



CAT[®] ATC SERVICE ENTRANCE RATED MCCB & POWER BREAKER BASED AUTOMATIC TRANSFER SWITCHES

Cat[®] Service Entrance Rated (SER) automatic transfer switches (ATS) are designed to provide standby power emergency power to entire installation loads to protect against utility power interruption; yet allow the ATS to be as close as possible to the point of service entrance. By safely and in code compliance, integrating the necessary overcurrent protection and service disconnecting means into the automatic transfer switch, a single installation can be made at the service entrance. This design eliminates the need for a separate upstream fault protection and respective interconnections, which in turn reduces installation space, time, and cost. Breaker-based Service Entrance Rated transfer switches are available from 30A to 5000A.

FEATURES

- ATC-100 on Residential & Light Commercial MCCB based, ATC-300+ or ATC-800 on MCCB & Power Breaker ATS products
- UL 1008 service entrance listed (up to 3200A)
- Service disconnect (both off) capability
- Integral over current protection
- Lockout when in disconnected position (only)
- Service entrance labeled
- Integrated Design
- Disconnecting neutral assembly
- Ground fault protection capability (all ratings) (Required by code on rating 480V, and 1000A or higher)
- Keyed service entrance switch
- Draw-out type breakers (available on Power Breaker ratings)
- UL 891 for 4000-5000A

BENEFITS

- Loads protected against extended power loss
- Quick restoration of the circuit after a trip (versus a fused circuit that requires fuse availability)
- Trip on a fault prohibits transfer to the emergency source
- Fused circuit allows switch testing by simulating an actual power failure.
- Lockable disconnect position permits safe downstream maintenance

AUTOMATIC TRANSFER SWITCH



OPTIONS

- Open, closed or delayed transition
- Integral overcurrent protection
- 4-position test switch
- Multi-meter options available
- Selectable Automatic or Non-Automatic operation
- Space heaters
- Load sequencing contacts
- Surge suppression
- Remote communications
- Seismic Zone 4 Qualified (BOCA, CBC, IBC, UBC and OSHPD)
- Field selectable, multi ratio, control voltage transformer 50/60 Hz
- Communications for the ATC-300+ controller via RS-232 or Modbus through an integrated RS-485 port

OPTIONAL DELAYED TRANSITION INCLUDES:

- Time Delay Neutral
- Pre-Transfer Signal with 1 N.O. and 1 N.C. contacts

RATINGS

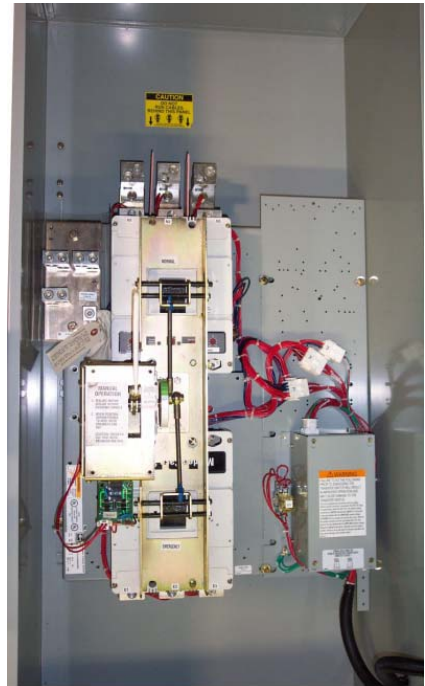
- 30-1000A 2, 3, or 4 Pole (MCCB)
- 200-3200A 2, 3, 4-Pole (Fixed Mount Power Breaker)
- 200-5000A 2, 3, or 4-Pole (Drawout Power Breaker)
- 120 – 600 Vac 50/60 Hz
- 100% rated
- Withstand up to 100 kAIC at 600V 3 cycles (Power Breaker)
- CSA C22.2 No. 178 certified
- UL 1008 listed up to 3200A; UL 891 listed for 4000A, and 5000A

CONTROLS AND WIRING

All control relays and industrial-grade relays are totally encapsulated to minimize exposure to dust and dirt. Lugs are 90°C rated and all control wire is #16 AWG, type XLPE with a 125°C temperature rating.

