

## Model RXT Automatic Transfer Switch

The Model RXT automatic transfer switch is designed for use only with Kohler® generator sets equipped with RDC2 or DC2 generator set/transfer switch controls. The transfer switch operation is controlled by the RDC2/DC2 integrated generator set/transfer switch controller, which is mounted on the following Kohler ${ }^{\circledR}$ generator set models:

- 14RESA/RESAL
- 20RESA/RESAL
- 48RCL


## Standard Features

- Allows utility voltage display on the RDC2/DC2 integrated generator set/transfer switch controller, available exclusively on Kohler ${ }^{\circledR}$ residential and light commercial generator sets
- Interface board for connection to the Model RDC2 or DC2 generator set/transfer switch controller (mounted on generator set models listed above)
- UL listed
- Models with load centers, UL 67 listed, file \#E251086
- Models without load centers, UL 1008 listed, file \# E58962
- CSA certified, file \#LR58301 (not applicable to service entrance or load center models)
- Corrosion-resistant NEMA 3R aluminum enclosure:
- Padlockable
- Approved for indoor or outdoor installation
- ANSI 49 gray
- Contactor electrically and mechanically interlocked
- Double throw inherently interlocked design
- Contactor manually operable for maintenance purposes
- Silver alloy main contacts
- Transfer switches are $100 \%$ equipment rated and can be applied at the rated current without derating (non-service entrance models)
- 100,200 , and 400 amp standard and service entrance models are available; see page 6 for available models
- 100 amp standard single-phase models are available with or without 16 -space load center. Up to 8 tandem breakers can be used for a total of 24 circuits.
- Service entrance models include disconnect circuit breaker on the utility (normal) source side ( $80 \%$ rated)
- Five-year limited warranty
- Optional status indicator available:
- LED indicators for source availability and contactor position
- View transfer switch status without removing enclosure cover


## Codes and Standards

The ATS meets or exceeds the requirements of the following specifications:

- Underwriters Laboratories UL 67, Enclosed Panel Boards (load center models) file \#E251086
- Underwriters Laboratories UL 1008, Standard for Automatic Transfer Switches for Use in Emergency Systems, file \# E58962
- Underwriters Laboratories UL 508, Standard for Industrial Control Equipment
- CSA certified, file \#LR58301 (not applicable to service entrance or load center models)
- NFPA 70, National Electrical Code
- NFPA 110, Emergency and Standby Power Systems
- NEMA Standard IC10-1993, AC Automatic Transfer Switches


## Specifications

| Environmental Specifications |  |
| :--- | :---: |
| Operating temperature | $-20^{\circ} \mathrm{C}$ to $70^{\circ} \mathrm{C}\left(-4^{\circ} \mathrm{F}\right.$ to $\left.158^{\circ} \mathrm{F}\right)$ |
| Storage temperature | $-40^{\circ} \mathrm{C}$ to $85^{\circ} \mathrm{C}\left(-40^{\circ} \mathrm{F}\right.$ to $\left.185^{\circ} \mathrm{F}\right)$ |
| Humidity | 5 to $95 \%$ noncondensing |


| Interface Module Specifications |  |
| :--- | :---: |
| Load Control Contact Rating | 10 A @ 250 VAC |
| Load Control Wire Size | \#12-18 AWG |
| Controller Interface Connections | \#20 AWG shielded twisted-pair |
| A and B Wire Size | Belden 9402 or 8723 or equivalent |


