250A	JL
				600A	LL
			200	150A	HR
				250A	JR
				600A	LR

Specific Breaker Model Types

600A 3 or 4 pole TruONE ATS transfer switches

ABB TruONE ATS	Max. Rated Voltage	Breaker Manufacturer	Max. Coordinated Breaker Rating (kA)	Max. Breaker Amp.	Breaker Type
OXA, OXB (TruONE Level 2, 3, 4 controller)	480V, 3-phase only	Eaton	35	125A	EGS
				225A	FD, FDE
				250A	JDB, JD, JGS
				400A	KD, CKD
				600A	LD, CLD
			50	600A	LGS
				800A	MDL, CMDL
			65	125A	EGH
				225A	HFD, HFDE
				250A	JGH, HJD
				400A	HKD, CHKD
				600A	HLD, CHLD, LGH, PDG3
				800A	HMDL, CHMDL, PDG4
			100	125A	EGC
				225A	FDC, FDCE, PDG2
				250A	JGC, JDC
				400A	KDC
				600A	LDC, CLDC, LGC
			150	100A	EGC
				250A	JGU
				600A	LGU
			200	250A	JGX, JGH+CL
				600A	LGX
		Siemens	18	125A	ED4
			25	125A	ED6
			35	400A	JD6A, JXD6A, SCJD6
				600A	LD6, LXD6, SCLD6
				1200A	3VA67, 3VA57
			42	125A	HED4
			65	125A	HHED4
				400A	HJD6A, HJXD6A, SHJD6
				600A	HLD6, HLXD6, SCLD6
				1000A	3VA66
			100	250A	HHFD6, HHFXD6, HFD6, HFXD6, FD6A, FXD6A, 3VA52
				400A	HHJD6A, HHJXD6A, 3VA53
				600A	HHLD6, HHLXD6, 3VA64
				600/800A	3VA65, 3VA55
				1000A	3VA66
			150	250A	3VA62
				400A	CJD6-A, SCJD6, 3VA63
				600A	CLD6, SCLD6, 3VA64
			200	125A	CED6
				250A	CFD6
		Fused	100	600A	Class RK5 fuses
			200	400A	Class RK5 fuses
				800A	Class J & T fuses
				800A	CLASS L Fuses
	480V, 3- and 1-phase	ABB	25	125A	XT2N
				250A	T4N, XT4N
				600A	T5N
			35	100A	T2S
				125A	XT2S
				250A	XT4S, T4S
				600A	T5S, XT5N
			50	600A	T5V, T5L, T5H, XT5S
			65	100A	T2H
				125A	XT2H
				250A	T4H, XT4H
				600A	XT5H
			100	125A	XT2L
				250A	XT4L, T4L, T4V
				600A	XT5L, XT5V
			150	125A	XT2V
				250A	XT4V

Specific Breaker Model Types

600A 3 or 4 pole TruONE ATS transfer switches

ABB TruONE ATS	Max. Rated Voltage	Breaker Manufacturer	Max. Coordinated Breaker Rating (kA)	Max. Breaker Amp.	Breaker Type
OXA, OXB (TruONE Level 2, 3, 4 controller)	480V, 3- and 1-phase	General Electric	18	60A	SED
				150A	SED
			25	60A	SEH
				150A	SEH
				250A	PEC
			35	250A	SFH, PEE
				600A	SGH, PGE
			50	600A	SGP, SGL, PGN, PGH, PGL, PGP
			65	60A	SEL
				150A	SEL
				250A	SFL, PEN
			85	250A	SFP
			100	60A	SEP
				150A	SEP
				250A	PEH
			150	250A	PEL
		Allen Bradley	35	400A	140G-K
			65	400A	140G-K
		Schneider	18	125A	EDB, BD
				150A	HD
				250A	JD
				600A	LD
			30	125A	EGB, BG, BJ, EJB
			35	150A	HG
				250A	JG
				600A	LG
			50	600A	LR, LL, LJ
			65	150A	HJ
				250A	JJ
			100	150A	HL
				250A	JL
			200	150A	HR
				250A	JR
		Eaton	35	125A	EGS
				225A	FD, FDE
				250A	JDB, JD, JGS
				400A	KD, CKD
				600A	LD, CLD, HLD, CHLD, LDC, CLDC
			50	400A	HKD, CHKD, KDC
				600A	LGX, LGU, LGC, LGH, LGS
			65	125A	EGH
				225A	HFD, HFDE
				250A	JGH, HJD
			100	125A	EGC
				225A	FDC, FDCE, PDG2
				250A	JGC, JGH, JDC
			150	100A	EGC
				250A	JGU
			200	250A	JGX
		Siemens	18	125A	ED4
			25	125A	ED6
			35	400A	CJD6A, HHJD6A, HHJXD6A, HJD6A, HJXD6A, JD6A, JXD6A, SJD6, 3VA63, 3VA53
				600A	CLD6, HHLD6, HHLXD6, HLD6, HLXD6, LD6, LXD6, SCLD6, 3VA64, 3VA54
			42	125A	HED4
			65	125A	HHED4
				400A	SCJD6, SHJD6, 3VA63
				600A	SCLD6, 3VA64
			100	250A	CFD6, HHFD6, HHFXD6, HFD6, HFXD6, FD6A, FXD6A, 3VA52
			150	250A	3VA62
			200	125A	CED6
		Fused	100	200A	Class RK5 fuses
				600A	Class J & T Fuses
			200	100A	Class RK5 fuses
				200A	Class J & T Fuses
				400A	Class J & T Fuses