ENCLOSURE

Durable powder-coated steel NEMA 1, 3R, or 12 enclosures with three door hinges to ensure proper support of the door and door mounted devices. The hinges have removable hinge pins to facilitate door removal for easy wall mounting or service and are supplied with pad-lockable latches.



AUTOMATIC TRANSFER SWITCH



TESTING STANDARDS

UL 991 UL standards for safety tests for safety-related controls employing solid-state devices	IEC 1000-5 Surge withstand tests
UL 1008 Dielectric test (endurance, withstand, etc.)	NEMA® ICS 109.21 Impulse withstand test
IEEE® 472 (ANSI C37.90A) Ringing wave immunity/voltage surge test	CSA® conformance C22.2 No. 178-1978 (reaffirmed 1992)
EN55022 (CISPR11): Conducted and radiated emissions	UL 869A Reference Std for Service Equipment
EN61000-4-2 Class B Level 4 ESD immunity test	UL 50/508 Enclosures
EN61000-4-3 (ENV50140) radiated RF, electromagnetic field immunity test	NEMA ICS 1 General standards for industrial control systems
EN61000-4-4 Electrical fast transient/burst immunity test	NEMA ICS 2 Standards for industrial control devices, controllers, and assemblies
EN61000-4-5 IEEE C62.41: Surge immunity test	NEMA ICS 6 Enclosures for industrial controls and systems
EN61000-4-6 (ENV50141) Conducted immunity test	NEMA ICS 10-1993 AC automatic transfer switches
EN61000-4-11 Voltage dips and interruption immunity	ANSI C33.76 Enclosures
FCC Part 15 Conducted/radiated emissions (Class A)	NEC® 517, 700, 701, and 702 National Electrical Code
CISPR 11 Conducted/radiated emissions (Class A)	NFPA® 70 National Electrical Code
IEC 1000-2 Electrostatic discharge test	NFPA 99 Health care facilities
IEC 1000-3 Radiated susceptibility tests	NFPA 101 Life safety code
IEC 1000-4 Fast transient tests	NFPA 110 Emergency and standby power systems
	EGSA 100S Standard for transfer switches
	CSA C22.2 No. 178-1978 Canadian Standards Association

WITHSTAND AND CLOSE RATINGS FOR MOLDED-CASE TYPE TRANSFER SWITCHES UP TO 600V

Wall Mount Transfer Switch Amperes	Number of Poles	When Protected by Any Breaker			When Protected by Fuses			
		Test Voltage			Rating (kA)	Test Voltage	Fuse Type	Maximum Fuse Amperes
		3-Cycle 240V (kA)	3-Cycle 480V (kA)	3-Cycle 600V (kA)				
30	2, 3, 4	100	65	25	200	600	J, T	200
70	2, 3, 4	100	65	25	200	600	J, T	200
100	2, 3, 4	100	65	25	200	600	J, T	200
150	2, 3, 4	100	65	25	200	600	J, T	400
225	2, 3, 4	100	65	25	200	600	J, T	400
300	2, 3, 4	100	65	25	200	600	J, T	400
400	2, 3, 4	100	65	25	200	600	J, T	600
600	2, 3	100	65	25	100/200	600	J, T	800/1200
	4		35	25	100/200	600	J, T	800/1200
800	2, 3	65	50	25	100/200	600	L	1200/1600
	4	65	35	25	100/200	600	L	1200/1600
1000	2, 3	65	50	25	200	600	L	1600
	4	65	35	25	200	600	L	1600

