

Image Shown may not Reflect Actual Package

## CAT ${ }^{\circledR}$ ATC CONTACTORBASED BYPASS ISOLATION AUTOMATIC TRANSFER SWITCH

Cat ${ }^{\circledR}$ 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)
- $\quad$ 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


## 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


## 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

- 120 - 600 Vac $50 / 60 \mathrm{~Hz}$
- 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 $90^{\circ} \mathrm{C}$ rated and all control wire is \#16 and \#18 AWG, type XLPE with a $125^{\circ} \mathrm{C}$ 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.


## 600-1200A Dual Drawout Bypass Isolation



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

## 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)

| UL 1008 Rating | 480 V |  | 600 V |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Any | Specific | Any | Specific |
|  | 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 |

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

| Ampere <br> Rating | Number of Poles | Conduit <br> Entry | Height | Width | Depth | Shipping <br> Weight Lbs. (kg) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| NEMA 1 Drawout Bypass ${ }^{1}$ |  |  |  |  |  |  |
| 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 Drawout 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 Bypass ${ }^{2}$ |  |  |  |  |  |  |
| 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 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) |  |  |  |  |  |  |
| * 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 |  |  |  |  |  |  |

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

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

| Ampere <br> Rating | Number of Poles | Conduit Entry | Height | Width | Depth | Shipping Weight Lbs. (kg) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| NEMA 1 Drawout Bypass ${ }^{1}$ |  |  |  |  |  |  |
| 600-1200A 120-600V | 2 | Either | 90 (2286) | 40 (1016) | 29 (737) | 1800 (816) |
|  | 3 | Either | 90 (2286) | 40 (1016) | 29 (737) | 1850 (839) |
|  | 4 | Either | 90 (2286) | 40 (1016) | 29 (737) | 1900 (862) |
| NEMA 3R Drawout Bypass ${ }^{1}$ |  |  |  |  |  |  |
| 600-1200A 120-600V | 2 | Either | 91 (2311) | 41 (1041) | 48 (1219) | 1850 (839) |
|  | 3 | Either | 91 (2311) | 41 (1041) | 48 (1219) | 1900 (862) |
|  | 4 | Either | 91 (2311) | 41 (1041) | 48 (1219) | 1950 (885) |
| NEMA 1 Fixed Bypass ${ }^{2}$ |  |  |  |  |  |  |
| 600A 120-600V | 2 | Either | 90 (2286) | 40 (1016) | 29 (737) | 1500 (680) |
|  | 3 | Either | 90 (2286) | 40 (1016) | 29 (737) | 1550 (703) |
|  | 4 | Either | 90 (2286) | 40 (1016) | 29 (737) | 1600 (726) |
| 800-1200A 120-600V | 2 | Either | 90 (2286) | 40 (1016) | 29 (737) | 1700 (771) |
|  | 3 | Either | 90 (2286) | 40 (1016) | 29 (737) | 1750 (794) |
|  | 4 | Either | 90 (2286) | 40 (1016) | 29 (737) | 1800 (816) |
| NEMA 3R Fixed Bypass ${ }^{2}$ |  |  |  |  |  |  |
| 600A 120-600V | 2 | Either | 91 (2311) | 41 (1041) | 48 (1219) | 1550 (703) |
|  | 3 | Either | 91 (2311) | 41 (1041) | 48 (1219) | 1600 (726) |
|  | 4 | Either | 91 (2311) | 41 (1041) | 48 (1219) | 1650 (748) |
| 800-1200A 120-600V | 2 | Either | 91 (2311) | 41 (1041) | 48 (1219) | 1750 (794) |
|  | 3 | Either | 91 (2311) | 41 (1041) | 48 (1219) | 1800 (816) |
|  | 4 | Either | 91 (2311) | 41 (1041) | 48 (1219) | 1850 (839) |

Dimensions in Inches (mm) \& 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 type of order

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.