| Cable Sizes |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| AL/CU UL-Listed Solderless Screw-Type Terminals for External Power Connections |  |  |  |  |  |  |
| Switch Size, Amps | Switch | Phases | Range of Wire Sizes, Cu/AI |  |  |  |
|  |  |  | Normal and Emergency | Load | Neutral | Ground |
| 100 | Standard | 1 | (1) \#14-1/0 AWG | (1) \#14-1/0 AWG | (3) \#12-1/0 AWG | (9) \#4-14 AWG |
|  | With load center | 1 | (1) \#14-1/0 AWG | per customer-supplied circuit breaker | (1) \#6-2/0 AWG | (9) \#4-14 AWG |
|  | Service Entrance | 1 | Normal: (1) \#12-2/0 AWG <br> Emerg: (1) \#6-250 MCM | (1) \#6-250 MCM | (3) \#6-250 MCM | (3) \#14-1/0 AWG |
|  | 3-Phase | 3 | (1) \#8-3/0 AWG | (1) \#8-3/0 AWG | (3) \#6 AWG - 3/0 AWG | (3) \#6-3/0 AWG |
| 200 | Standard | 1 | (1) \#6 AWG - 250 MCM | (1) \#6 AWG - 250 MCM | (3) \#6 AWG - 250 MCM | (9) \#4-14 AWG |
|  | Service Entrance | 1 | Normal: (1) \#4-300 MCM <br> Emerg: (1) \#6-250 MCM | (1) \#6 AWG - 250 MCM | (3) \#6 AWG - 250 MCM | (3) \#14-1/0 AWG |
|  | 3-Phase | 3 | (1) \#6 AWG - 250 MCM | (1) \#6 AWG - 250 MCM | (3) \#4 AWG - 600 MCM <br> (6) $1 / 0-250 \mathrm{MCM}$ | (3) \#6-3/0 AWG |
| 400 | Standard | 1 | (2) \#6-250 MCM | (2) \#6-250 MCM | (3) \#4-600 MCM <br> (6) $1 / 0-250 \mathrm{MCM}$ | (3) \#6-3/0 AWG |
|  | Service Entrance | 1 | Normal: (2) 3/0-250 MCM <br> Emerg: (2) \#6-250 MCM | (2) \#6-250 MCM |  |  |
|  | $\begin{gathered} \text { 3-pole } \\ 208-240 \mathrm{~V} \end{gathered}$ | 3 | (2) \#6-250 MCM | (2) \#6-250 MCM |  |  |
|  | $\begin{gathered} 3 \text { or } 4 \text { pole } \\ 480 \mathrm{~V} \end{gathered}$ | 3 | (1) $\# 4-600 \mathrm{MCM}$ <br> (2) \#6-250 MCM | (1) $\# 4-600 \mathrm{MCM}$ <br> (2) \#6-250 MCM |  |  |

Note: Data is subject to change. Refer to the transfer switch dimension drawings and wiring diagrams for planning and installation.

# Withstand and Close-On Ratings (WCR) 

## Service Entrance Transfer Switch Ratings

The service entrance transfer switch is factory-equipped with a normal source disconnect circuit breaker.
Suitable for control of motors, electric discharge lamps, tungsten filament lamps and electric heating equipment where the sum of motor full-load ampere ratings and the ampere ratings of other loads do not exceed the ampere rating of the switch and the tungsten load does not exceed 30 percent of switch rating.

| Switch Rating, Amps | WCR, RMS Symmetrical Amps at 240 VAC |
| :---: | :---: |
| 100 * <br> 200 * | 22,000 |
| 400 * | 35,000 |
| * Continuous load current not to exceed $80 \%$ of switch rating. |  |

## Contactor Ratings with Coordinated Circuit Breakers

Single-phase transfer switches are UL listed at 240 VAC maximum. Three-phase transfer switches are rated at 480 VAC maximum. The following table lists contactor withstand current ratings (WCR) for 100-400 ampere non-service entrance rated switches with specific manufacturer's circuit breakers per UL and Canadian safety standards. Suitable for control of motors, electric discharge lamps, tungsten filament lamps and electric heating equipment where the sum of motor full-load ampere ratings and the ampere ratings of other loads do not exceed the ampere rating of the switch and the tungsten load does not exceed 30 percent of switch rating.

The transfer switch is rated for use on a circuit capable of delivering not more than the RMS symmetrical amperes maximum as shown in the tables below, but no greater than the interrupting capacity of the selected breaker.