AUTOMATIC TRANSFER SWITCH



WITHSTAND AND CLOSE RATINGS FOR POWER BREAKER TYPE TRANSFER SWITCHES UP TO 600V

Power Breaker Transfer Switch Amperes	Number of Poles	When Protected by Any Breaker		When Coordinated with Upstream Breaker with a Short		When Protected by Fuses			
		Test Voltage		30-Cycle 480V (kA)	30-Cycle 600V (kA)	Rating (kA)	Test Voltage	Fuse Type	Maximum Fuse Amperes
		3-Cycle 480V (kA)	3-Cycle 600V (kA)						
200	2, 3, 4	100	100	85	85	-	-	-	-
300	2, 3, 4	100	100	85	85	-	-	-	-
400	2, 3, 4	100	100	85	85	-	-	-	-
600	2, 3, 4	100	100	85	85	-	-	-	-
800	2, 3, 4	100	100	85	85	-	-	-	-
1000	2, 3, 4	100	100	85	85	-	-	-	-
1200	2, 3, 4	100	100	85	85	-	-	-	-
1600	2, 3, 4	100	100	85	85	-	-	-	-
2000	2, 3, 4	100	100	85	85	-	-	-	-
2500	2, 3, 4	100	100	85	85	-	-	-	-
3000	2, 3, 4	100	100	85	85	-	-	-	-
3200	2, 3, 4	100	100	85	85	-	-	-	-
4000	2, 3, 4	100	100	85	85	-	-	-	-
5000	2, 3, 4	100	100	85	85	-	-	-	-

AUTOMATIC TRANSFER SWITCH



SERVICE ENTRANCE RATED POWER BREAKER DIMENSIONS AND WEIGHTS 200-4000A

Rating Ampere	SER Switch Type	Enclosure Type	Poles	Height	Width	Depth	Weight Lbs
				Inches (mm)	Inches (mm)	Inches (mm)	
200-2000	Power Breaker Fixed	NEMA 1 Rear	2, 3	90 (2286)	32 (813)	48 (1219)	1050
200-2000	Power Breaker Fixed	NEMA 1 Rear	4	90 (2286)	32 (813)	48 (1219)	1250
2500-3200	Power Breaker Fixed	NEMA 1 Rear	2, 3	90 (2286)	44 (1118)	48 (1219)	1900
2500-3200	Power Breaker Fixed	NEMA 1 Rear	4	90 (2286)	44 (1118)	48 (1219)	2000
200-2000	Power Breaker Fixed	NEMA 1 Thru	2, 3	90 (2286)	32 (813)	48 (1219)	1050
200-2000	Power Breaker Fixed	NEMA 1 Thru	4	90 (2286)	32 (813)	48 (1219)	1250
2500-3200	Power Breaker Fixed	NEMA 1 Thru	2, 3	90 (2286)	44 (1118)	48 (1219)	1900
2500-3200	Power Breaker Fixed	NEMA 1 Thru	4	90 (2286)	44 (1118)	48 (1219)	2000
200-2000	Power Breaker Fixed	NEMA 3R	2, 3	90 (2286)	32 (813)	63 (1600)	1600
200-2000	Power Breaker Fixed	NEMA 3R	4	90 (2286)	32 (813)	63 (1600)	1800
2500-3200	Power Breaker Fixed	NEMA 3R	2, 3	90 (2286)	44 (1118)	63 (1600)	2400
2500-3200	Power Breaker Fixed	NEMA 3R	4	90 (2286)	44 (1118)	63 (1600)	2500
200-2000	Power Breaker Drawout	NEMA 1 Rear	2, 3	90 (2286)	32 (813)	60 (1524)	1600
200-2000	Power Breaker Drawout	NEMA 1 Rear	4	90 (2286)	32 (813)	60 (1524)	1900
2500-3200	Power Breaker Drawout	NEMA 1 Rear	2, 3	90 (2286)	44 (1118)	60 (1524)	2500
2500-3200	Power Breaker Drawout	NEMA 1 Rear	4	90 (2286)	44 (1118)	60 (1524)	2800
4000	Power Breaker Drawout	NEMA 1 Rear	2, 3	90 (2286)	86 (2184)	71 (1803)	4150
4000	Power Breaker Drawout	NEMA 1 Rear	4	90 (2286)	86 (2184)	71 (1803)	4150
200-2000	Power Breaker Drawout	NEMA 1 Thru	2, 3	90 (2286)	32 (813)	60 (1524)	1600
200-2000	Power Breaker Drawout	NEMA 1 Thru	4	90 (2286)	32 (813)	60 (1524)	1900
2500-3200	Power Breaker Drawout	NEMA 1 Thru	2, 3	90 (2286)	44 (1118)	60 (1524)	2500
2500-3200	Power Breaker Drawout	NEMA 1 Thru	4	90 (2286)	44 (1118)	60 (1524)	2800
200-2000	Power Breaker Drawout	NEMA 3R	2, 3	90 (2286)	32 (813)	75 (1905)	2100
200-2000	Power Breaker Drawout	NEMA 3R	4	90 (2286)	32 (813)	75 (1905)	2400
2500-3200	Power Breaker Drawout	NEMA 3R	2, 3	90 (2286)	44 (1118)	75 (1905)	3000
2500-3200	Power Breaker Drawout	NEMA 3R	4	90 (2286)	44 (1118)	75 (1905)	3300
4000	Power Breaker Drawout	NEMA 3R	2, 3	90 (2286)	86 (2184)	87 (2210)	4150
4000	Power Breaker Drawout	NEMA 3R	4	90 (2286)	86 (2184)	87 (2210)	4150
200-2000	Bypass Isolation Power Breaker	NEMA 1 Rear	2, 3	90 (2286)	64 (1626)	60 (1524)	3100
200-2000	Bypass Isolation Power Breaker	NEMA 1 Rear	4	90 (2286)	64 (1626)	60 (1524)	3700
2500-3200	Bypass Isolation Power Breaker	NEMA 1 Rear	2, 3	90 (2286)	64 (1626)	60 (1524)	4700
2500-3200	Bypass Isolation Power Breaker	NEMA 1 Rear	4	90 (2286)	64 (1626)	60 (1524)	5500
4000	Bypass Isolation Power Breaker	NEMA 1 Rear	4	90 (2286)	140 (3556)	71 (1803)	4150
200-2000	Bypass Isolation Power Breaker	NEMA 3R	2, 3	90 (2286)	64 (1626)	75 (1905)	4100
200-2000	Bypass Isolation Power Breaker	NEMA 3R	4	90 (2286)	64 (1626)	75 (1905)	4700
2500-3200	Bypass Isolation Power Breaker	NEMA 3R	2, 3	90 (2286)	64 (1626)	75 (1905)	5700
2500-3200	Bypass Isolation Power Breaker	NEMA 3R	4	90 (2286)	64 (1626)	75 (1905)	6500
200-2000	Power Breaker Drawout	NEMA 1 Rear	4	90 (2286)	64 (1626)	48 (1219)	4700
200-2000	Power Breaker Drawout	NEMA 1 Rear	2, 3	90 (2286)	64 (1626)	48 (1219)	4700
2500-3200	Power Breaker Drawout	NEMA 1 Rear	4	90 (2286)	64 (1626)	48 (1219)	4700
2500-3200	Power Breaker Drawout	NEMA 1 Rear	2, 3	90 (2286)	64 (1626)	48 (1219)	4700
200-2000	Power Breaker Drawout	NEMA 3R	4	90 (2286)	64 (1626)	63 (1600)	5200
200-2000	Power Breaker Drawout	NEMA 3R	2, 3	90 (2286)	64 (1626)	63 (1600)	5200
2500-3200	Power Breaker Drawout	NEMA 3R	4	90 (2286)	64 (1626)	63 (1600)	5200
2500-3200	Power Breaker Drawout	NEMA 3R	2, 3	90 (2286)	64 (1626)	63 (1600)	5200
200-2000	Bypass Isolation Power Breaker	NEMA 1 Rear	2, 3	90 (2286)	96 (2438)	48 (1219)	4700
200-2000	Bypass Isolation Power Breaker	NEMA 1 Rear	4	90 (2286)	96 (2438)	48 (1219)	4700
2500-3200	Bypass Isolation Power Breaker	NEMA 1 Rear	2, 3	90 (2286)	96 (2438)	48 (1219)	4700
2500-3200	Bypass Isolation Power Breaker	NEMA 1 Rear	4	90 (2286)	96 (2438)	48 (1219)	4700
200-2000	Bypass Isolation Power Breaker	NEMA 3R	2, 3	90 (2286)	96 (2438)	63 (1600)	5200
200-2000	Bypass Isolation Power Breaker	NEMA 3R	4	90 (2286)	96 (2438)	63 (1600)	5200
2500-3200	Bypass Isolation Power Breaker	NEMA 3R	2, 3	90 (2286)	96 (2438)	63 (1600)	5200
2500-3200	Bypass Isolation Power Breaker	NEMA 3R	4	90 (2286)	96 (2438)	63 (1600)	5200

All dimensions and weights shown are approximate and subject to change without notice and are not for construction use

