



### Controller

• Decision-Maker® MPAC 1500

## Ratings

Model	Current	Voltage, Frequency
KAS	150 600 amps	208-600 VAC
KAP	150-600 amps	50/60 Hz

## **Transfer Switch Standard Features**

- UL 1008 listed, file #E108981
- CSA certification available
- Bypass/isolation switches for uninterrupted power to the load during switch maintenance and testing
- Electrically operated: bypass the primary mechanism at the touch of a button
- One-line diagram with LEDs to indicate transfer switch and bypass status
- 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
- Fully rated for use as a manual 3-position transfer switch
- · Heavy duty mechanical interlocks
- Bypass switch and contactor position indicators
- · Drawout contactor for ease of maintenance
- Design suitable for emergency and standby applications on all classes of load, 100% tungsten rated through 400 amps
- Reliable, field-proven solenoid mechanism
- Switching mechanisms lubricated for life
- Main shaft auxiliary contacts
- · Front-connection standard
- Standard one-year limited warranty. Extended limited warranties are available.

## Standard-Transition Models (KAS)

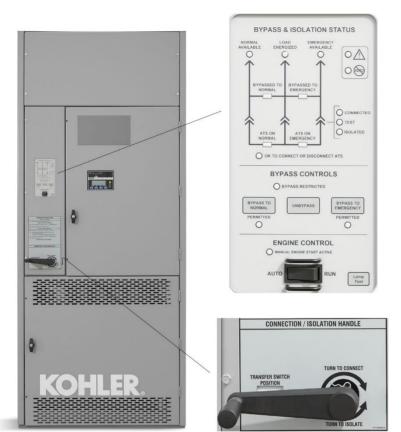
- Standard-transition transfer time less than 100 milliseconds (6 cycles @ 60 Hz)
- Double-throw, mechanically interlocked design (break-before-make)
- Solid, switched, or overlapping neutral

### **Programmed-Transition Models (KAP)**

- 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 both sides)
- · Solid or switched neutral



# **Simple Bypass Operation**



High visibility alarm and operating mode indicators

A simple one- line diagram indicates real- time switch and bypass status

Permitted and restricted operations indicated

Single button bypass operation

Manual engine start controls

A single handle connects and isolates transfer switch for inspection, testing, or service



### **Automatic Transfer Switch Controller**

The Decision-Maker® MPAC 1500 Automatic Transfer Switch Controller is used on bypass/isolation transfer switch models.

### 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 is 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:
  - o CISPR 11, Radiated Emissions
  - o IEC 1000-4-2, Electrostatic Discharge
  - o IEC 1000-4-3, Radiated Electromagnetic Fields
  - o IEC 1000-4-4, Electrical Fast Transients (Bursts)
  - o IEC 1000-4-5, Surge Voltage
  - o IEC 1000-4-6, Conducted RF Disturbances
  - o IEC 1000-4-8. Magnetic Fields
  - o 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
- Underwriters Laboratories UL 508, Standard for Industrial Control Equipment
- Underwriters Laboratories UL 1008, Standard for Automatic Transfer Switches for Use in Emergency Standby Systems, file # E108981



## **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							

Auxiliary Position Indicating Contacts (rated 10 amps @ 32 VDC/250 VAC)						
	Number of Contacts Indicating Normal, Emergency					
Switch Rating, Amps	KAS	KAP				
150- 600	8, 8	7, 7				

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

### Cable Sizes

UL-Listed Solderless Screw-Type Terminals for External Power Connections									
Range of Wire Sizes, Copper or Aluminum									
Switch Rating, Amps	Normal, Emergency, and Load Terminals Per Phase and Neutral	Ground							
150- 400	(1) #4 AWG to 600 KCMIL or (2) 1/0 AWG to 250 KCMIL	(3) 600 KCMIL							
600	(2) #2 AWG to 600 KCMIL	(6) 600 KCMIL							
* Use 75°C minimum Cu/Al wire for power connections.									

## **Weights and Dimensions**

Note: Weights and dimensions are provided for reference only. 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 bypass/isolation transfer switches in NEMA type 1 enclosures. See the transfer switch dimension drawings for other enclosure types.