| WCR Ratings with Specific Manufacturer's Molded-Case Circuit Breakers |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Switch Rating, Amps | Voltage, max. | Number of Poles/ Phases | WCR, RMS Symmetrical Amps | Manufacturer | Type or Class | Maximum <br> Size, Amps |
| 100 | 240 | 2 pole/ <br> 1 phase | 10,000 | Eaton/ Cutler-Hammer | FCL, FB, QCHW, GB, GHB, GC, GHC, GD, EHD | 100 |
|  |  |  |  |  | FDB, FD, HFD, FDC, CA, CAH | 150 |
|  |  |  |  | Square D | FI, FC, FA, FH | 100 |
|  |  |  |  |  | QOM1, QOM1-VH | 125 |
|  |  |  |  |  | Q2, Q2-H. Q2H | 175 |
|  |  |  |  |  | QOM2, QOM2-VH | 225 |
|  |  |  |  |  | QB, QD, QG, GJ | 250 |
|  |  |  |  | Siemens | CED6, ED2, ED4, ED6, HED4, HED6, QP(Q2125), QPH(Q2125H) | 125 |
|  |  |  |  |  | QJ2, QJH2 | 150 |
|  |  |  |  | GE | THQB, THQC, THHQB, THHQC | 100 |
|  |  |  |  |  | THHQL, TQDL, THQDL | 125 |
|  |  |  |  |  | SE, TQD, THQD, THED | 150 |
| 200 | 240 | 2 pole/ <br> 1 phase | 10,000 | Eaton/ Cutler-Hammer | CSR/BHW, FD, HFD | 225 |
|  |  |  |  |  | JD, JDB, HJD | 225-250 |
|  |  |  |  |  | JDC | 250 |
|  |  |  |  |  | DK, KD, KDB, HKD, KDC, LCL, LA | 400 |
|  |  |  |  | Square D | Q2. QOM2, QOM2-VH, Q2-H, Q2H | 225 |
|  |  |  |  |  | KI, KA, KH, KC, QB, QD, QG, QJ | 250 |
|  |  |  |  |  | LE, LX, LXI, LC, LI, LA, LH | 400 |
|  |  |  |  | Siemens | FD6-A, FXD6-A, HFD6, CFD6 | 250 |
|  |  |  |  | GE | TQDL, THQDL | 125 |
|  |  |  |  |  | THLC2 | 225 |
|  |  |  |  |  | SF | 250 |


| WCR Ratings with Specific Manufacturer's Molded-Case Circuit Breakers |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Switch Rating, Amps | Voltage, max. | Number of Poles/ Phases | WCR, RMS Symmetrical Amps | Manufacturer | Type or Class | Maximum <br> Size, Amps |
| $\begin{aligned} & 100 \\ & 200 \end{aligned}$ | 480 | 3 pole/ 3 phase <br> 4 pole/ 3 phase | 30,000 | Cutler-Hammer | FDC, HFD | 150 |
|  |  |  |  |  | HJD, JDC | 250 |
|  |  |  |  |  | HKD, KD, KDB, KDC, LA TRI-PAC, LCL | 400 |
|  |  |  |  | Square D | FC, FI | 100 |
|  |  |  |  |  | KC, KH, KI | 250 |
|  |  |  |  |  | LA, LC, LE, LH, LI, LX, LXI | 400 |
|  |  |  |  | ITE/Siemens | CED6, HED4, HED6 | 125 |
|  |  |  |  |  | CFD6, FD6, FXD6, HFD6 | 250 |
|  |  |  |  |  | CJD6, HJD6, HHJD6, HHJXD6, JD6, JXD6, SCJD6, SHJD6, SJD6 | 400 |
|  |  |  |  | GE | TB1 | 100 |
|  |  |  |  |  | SEL, SEP, TEL, THLC1 | 150 |
|  |  |  |  |  | TFL, THLC2 | 225 |
|  |  |  |  |  | SFL, SFP | 250 |
|  |  |  |  |  | SGL4, SGP4, TB4, THJK4, THLC4, TJJ, TJK4, TLB4 | 400 |
| 400 | 240 | 1 phase <br> 3 pole/ 3 phase | 50,000 | Cutler-Hammer | LD, LDB, HLD, LDC, CLD, CHLD, CLDC | 600 |
|  |  |  |  |  | MDL, HMDL, NB | 800 |
|  |  |  |  | Square D | LC, LI, LE, LX, LXI, DG, DJ, DL | 600 |
|  |  |  |  | ITE/Siemens | LD, LXD, HLD, HLXD, HHLD, HHLXD, CLD, NLGA, HLGA, LLGA, SLD, SHLD, SCLD | 600 |
|  |  |  |  |  | LMD, LMXD, HLMD, HLMXD, MD, MXD, HMD, HMXD, CMD, NMG, HMG, LMG, SMD, SHMD, SCMD | 800 |
|  |  |  |  | GE | SGHA, FGN, FGL, FGP | 600 |
|  |  |  |  | Merlin Gerin | CJ600N, CJ600H | 600 |
|  |  |  |  | ABB | T5, 76 | 600 |
| 400 | 240 | 1 phase <br> 3 pole/ 3 phase | 50,000 | If any of the following breakers is selected for application, the continuous load current must not exceed 80 percent of the switch rating: |  |  |
|  |  |  |  | Cutler-Hammer | DK, KDB, KD, CKD, HKD, CHKD, KDC, LCL, LA TRIPAC | 400 |
|  |  |  |  | Square D | LA, LH, LC, LI, LE, LX, LXI | 400 |
|  |  |  |  | ITE/Siemens | NJGA, HJGA, LJGA, JXD2, JD6, JXD6, HJD6, HJXD6, HHJD6, HHJXD6, CJD6, SJD6, SHJD6, SCJD6 | 400 |
|  |  |  |  | Merlin Gerin | CJ400N, CJ400H, CJ400L | 400 |


