



#### 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
- 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

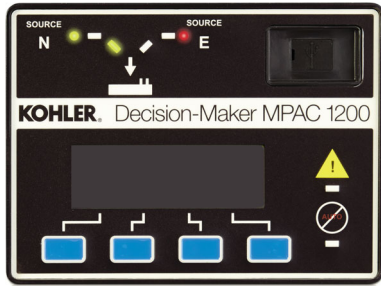
#### Closed-Transition Models (KCC)

- 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.

## 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
<b>Note:</b> 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	(3) #6 to 3/0
	200	(1) #14 AWG to 4/0 AWG <i>Cu only</i>	(3) #14 to 4/0	(3) #6 to 3/0
	230 (208- 480 V)			
	230 (600 V)	(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
	260- 400			
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	(4) 1/0 AWG to 750 KCMIL	(12) #2 AWG to 600 KCMIL	
	1200 (NEMA 3R)			
	1200 (NEMA 1)	(4) 1/0 AWG to 750 KCMIL	(16) 1/0 to 750 KCMIL	(3) #4 to 500 KCMIL
	1600- 2000 F † (NEMA 3R)	(6) 1/0 AWG to 750 KCMIL	(24) 1/0 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	(24) 1/0 to 750 KCMIL	(3) #4 to 500 KCMIL
	2600- 3000	(12) 1/0 AWG to 750 KCMIL	(36) 1/0 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	—				—			
	200	200kA	—	200	J	0.025	10kA	10kA	—	—				—			
	70 104 150	35kA	35kA	200	RK1	0.025	10kA	10kA	10kA	—				—			
	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
	70	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	90
		25,000			HD	150
		25,000			BD	125
		22,000	480	Square D	THED	90
		85,000			HL, HR	150
		50,000			BJ	125
		35,000			HG, HJ	150
					BG	125
					BD, HD	125
	18,000	600	Square D	HJ, HL, HR	150	
	25,000			BJ	125	
				HG	150	
				BG	125	
				HD	150	
	14,000	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
					BD	125
		22,000	480	Square D	THED	150
		85,000			HL, HR	150
		50,000			BJ	125
		35,000			HG, HJ	150
					BG	125
		18,000			BD, HD	125
		25,000	600	Square D	HJ, HL, HR	150
		18,000			BJ	125
					HG	150
					BG	125
					HD	150
	14,000	BD	125			

Model	Switch Rating, amps	WCR, amps RMS	Volts, Max.	Molded-Case Circuit Breakers		
				Manufacturer	Type or Class	Max. Size, amps
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
					HD	150
					BD	125
		22,000	480	GE	THED	150
		85,000		Square D	HL, HR	150
		50,000			BJ	125
		35,000			HG, HJ	150
		25,000			BG	125
		18,000			JG, JJ, JL	200
					BD, HD	125
		25,000	600	Square D	HJ, HL, HR	150
					BJ	125
		18,000			HG	150
		14,000			BG	125
KCS	200 230	200,000	240	Square D	HD	150
		125,000			BD	125
		100,000			JR	250
		65,000			JL	250
		42,000			JJ	250
		25,000			JG	250
					QG, QJ	225
		85,000	480	Square D	JD	250
		30,000			JL, JR	250
		18,000			JG, JJ	250
KCS	230	42,000	600	Eaton/ Cutler Hammer	JD	250
					JGU, JGX, JGH	250
					KDC	400
				GE	LDC, CLDC	600
					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
					HHLD6, HHLXD6, CLD6, SCLD6, LNG, LPG, LGC*, LGU*, LGX*	600

