KOHLER. Power Systems

Automatic Transfer Switch 100-400 Amps





Covers have been removed for illustration.

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.

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 certification, file #LR58301, is available for:
 - Standard ATS without load center (single and three-phase)
 - Service entrance ATS 100, 150, and 200 amp models
- Corrosion-resistant NEMA 3R aluminum enclosure
 - Padlockable
 - Approved for indoor or outdoor installation
 - o ANSI 49 gray
- NEMA 1 enclosure available on 100 amp load center models
- 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)
- Service entrance models include disconnect circuit breaker on the utility (normal) source side (80% rated)
- Five-vear limited warranty

Available Models

- 100, 200, and 400 amp standard and service entrance models are available.
- 150 and 300 amp service entrance models are also available.
- 100 amp standard single-phase models are available with or without a 16-space load center. Up to 8 tandem breakers can be used for a total of 24 circuits.
- 100 Amp standard single phase model with a 12-space load center and a NEMA 1 enclosure is available as a standalone non-configurable spec (GM85273-SA).
- See page 6 for more information.

Optional Accessories

The following optional accessories are available:

☐ Status indicator kit

- LED indicators for source availability and contactor position
- Mounts on the outside of the RXT enclosure
- Dimensions: 92 mm x 42 mm (3.62 in. x 1.65 in.)
- View transfer switch status without removing enclosure cover
- An overhang on the enclosure protects the indicator panel and ribbon cable opening
- For more information on the status indicator kit, see specification sheet G11-123

Load shed kit

- Automatically sheds non-critical loads when essential appliances are running
- Prevents generator overload in compliance with NEC 2008
- Provides two (2) HVAC relays, rated 10 A @ 125 VAC, to control two independent air conditioner loads
- Includes four (4) pilot relays rated 120VAC, 125VA (pilot duty), 10 A @ 125 VAC (general purpose) to control customer-provided power relays for non-essential loads
- Mounts inside the ATS enclosure
- Uses Kohler's exclusive RBUS communication protocol
- Requires Kohler® residential generator set with RDC2 or DC2 controller
- For more information on the load shed kit, see specification sheet G11-124

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 certification available, file #LR58301 (not available for 300-400 amp service entrance or 100 amp load center models). Must be selected when the transfer switch is ordered.
- NFPA 70, National Electrical Code
- NFPA 110, Emergency and Standby Power Systems
- NEMA Standard IC10-1993, AC Automatic Transfer Switches

Specifications

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				

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				

	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 to 250 KCMIL (Cu) or (3) #10 to 250 KCMIL (Al)	(0) // 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4			
100	With load center 1 (1) #14 –	(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) #12 to 250 KCMIL (Cu) or (3) #10 to 250 KCMIL (Al)	(3) #14 – 1/0 AWG			
	3-Phase	3	(1) #8 – 3/0 AWG	(3) #6 AWG – 3/0 AWG	(3) #6 – 3/0 AWG				
150 200	Service Entrance	1	Normal: (1) #4 – 300 MCM Emerg: (1) #6 – 250 MCM (1) #6 AWG – 250 MCM (3) #12 to 250 KCMIL (Cu) or (3) #10 to 250 KCMIL (Al)		(3) #14 – 1/0 AWG				
222	Standard	1	(1) #6 AWG – 250 MCM	(1) #6 AWG – 250 MCM (1) #6 AWG – 250 MCM (3) #12 to 250 KCMIL (Cu) or (3) #10 to 250 KCMIL (Al)		(9) #4 – 14 AWG			
200 3-Phase 3		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			
300 400	Service Entrance	1	Normal: : (1) #1 - 600 MCM or (2) #1 - 250 MCM Emerg: (2) #6 - 250 MCM (2) #6 - 250 MCM (3) #4 - 600 MCM (6) 1/0 - 250 MCM		(3) #6 – 3/0 AWG				
	Standard	1							
400	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	(0) 1/0 - 200 MOM				

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, 150, 200	22,000				
300, 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.

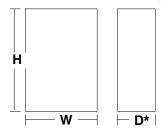
The transfer switch is rated for use on a circuit capable of delivering not more than the RMS symmetrical amperes maximum as shown in the tables below, but no greater than the interrupting capacity of the selected breaker.