		Dimensions mm (in.)			V	Dimension		
Model	Amps	Height	Width	Depth	2-Pole	3-Pole	4-Pole	Drawing
1440	150-260	2162 (85.1)	864 (34)	711 (28)**	431 (950)	431 (950)	431 (950)	
KAS KAP	150-600 w/ 12" pull box †	2162 (85.1)	1168 (46)	711 (28)**	431 (950)	431 (950)	431 (950)	ADV-9230
TV-VI	150-600 w/ 15" pull box †	2162 (85.1)	1245 (49)	711 (28)**	431 (950)	431 (950)	431 (950)	

<sup>\*</sup> Approximate weights

# Withstand and Close-On Ratings (WCR)

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.

### Note: For specific breaker ratings, refer to the next table.

		Withstand Current Ratings in RMS Symmetrical Amperes										Short Time Ratings (sec.) ‡					
Switch	C	Current-Limiti	ng Fuses		Tim	ne-Based Rati	ng *	480 V Max.				600 V Max.					
Rating, Amps	Amps @ 480 V	Amps @ 600 V	Amps, Max.	Fuse Class	Amps @ 240 V	Amps @ 480 V	Amps @ 600 V	.13	.2	.3	.5	.1	.13	.3	.5		
150 225			600	J	J												
260 400 600	200kA	200kA	800	L	65kA	42kA †	35kA	750	0A	-	_		-	_			

Based on 0.050 seconds (approximately 3 cycles). Applicable to breakers with instantaneous trip elements.

<sup>†</sup> Pull box is required for bottom cable entry on 400-600 amp units; optional on 150- 260 amp units.

<sup>\*\*</sup> Transfer switch carriage manual crank handle can be removed. Also note that the transfer switch carriage manual crank handle can be left in place and folded down. Recommended front clearance is 32 in. minimum.

<sup>†</sup> 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.

<sup>‡</sup> Short time ratings are provided for applications involving breakers that utilize trip delay settings for system selective coordination.



# Ratings with Specific Manufacturer's Circuit Breakers

The following charts list power switching device withstand and close-on ratings (WCR) in RMS symmetrical amperes for circuit breakers from specific manufacturers. Ratings apply to both open- and programmed-transition models. Circuit breakers are supplied by the customer.

Switch Rating,	WCR, amps	Voltage,		Molded-Case Circuit Breakers	Max, Size			
amps	RMS	Max.	Manufacturer	Туре	amps			
			GE	THQMV	225			
				SGL1, SGL4, SGL6, SGP1, SGP4, SGP6	600			
	65,000		Eaton/Cutler	LDC, CLDC, HLD, CHLD				
	,		Hammer					
			Siemens/ITE Square D	HLD6, HLXD6 QG, QJ	600 250			
	100.000	240	Square D	LJ (current limiting)	600			
	125,000		Square D	LL (current limiting)	600			
	120,000		Oquaic D	LR (current limiting)	600			
	200,000		Eaton/Cutler	PD2 (current limiting)	225			
	200,000		Hammer	PD3 (current limiting)	600			
			Tidillillo	HFDE, FDC, FDCE	225			
				NHH	250			
			Eaton/Cutler	JDC, JGU, JGX	350			
			Hammer	HKD, CHKD, KDC, HKDB, CHKDB, LHH	400			
				HLD, CHLD, LDC, CLDC, LGH*, LGC*, LGU*, LGX*	600			
				HMDLB, CHMDLB	800			
				SEL, SEP	150			
				SFL, SFP, FEN, FEH	250			
			GE	TBC4	400			
				FGN, FGH, FGL, FGP, SGL1, SGL4, SGL6, SGP1, SGP4, SGP6.				
	50,000			TJL4V, TJL1S- 6S, TBC6	000			
	·			TB8 HDG, LDG	800 150			
			Siemens/ITE	HFD, HFD6, HFXD, HFXD6, HHFD6, HHFXD6, CFD6, HFG, LFG	250			
				HJD, HJD6, HJXD, HJXD6, SHJD, SHJD6, HHJD6, HHJXD6,				
150		480		CJD6, SCJD6, HJG, LJG, LLG	400			
				HLD6, HLXD6, HHLD6, HHLXD6, CLD6, SHLD6, SCLD6, HLG	600			
225				HJ, HL	150			
225				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			
	65,000			JJ (current limiting) LJ (current limiting)	250 600			
				JL (current limiting)	250			
				LL (current limiting)	600			
	100,000		Eaton/Cutler	PD2 (current limiting)	225			
			Hammer	PD3 (current limiting)	600			
			_	JR (current limiting)	250			
	200,000		Square D	LR (current limiting)	600			
			Eaton/Cutler	JGU, JGX, JGH	250			
			Hammer	KDC	400			
			- Idillilloi	LDC, CLDC	600			
			GE	TBC4	400			
				SGL1, SGL4, SGL6, SGP1, SGP4, SGP6, FGP	600			
	42,000		Siemens/ITE	HJD, CFD6 HHJD6, HHJXD6, CJD6, SCJD6	250 400			
			Oleitiei 18/11 L	HHLD6, HHLXD6, CLD6, SCLD6, LNG, LPG, LGC*, LGU*, LGX*	600			
		600		HJ, HL, HG	150			
				KI, JJ, JL, JR, CF250L	250			
			Square D	CK400H, CK400HH, CJ400L	400			
				LI, MasterPact STR 28D, PK	600			
	50,000			LL (current limiting)	600			
	65,000		Eaton/Cutler	PD3 (current limiting)	600			
			Hammer	( 0/				
	100,000 gitrip 310+ LS or L		Square D	LR (current limiting)	600			