| WCR Ratings with Specific Manufacturer's Molded-Case Circuit Breakers |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Switch <br> Rating, <br> Amps | Voltage, max. | Number of Poles/ Phases | WCR, RMS Symmetrical Amps | Manufacturer | Type or Class | Maximum <br> Size, Amps |
| 400 | 480 | 3 pole/ 3 phase <br> 4 pole/ 3 phase | 50,000 | Cutler-Hammer | HJD, JDC | 250 |
|  |  |  |  |  | HKD, CHKD, KDC, LCL, LA TRIPAC | 400 |
|  |  |  |  |  | HLD, CHLD, LDC, CLDC | 300-600 |
|  |  |  |  |  | NB TRI-PAC | 300-800 |
|  |  |  |  | Square D | KI, KC | 250 |
|  |  |  |  |  | LI, LXI, LX, LE, LC | 600 |
|  |  |  |  |  | MX, ME, MH | 800 |
|  |  |  |  | ITE/Siemens | CFD6, HFD6 | 250 |
|  |  |  |  |  | CJD6, SCJD6, HHJD6, HHJXD6, SHJD6, HJD6 | 400 |
|  |  |  |  |  | CLD6, SCLD6, HHLD6, HHLXD6, SHLD6, HLD6 | 600 |
|  |  |  |  |  | CMD6, SCMD6, HMD6, SHMD6, HMXD6, MD6, MXD6, SMD6 | 800 |
|  |  |  |  | GE | SFL, SFP, TFL, THLC2 | 250 |
|  |  |  |  |  | SGL4, SGP4, TB4, THLC4, TLB4 | 400 |
|  |  |  |  |  | SGL6, SGP6, TB6, TJL4V, TKL4V, TJL1S-6S | 600 |
|  |  |  |  |  | SKL8, SKP8, TB8, SKH8 | 800 |
|  |  |  |  | Merlin Gerin | CF250L, CF250H | 250 |
|  |  |  |  |  | CJ400L, CK400H, CJ400H, CK400N | 400 |
|  |  |  |  |  | CJ600H | 600 |
|  |  |  |  |  | CK800H, CK800N | 800 |

