KOHLER POWER SYSTEMS

Automatic Transfer Switch 100-400 Amps





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® 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[®] 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°C to 70°C (-4°F to 158°F)					
Storage temperature	−40°C to 85°C (−40°F to 185°F)				
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 A and B Wire Size	#20 AWG shielded twisted-pair Belden 9402 or 8723 or equivalent					
Controller Interface Connections PWR and COM Wire Size	#12-20 AWG					

	Cable Sizes									
AL/CU UL-Listed Solderless Screw-Type Terminals for External Power Connections										
Switch			Range of Wire Sizes, Cu/Al							
Size, Amps	Switch Phases		Normal and Emergency	Load	Neutral	Ground				
	Standard	1	(1) #14 - 1/0 AWG	(1) #14 – 1/0 AWG	(3) #12 – 1/0 AWG	(9) #4 – 14 AWG				
100	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 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				
	Standard	1	(1) #6 AWG – 250 MCM	(1) #6 AWG – 250 MCM	(3) #6 AWG – 250 MCM	(9) #4 – 14 AWG				
200	Service Entrance	1	Normal: (1) #4 – 300 MCM 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 (6) 1/0 – 250 MCM	(3) #6 – 3/0 AWG				
	Standard	1	(2) #6 - 250 MCM	(2) #6 - 250 MCM						
400	Service Entrance	1	Normal: (2) 3/0 – 250 MCM Emerg: (2) #6 – 250 MCM	(2) #6 – 250 MCM	(2) (1)					
	3-pole 208-240 V	3	(2) #6 – 250 MCM	(2) #6 – 250 MCM	(3) #4 – 600 MCM (6) 1/0 – 250 MCM	(3) #6 – 3/0 AWG				
	3 or 4 pole 480 V	3	(1) #4 – 600 MCM (2) #6 – 250 MCM	(1) #4 – 600 MCM (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 *	00.000				
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.

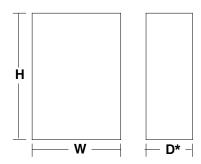
The transfer switch is rated for use on a circuit capable of delivering not more than the RMS symmetrical amperes maximum as shown in the tables below, but no greater than the interrupting capacity of the selected breaker.

		WCR F	Ratings with Spe	ecific Manufactur	er's Molded-Case Circuit Breakers	
Switch Rating, Amps	Voltage, max.	Number of Poles/ Phases	WCR, RMS Symmetrical Amps	Manufacturer	Type or Class	Maximum Size, Amps
				Eaton/	FCL, FB, QCHW, GB, GHB, GC, GHC, GD, EHD	100
				Cutler-Hammer	FDB, FD, HFD, FDC, CA, CAH	150
					FI, FC, FA, FH	100
					QOM1, QOM1-VH	125
100				Square D	Q2, Q2-H. Q2H	175
					QOM2, QOM2-VH	225
	240	2 pole/ 1 phase	10,000		QB, QD, QG, GJ	250
		Тріпасс		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	
					CSR/BHW, FD, HFD	225
				Eaton/ Cutler-Hammer	JD, JDB, HJD	225-250
					JDC	250
					DK, KD, KDB, HKD, KDC, LCL, LA	400
					Q2. QOM2, QOM2-VH, Q2-H, Q2H	225
200	240	2 pole/ 1 phase	10,000	Square D	KI, KA, KH, KC, QB, QD, QG, QJ	250
		i piiase	. 5,555		LE, LX, LXI, LC, LI, LA, LH	400
				Siemens	FD6-A, FXD6-A, HFD6, CFD6	250
					TQDL, THQDL	125
				GE	THLC2	225
					SF	250

Switch Rating, Amps	Voltage, max.	Number of Poles/ Phases	WCR, RMS Symmetrical Amps	Manufacturer	Type or Class	Maximum Size, Amps	
			•		FDC, HFD	150	
				Cutler-Hammer	HJD, JDC	250	
					HKD, KD, KDB, KDC, LA TRI-PAC, LCL	400	
					FC, FI	100	
				Square D	KC, KH, KI	250	
					LA, LC, LE, LH, LI, LX, LXI	400	
		3 pole/ 3 phase			CED6, HED4, HED6	125	
100	480	3 priase	30,000		CFD6, FD6, FXD6, HFD6	250	
200	400	4 pole/ 3 phase	30,000	ITE/Siemens	CJD6, HJD6, HHJD6, HHJXD6, JD6, JXD6, SCJD6, SHJD6, SJD6	400	
				TB1	100		
				SEL, SEP, TEL, THLC1	150		
		1 phase 240 3 pole/ 3 phase		GE	TFL, THLC2	225	
					SFL, SFP	250	
					SGL4, SGP4, TB4, THJK4, THLC4, TJJ, TJK4, TLB4	400	
					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
			50,000 B pole/	ITE/Siemens	LD, LXD, HLD, HLXD, HHLD, HHLXD, CLD, NLGA, HLGA, LLGA, SLD, SHLD, SCLD	600	
400	240				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, T6	600	
					owing breakers is selected for application, the co t exceed 80 percent of the switch rating:	ontinuous load	
400		1 phase	1 phase	Cutler-Hammer	DK, KDB, KD, CKD, HKD, CHKD, KDC, LCL, LA TRIPAC	400	
	240		50,000	Square D	LA, LH, LC, LI, LE, LX, LXI	400	
		3 pole/ 3 phase	·/	ITE/Siemens	NJGA, HJGA, LJGA, JXD2, JD6, JXD6, HJD6, HJXD6, HHJD6, HHJXD6, CJD6, SJD6, SHJD6, SCJD6	400	
				Merlin Gerin	CJ400N, CJ400H, CJ400L	400	