				Molded-Case Circuit Breakers			
Rating,			Manufactura	Time	Max. Size		
amps	amps RMS	wax.	wanutacturer		amps		
			GE	SGL1, SGL4, SGL6, SGP1, SGP4, SGP6	225 600		
	65,000		Faton/Cutler				
Switch Rating, amps			Hammer	LDC, CLDC, HLD, CHLD	600		
	Manufacturer	HLD6, HLXD6	600				
	65,000	240		QG, QJ	250		
			Square D		600		
	125,000		Oquaic D		600		
					600		
	200,000			PD2 (current limiting)	225		
			Hammer	· · · · · · · · · · · · · · · · · · ·	600		
				HFDE, FDCE, HFD, FDC, LHH	225		
					250		
				HKD, HKDB, CHKD, CHKDB, KDC	400		
			Hammer	HLD, CHLD, LDC, CLDC, LGH*, LGC*, LGU*, LGX*, NHH	600		
				MDL, CMDL, HMDL, CHMDL, NGS, NGH, NGC, MDLB, CMDLB,	800		
					250		
					400		
			GE	TBC6, TJL4V, TJL1S- 6S, SGL1, SGL4, SGL6, SGP1, SGP4, SGP6,			
					600		
				TBC8, TKL4V, TKH8S- 12S, TKL8S- 12S, SKH8, SKL8, SKP8, TB8	800		
				HFD6, HFXD6, HHFD6, HHFXD6, CFD6, HFG, LFG	250		
	50,000			HJD6, HJXD6, SHJD6, HHJD6, HHJXD6, CJD6, SCJD6, HJG, LJG,	400		
			Siemens / ITE				
				LMD, LMD6, LMXD, LMXD6, HLMD, HLMD6, HLMXD, HLMXD6, MD,	000		
		480		MD6, MXD6, HMG, HMD6, HMXD6, SMD6, SHMD6, CMD6, SCMD6,	800		
				CK400N, CK400NN, CK400H, CK400HH, CJ400L, NSJ400	250 400		
				LC, DJ, DL, LJ, LR, LI, NSJ600			
260				CK800N, CK800NN, CK800H, CK800HH, MasterPact STR 28D, MJ,	600		
				PK, PJ, PL	800		
					1000		
			Square D	,	1200		
	65.000				250		
	,				600		
	100,000				250 600		
					250		
					600		
	200,000		Eaton/Cutlor	7	225		
			. Idillilloi	ν σ/	600 250		
					400		
			Hammer		600		
					400		
			GE	TBC6, SGL1, SGL4, SGL6, SGP1, SGP4, SGP6, FGP	600		
				TBC8, TKL4V, TKL8S- 12S, SKL8, SKP8	800		
					250		
	42,000			HHJD6, HHJXD6, CJD6, SCJD6	400		
			Siemens/ITE	HHLD6, HHLXD6, CLD6, SCLD6	600		
		600		HLMD6, HLMXD6, HMXD6, SHMD6, HMD6, CMD6, SCMD6, LMG,	800		
				LNG, LPG, LGC*, LGU*, LGX*			
					250		
			Sausro D	, ,	400 600		
			Square D	CK800H, CK800HH, MasterPact STR 28D, PK	800		
	50 000				600		
			Eaton/Cutler				
	65,000		Hammer	PD3 (current limiting)	600		