Specific Breaker Model Types

600A 3 or 4 pole TruONE ATS transfer switches

ABB TruONE ATS	Max. Rated Voltage	Breaker Manufacturer	Max. Coordinated Breaker Rating (kA)	Max. Breaker Amp.	Breaker Type
OXA, OXB (TruONE Level 2, 3, 4 controller)	240V, 3-phase only	ABB	18	60A	SED
				150A	SED
			20	1200A	XT7L, XT7H, XT7S
			25	125A	BD
				150A	HD
				250A	JD
				600A	LD
			35	800A	XT6H, XT6S, XT6N
			50	800A	T6L, T6H, T6S, T6N
			65	100A	T2S
				125A	XT2N
				250A	T4N, XT4N
				600A	T5N, XT5N
			100	125A	XT2S
				250A	T4S, XT4S
				600A	T5S, XT5S
			150	100A	T2H
				125A	XT2H
				250A	T4H, XT4H
				600A	T5H, XT5H
			200	125A	XT2V, XT2L
				250A	T4V, T4L, XT4V, XT4L
				600A	T5V, T5L, XT5V, XT5L
		General Electric	18	60A	SED
				150A	SED
			42	250A	PEC
			65	60A	SEH
				150A	SEH
				250A	SFH, PEE
				600A	SGH, PGE
			100	60A	SEL
				150A	SEL
				250A	SFL, PEN
				600A	SGL, PGN
			150	250A	PEH
				600A	PGH
			200	60A	SEP
				150A	SEP
				250A	SFP, PEL
				600A	SGP, PGL, PGP
		Schneider	25	125A	BD
				150A	HD
				250A	JD
				600A	LD
			65	125A	BG
				150A	HG
				250A	JG
				600A	LG
			100	125A	BJ
				150A	HJ
				250A	JJ
				600A	LL, LJ
			125	150A	HL
				250A	JL
			200	150A	HR
				250A	JR
				600A	LR

Specific Breaker Model Types

600A 3 or 4 pole TruONE ATS transfer switches

ABB TruONE ATS	Max. Rated Voltage	Breaker Manufacturer	Max. Coordinated Breaker Rating (kA)	Max. Breaker Amp.	Breaker Type
OXA, OXB (TruONE Level 2, 3, 4 controller)	240V, 3-phase only	Eaton	65	225A	FD, FDE
				250A	JD, JDB
				400A	KD, CKD
				600A	LD, CLD
				800A	HMDL, CHMDL, MDL, CMDL
			85	125A	EGS
				250A	JGS
				600A	LGS
			100	125A	EGH
				225A	HFD, HFDE
				250A	HJD, JGH
				400A	HKD, CHKD
				600A	LGH, HLD, CHLD, PDG3
				800A	PDG4
			200	125A	EGC
				225A	FDC, FDCE, JDC, PDG2
				250A	JGX, JGU, JGC
				400A	KDC, PDG3
				600A	LGX, LGU, LGC, LDC, CLDC
		Siemens	65	125A	ED6, ED4
				250A	FD6A, FXD6A
				400A	JD6A, JXD6A, SJD6
				600A	LD6, LXD6, SLD6
			100	125A	HHED4, HED4
				250A	HFD6, HFXD6
				400A	HJD6A, HJXD6A, SHJD6
				600A	HLD6, HLXD6, SHLD6
				1000A	3VA66
			200	125A	CED6
				250A	CFD6, HHFD6, HHFXD6
				400A	CJD6A, HHJD6A, HHJXD6A, SCJD6, 3VA63, 3VA53
				600A	CLD6, HHLD6, HHLXD6, SCLD6, 3VA64, 3VA54
				600/800A	3VA65, 3VA55
		Fused	200	800A	300V Class T-fuses
	240V, 3- and 1-phase	ABB	65	100A	T2S
				125A	XT2N
				250A	T4N, XT4N
				600A	XT5N
			100	125A	XT2S
				250A	T4S, XT4S
				600A	XT5S
			150	100A	T2H
				125A	XT2H
				250A	T4H, XT4H
				600A	XT5H
			200	125A	XT2V, XT2L
				250A	T4V, T4L, XT4V, XT4L
				600A	XT5V, XT5L
		General Electric	18	60A	SED
				150A	SED
			42	250A	PEC
			50	600A	SGP, SGL, SGH
			65	60A	SEH
				150A	SEH
				250A	SFH, PEE
				600A	PGE
			100	60A	SEL
				150A	SEL
				250A	SFP, SFL, PEN
				600A	PGN, PGH, PGL, PGP
			150	250A	PEH
			200	60A	SEP
				150A	SEP
				250A	PEL

