



CAT[®] ATC POWER BREAKER BYPASS ISOLATION OPEN / CLOSED TRANSITION AUTOMATIC TRANSFER SWITCH

Cat[®] transfer switches are designed for a variety of standby power applications. They provide flexibility, reliability and value in a compact package. A Bypass Isolation Automatic Transfer Switch (ATS) provides fully functioning transfer in applications where emergency power to critical loads must be maintained at all times with no interruption. This type of design allows for inspection, maintenance or replacement of the power switching mechanisms with no interruption in electrical service. Breaker-based Bypass Isolation ATS are available from 200A to 5,000A.

FEATURES

- ATC-800 microprocessor-based controller
- True RMS voltage and frequency sensing
- Full 30-cycle short time withstand capability
- 30-cycle, 85 kA short-time rating on power Circuit breaker
- Multiple field programmable time delays
- Switch position indication
- Source availability indication
- Source 1 and 2 auxiliary contacts
- Programmable plant exerciser
- System test pushbutton
- Load shed from emergency
- Mimic diagram
- Safe manual operation under full load with permanently affixed operating handle
- Drawout capabilities on both ATS, bypass portions and power switching devices completely interchangeable between ATS and bypass units

AUTOMATIC TRANSFER SWITCH



OPTIONS

- Integrated service entrance
- Open or Closed Transition
- Integral overcurrent protection
- 2- or 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

OPTIONAL DELAYED TRANSITION INCLUDES:

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

RATINGS

- 200-5000A 2-, 3-, 4-pole
- 120 – 600 Vac 50/60 Hz
- 100% rated Short
- Time Withstand – 85,000 for 30 cycles
- Withstand 100 kAIC at 600V 3 cycles
- UL 1008 listed
- CSA C22.2 No. 178 certified
- UL 1008 listed up to 3200A, 4000A, and 5000A UL 891 listed

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 system
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 Fire Protection Agency
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

UL 1008 WITHSTAND AND CLOSE-ON RATINGS (kA)

Rating When Used with:

Ampere Rating	Upstream Circuit Breaker	Upstream Fuse
	3-Cycle 600 V (kA)	30-Cycle 600 V (kA)
800	100	85
1000	100	85
1200	100	85
1600	100	85
2000	100	85
2500	100	85
3200	100	85
4000	100	85
5000	100	85

AUTOMATIC TRANSFER SWITCH



BYPASS ISOLATION TRANSFER SWITCH 200 – 5000A DIMENSIONS*

Ampere Rating	Number of Poles	Enclosure			Standard Terminals **		
		Height	Width	Depth	Load Side, Normal and Standby Source	Neutral Connection	Shipping Weight Lbs. (kg)
NEMA 1 Enclosed Drawout Transfer Switch							
200-2000A	2	90 (2286)	64 (1626)	60 (1524)	(6) 3/0 - 750	(24) 4/0 - 500	3100 (1409)
	3	90 (2286)	64 (1626)	60 (1524)	kcmil	kcmil	3100 (1409)
	4	90 (2286)	64 (1626)	60 (1524)	Bottom Entry		3700 (1682)
2500-3200A	2	90 (2286)	64 (1626)	60 (1524)	(9) 3/0 - 750	(36) 4/0 - 500	4700 (2136)
	3	90 (2286)	64 (1626)	60 (1524)	kcmil	kcmil	4700 (2136)
	4	90 (2286)	64 (1626)	60 (1524)	Bottom Entry		5500 (2500)
4000-5000A	2						
	3	Consult Factory					
	4						
NEMA 3R Enclosed Drawout Transfer Switch							
200-2000A	2	90 (2286)	64 (1626)	75 (1905)	(6) 3/0 - 750	(24) 4/0 - 500	4100 (1864)
	3	90 (2286)	64 (1626)	75 (1905)	kcmil	kcmil	4100 (1864)
	4	90 (2286)	64 (1626)	75 (1905)	Bottom Entry		4700 (2136)
2500-3200A	2	90 (2286)	64 (1626)	75 (1905)	(9) 3/0 - 750	(36) 4/0 - 500	5700 (2591)
	3	90 (2286)	64 (1626)	75 (1905)	kcmil	kcmil	5700 (2591)
	4	90 (2286)	64 (1626)	75 (1905)	Bottom Entry		6500 (2955)
4000-5000A	2						
	3	Consult Factory					
	4						

Dimensions in Inches (mm) & Approximate Shipping lbs (kg)

* Add 6" to the width and 3" to the depth for seismic brackets where required

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

** Standard Terminals – () indicate the quantity of supplied terminals per pole.

Information contained in this publication may be considered confidential. Discretion is recommended when distributing. Materials and specifications are subject to change without notice.

CAT, CATERPILLAR, their respective logos, "Caterpillar Yellow," the "Power Edge" trade dress as well as corporate and product identity used herein, are trademarks of Caterpillar and may not be used without permission.

www.Cat-ElectricPower.com