Model	Switch Rating, amps	WCR, amps RMS	Volts, Max.	Molded-Case Circuit Breakers		
				Manufacturer	Type or Class	Max. Size, amps
KCP KCC	150 200 225 § 230 260 400 600	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
	150 225 §	50,000	480	Eaton/ Cutler Hammer	HFDE, FDC, FDCE	225
					NHH	250
					JDC, JGU, JGX	350
					HKD, CHKD, KDC, HKDB, CHKDB, LHH	400
					HLD, CHLD, LDC, CLDC, LGH*, LGC*, LGU*, LGX*	600
					HMDLB, CHMDLB	800
				GE	SEL, SEP	150
					SFL, SFP, FEN, FEH	250
					TBC4	400
					FGN, FGH, FGL, FGP, SGL1, SGL4, SGL6, SGP1, SGP4, SGP6, TJL4V, TJL1S-6S, TBC6	600
					TB8	800
				Siemens/ITE	HDG, LDG	150
					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, HHLD6, 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
					MasterPact STR 28D, PK, PJ, PL	800
				Square D	JJ (Current Limiting)	250
					JL (Current Limiting)	
					JR (Current Limiting)	
		65,000		Eaton/ Cutler Hammer	JGU, JGX, JGH	250
		100,000			KDC	400
		200,000			LDC, CLDC	600
		42,000	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
					HHLD6, 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	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
				GE	MDL, CMDL, HMDL, CHMDL, NGS, NGH, NGC, MDLB, CMDLB, HMDLB, CHMDLB	800
					SFL, SFP, FEN, FEH	250
					TBC4	400
					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
				Siemens /ITE	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
					LMD, LMD6, LMXD, LMXD6, HLMD, HLMD6, HLMXD, HLMXD6, MD, MD6, MXD6, HMG, HMD6, HMXD6, SMD6, SHMD6, CMD6, SCMD6, LMG, MG	800
				Square D	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
				Square D	CK1000HL	1000
					CK1200NN, CK1200HH	1200
					JJ (Current Limiting)	250
					JL (Current Limiting)	250
					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
					TBC8, TKL4V, TKL8S- 12S, SKL8, SKP8	800
				Siemens /ITE	HJD, CFD6	250
					HHJD6, HHJXD6, CJD6, SCJD6	400
					HHL6, HHLXD6, CLD6, SCLD6	600
					HLMD6, HLMXD6, HMXD6, SHMD6, HMD6, CMD6, SCMD6, LMG, LNG, LPG, LGC*, LGU*, LGX*	800
				Square D	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	50,000	480	Eaton/ Cutler Hammer	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
				GE	TBC4	400
					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
				Siemens /ITE	HFD6, HFXD6, HFG, LFG	250
					HJD6, HJXD6, SHJD6, HHJD6, HHJXD6, CJD6, SCJD6, HJG, LLG, LJG	400
					HLD6, HLXD6, SHLD6, HHLD6, HHLXD6, CLD6, SCLD6, HLG	600
					LMD6, LMXD6, HLMD6, HLMXD6, MD6, MXD6, HMD6, HMXD6, SMD6, SHMD6, CMD6, SCMD6, HMG, LMG	800
				Square D	CK400N, CK400NN, CK400H, CK400HH, CJ400L, NSJ400	400
					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
		42,000	600	Eaton/ Cutler Hammer	KDC	400
					LDC, CLDC, LGC*, LGU*, LGX*	600
				GE	TBC4	400
					TBC6, SGL1, SGL4, SGL6, SGP1, SGP4, SGP6, FGP	600
					TBC8, TKL4V, TKL8S- 12S, SKL8, SKP8	800
				Siemens /ITE	HHJD6, HHJXD6, CJD6, SCJD6	400
					HHLD6, HHLXD6, CLD6, SCLD6	600
					HLMD6, 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					
* 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, 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	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	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
				Eaton/ Cutler Hammer	Tri-Pac NB	800
					RDC	2500
				Siemens/ITE	CND	1200

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

# 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
		3R	3,4	4	2286 (90)	940 (37)	717 (28.2)	—	356 (785)	379 (835)	ADV-8575
	1600-2000F †	1	3,4	4	2286 (90)	963 (38)	688 (27.1)	—	472 (1040)	494 (1090)	ADV-8577
		3R	3,4	4	2286 (90)	940 (37)	869 (34.2)	—	356 (785)	379 (835)	ADV-8578
	1600-2000	1	3,4	4	2286 (90)	963 (38)	1220 (48)	—	472 (1040)	494 (1090)	ADV-8579
		3R	3,4	4	2286 (90)	940 (37)	1434 (56.4)	—	472 (1040)	494 (1090)	ADV-8580
	2600-3000	1	3,4	4	2286 (90)	963 (38)	1524 (60)	—	649 (1430)	679 (1495)	ADV-8581
		3R	3,4	4	2286 (90)	940 (37)	1738 (68.4)	—	649 (1430)	679 (1495)	ADV-8582
	4000	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
KCP	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
	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.

## 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
- IEC 60947-6-1, Low Voltage Switchgear and Control Gear; Multifunction Equipment; Automatic Transfer Switching Equipment
- 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)

## 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

### ☐ Current Sensing Kit

### ☐ Line-to-Neutral Voltage Monitoring

### ☐ 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
- Two Form A relay outputs
- Serial port for optional network connections
- Data logging
- Factory-installed

### ☐ 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 models
- Customer-supplied signal (contact closure) is required for the forced transfer to OFF function
- Factory-installed

### ☐ Neutral Assembly

- Available as loose kit for open units

### ☐ 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
- Surge protection 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

### ☐ 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:

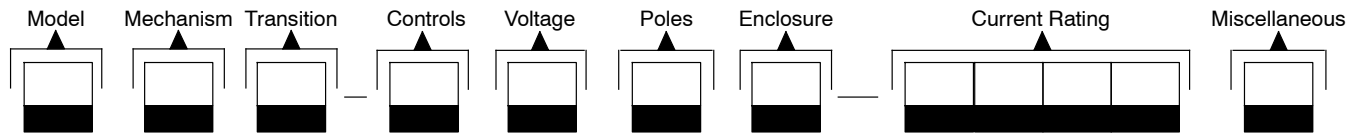
ATS Size, Amps	Enclosure, NEMA Type:				
	1	3R	4	4X	12
30-1200	•	•	•	•	•
1600-4000	•	•			

### ☐ California OSHPD Approval

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

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 10kAmps		
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 (Any Breaker)

#### 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

#### 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.

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