witch lating,	WCD amag	Voltage		Molded-Case Circuit Breakers	May C:-		
mps	WCR, amps RMS	Voltage, Max.	Manufacturer	Туре	Max. Size		
			GE	THQMV	225		
	65,000		Eaton/Cutler Hammer	SGL1, SGL4, SGL6, SGP1, SGP4, SGP6			
				LDC, CLDC, HLD, CHLD			
	200,000			PD2 (current limiting)	225		
	200,000	240		PD3 (current limiting)	600		
	65.000	240	Siemens / ITE	HLD6, HLXD6	600		
	65,000			QG, QJ	250		
	100,000		Square D	LJ (current limiting)	600		
	125,000		Square D	LL (current limiting)	600		
	200,000			LR (current limiting)	600		
				JGH, JGC, NHH	250		
				HKD, CHKD, KDC, HKDB, CHKDB, LHH	400		
			Eaton/Cutler	CHLD, LDC, CLDC, LGH*, LGC*, LGU*, LGX*	600		
			Hammer	MDL, CMDL, HMDL, CHMDL, NGS, NGH, NGC, MDLB, CMDLB, HMDLB, CHMDLB	800		
				NGU	1600		
				TBC4	400		
			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		
	50,000	480	Siemens/ITE	HFD6, HFXD6, HFG, LFG	250		
				HJD6, HJXD6, SHJD6, HHJD6, HHJXD6, CJD6, SCJD6, HJG, LLG, LJG	400		
		460		HLD6, HLXD6, SHLD6, HHLD6, HHLXD6, CLD6, SCLD6, HLG			
				LMD6, LMXD6, HLMD6, HLMXD6, MD6, MXD6, HMD6, HMXD6, SMD6, SHMD6, CMD6, SCMD6, HMG, LMG	800		
400				CK400N, CK400NN, CK400H, CK400HH, CJ400L, NSJ400	400		
				LC, DJ, DL, LJ, LL, LR, LI, NSJ600	600		
				CK800N, CK800NN, CK800H, CK800HH, MJ	800		
			Square D	CK1000HH	1000		
			Square D	PK, PJ, PL, MH, MasterPact STR 28D, CK1200HH	1200		
	65,000			LJ (current limiting)	600		
	100,000			LL (current limiting)	600		
	200,000			LR (current limiting)	600		
	100,000		Eaton/Cutler Hammer	PD3 (current limiting)	600		
	42,000		Fotos/Outlan	KDC	400		
	42,000		Eaton/Cutler Hammer	LDC, CLDC, LGC*, LGU*, LGX*	600		
	65,000		- Idillillel	PD3 (current limiting)	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		
		600	Siemens / ITE	HHLD6, HHLXD6, CLD6, SCLD6	600		
	42,000	000	OICHIGHS / ITL	HLMD6, HLMXD6, HMXD6, SHMD6, HMD6, CMD6, SCMD6, LMG	800		
				LNG, LPG	1200		
				CK400H, CK400HH, CJ400L	400		
				LI	600		
			Square D	CK800H, CK800HH	800		
		1	Squaio D	MasterPact STR 28D, PK	1200		
	50,000			LL (current limiting)	600		
	100,000			LR (current limiting)	600		