		WCR F	Ratings with Sp	ecific Manufactur	er's Molded-Case Circuit Breakers	
Switch Rating, Amps	Voltage, max.	Number of Poles/ Phases	WCR, RMS Symmetrical Amps	Manufacturer	Type or Class	Maximum Size, Amps
					HJD, JDC	250
				0.41	HKD, CHKD, KDC, LCL, LA TRIPAC	400
				Cutler-Hammer	HLD, CHLD, LDC, CLDC	300-600
					NB TRI-PAC	300-800
					KI, KC	250
				Square D	LI, LXI, LX, LE, LC	600
				MX, ME, MH	800	
			50,000	ITE/Siemens	CFD6, HFD6	250
		3 pole/ 3 phase			CJD6, SCJD6, HHJD6, HHJXD6, SHJD6, HJD6	400
400	480	480 4 pole/ 3 phase			CLD6, SCLD6, HHLD6, HHLXD6, SHLD6, HLD6	600
400	460				CMD6, SCMD6, HMD6, SHMD6, HMXD6, MD6, MXD6, SMD6	800
					SFL, SFP, TFL, THLC2	250
				SGL4, SGP4, TB4, THLC4, TLB4	400	
				GE	SGL6, SGP6, TB6, TJL4V, TKL4V, TJL1S-6S	600
				SKL8, SKP8, TB8, SKH8	800	
					CF250L, CF250H	250
				Marilia O anta	CJ400L, CK400H, CJ400H, CK400N	400
				Merlin Gerin	CJ600H	600
					CK800H, CK800N	800

Dimensions and Weights



				Shipping	Weight †
Amps	Description	Dimensions, F	kg	(lb.)	
	Single phase	620 x 335 x 180	(24.4 x 13.2 x 7.1)	7	(15)
	With load center	620 x 335 x 180	(24.4 x 13.2 x 7.1)	9	(20)
100	Three phase	679 x 462 x 228	(26.7 x 18.2 x 9.0)	15	(34)
	Service Entrance	731 x 416 x 175	(28.8 x 16.4 x 6.9)	12	(26)
	Single phase	620 x 335 x 180	(24.4 x 13.2 x 7.1)	8	(17)
200	Three phase	679 x 462 x 228	(26.7 x 18.2 x 9.0)	16	(35)
Ī	Service Entrance	731 x 416 x 175	(28.8 x 16.4 x 6.9)	14	(30)
	Single phase	1067 x 559 x 329	(42.0 x 22.0 x 12.9)	50	(110)
400	3-Pole/208-240 Volts	1067 x 559 x 329	(42.0 x 22.0 x 12.9)	54	(120)
	3-Pole/480 Volts	1222 x 610 x 343	(48.1 x 24.0 x 13.5)	68	(150)
	4-Pole	1222 x 610 x 343	(48.1 x 24.0 x 13.5)	73	(160)
	Service Entrance	1067 x 559 x 329	(42.0 x 22.0 x 12.9)	59	(130)

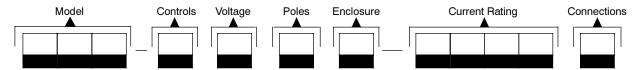
^{*} Depth does not include the padlock hasp on the front of the enclosure.

[†] Shipping weights are approximate and include packaging.

KOHLER CO., Kohler, Wisconsin 53044 USA Phone 920-457-4441, Fax 920-459-1646 For the nearest sales and service outlet in the US and Canada, phone 1-800-544-2444 KohlerPower.com

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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)

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:

0200

0400

Connections

No load center

With load center (100 amp single-phase only) B:

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.

	Description	Voltages					WCR*
Amps	•		240 (F)	480 (M)	Poles	Phases	RMS Symmetrical Amps
	Standard (A)		•		2 (N)	1	10,000
100	Standard, with load center (B) †		•		2 (N)	1	10,000
100	Service entrance (ASE)		•		2 (N)	1	22,000
	Standard, 3-phase	•	•	•	3 (T) or 4 (V)	3	30,000
	Standard (A)		•		2 (N)	1	10,000
200	Service entrance (ASE)		•		2 (N)	1	22,000
	Standard, 3-phase (A)	•	•	•	3 (T) or 4 (V)	3	30,000
	Standard (A)		•		2 (N)	1	50,000
400	Service entrance (ASE)		•		2 (N)	1	35,000
	Standard, 3-phase (A)	•	•	•	3 (T) or 4 (V)	3	50,000

^{*} Withstand and close-on rating. See pages 3-5 for WCR information and specific breaker ratings.

DISTRIBUTED BY:		

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.

^{† 16-}space load center. Up to 8 tandem breakers can be used, for a maximum of 24 circuits.