AUTOMATIC TRANSFER SWITCH



MCCB DIMENSIONS AND WEIGHTS FOR SERVICE ENTRANCE RATED SWITCHES

Rating Ampere	Breaker Type	Poles	Switch Type	Height Inches (mm)	Width Inches (mm)	Depth Inches (mm)	Weight Lbs (kg)	
Distribution Panels (240/120V Single Phase, ATC-300 only) Nema 1, 3R & 12								
225	FD	2	Service Entrance	53 (1346)	26 (660)	17 (432)	304	(138)
300	KD		Service Entrance	64 (1626)	26 (660)	17 (432)	405	(184)
400	LD		Service Entrance	77 (1956)	26 (660)	18 (457)	505	(229)
Automatic Transfer Switches (AG: 240/120 Single Phase, 280/120, ATC-100 & ATC-300) Nema 1, 3R & 12								
30-100	FD	2	Service Entrance	36 (914)	20 (509)	11.5 (292)	150	(68)
		3	Service Entrance	36 (914)	20 (509)	11.5 (292)	150	(68)
		4	Service Entrance	36 (914)	20 (509)	11.5 (292)	150	(68)
150-225	FD	2	Service Entrance	36 (914)	20 (509)	11.5 (292)	150	(68)
		3	Service Entrance	36 (914)	20 (509)	11.5 (292)	150	(68)
		4	Service Entrance	36 (914)	20 (509)	11.5 (292)	150	(68)
400-600	LD	2	Service Entrance	64 (1626)	26 (660)	17 (432)	445	(202)
		3	Service Entrance	64 (1626)	26 (660)	17 (432)	475	(215)
		4	Service Entrance	64 (1626)	26 (660)	17 (432)	475	(215)
600-800	MD	2	Service Entrance	77 (1956)	26 (660)	18 (457)	570	(259)
		3	Service Entrance	77 (1956)	26 (660)	18 (457)	570	(259)
Automatic Switches & Non-Automatic Transfer Switches Nema 1, 3R & 12								
30-100	FD	2	Service Entrance	48 (1219)	21 (533)	15 (381)	227	103
		3	Service Entrance	48 (1219)	21 (533)	15 (381)	232	(105)
		4	Service Entrance	48 (1219)	21 (533)	15 (381)	240	(109)
150	FD	2	Service Entrance	48 (1219)	21 (533)	15 (381)	227	(103)
		3	Service Entrance	48 (1219)	21 (533)	15 (381)	232	(105)
		4	Service Entrance	48 (1219)	21 (533)	15 (381)	240	(109)
150-225	KD	2	Service Entrance	48 (1219)	21 (533)	17 (432)	305	(138)
		3	Service Entrance	48 (1219)	21 (533)	17 (432)	305	(138)
		4	Service Entrance	48 (1219)	21 (533)	17 (432)	315	(143)
300	KD	2	Service Entrance	56 (1422)	21 (533)	17 (432)	295	(134)
		3	Service Entrance	56 (1422)	21 (533)	17 (432)	305	(138)
		4	Service Entrance	56 (1422)	21 (533)	17 (432)	315	(143)
400	LD	2	Service Entrance	53 (1346)	26 (660)	17 (432)	395	(179)
		3	Service Entrance	53 (1346)	26 (660)	17 (432)	425	(193)
		4	Service Entrance	53 (1346)	26 (660)	17 (432)	455	(206)
400-600	LD	2	Service Entrance	64 (1626)	26 (660)	17 (432)	395	(179)
		3	Service Entrance	64 (1626)	26 (660)	17 (432)	425	(193)
		4	Service Entrance	64 (1626)	26 (660)	17 (432)	425	(193)
600-800	MD	2	Service Entrance	77 (1956)	26 (660)	18 (457)	570	(259)
		3	Service Entrance	77 (1956)	26 (660)	18 (457)	570	(259)
600-1000	NB	2	Service Entrance	77 (1956)	26 (660)	18 (457)	540	(245)
		3	Service Entrance	77 (1956)	26 (660)	18 (457)	570	(259)
		4	Service Entrance	77 (1956)	26 (660)	18 (457)	600	(272)

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Materials and specifications are subject to change without notice.

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