

Automatic Transfer Switches Standard Any Breaker Rated



Available Controllers

- Decision-Maker® MPAC 1200
- Decision-Maker® MPAC 1500

Ratings

Model	Current	Voltage, Frequency
KCS	30- 4000 amps	208- 600 VAC 50/60 Hz
KCP	150- 4000 amps	
KCC	150- 4000 amps	

Transfer Switch Standard Features

- UL 1008 listed
file # E58962 (automatic), # E86894 (nonautomatic)
- CSA certification available
- IBC and OSHPD seismic certification available
- Available in 2, 3, or 4 pole configurations
- Integral solid neutral provides line-to-neutral monitoring
- Electrically operated, mechanically held mechanism
- High withstand and close-on ratings
- Design suitable for emergency and standby applications on all classes of load, 100% tungsten rated through 400 amps
- Silver alloy main contacts
- Gold-flashed engine start contacts rated 2 amps @ 30 VDC/250 VAC
- Front-accessible contacts for easy inspection
- Front-replaceable main and arcing contacts (800- 4000 amps)
- Reliable, field-proven solenoid mechanism
- Switching mechanisms lubricated for the expected life of the transfer switch
- Internal manual operating handle
- Main shaft auxiliary position-indicating contacts rated 10 amps @ 32 VDC/250 VAC
- NEMA type 1, 12, 3R, 4, and 4X enclosures available
- Standard one-year limited warranty. Extended limited warranties are available.

Standard-Transition Models (KCS)

- Standard-transition operation with either automatic or non-automatic control
- Standard-transition transfer time less than 100 milliseconds (6 cycles @ 60 Hz)
- Double-throw, mechanically interlocked design (break-before-make power contacts)
- Solid, switched, or overlapping (make-before-break) neutral

Programmed-Transition Models (KCP)

- Programmed-transition operation with either automatic or non-automatic control
- Programmed-transition operation provides a center OFF position that allows residual voltages in the load circuits to decay
- Programmable OFF time
- Double-throw, mechanically interlocked design (break-before-make power contacts)
- Solid or switched neutral

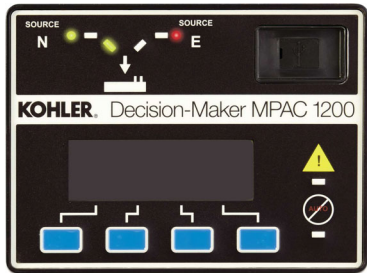
Closed-Transition Models (KCC)

- Closed-transition transfer switches operate with no power interruption during transfer and retransfer between two live sources
- Source parallel times are less than 100 milliseconds (6 cycles @ 60 Hz)
- Adjustable extended transfer time relay (ensure that the setting complies with applicable codes)
- Solid or switched neutral

Available Automatic Transfer Switch Controllers

Select one of the following controllers for your automatic transfer switch.

Decision-Maker® MPAC 1200 Controller



- LCD display, 4 lines x 20 characters, backlit
- Complete programming and viewing capability at the door using the keypad and LCD display
- LED indicators: Source available, transfer switch position, service required (fault), and “not in auto”
- Programmable voltage and frequency pickup and dropout settings
- Programmable time delays
- Programmable generator exerciser
- Time-based load control
- Two programmable inputs and two programmable outputs
- Up to four I/O extension modules available
- Modbus communication standard
- RS-485 communication standard
- Ethernet communication optional

For more information about Decision-Maker® MPAC 1200 features and functions, see specification sheet G11-127.

Decision-Maker® MPAC 1500 Controller



- LCD display, 4 lines x 20 characters, backlit
- Complete programming and viewing capability at the door using the keypad and LCD display
- LED indicators: Source available, transfer switch position, service required (fault), and “not in auto”
- Programmable voltage and frequency pickup and dropout settings
- Programmable time delays
- Programmable generator exerciser
- Time-based load control
- Current-based load control (current-sensing kit required)
- Two programmable inputs and two programmable outputs
- Up to four I/O extension modules available
- Modbus communication standard
- RS-485 communication standard
- Ethernet communication standard
- Three-source system
- Prime power

For more information about Decision-Maker® MPAC 1500 features and functions, see specification sheet G11-128.

Codes and Standards

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

- CSA C22.2 No. 178 certification available, file #LR58301
- EN61000-4-4 Fast Transient Immunity Severity Level 4
- EN61000-4-5 Surge Immunity Class 4 (voltage sensing and programmable inputs only)
- IEC Specifications for EMI/EMC Immunity:
 - CISPR 11, Radiated Emissions
 - IEC 1000-4-2, Electrostatic Discharge
 - IEC 1000-4-3, Radiated Electromagnetic Fields
 - IEC 1000-4-4, Electrical Fast Transients (Bursts)
 - IEC 1000-4-5, Surge Voltage
 - IEC 1000-4-6, Conducted RF Disturbances
 - IEC 1000-4-8, Magnetic Fields
 - IEC 1000-4-11, Voltage Dips and Interruptions
- IEEE Standard 446, IEEE Recommended Practice for Emergency and Standby Power Systems for Commercial and Industrial Applications

- IEEE 472 (ANSI C37.90A) Ring Wave Test
- NEMA Standard ICS 10-2005, Electromechanical AC Transfer Switch Equipment
- NFPA 70, National Electrical Code
- NFPA 99, Essential Electrical Systems for Health Care Facilities
- NFPA 110, Emergency and Standby Power Systems
- Seismic certification in accordance with the International Building Code is available. (Accessory kit is required for seismic certification.)
 - IBC 2000, referencing ASCE 7-98 and ICC AC-156
 - IBC 2003, referencing ASCE 7-02 and ICC AC-156
 - IBC 2006, referencing ASCE 7-05 and ICC AC-156
 - IBC 2009, referencing ASCE 7-05 and ICC AC-156
 - IBC 2012, referencing ASCE 7-10 and ICC AC-156
- California OSHPD approval is available. (Accessory kit required.)
- Underwriters Laboratories UL 1008, Standard for Automatic Transfer Switches for Use in Emergency Standby Systems file #E58962 (automatic), #E86894 (nonautomatic)