## Dimensions and Weights



| Amps | Description | Dimensions, H x W x D, mm (in.) * |  | Shipping Weight <br> kg <br> (lb.) |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 100 | Single phase | $620 \times 335 \times 180$ | $(24.4 \times 13.2 \times 7.1)$ | 7 | (15) |
|  | With load center | $620 \times 335 \times 180$ | $(24.4 \times 13.2 \times 7.1)$ | 9 | (20) |
|  | Three phase | $679 \times 462 \times 228$ | $(26.7 \times 18.2 \times 9.0)$ | 15 | (34) |
|  | Service Entrance | $731 \times 416 \times 175$ | $(28.8 \times 16.4 \times 6.9)$ | 12 | (26) |
| 200 | Single phase | $620 \times 335 \times 180$ | $(24.4 \times 13.2 \times 7.1)$ | 8 | (17) |
|  | Three phase | $679 \times 462 \times 228$ | $(26.7 \times 18.2 \times 9.0)$ | 16 | (35) |
|  | Service Entrance | $731 \times 416 \times 175$ | $(28.8 \times 16.4 \times 6.9)$ | 14 | (30) |
| 400 | Single phase | $1067 \times 559 \times 329$ | $(42.0 \times 22.0 \times 12.9)$ | 50 | (110) |
|  | 3-Pole/208-240 Volts | $1067 \times 559 \times 329$ | $(42.0 \times 22.0 \times 12.9)$ | 54 | (120) |
|  | 3-Pole/480 Volts | $1222 \times 610 \times 343$ | $(48.1 \times 24.0 \times 13.5)$ | 68 | (150) |
|  | 4-Pole | $1222 \times 610 \times 343$ | $(48.1 \times 24.0 \times 13.5)$ | 73 | (160) |
|  | Service Entrance | $1067 \times 559 \times 329$ | $(42.0 \times 22.0 \times 12.9)$ | 59 | (130) |
| Depth does not include the padlock hasp on the front of the enclosure. <br> Shipping weights are approximate and include packaging. |  |  |  |  |  |

## Model Designation



Record the transfer switch model designation in the boxes. The transfer switch model designation defines ratings and characteristics as explained below.

## Sample Model Designation: RXT-JFNC-0200A

## Model

RXT: Kohler Automatic Transfer Switch
Controls
J: Interface for RDC2/DC2 Controller
Voltage/Frequency
C: 208 Volts/ 60 Hz (3-phase only)
F: 240 Volts/ 60 Hz
M: 480 Volts/ 60 Hz (3-phase only)

## Number of Poles/Wires

N : 2-pole, 3-wire, solid neutral (120/240 V only)
T: 3-pole, 4-wire, solid neutral
V: 4-pole, 4-wire, switched neutral

## Enclosure

C: NEMA 3R
Current Rating: Numbers indicate the current rating of the switch in amperes:
0100
0200
0400

## Connections

A: No load center
B: With load center (100 amp single-phase only)
ASE: Service entrance rated

## Available Models

All Model RXT transfer switches are standard-transition 60 Hz automatic transfer switches with NEMA 3R aluminum enclosures. Letters in parentheses refer to the model designation code described above.

| Amps | Description (Connections) | Voltages |  |  | Poles | Phases | WCR * <br> RMS Symmetrical Amps |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 208 (C) | 240 (F) | 480 (M) |  |  |  |
| 100 | Standard (A) |  | - |  | 2 (N) | 1 | 10,000 |
|  | Standard, with load center $(\mathrm{B}) \dagger$ |  | $\bullet$ |  | 2 (N) | 1 | 10,000 |
|  | Service entrance (ASE) |  | - |  | 2 (N) | 1 | 22,000 |
|  | Standard, 3-phase | $\bullet$ | $\bullet$ | $\bullet$ | $3(\mathrm{~T})$ or $4(\mathrm{~V})$ | 3 | 30,000 |
| 200 | Standard (A) |  | - |  | 2 (N) | 1 | 10,000 |
|  | Service entrance (ASE) |  | $\bullet$ |  | 2 (N) | 1 | 22,000 |
|  | Standard, 3-phase (A) | $\bullet$ | $\bullet$ | $\bullet$ | $3(\mathrm{~T})$ or $4(\mathrm{~V})$ | 3 | 30,000 |
| 400 | Standard (A) |  | $\bullet$ |  | $2(\mathrm{~N})$ | 1 | 50,000 |
|  | Service entrance (ASE) |  | $\bullet$ |  | 2 (N) | 1 | 35,000 |
|  | Standard, 3-phase (A) | $\bullet$ | $\bullet$ | $\bullet$ | $3(\mathrm{~T})$ or $4(\mathrm{~V})$ | 3 | 50,000 |

* Withstand and close-on rating. See pages 3-5 for WCR information and specific breaker ratings.
$\dagger$ 16-space load center. Up to 8 tandem breakers can be used, for a maximum of 24 circuits.

Availability is subject to change without notice. Kohler Co. reserves the right to change the design or specifications without notice and without any obligation or liability whatsoever. Contact your local Kohler® generator distributor for availability.

## DISTRIBUTED BY:

