



Image Shown may not Reflect Actual Package

CAT® ATC CONTACTOR-BASED BYPASS ISOLATION 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. Contactor -based Bypass Isolation ATS are available from 100A to 1200A.

FEATURES

- ATC-300+ or ATC-800 microprocessor-based controller
- True RMS voltage and frequency sensing
- Maintains fully automatic capability while in bypass mode (optional)
- Single motion rack-out with the door closed
- 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
- Ability to test power switching isolated components

AUTOMATIC TRANSFER SWITCH



OPTIONS

- Drawout capabilities on both ATS bypass portions and power switching devices completely interchangeable between ATS and bypass units
- Open, Delayed or Closed Transition
- 2- or 4-position test switch
- Multi-meter options available
- Selectable Automatic or Non-Automatic operation
- Space heaters (recommended for use in NEMA 3R enclosures)
- Load sequencing contacts
- Surge suppression
- Remote communications
- Seismic Qualified (BOCA, CBC, IBC, UBC)
- Field selectable, multi ratio, control voltage transformer 50/60 Hz
- Dual drawout type is field configurable for top or bottom conduit entry



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



600-1200A Dual Drawout Bypass Isolation

RATINGS

- 100-1200A 2-, 3-, 4-pole
- 120 600 Vac 50/60 Hz
- Up to 65 kAIC withstand
- UL 1008 listed
- CSA C22.2 No. 178 certified
- IBC 2006, CBC 2007 and OSHPD

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 and #18 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.



100-400A Fixed Bypass Isolation Shown with top and bottom panels removed

LEHE0062-05 2

AUTOMATIC TRANSFER SWITCH



TESTING STANDARDS

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

UL 1008 WITHSTAND AND CLOSE-ON RATINGS (kA)

		480 V		600 V		
	UL 1008	Any	Specific	 Any	Specific	-
	Rating	Breaker	Breaker	Breaker	Breaker	
	100	30,000	50,000	22,000	35,000	
	150	30,000	50,000	22,000	35,000	
	200	30,000	30,000	22,000	35,000	
	225	30,000	50,000	42,000	65,000	
	260	30,000	50,000	42,000	65,000	
	320	30,000	50,000	42,000	65,000	
	400	30,000	50,000	42,000	65,000	
	600	50,000	65,000	42,000	65,000	
	800	50,000	65,000	42,000	65,000	
	1000	50,000	65,000	42,000	65,000	
	1200	50,000	65,000	42,000	65,000	

LEHE0062-05 3





FIXED & DRAWOUT BYPASS ISOLATION CONTACTOR BASED TRANSFER SWITCHES 100-400A*

Ampere	Number	Conduit				Shipping
Rating	of Poles	Entry	Height	Width	Depth	Weight Lbs. (kg)
NEMA 1 Drawout						
100-400A 120-480V	2	Either	78 (1981)	30 (762)	29 (737)	600 (273)
&	3	Either	78 (1981)	30 (762)	29 (737)	625 (284)
100-200A @ 600V	4	Either	78 (1981)	30 (762)	29 (737)	650 (295)
NEMA 3R Drawou	ut Bypass ¹					
100-400A 120-480V	2	Either	78 (1981)	30 (762)	48 (1219)	625 (284)
&	3	Either	78 (1981)	30 (762)	48 (1219)	650 (295)
100-200A @ 600V	4	Either	78 (1981)	30 (762)	48 (1219)	675 (307)
NEMA 1 Fixed By						
100-400A 120-480V	2	Either	78 (1981)	30 (762)	29 (737)	600 (273)
&	3	Either	78 (1981)	30 (762)	29 (737)	625 (284)
100-200A @ 600V	4	Either	78 (1981)	30 (762)	29 (737)	650 (295)
NEMA 3R Fixed E	Bypass ²					
100-400A 120-480V	2	Either	78 (1981)	30 (762)	48 (1219)	625 (284)
&	3	Either	78 (1981)	30 (762)	48 (1219)	650 (295)
100-200A @ 600V	4	Either	78 (1981)	30 (762)	48 (1219)	675 (307)

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

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

LEHE0062-05

^{*} Add 6" to width for seismic brackets where required

¹ Dual drawout type is field configurable for top or bottom entry

² Fixed type conduit entry (top or bottom) must be specified at type of order

AUTOMATIC TRANSFER SWITCH



FIXED& DRAWOUT BYPASS ISOLATION CONTACTOR BASED TRANSFER SWITCHES 100A-1200A*

NEMA 1 Drawout Bypass ¹ 2 Either 90 (2286) 40 (1016) 29 (737) ¹ 600-1200A 120-600V 3 Either 90 (2286) 40 (1016) 29 (737) 1							
2 Either 90 (2286) 40 (1016) 29 (737) 1 600-1200A 120-600V 3 Either 90 (2286) 40 (1016) 29 (737) 1 4 Either 90 (2286) 40 (1016) 29 (737) 1	ght Lbs. (kg)						
600-1200A 120-600V 3 Either 90 (2286) 40 (1016) 29 (737) 1 4 Either 90 (2286) 40 (1016) 29 (737) 1	NEMA 1 Drawout Bypass ¹						
4 Either 90 (2286) 40 (1016) 29 (737)	800 (816)						
	850 (839)						
NEMA 3R Drawout Bypass 1	900 (862)						
	_						
2 Either 91 (2311) 41 (1041) 48 (1219) 1	850 (839)						
600-1200A 120-600V 3 Either 91 (2311) 41 (1041) 48 (1219)	900 (862)						
4 Either 91 (2311) 41 (1041) 48 (1219) 1	950 (885)						
NEMA 1 Fixed Bypass ²							
2 Either 90 (2286) 40 (1016) 29 (737) 1	500 (680)						
600A 120-600V 3 Either 90 (2286) 40 (1016) 29 (737) 1	550 (703)						
4 Either 90 (2286) 40 (1016) 29 (737) ¹	600 (726)						
2 Either 90 (2286) 40 (1016) 29 (737) 1	700 (771)						
800-1200A 120-600V 3 Either 90 (2286) 40 (1016) 29 (737) 1	750 (794)						
4 Either 90 (2286) 40 (1016) 29 (737) 1	800 (816)						
NEMA 3R Fixed Bypass ²							
2 Either 91 (2311) 41 (1041) 48 (1219) 1	550 (703)						
600A 120-600V 3 Either 91 (2311) 41 (1041) 48 (1219) 1	600 (726)						
4 Either 91 (2311) 41 (1041) 48 (1219) 1	650 (748)						
2 Either 91 (2311) 41 (1041) 48 (1219) 1	750 (794)						
800-1200A 120-600V 3 Either 91 (2311) 41 (1041) 48 (1219)	800 (816)						
4 Either 91 (2311) 41 (1041) 48 (1219) 1	850 (839)						

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

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

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.

^{*} Add 6" to width for seismic brackets where required

¹ Dual drawout type is field configurable for top or bottom entry

² Fixed type conduit entry (top or bottom) must be specified at type of order