Application Data

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

Input and Output Connection Specifications	
Component	Wire Size Range
Main board I/O terminals	#12- 24 AWG
I/O module terminals	#14- 24 AWG

Auxiliary Position Indicating Contacts (rated 10 amps @ 32 VDC/250 VAC)			
Switch Rating, Amps	Number of Contacts Indicating Normal, Emergency		
	KCS	KCP	KCC
30- 230	2, 2	N/A	N/A
260- 600	8, 8	—	—
150- 600	—	8, 8	7, 7
800-1200	8, 8	8, 8	7, 7
1600- 4000	8, 8	7, 7	6, 6

Extended Transfer Time Adjustable Relay (Model KCC only)	
Power	12 or 24 VDC (customer-supplied)
Connections	12- 20 AWG
Output type	Relay contacts, DPDT (2 form C)
Rating	10 amps max. resistive at 240 VAC
Note: Customer-supplied shunt trip on emergency source circuit breaker is required.	

Source Synchronization Settings (Model KCC)		
Parameter	Default	Adjustment Range
Voltage differential	5%	0- 5%
Frequency differential	0.1 Hz	0- 0.3 Hz
Phase angle	10 deg.	0- 10 deg.

Cable Sizes

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

UL-Listed Solderless Screw-Type Terminals for External Power Connections				
Range of Wire Sizes, Copper or Aluminum ‡				
Model	Switch Rating, Amps	Normal, Emergency, and Load (per phase)	Neutral (3-pole)	Ground
KCS	30- 150	(1) #14 AWG to 4/0 AWG	(3) #14 to 4/0 AWG	(3) #6 to 3/0
	200	(1) #14 AWG to 4/0 AWG <i>Cu only</i>	(3) #14 to 4/0 AWG <i>Cu only</i>	(3) #6 to 3/0
	230 (208- 480 V)			
	230 (600 V) 260- 400	(1) #4 AWG to 600 KCMIL or (2) 1/0 to 250 KCMIL	(3) #4 AWG to 600 KCMIL or (6) 1/0 to 250 KCMIL	(3) #4 AWG to 600 KCMIL or (6) 1/0 to 250 KCMIL
KCP KCC	150- 400	(1) #4 AWG to 600 KCMIL or (2) 1/0 to 250 KCMIL	(3) #4 AWG to 600 KCMIL or (6) 1/0 to 250 KCMIL	(3) #4 AWG to 600 KCMIL or (6) 1/0 to 250 KCMIL
KCS KCP KCC	600	(2) #2 AWG to 600 KCMIL	(6) #2 AWG to 600 KCMIL	(3) #4 AWG to 600 KCMIL or (6) 1/0 to 250 KCMIL
	800- 1000 1200 (NEMA 3R)	(4) 1/0 AWG to 750 KCMIL	(12) 1/0 AWG to 750 KCMIL	
	1200 (NEMA 1)	(4) 1/0 AWG to 750 KCMIL	(12) 1/0 AWG to 750 KCMIL	(3) #4 to 500 KCMIL
	1600- 2000 F † (NEMA 3R)	(6) 1/0 AWG to 750 KCMIL	(18) 1/0 AWG to 750 KCMIL	(3) #4 AWG to 600 KCMIL or (6) 1/0 to 250 KCMIL
	1600- 2000	(6) 1/0 AWG to 750 KCMIL	(18) 1/0 AWG to 750 KCMIL	(3) #4 to 500 KCMIL
	2600- 3000	(12) 1/0 AWG to 750 KCMIL	(36) 1/0 AWG to 750 KCMIL	
	4000	(12) 1/0 AWG to 750 KCMIL	(36) 1/0 AWG to 750 KCMIL	

† F = Front connected
‡ Use 75°C minimum Cu/Al wire for power connections.

Withstand and Close-On Ratings (WCR) Standard, Programmed, and Closed-Transition Models

Maximum current in RMS symmetrical amperes when coordinated with customer-supplied fuses or circuit breakers. All values are available symmetrical RMS amperes and tested in accordance with the withstand and close-on requirements of UL 1008. Application requirements may permit higher withstand ratings for certain size switches. Contact the factory for assistance.