Specific Breaker Model Types

600A 3 or 4 pole TruONE ATS transfer switches

ABB TruONE ATS	Max. Rated Voltage	Breaker Manufacturer	Max. Coordinated Breaker Rating (kA)	Max. Breaker Amp.	Breaker Type
OXA, OXB (TruONE Level 2, 3, 4 controller)	240V, 3- and 1-phase	Schneider	25	125A	BD
				150A	HD
				250A	JD
				600A	LD
			65	125A	BG
				150A	HG
				250A	JG
				600A	LG
			100	125A	BJ
				150A	HJ
				250A	JJ
				600A	LR, LL, LJ
			125	150A	HL
				250A	JL
			200	150A	HR
				250A	JR
		Eaton	42	600A	LDC, CLDC, HLD, CHLD, LD, CLD
			65	225A	FD, FDE
				250A	JD, JDB
				400A	KDC, HKD, CHKD, KD, CKD
			85	125A	EGS
				250A	JGS
				600A	LGS
			100	125A	EGH
				225A	HFD, HFDE
				250A	JGH, JDC, HJD
				600A	LGX, LGU, LGC, LGH
			200	125A	EGC
				225A	FDC, FDCE, PDG2
				250A	JGX, JGU, JGC
		Siemens	65	125A	ED6, ED4
				250A	FD6A, FXD6A
				400A	JD6A, JXD6A, SJD6
				600A	LD6, LXD6, SLD6
			85	400A	CJD6A, HHJD6A, HHJXD6A, HJD6A, HJXD6A
				600A	CLD6, HHLD6, HHLXD6, HLD6, HLXD6
			100	125A	HHED4, HED4
				250A	HFD6, HFXD6
				400A	SHJD6, 3VA63, 3VA53
				600A	SHLD6, 3VA64, 3VA54
			200	125A	CED6
				250A	CFD6, HHFD6, HHFXD6, 3VA62, 3VA52
				400A	SCJD6
				600A	SCLD6
		Fused	50	800A	300V Class T-fuses
			100	600A	300V Class T-fuses
			200	400A	300V Class T-fuses

800A 3 or 4 pole TruONE ATS transfer switches

ABB TruONE ATS	Max. Rated Voltage	Breaker Manufacturer	Max. Coordinated Breaker Rating (kA)	Max. Breaker Amp.	Breaker Type
OXA, OXB (TruONE Level 2, 3, 4 controller)	480V, 3 Phase	ABB	65	600	XT5H
				800	XT6H
				1200	XT7L, XT7H
	480V, 3 Phase		85	1200	T7L
	240V, 1 Phase				

Specific Breaker Model Types

1000-1200A 3 or 4 pole TruONE ATS transfer switches

ABB TruONE ATS	Max. Rated Voltage	Breaker Manufacturer	Max. Coordinated Breaker Rating (kA)	Max. Breaker Amp.	Breaker Type
OXA, OXB (TruONE Level 2, 3, 4 controller)	480V, 3 Phase	ABB	50	600	XT5S
				800	T6S, XT6S
				1200	T7S, XT7S
			65	600	T5H, XT5H
				800	T6H, XT6H
				1200	T7H, XT7L, XT7H
			85	800	T6L
				1200	T7L
			100	600	T5L, XT5L
			150	600	T5V, XT5V
		General Electric	50	1200	SKH
			65	600	SGL
				1200	SKP, SKL
			100	600	SGP
		Allen Bradley	35	400	140G-K
			65	400	140G-K
		Schneider	50	1200	PK, RL, RJ, RK
			65	600	LJ
				800	MJ
				1200	PL, PJ
			100	600	LL
			200	600	LR
		Eaton	50	600	LGS
				800	MDL, CMDL
				1200	NGS, ND, CND
			65	400	HKD, CHKD
				600	LGH, HLD, CHLD
				800	HMDL, CHMDL, PDG4
				1200	NGH, HND, CHND
				1600	RGH
			100	400	KDC, PDG3
				600	LGC, LDC, CLDC, PDG3
			150	600	LGU
			200	600	LGX
		Siemens	50	800	MD6, MXD6, LMD6, LMXD6
				1200	ND6, NXD6
				1600	PD6, PXD6
			65	400	HJD6, HJXD6, SHJD6
				600	HLD6, HLXD6, SCLD6
				800	HMD6, HMXD6
				1200	HND6, HNXD6, 3VA67, 3VA57
				1600	CPD6, HPD6, HPXD6, 3VA68, 3VA58
				2000	3VA69, 3VA59
			100	400	3VA63, 3VA59
				600	3VA64, 3VA54
				600/800	3VA65, 3VA55
				800	CMD6
				1000	3VA66
				1200	CND6
			150	400	CJD6, SCJD6, 3VA63
				600	CLD6, SCLD6, 3VA64
		Fused	100	2000	CLASS L fuses
			200	600	CLASS RK5 fuses
				800	CLASS J & T fuses
				1200	CLASS L fuses

