Image shown may not reflect actual configuration

Cat® ATC Contactor-based Bypass Isolation Automatic Transfer Switch (ATS)

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 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, dual ATS, fixed-mount bypass is available from 100-1200A or dual drawout is available from 100-1600A.

Features

- ATC-300+ or ATC-900 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
- Standard front access on all ratings
- Source availability indication
- Source 1 and Source 2 auxiliary contacts
- Programmable plant exerciser
- System test pushbutton
- Load shed from emergency
- Mimic diagram
- Ability to test power switching isolated components

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
- Multiple metering options available
- Selectable automatic or non-automatic operation
- Space heaters (recommended for use in outdoor enclosures)
- Load sequencing contacts
- Surge suppression
- Remote communications
- Communications for ATC-300+ and ATC-900 through Modbus or an integrated RS-485 port
- Field-selectable, multi-ratio, control voltage transformer 50/60 Hz
- Dual drawout type is field configurable for top or bottom conduit entry

Optional Delayed Transition Includes:

- Time delay neutral
- Pre-transfer signal with 1 N.O. and 1 N.C. contacts

Ratings

- 100-1200A 2-, 3-, 4-pole
- 100-1600A 3-, 4-pole, 120-480V, dual draw-out
- 120-600 VAC 50/60 Hz
- Up to 65 kAIC withstand
- UL 1008 listed
- CSA C22.2 No. 178 certified
- Seismic 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 90ºC 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 padlockable latches.

600-1600A dual draw-out bypass isolation. Image shown may not reflect actual configuration.

100-400A fixed bypass isolation shown with top and bottom panels removed. Image shown may not reflect actual configuration.

Testing Standards

- UL 991 standards for safety tests for safety-related controls employing solid-state devices
- UL 1008 dielectric test (endurance, withstand, etc.)
- IEEE® 472 (ANSI C37.90A) ringing wave immunity/voltage surge test
- EN55022 (CISPR11): conducted and radiated emissions
- EN61000-4-2 Class B Level 4 ESD immunity test
- EN61000-4-3 (ENV50140) radiated RF, electromagnetic field immunity test
- EN61000-4-4 electrical fast transient/burst immunity test
- EN61000-4-5 IEEE C62.41: surge immunity test
- EN61000-4-6 (ENV50141) conducted immunity test
- EN61000-4-11 voltage dips and interruption immunity
- FCC Part 15 conducted/radiated emissions (Class A)
- CISPR 11 Conducted/radiated emissions (Class A)
- IEC 1000-2 electrostatic discharge test
- IEC 1000-3 radiated susceptibility tests
- IEC 1000-4 fast transient tests
- IEC 1000-5 surge withstand tests
- NEMA® ICS 109.21 impulse withstand test
- CSA® conformance C22.2 No. 178-1978 (reaffirmed 1992)
- UL 869A reference standard for service equipment
- UL 50/508 enclosures
- NEMA ICS 1 general standards for industrial control system
- NEMA ICS 2 standards for industrial control devices, controllers, and assemblies
- NEMA ICS 6 enclosures for industrial controls and systems
- NEMA ICS 10-1993 AC automatic transfer switches
- ANSI C33.76 enclosures
- NEC® 517, 700, 701, and 702 National Electrical Code
- NFPA® 70 National Fire Protection Agency
- NFPA 99 health care facilities
- NFPA 101 life safety code
- NFPA 110 emergency and standby power systems
- EGSA 100S standard for transfer switches
- CSA C22.2 No. 178-1978 Canadian Standards Association

Fixed and Drawout Bypass Isolation Contactor-based Transfer Switches 100-400A*

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

Dimensions in inches (mm) and approximate shipping lbs (kg).

*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 time of order.

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

Fixed and Drawout Bypass Isolation Contactor-based Transfer Switches 600-1600A*

Ampere Rating	Number of Poles	Conduit Entry	Height	Width	Depth	Shipping Weight Lbs (kg)
NEMA 1 Drawout Bypass[1]						
600-1200A 120V-600V	2 3 4	Either Either Either	90 (2286) 90 (2286) 90 (2286)	40 (1016) 40 (1016) 40 (1016)	29 (737) 29 (737) 29 (737)	1800 (816) 1850 (839) 1900 (862)
1600A 480V	3 4	Either Either	90 (2286) 90 (2286)	40 (1016) 40 (1016)	40 (1016) 40 (1016)	Contact Factory
NEMA 3R Drawout Bypass[1]						
600-1200A 120V-600V	2 3 4	Either Either Either	91 (2311) 91 (2311) 91 (2311)	41 (1041) 41 (1041) 41 (1041)	48 (1219) 48 (1219) 48 (1219)	1850 (839) 1900 (862) 1950 885)
1600A 480V	3 4	Either Either	90 (2286) 90 (2286)	40 (1016) 40 (1016)	59 (1488) 59 (1488)	Contact Factory
NEMA 1 Fixed Bypass[2]						
600A 120-600V	2 3 4	Either Either Either	90 (2286) 90 (2286) 90 (2286)	40 (1016) 40 (1016) 40 (1016)	29 (737) 29 (737) 29 (737)	1500 (680) 1550 (703) 1600 (726)
800-1200A 120-600V	2 3 4	Either Either Either	90 (2286) 90 (2286) 90 (2286)	40 (1016) 40 (1016) 40 (1016)	29 (737) 29 (737) 29 (737)	1700 (771) 1750 (794) 1800 (816)
NEMA 3R Fixed Bypass[2]						
600A 120-600V	2 3 4	Either Either Either	91 (2311) 91 (2311) 91 (2311)	41 (1041) 41 (1041) 41 (1041)	48 (1219) 48 (1219) 48 (1219)	1550 (703) 1600 (726) 1650 (748)
800-1200A 120-600V	2 3 4	Either Either Either	91 (2311) 91 (2311) 91 (2311)	41 (1041) 41 (1041) 41 (1041)	48 (1219) 48 (1219) 48 (1219)	1750 (794) 1800 (816) 1850 (839)

Dimensions in inches (mm) and approximate shipping lbs (kg).

*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 time of order.

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