Model	Switch Rating, Amps	Withstand Current Ratings in RMS Symmetrical Amperes								Short Time Ratings (sec.) ‡								
		Current-Limiting Fuses				Time-Based Rating *				480 V Max.				600 V Max.				
		480 V Max.	600 V Max.	Amps, Max.	Fuse Class	Time, sec.	240 V, Max	480 V, Max	600 V, Max	.13	.2	.3	.5	.1	.13	.3	.5	
KCS	30	100kA	—	300	J	0.025	10kA	10kA	10kA	—				—				
		200kA	35kA	200	J					—				—				
		35kA	35kA	200	RK1					—				—				
	70 104 150	200kA	35kA	200	J	0.025	10kA	10kA	10kA	—				—				
		35kA	35kA	200	RK1	0.025	10kA	10kA	10kA	—				—				
	200	200kA	35kA	200	J	0.025	10kA	10kA	10kA	—				—				
		35kA	35kA	200	RK1					—				—				
230 (480V)	100kA	—	300	J	0.025	10kA	10kA	—	—				—					
230 (600V)	200kA	200kA	600	J	0.05	65kA	42kA †	35kA	7500A	—				—				
			800	L						—				—				
KCP KCC	150	200kA	200kA	600	J	0.05	65kA	42kA †	35kA	7500A	—				—			
				800	L	0.05	65kA	42kA †	35kA	7500A	—				—			
KCP	225	200kA	200kA	600	J	0.05	65kA	42kA †	35kA	7500A	—				—			
				800	L	0.05	65kA	42kA †	35kA	7500A	—				—			
KCS KCP KCC	260 400	200kA	200kA	600	J	0.05	65kA	42kA †	35kA	7500A	—				—			
				800	L	0.05	65kA	42kA †	35kA	7500A	—				—			
	600	200kA	200kA	600	J	0.05	65kA	42kA †	35kA	—	—				—			
				800	L	0.05	65kA	42kA †	35kA	—	—				—			
	800- 1200	200kA	200kA	1600	L	0.05	50kA	50kA	50kA	36kA	—		36kA	—				
	1600- 2000 F	200kA	200kA	2500	L	0.05	85kA	85kA	85kA	42kA	36kA		—					
	1600- 2000 S	200kA	200kA	3000	L	0.05	100kA	100kA	100kA	42kA	36kA		42kA	—				
2600 3000	200kA	200kA	4000	L	0.05	100kA	100kA	100kA	42kA	36kA		42kA	—					
4000	200kA	200kA	5000	L	0.05	100kA	100kA	100kA	85kA	65kA		65kA						

* Applicable to breakers with instantaneous trip elements.
† Applicable to 2-pole, 3-pole, and conventional 4-pole switches only. Overlapping neutral switches have "any" breaker ratings of 35kA, 0.050 seconds at 480 V.
‡ Short time ratings are provided for applications involving breakers that utilize trip delay settings for system selective coordination.

Ratings with Specific Manufacturers' Circuit Breakers

The following charts list power switching device withstand and close-on ratings (WCR) in RMS symmetrical amperes for specific manufacturers' circuit breakers. Circuit breakers are supplied by the customer.

Model	Switch Rating, amps	WCR, amps RMS	Volts, Max.	Molded-Case Circuit Breakers						
				Manufacturer	Type or Class	Max. Size, amps				
KCS	30	22,000	480	GE	THED	40				
				Square D	HR	250				
	HL	150								
	BJ, HJ	125								
	BG, HG	125								
	QG, QJ	90								
	HD	150								
	70	150,000	240	Square D	BD	125				
125,000					240	Square D	BD	125		
100,000							240	Square D	BD	125
65,000									240	Square D
42,000	240	Square D	BD	125						
25,000			240	Square D	BD	125				
25,000					240	Square D	BD	125		

Model	Switch Rating, amps	WCR, amps RMS	Volts, Max.	Molded-Case Circuit Breakers						
				Manufacturer	Type or Class	Max. Size, amps				
KCS	70	22,000	480	GE	THED	90				
		85,000		Square D	HL, HR	150				
		50,000			BJ	125				
		35,000			HG, HJ	150				
		18,000	BG		125					
		25,000	600	Square D	BD, HD	125				
		18,000			HJ, HL, HR	150				
		14,000			BJ	125				
BD	125									
KCS	104	150,000	240	Square D	HR	250				
		125,000			HL	150				
		100,000			BJ, HJ	125				
		65,000			BG, HG	125				
		42,000			QG, QJ	125				
		25,000			HD	150				
		22,000			480	Square D	BD	125		
							85,000	GE	THED	150
			50,000	HL, HR			150			
			35,000	BJ			125			
			18,000	HG, HJ			150			
			25,000	600			Square D	BG	125	
								18,000	BD, HD	125
								14,000	HJ, HL, HR	150
		BJ			125					
		KCS	150	150,000	240	Square D	HR	250		
125,000	HL			150						
100,000	BJ, HJ			125						
65,000	JG, JJ, JL, JR			200						
42,000	BG, HG			125						
25,000	QG, QJ			200						
22,000	480			Square D			HD	150		
							85,000	BD	125	
					50,000	GE	THED	150		
					35,000	HL, HR	150			
					25,000	BJ	125			
					18,000	HG, HJ	150			
					25,000	600	Square D	BG	125	
								18,000	JG, JJ, JL	200
14,000	BD, HD			125						
	HJ, HL, HR			150						
KCS	200 230	200,000	240	Square D	BJ	125				
		125,000			HG	150				
		100,000			BG	125				
		65,000			JG, JJ, JL	200				
		42,000	480	Square D	BD, HD	125				
		25,000			JD	250				
		85,000			JL, JR	250				
		30,000			JG, JJ	250				
18,000			JD	250						