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 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
				Square D	Q2, Q2-H. Q2H	175
100 240		0 1- /			QOM2, QOM2-VH	225
	2 pole/ 1 phase	10,000		QB, QD, QG, GJ	250	
		, pinass		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
450					Q2. QOM2, QOM2-VH, Q2-H, Q2H	225
150	240	2 pole/ 1 phase	10,000	Square D	KI, KA, KH, KC, QB, QD, QG, QJ	250
200		i pilase			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
			Cutler-Hammer	FDC, HFD	150	
				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	o pridoc	30,000	ITE/Siemens	CFD6, FD6, FXD6, HFD6	250
200		4 pole/ 3 phase	30,000	TTE/Siemens	CJD6, HJD6, HHJD6, HHJXD6, JD6, JXD6, SCJD6, SHJD6, SJD6	400
				TB1	100	
				GE	SEL, SEP, TEL, THLC1	150
					TFL, THLC2	225
					SFL, SFP	250
					SGL4, SGP4, TB4, THJK4, THLC4, TJJ, TJK4, TLB4	400
			Cu	Cutler-Hammer	LD, LDB, HLD, LDC, CLD, CHLD, CLDC	600
				Cutier-Hammer	MDL, HMDL, NB	800
				Square D	LC, LI, LE, LX, LXI, DG, DJ, DL	600
300		1 phase		ITE/Siemens	LD, LXD, HLD, HLXD, HHLD, HHLXD, CLD, NLGA, HLGA, LLGA, SLD, SHLD, SCLD	600
400	240	3 pole/ 3 phase	50,000		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
					wing breakers is selected for application, the co exceed 80 percent of the switch rating:	ntinuous load
300		1 phase)	Cutler-Hammer	DK, KDB, KD, CKD, HKD, CHKD, KDC, LCL, LA TRIPAC	400
400	240	0 1- /	50,000	Square D	LA, LH, LC, LI, LE, LX, LXI	400
700		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 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 Size, Amps
				HJD, JDC	250	
				0 11- 11- 11- 11- 11- 11- 11- 11- 11- 11	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		
				CFD6, HFD6	250	
		3 pole/ 3 phase	Э	ITE/Siemens	CJD6, SCJD6, HHJD6, HHJXD6, SHJD6, HJD6	400
400	400				CLD6, SCLD6, HHLD6, HHLXD6, SHLD6, HLD6	600
400 480 4 pole/				CMD6, SCMD6, HMD6, SHMD6, HMXD6, MD6, MXD6, SMD6	800	
		3 phase		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		
					CJ400L, CK400H, CJ400H, CK400N	400
				Merlin Gerin	CJ600H	600
				CK800H, CK800N	800	

Dimensions and Weights



				Shipping	Weight ‡
Amps	Description	Dimensions, H	kg	(lb.)	
	Single phase	620 x 335 x 180	(24.4 x 13.2 x 7.1)	7	(15)
	With 12- or 16-space load center (NEMA 1)	610 x 330 x 154	(24.0 x 13.0 x 6.0)	12	(26)
100	With 16-space load center	614 x 335 x 180	(24.2 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 (ASE)	731 x 416 x 175	(28.8 x 16.4 x 6.9)	12	(26)
	Service entrance (CSE)	735 x 416 x 175	(28.9 x 16.4 x 6.9)	14	(30)
	Service entrance (ASE)	731 x 416 x 175	(28.8 x 16.4 x 6.9)	14	(30)
150-200	Service entrance (CSE)	735 x 416 x 175	(28.9 x 16.4 x 6.9)	16	(34)
000	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)
300	Service entrance	1067 x 559 x 329	(42.0 x 22.0 x 12.9)	59	(130)
	Single phase	1067 x 559 x 329	(42.0 x 22.0 x 12.9)	50	(110)
	3-Pole/208-240 volts	1067 x 559 x 329	(42.0 x 22.0 x 12.9)	54	(120)
400	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)

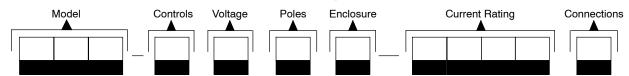
 $[\]ensuremath{^{\dagger}}$ Depth does not include the padlock hasp on the front of the enclosure.

Note: Enclosures are type NEMA 3R except as noted.

[‡] Shipping weights are approximate and include packaging.

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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)

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

A: NEMA 1 *

C: NEMA 3R

* NEMA 1 enclosure is available on 100 amp load center models only.

Current Rating

0100: 100 amps 0150: 150 amps 0200: 200 amps 0300: 300 amps 0400: 400 amps Connections

A: No load center

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

ASE: Service entrance rated

CSE: Service entrance rated with CSA certification (100/150/200 amps

only)

Available Models

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

	Description	Description Voltages (Connections) 208 (C) 240 (F) 480 (M)				WCR §	
Amps	•			Poles	Phases	RMS Symmetrical Amps	
	Standard (A)		•		2 (N)	1	10,000
	Standard, with load center (B) ¶		•		2 (N)	1	10,000
100	Standard, with load center **		•		2 (N)	1	10,000
	Service entrance (ASE, CSE)		•		2 (N)	1	22,000
	Standard, 3-phase	•	•	•	3 (T) or 4 (V)	3	30,000
150	Service entrance (ASE, CSE)		•		2 (N)	1	22,000
	Standard (A)		•		2 (N)	1	10,000
200	Service entrance (ASE, CSE)		•		2 (N)	1	22,000
	Standard, 3-phase (A)	•	•	•	3 (T) or 4 (V)	3	30,000
300	Service entrance (ASE)		•		2 (N)	1	35,000
	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.

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.

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[¶] With 16-space load center and NEMA 1 or NEMA 3R enclosure. Up to 8 tandem breakers can be used, for a maximum of 24 circuits.

^{**} GM85273-SA with 12-space load center and NEMA 1 enclosure.