Switch				Molded-Case Circuit Breakers	
Rating, amps	WCR, amps RMS	Voltage, Max.	Manufacturer	Туре	Max. Size amps
			GE	THQMV	225
			GL	SGL1, SGL4, SGL6, SGP1, SGP4, SGP6	600
	65,000		Siemens/ITE	HLD6, HLXD6	600
	00,000		Eaton/Cutler Hammer	LDC, CLDC, HLD, CHLD	600
		240		QG, QJ	250
	100,000		Square D	LJ (current limiting)	600
	125,000		Square D	LL (current limiting)	600
				LR (current limiting)	600
	200,000		Eaton/Cutler	PD2 (current limiting)	225
			Hammer	PD3 (current limiting)	600
				JGH, JGC, HFG, LFG	250
			Eaton/Cutler	HLD, CHLD, LDC, CLDC, LGH*, LGC*, LGU*, LGX*	600
			Hammer	MDL, CMDL, HMDL, CHMDL, NGS, NGH, NGC, NGU, MDLB, CMDLB, NF	800
			05	TBC6, TJL4V, TJL1S- 6S, SGL1, SGL4, SGL6, SGP1, SGP4, SGP6, FGN, FGH, FGL, FGP	600
			GE	TBC8, TKL4V, TKH8S- 12S, TKL8S- 12S, SKH8, SKL8, SKP8, TB8	800
				SKL12, SK12P	1200
	50,000		Siemens/ITE	HLD6, HLXD6, SHLD6, HHLD6, HHLXD6, CLD6, SCLD6, HLG, LLG	600
	50,000			LMD6, LMXD6, HLMD6, HLMXD6, MD6, MXD6, HMD6, HMXD6, SMD6, SHMD6, CMD6, SCMD6, HMG, LMG	800
		480		HND6, HNXD6, SND6, SHND6, ND6, NXD6, HNG, LNG, CND6	1200
		460		LC, DJ, DL, LI, NSJ600	600
				CK800N, CK800NN, MJ	800
600				MH, CK1200N, CK1200NN, CK1200H, CK1200HH, NT- H, NT- L1, NT- L, NT- LF, PK, PJ, PL	1200
			Causes D	CM2000HH	2000
			Square D	CM2500HH	2500
	85,000			PL1200	1200
	65,000			LJ (current limiting)	600
	100,000			LL (current limiting)	600
	200,000			LR (current limiting)	600
	100,000		Eaton/Cutler Hammer	PD3 (current limiting)	600
			Fatara/Cuttar	JGC	250
			Eaton/Cutler Hammer	TBC4	400
			Tidilinioi	LDC, CLDC	600
				TBC6, SGL1, SGL4, SGL6, SGP1, SGP4, SGP6, FGP	600
			GE	TBC8, TKL4V, TKL8S- 12S, SKL8, SKP8	800
				SKL12, SKP12	1200
	42,000			HHLD6, HHLXD6, CLD6, SCLD6	600
			Siemens/ITE	HLMD6, HLMXD6, HMXD6, SHMD6, HMD6, CMD6, SCMD6, LMG	800
		600		HND6, HNXD6, HNG, LNG, SHND6	1200
				LI	600
				CK800H, CK800HH	800
			Square D	CK1000HL	1000
		1		CK1200H, CK1200HH, NT- H, NT- L, NT- LF, NT- L1,	1200
	50,000	1		LL (current limiting)	600
	65,000		Eaton/Cutler Hammer	PD3 (current limiting)	600
	100,000		Square D	LR (current limiting)	600



### **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
- ☐ 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
- 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 kit is included with each transfer switch)
- Overhaul literature kit

### □ Load Shed Kit

- Forced transfer from Emergency to OFF for programmedtransition models
- Customer-supplied signal (contact closure) is required for the forced transfer to OFF function
- Factory-installed only

#### □ Pull Boxes

- Required for bottom cable entry on 400- 600 amp units
- Optional for 150- 260 amp units
- Available in 305 and 381 mm (12 and 15 inch) widths

### ☐ 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:

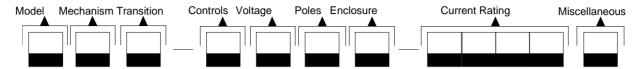
Contacts: 1 NO, 1 NC Min Load: 12VDC/10 mA Max. Load: 250 VAC/1 A Wire Size (max.): 16AWG

- 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

	SPD Specifications											
Nominal Voltage	Max. Discharge Current			UL VPR 3rd Ed (L-N/N-G/L-G)		ge, (L-N/N-G/L-G) kV)	Short Circuit Withstand	Maximum Continuous Operating				
(V±15%)	(kA)	Phase	Poles	(L 1,11 3,2 3) (kV)	at 3kAmps	at 10kAmp	Current (kA)	Voltage (VAC)				
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: KAS-DMVA-0400S

Model

K: Kohler

Mechanism

A: Electrically Operated Bypass/Isolation

Transition

S: Standard P: Programmed

Controller

D: Decision-Maker® MPAC 1500, Automatic

Voltage/Frequency

208 Volts/60 Hz C: 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 380 Volts/60 Hz 400 Volts/50 Hz R: 220 Volts/60 Hz H: 416 Volts/50 Hz S: 400 Volts/60 Hz

**Number of Poles/Wires** 

N: 2 Poles/3 Wires, Solid NeutralT: 3 Poles/4 Wires, Solid NeutralV: 4 Poles/4 Wires, Switched Neutral

V: 4 Poles/4 Wires, Overlapping Neutral (KAS only)

**Enclosure** 

A: NEMA 1 C: NEMA 3R

**Current, Amps** 

Connections

S: Standard

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