Model	Switch Rating, amps	WCR, amps RMS	Volts, Max.	Molded-Case Circuit Breakers			
				Manufacturer	Type or Class	Max. Size, amps	
KCS	230	42,000	600	Eaton/ Cutler Hammer	JGU, JGX, JGH	250	
					KDC	400	
					LDC, CLDC	600	
				GE	TBC4	400	
					SGL1, SGL4, SGL6, SGP1, SGP4, SGP6, FGP	600	
				Square D	HJ, HL, HG	150	
					KI, JJ, JL, JR, CF250L	250	
					CK400H, CK400HH, CJ400L	400	
					LI, MasterPact STR 28D, PK	600	
				Siemens / ITE	HJD, CFD6	250	
					HHJD6, HHJXD6, CJD6, SCJD6	400	
					HHL6, HHLXD6, CLD6, SCLD6, LNG, LPG, LGC*, LGU*, LGX*	600	
KCP KCC	150 225 §	65,000	240	GE	THQMV	225	
					SGL1, SGL4, SGL6, SGP1, SGP4, SGP6	600	
				Eaton/ Cutler Hammer	LDC, CLDC, HLD, CHLD	600	
					Siemens / ITE	HLD6, HLXD6	600
				Square D		QG, QJ	250
					LJ, LL, LR	600	
		50,000	480	Eaton/ Cutler Hammer	HFDE, FDC, FDCE	NHH	225
						JDC, JGU, JGX	250
						HKD, CHKD, KDC, HKDB, CHKDB, LHH	350
						HLD, CHLD, LDC, CLDC, LGH*, LGC*, LGU*, LGX*	400
						HMDLB, CHMDLB	600
						800	
				GE	SEL, SEP	150	
					SFL, SFP, FEN, FEH	250	
					TBC4	400	
				Siemens / ITE	FGN, FGH, FGL, FGP, SGL1, SGL4, SGL6, SGP1, SGP4, SGP6, TJJ4V, TJJ1S-6S, TBC6	600	
					TB8	800	
					HDG, LDG	150	
	Square D			HFD, HFD6, HFXD, HFXD6, HHFD6, HHFXD6, CFD6, HFG, LFG	250		
				HJD, HJD6, HJXD, HJXD6, SHJD, SHJD6, HHJD6, HHJXD6, CJD6, SCJD6, HJG, LJG, LLG	400		
				HLD6, HLXD6, HHL6, HHLXD6, CLD6, SHLD6, SCLD6, HLG	600		
	Square D			HJ, HL	150		
				KC, KI, CF250L, NSF250	250		
				CK400N, CK400NN, CK400H, CK400HH, CJ400L, NSJ400	400		
		LC, DJ, DL, LI, NSJ600	600				
	Square D	MasterPact STR 28D, PK, PJ, PL	800				
		JJ (Current Limiting)	250				
		JL (Current Limiting)					
	JR (Current Limiting)						
	42,000	600	Eaton/ Cutler Hammer	JGU, JGX, JGH	250		
				KDC	400		
				LDC, CLDC	600		
			GE	TBC4	400		
				SGL1, SGL4, SGL6, SGP1, SGP4, SGP6, FGP	600		
			Square D	HJ, HL, HG	150		
	KI, JJ, JL, JR, CF250L	250					
CK400H, CK400HH, CJ400L	400						
Siemens / ITE	LI, MasterPact STR 28D, PK	600					
	HJD, CFD6	250					
	HHJD6, HHJXD6, CJD6, SCJD6	400					
					HHL6, HHLXD6, CLD6, SCLD6, LNG, LPG, LGC*, LGU*, LGX*	600	

* With Digitrip 310+ LS or LSG Inst. Override set to 12X.

§ KCP only

Model	Switch Rating, amps	WCR, amps RMS	Volts, Max.	Molded-Case Circuit Breakers					
				Manufacturer	Type or Class	Max. Size, amps			
KCS KCP KCC	260	65,000	240	GE	THQMV	225			
					SGL1, SGL4, SGL6, SGP1, SGP4, SGP6	600			
				Eaton/Cutler Hammer	LDC, CLDC, HLD, CHLD	600			
				Siemens/ITE	HLD6, HLXD6	600			
				Square D	QG, QJ	250			
					LJ, LL, LR	600			
				50,000	480	Eaton/Cutler Hammer	HFDE, FDCE, HFD, FDC, LHH	225	
							JDC, JGH, JGC, JGU, JGX	250	
		HKD, HKDB, CHKD, CHKDB, KDC	400						
		HLD, CHLD, LDC, CLDC, LGH*, LGC*, LGU*, LGX*, NHH	600						
		MDL, CMDL, HMDL, CHMDL, NGS, NGH, NGC, MDLB, CMDLB, HMDLB, CHMDLB	800						
		GE	SFL, SFP, FEN, FEH			250			
			TBC4			400			
			TBC6, TJL4V, TJL1S- 6S, SGL1, SGL4, SGL6, SGP1, SGP4, SGP6, FGN, FGH, FGL, FGP			600			
		Siemens/ITE	TBC8, TKL4V, TKH8S- 12S, TKL8S- 12S, SKH8, SKL8, SKP8, TB8			800			
			HFD6, HFXD6, HHFD6, HHFXD6, CFD6, HFG, LFG			250			
			HJD6, HJXD6, SHJD6, HHJD6, HHJXD6, CJD6, SCJD6, HJG, LJG, LLG			400			
			HLD6, HLXD6, SHLD6, HHL6, HHLXD6, CLD6, SCLD6, HLG			600			
		Square D	LMD, LMD6, LMXD, LMXD6, HLMD, HLMD6, HLMXD, HLMXD6, MD, MD6, MXD6, HMG, HMD6, HMXD6, SMD6, SHMD6, CMD6, SCMD6, LMG, MG			800			
			KI, KC, CF250L, NSF250			250			
			CK400N, CK400NN, CK400H, CK400HH, CJ400L, NSJ400			400			
			LC, DJ, DL, LJ, LL, LR, LI, NSJ600			600			
			CK800N, CK800NN, CK800H, CK800HH, MasterPact STR 28D, MJ, PK, PJ, PL			800			
			CK1000HL			1000			
		Square D	CK1200NN, CK1200HH			1200			
			JJ (Current Limiting)			250			
			JL (Current Limiting)	250					
		65,000	240	Square D	JR (Current Limiting)	250			
					42,000	600	Eaton/Cutler Hammer	JGU, JGX	250
								KDC	400
		LDC, CLDC	600						
		GE	TBC4	400					
			TBC6, SGL1, SGL4, SGL6, SGP1, SGP4, SGP6, FGP	600					
Siemens/ITE	TBC8, TKL4V, TKL8S- 12S, SKL8, SKP8	800							
	HJD, CFD6	250							
	HHJD6, HHJXD6, CJD6, SCJD6	400							
	HHL6, HHLXD6, CLD6, SCLD6	600							
Square D	HLM6, HLMXD6, HMXD6, SHMD6, HMD6, CMD6, SCMD6, LMG, LNG, LPG, LGC*, LGU*, LGX*	800							
	KI, JL, JR, JJ, CF250L	250							
	CK400H, CK400HH, CJ400L	400							
	LI	600							
CK800H, CK800HH, MasterPact STR 28D, PK	800								

* With Digitrip 310+ LS or LSG Inst. Override set to 12X.

Model	Switch Rating, amps	WCR, amps RMS	Volts, Max.	Molded-Case Circuit Breakers					
				Manufacturer	Type or Class	Max. Size, amps			
KCS KCP KCC	400	65,000	240	GE	THQMV	225			
					SGL1, SGL4, SGL6, SGP1, SGP4, SGP6	600			
				Eaton/Cutler Hammer	LDC, CLDC, HLD, CHLD	600			
				Siemens/ITE	HLD6, HLXD6	600			
				Square D	QG, QJ	250			
					LJ, LL, LR	600			
				50,000	480	Eaton/Cutler Hammer	JGH, JGC, NHH	JGH, JGC, NHH	250
								HKD, CHKD, KDC, HKDB, CHKDB, LHH	400
		CHLD, LDC, CLDC, LGH*, LGC*, LGU*, LGX*	600						
		MDL, CMDL, HMDL, CHMDL, NGS, NGH, NGC, MDLB, CMDLB, HMDLB, CHMDLB	800						
		NGU	1600						
		TBC4	400						
		GE	TBC6, TJK4V, TJK1S- 6S, SGL1, SGL4, SGL6, SGP1, SGP4, SGP6, FGN, FGH, FGL, FGP			600			
			TBC8, TKL4V, TKH8S- 12S, TKL8S- 12S, SKH8, SKL8, SKP8, TB8			800			
			HFD6, HFXD6, HFG, LFG			250			
		Siemens/ITE	HJD6, HJXD6, SHJD6, HHJD6, HHJXD6, CJD6, SCJD6, HJG, LLG, LJG			400			
			HLD6, HLXD6, SHLD6, HHLD6, HHLXD6, CLD6, SCLD6, HLG			600			
			LMXD6, LMXD6, HLMXD6, HLMXD6, MD6, MXD6, HMD6, HMXD6, SMD6, SHMD6, CMD6, SCMD6, HMG, LMG			800			
			CK400N, CK400NN, CK400H, CK400HH, CJ400L, NSJ400			400			
		Square D	LC, DJ, DL, LJ, LL, LR, LI, NSJ600			600			
			CK800N, CK800NN, CK800H, CK800HH, MJ			800			
			CK1000HH			1000			
			PK, PJ, PL, MH, MasterPact STR 28D, CK1200HH			1200			
			KDC			400			
		42,000	600	Eaton/Cutler Hammer	LDC, CLDC, LGC*, LGU*, LGX*	LDC, CLDC, LGC*, LGU*, LGX*	600		
						TBC4	400		
				GE	TBC6, SGL1, SGL4, SGL6, SGP1, SGP4, SGP6, FGP	600			
					TBC8, TKL4V, TKL8S- 12S, SKL8, SKP8	800			
					HHJD6, HHJXD6, CJD6, SCJD6	400			
				Siemens/ITE	HHLD6, HHLXD6, CLD6, SCLD6	600			
HLMXD6, HLMXD6, HMXD6, SHMD6, HMD6, CMD6, SCMD6, LMG	800								
LNG, LPG	1200								
Square D	CK400H, CK400HH, CJ400L			400					
	LI			600					
	CK800H, CK800HH			800					
MasterPact STR 28D, PK	1200								
KCS KCP KCC	600	65,000	240	GE	THQMV	225			
					SGL1, SGL4, SGL6, SGP1, SGP4, SGP6	600			
				Eaton/Cutler Hammer	LDC, CLDC, HLD, CHLD	600			
				Siemens/ITE	HLD6, HLXD6	600			
				Square D	QG, QJ	250			
					LJ, LL, LR	600			

* With Digitrip 310+ LS or LSG Inst. Override set to 12X.