Specific Breaker Model Types

1000-1200A 3 or 4 pole TruONE ATS transfer switches

ABB TruONE ATS	Max. Rated Voltage	Breaker Manufacturer	Max. Coordinated Breaker Rating (kA)	Max. Breaker Amp.	Breaker Type
OXA, OXB (TruONE Level 2, 3, 4 controller)	240V, 3 Phase	ABB	65	600	T5N, XT5N
				800	XT6N
				1200	XT7L, XT7H, XT7S
			85	800	T6L, T6H, T6S
				1200	T7L, T7H
			100	600	T5S, XT5S
				800	XT6S
			150	600	T5H, XT5H
			200	600	T5V, T5L, XT5V, XT5L
				800	XT6H
		General Electric	65	600	SGH
				1200	SKH
			100	600	SGL
				1200	SKP, SKL
			200	600	SGP
		Schneider	50	1200	RL, RJ, RK
			65	600	LG
				800	MJ, MG
				1200	PL, PJ, PK
			100	600	LJ
			125	600	LL
			200	600	LR
		Eaton	50	1200	NGS
			65	400	KD, CKD
				600	LD, CLD
				800	HMDL, CHMDL, MDL, CMDL
				1200	NGH, HND, CHND, ND, CND
				1600	RGH
			85	600	LGS
			100	400	HKD, CHKD, PDG3
				600	LGH, HLD, CHLD, PDG3
				800	PDG4
			200	400	KDC, PDG3
				600	LGX, LGU, LGC, LDC, CLDC, PDG3
		Siemens	65	400	JD6, JXD6, SJD6
				600	LD6, LXD6, SLD6
				800	MD6, MXD6, LMD6, LMXD6
				1200	HND6, NXD6
				1600	PD6, PXD6
			100	400	HJD6, HJXD6, SHJD6, 3VA63, 3VA53
				600	HLD6, HLXD6, SHLD6
				600/800	3VA65, 3VA55
				800	HMD6, HMXD6
				1200	HND6, HNXD6, 3VA67, 3VA57
				1600	HPD6, HPXD6, 3VA68, 3VA58
				2000	3VA69, 3VA59
			200	400	CJD6, SCJD6, 3VA63
				600	CLD6, SCLD6, 3VA64, 3VA65
				800	CMD6
				1000	3VA66
				1200	CND6
				1600	CPD6
		Fused	200	800	CLASS T fuses

Specific Breaker Model Types

1000-1200A 3 or 4 pole TruONE ATS transfer switches

ABB TruONE ATS	Max. Rated Voltage	Breaker Manufacturer	Max. Coordinated Breaker Rating (kA)	Max. Breaker Amp.	Breaker Type
OXA, OXB (TruONE Level 2, 3, 4 controller)	480V, 1-phase only	ABB	25	600	T5N
			35	600	T5S, XT5N
				800	XT6N
			50	600	XT5S
				800	XT6S
				1200	XT7L, XT7L, XT7H, XT7S
			65	600	T5H, XT5H
				800	XT6H
			100	600	T5L, XT5L
			150	600	T5V, XT5V
		General Electric	35	600	SGH
			50	1200	SKH, SKL, SKP
			65	600	SGL
			100	600	SGP
		Allen Bradley	35	400	140G-K
			65	400	140G-K

1000-1200A 3 or 4 pole TruONE ATS transfer switches

ABB TruONE ATS	Max. Rated Voltage	Breaker Manufacturer	Max. Coordinated Breaker Rating (kA)	Max. Breaker Amp.	Breaker Type
OXA, OXB (TruONE Level 2, 3, 4 controller)	240V, 1-phase only	ABB	50	1200	XT7S, XT7H, XT7L
			65	600	T5N, XT5N
				800	XT6N
			100	600	T5S, XT5S
				800	XT6S
			150	600	T5H, XT5H
			200	600	T5V, T5L, XT5V, XT5L
				800	XT6H
		General Electric	50	1200	SKH, SKL, SKP
			65	600	SGH
			100	600	SGL
			200	600	SGP

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