Model	Switch Rating, amps	WCR, amps RMS	Volts, Max.	Molded-Case Circuit Breakers						
				Manufacturer	Type or Class	Max. Size, amps				
KCS KCP KCC	600	50,000	480	Eaton/ Cutler Hammer	JGH, JGC, HFG, LFG	250				
					HLD, CHLD, LDC, CLDC, LGH*, LGC*, LGU*, LGX*	600				
					MDL, CMDL, HMDL, CHMDL, NGS, NGH, NGC, NGU, MDLB, CMDLB, NF	800				
				GE	TBC6, TJL4V, TJL1S- 6S, SGL1, SGL4, SGL6, SGP1, SGP4, SGP6, FGN, FGH, FGL, FGP	600				
					TBC8, TKL4V, TKH8S- 12S, TKL8S- 12S, SKH8, SKL8, SKP8, TB8	800				
					SKL12, SK12P	1200				
				Siemens / ITE	HLD6, HLXD6, SHLD6, HHLXD6, HHLXD6, CLD6, SCLD6, HLG, LLG	600				
					LMD6, LMXD6, HLMD6, HLMXD6, MD6, MXD6, HMD6, HMXD6, SMD6, SHMD6, CMD6, SCMD6, HMG, LMG	800				
					HND6, HNXD6, SND6, SHND6, ND6, NXD6, HNG, LNG, CND6	1200				
		Square D	LC, DJ, DL, LI, NSJ600	600						
			CK800N, CK800NN, MJ	800						
			MH, CK1200N, CK1200NN, CK1200H, CK1200HH, NT- H, NT- L1, NT- L, NT- LF, PK, PJ, PL	1200						
			CM2000HH	2000						
							CM2500HH	2500		
		42,000	600	600	Eaton/ Cutler Hammer	JGC	250			
						TBC4	400			
						LDC, CLDC	600			
					GE	TBC6, SGL1, SGL4, SGL6, SGP1, SGP4, SGP6, FGP	600			
	TBC8, TKL4V, TKL8S- 12S, SKL8, SKP8					800				
	SKL12, SKP12					1200				
	Siemens / ITE				HHLXD6, HHLXD6, CLD6, SCLD6	600				
					HLMD6, HLMXD6, HMXD6, SHMD6, HMD6, CMD6, SCMD6, LMG	800				
					HND6, HNXD6, HNG, LNG, SHND6	1200				
	Square D		LI	600						
			CK800H, CK800HH	800						
			CK1000HL	1000						
			CK1200H, CK1200HH, NT- H, NT- L, NT- LF, NT- L1, MasterPact STR 28D, PK	1200						
	800 1000 1200		65,000	480	Eaton/ Cutler Hammer	HLD, CHLD, LGH, LGC, LGU, LGX, LDC, CLDC	600			
						HMDL, CHMDL, HMDLB, CHMDLB	800			
						HND, CHND, NDC, CNDC, NF	1200			
						NGH, NGC, NGU	1600			
						RGH, RGC	2500			
		GE			TBC6, TJL4V, SGL, SGP6	600				
					TBC8, SKL8, SKP8	800				
					SKL12, SKP12, TKL4V	1200				
Siemens / ITE		HLXD6, HHLXD6, HHLXD6, CLD6, SHLD6, SCLD6, HLG, LLG			600					
		HMXD6, HMD6, SHMD6, HMG, LMG, CMD6, SCMD6			800					
		SHND6, CND6, HNXD6, HNG, LNG			1200					
		HPG, LPG, HPD, HPD6, CPD6, HPXD, HPXD6, SHPD, SHPD6			1600					
							HRD6, HRXD6	2000		
600		600			600	Square D	LI, LE LSI, LE LI, LX, LXI, LJ, LL, LR	600		
							MJ, ME, MX, CK800H, CK800HH	800		
							CK1000HL	1000		
							NT- L1, NT- L, NT- LF, NE, NX, CK1200H, CK1200HH, PJ, PL	1200		
				NW, RJ, RL			1600			
				PE, PX			2500			
				SES, SE, SEH (LS or LSI TRIP)			3000			
				SE (LI, LSI- E, and LI- E TRIP)			4000			
				MasterPact STR 28D			6300			
KCP		1600 2000		200,000	480	Eaton/ Cutler Hammer	Tri-Pac NB	800		
							RDC	2500		
	Siemens / ITE		CND			1200				
				Square D	MTZ- L1/L/LF, MTZ2/3- L1/L1F, MTZ2/3- L/LF except MTZ2/3- 20L	2000				

Weights and Dimensions

Note: Always use the transfer switch dimension drawing for planning and installation. Weights and dimensions may vary for different configurations. See your local distributor for dimension drawings.

Weights and dimensions are shown for NEMA Type 1 enclosures, NEMA Type 3R enclosures and open units. See the transfer switch dimension drawings for other enclosure types.

Model	Amps	NEMA Type	Poles	Wires	Dimensions mm (in.)			Weight kg (lb.)			Dimension Drawing
					Height	Width	Depth	2-Pole	3-Pole	4-Pole	
KCS	30-200	1, 3R	2,3,4	3, 4	791 (31)	450 (18)	314 (12.4)‡	28 (62)	30 (65)	31 (68)	ADV-8566
	230 (208-480V)		2,3,4	3, 4	1223 (48)	560 (22)	362 (14.3)‡	52 (115)	56 (123)	59 (131)	ADV-8568
	230 (600 V) 260-600		2,3,4	3, 4	1702 (67)	610 (24)	514 (20.2)‡	179 (395)	183 (403)	188 (414)	ADV-8570
	800		2,3,4	3, 4	1932 (76)*	864 (34)	515 (20.3)‡	220 (485)	231 (510)	238 (525)	ADV-8572
	1000		3,4	4	1932 (76)*	864 (34)	515 (20.3)‡	—	231 (510)	238 (525)	ADV-8572
	1200	1	3,4	4	2286 (90)	963 (38)	688 (27.1)	—	356 (785)	379 (835)	ADV-8574
	1600-2000F †	3R	3,4	4	2286 (90)	940 (37)	717 (28.2)	—	356 (785)	379 (835)	ADV-8575
		1	3,4	4	2286 (90)	963 (38)	688 (27.1)	—	472(1040)	494(1090)	ADV-8577
	1600-2000	3R	3,4	4	2286 (90)	940 (37)	869 (34.2)	—	356 (785)	379 (835)	ADV-8578
		1	3,4	4	2286 (90)	963 (38)	1220 (48)	—	472(1040)	494(1090)	ADV-8579
	2600-3000	3R	3,4	4	2286 (90)	940 (37)	1434 (56.4)	—	472(1040)	494(1090)	ADV-8580
		1	3,4	4	2286 (90)	963 (38)	1524 (60)	—	649(1430)	679(1495)	ADV-8581
	4000	3R	3,4	4	2286 (90)	940 (37)	1738 (68.4)	—	649(1430)	679(1495)	ADV-8582
		1	3,4	4	2311 (91)	1524 (60)	1836 (72.3)	—	975(2149)	1056(2328)	ADV-8583
3R	3,4	4	2529 (100)	1606 (63)	2310 (91)	—	1436(3165)	1523(3357)			
KCS	30-200	Open Unit §	2,3,4	3, 4	787 (31)	445 (18)	296 (11.6)	8 (17)	9 (20)	11 (23)	ADV-7182
	230 (208-480V)		2,3,4	3, 4	1219 (48)	457 (18)	330 (13.0)	17 (37)	21 (45)	24 (53)	
	230 (600V) 260-600		2,3,4	3, 4	1422 (56)	610 (24)	362 (14.3)	31 (68)	34 (74)	36 (80)	
	800		2,3,4	3, 4	1829 (72)	864 (34)	508 (20)	68 (150)	78 (170)	90 (196)	
	1000		3,4	4	1829 (72)	864 (34)	508 (20)	—	78 (170)	90 (196)	
	1200		3,4	4	2210 (87)	965 (38)	584 (23)	—	78 (170)	90 (196)	
	1600-2000F †		3,4	4	2210 (87)	965 (38)	635 (25)	—	190 (420)	213 (470)	
	1600-2000		3,4	4	2286 (90)	965 (38)	1219 (48)	—	190 (420)	213 (470)	
2600-3000	3,4	4	2286 (90)	965 (38)	1524 (60)	—	213 (470)	243 (535)			
KCP KCC	150-600	1, 3R	2,3,4	3, 4	1702 (67)	610 (24)	514 (20.2)‡	179 (395)	183 (403)	188 (414)	ADV-8570
	800	1, 3R	2,3,4	3, 4	1932 (76)*	864 (34)	515 (20.3)‡	220 (485)	231 (510)	238 (525)	ADV-8572
	1000	1, 3R	2,3,4	4	1932 (76)*	864 (34)	515 (20.3)‡	220 (485)	231 (510)	238 (525)	ADV-8572
	1200	1	3,4	4	2286 (90)	963 (38)	688 (27)	—	463(1020)	485(1070)	ADV-8574
		3R	3,4	4	2286 (90)	940 (37)	717 (28.2)	—	463(1020)	485(1070)	ADV-8575
	1600-2000F †	1	3,4	4	2286 (90)	963 (38)	688 (27)	—	533(1175)	556(1225)	ADV-8577
		3R	3,4	4	2286 (90)	940 (37)	869 (34.2)	—	533(1175)	556(1225)	ADV-8578
	1600-2000	1	3,4	4	2286 (90)	963 (38)	1220 (48)	—	533(1175)	556(1225)	ADV-8579
		3R	3,4	4	2286 (90)	940 (37)	1434 (56.4)	—	533(1175)	556(1225)	ADV-8580
	3000	1	3,4	4	2286 (90)	963 (38)	1524 (60)	—	735(1620)	765(1685)	ADV-8581
3R		3,4	4	2286 (90)	940 (37)	1738 (68.4)	—	735(1620)	765(1685)	ADV-8582	
4000	1	3,4	4	2311 (91)	1524 (60)	1836 (72.3)	—	975(2149)	1056(2328)	ADV-8583	
	3R	3,4	4	2528 (100)	1606 (63)	2310 (91)	—	1436(3165)	1523(3357)	ADV-8583	
KCP	150-600	Open Unit §	2,3,4	3, 4	1422 (56)	610 (24)	362 (14.3)	38 (84)	41 (90)	44 (96)	ADV-7182
	800		2,3,4	3, 4	1829 (72)	864 (34)	508 (20)	80 (175)	94 (205)	108 (235)	
	1000		2,3,4	4	1829 (72)	864 (34)	508 (20)	80 (175)	94 (205)	108 (235)	
	1200		2,3,4	4	2210 (87)	965 (38)	584 (23)	80 (175)	94 (205)	108 (235)	
	1600-2000F †		3,4	4	2210 (87)	965 (38)	635 (25)	—	252 (555)	274 (605)	
	1600-2000		3,4	4	2286 (90)	965 (38)	1219 (48)	—	252 (555)	274 (605)	
	2600-3000		3,4	4	2286 (90)	965 (38)	1524 (60)	—	300 (660)	329 (725)	
	2600-3000		3,4	4	2286 (90)	965 (38)	1524 (60)	—	300 (660)	329 (725)	

* Includes mounting feet

† F = Front connected

‡ On 30-1000 amp models, the NEMA type 3R enclosures have a security cover on the controller that extends 54 mm (2.1 in.) beyond the door.

§ Dimensions shown for open units are the minimum required enclosure size. Open unit weights are shipping weights for the contactor only.

Controller Accessories

See the controller specification sheets for more information.

Accessory Modules

- Alarm Module
- External Battery Supply Module
- Input/Output Module
- High-Power Input/Output Module

Controller Disconnect Switch

Ethernet Communications

(Standard with MPAC1500 controller)

Current Sensing Kit

Padlockable User Interface Cover

Supervised Transfer Control Switch

Transfer Switch Accessories

Accessories are available either factory-installed or as loose kits, unless otherwise noted.

CSA Certification

Digital Meter

- Measure and display voltage, current, frequency, and power
- 35 programmable alarms
- LCD display, 67 x 62.5 mm (2.65 x 2.5 in.)
- Pushbutton operation
- Password-protected programming menus
- Two digital inputs
- Two digital outputs and two Form A relay outputs
- Serial port for optional network connections
- Data logging
- Factory-installed

Engine Start Circuit Monitor

See Specification Sheet G6- 165.

Export Packaging

Extended Limited Warranties

- 2-year basic
- 5-year basic
- 5-year comprehensive
- 10-year major components

Heater, Anti-Condensation

- Hygrostat-controlled 120 VAC strip heater (customer-supplied voltage source required)
- 100 or 250 watts (sized for enclosure)
- Protective 15 Amp circuit breaker

Literature Kits

- Production literature kit (one set of literature is included with each transfer switch)
- Overhaul literature kit

Load Shed Kit

- Forced transfer from Emergency to OFF for programmed-transition or closed-transition models
- Customer-supplied signal (contact closure) is required for the forced transfer to OFF function
- Factory-installed and loose kits available

RSA III Remote Serial Annunciator

- Monitors the generator set
- Monitors Normal and Emergency source status and connection
- Monitors ATS common alarm
- Allows remote testing of the ATS
- For more information, see specification sheet G6- 139.

Surge Protection Device (SPD)

- SPD available for the normal source supply
- Reduces transient voltages to harmless levels
- Protection modes: L-L / L-N / L-G / N-G
- Replaceable phase and neutral cartridges for service
- Frequency: 50- 60 Hz
- Operating Temperature Range: - 40 to 176°F (- 40 to 80°C)
- Remote contacts for customer-supplied status indicators:
 - Contacts: 1 NO, 1 NC
 - Min Load: 12VDC / 10 mA
 - Max. Load: 250 VAC / 1 A
 - Wire Size (max.): 16AWG
- Fuse protection: 30 amps / 600 V
- UL 1449, 3rd Edition for Type 2 applications
- IEC 61-643-1, 2nd Edition T2/11
- See additional SPD specifications below

Seismic Certification

California OSHPD Pre-Approval

- Available for KC model transfer switches with NEMA 1 and NEMA 3R enclosures.

IBC Seismic Certification

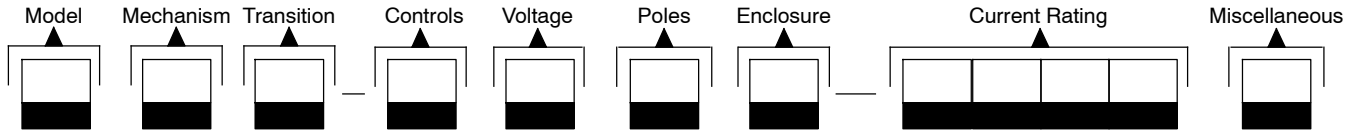
- Certification depends on application and geographic location. Contact your distributor for details.
- Available for the KC model transfer switches with enclosures shown below:

ATS Size, Amps	Enclosure, NEMA Type:				
	1	3R	4	4X	12
30- 1200	•	•	•	•	•
1600- 4000	•	•			

SPD Specifications

Nominal Voltage (V ± 15%)	Max. Discharge Current (kA)	Phase	Poles	UL VPR 3rd Ed (L-N/N-G/L-G) (kV)	Limiting Voltage, (L-N/N-G/L-G) (kV)		Short Circuit Withstand Current (kA)	Maximum Continuous Operating Voltage (VAC)
					at 3kAmps	at 10kAmp		
240/120	40	Split	3	0.6 / 1.2 / 0.7	0.6 / 0.4 / 0.6	0.8 / 0.7 / 0.8	200	175 / 350
208/120	40	Wye	4	0.6 / 1.2 / 0.7	0.6 / 0.4 / 0.6	0.8 / 0.7 / 0.8	200	175 / 350
480/277	40	Wye	4	1.0 / 1.2 / 1.1	1.0 / 0.4 / 1.0	1.2 / 0.7 / 1.2	200	320 / 640
240/120	40	HLD	4	1.0 / 1.2 / 1.1	1.0 / 0.4 / 1.0	1.2 / 0.7 / 1.2	200	320 / 640
600/347	40	Wye	4	1.3 / 1.2 / 1.4	1.3 / 0.4 / 1.3	1.5 / 0.7 / 1.5	200	440 / 880

Model Designation



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

Sample Model Designation: KCS-DNTA-0400S

Model

K: Kohler

Mechanism

C: Standard (Time-Based)

Transition

S: Standard

P: Programmed

C: Closed

Controller

A: Decision-Maker® MPAC 1200, Automatic

B: Decision-Maker® MPAC 1200, Non-Automatic

D: Decision-Maker® MPAC 1500, Automatic

F: Decision-Maker® MPAC 1500, Non-Automatic

Voltage/Frequency

C: 208 Volts/60 Hz

K: 440 Volts/60 Hz

D: 220 Volts/50 Hz

M: 480 Volts/60 Hz

F: 240 Volts/60 Hz

N: 600 Volts/60 Hz

G: 380 Volts/50 Hz

P: 380 Volts/60 Hz

H: 400 Volts/50 Hz

R: 220 Volts/60 Hz

J: 416 Volts/50 Hz

S: 400 Volts/60 Hz

Number of Poles/Wires

N: 2 Poles/3 Wires, Solid Neutral

T: 3 Poles/4 Wires, Solid Neutral

V: 4 Poles/4 Wires, Switched Neutral

W: 4 Poles/4 Wires, Overlapping Neutral

Enclosure

A: NEMA 1

D: NEMA 4

B: NEMA 12

F: NEMA 4X

C: NEMA 3R

G: Open Unit

Current, Amps

0030

0230

1200

0070

0260

1600

0104

0400

2000

0150

0600

2600

0200

0800

3000

0225

1000

4000

Connections

S: Standard

F: Front (1600 and 2000 amp only)

Note: Some selections are not available for every model. Contact your Kohler distributor for availability.

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® Power Systems distributor for availability.