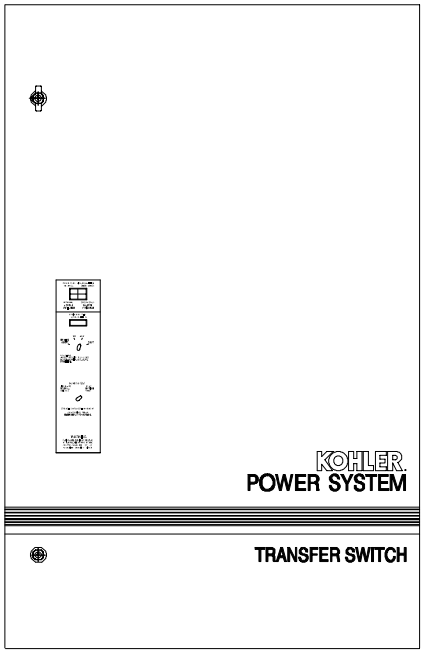
Model MMS/MNS

KOHLER POWER SYSTEMS

Automatic Transfer Switches

ISO 9001 KOHLER GENERATORS INTERNATIONALLY REGISTERED



(Shown with S340+ controls and options)

Standard Features

- **Rated per IEC 947-2 and IEC 947-3 standards**
- **Current ratings from 1600 to 4000 amps at 40°C**
- **Provided with 3 or 4 fully rated poles. Two-pole configurations are also available.**
- **Available to 600 VAC, 50 or 60 Hz**
- **Available with power circuit breakers with overcurrent protection**
- **Available with power switches with no overcurrent protection**
- **Provided as a complete automatic transfer switch with electrical controls in a NEMA type 1 enclosure**
- **Available with E33+, S340+, or M340+ controls; see controls specification sheets G11-54, G11-55, and G11-56 for control features and available options**
- **Indication of the circuit breaker/switch position provided**
- **Power switching devices electrically or manually operated**
- **Circuit breakers/switches electrically and mechanically interlocked**
- **Available with a programmed transition function to disconnect the load from both sources during switching; see controls specification sheets for details**
- **Ambient operating temperature range from −5° to 55°C without derating**
- **Ambient storage temperature range from −50° to 100°C**
- **Humidity range from 5% to 95% noncondensing**

Ratings

Switch Rating (amps)	Ultimate Short-Circuit Breaking Capacity (Icu)* 50/60 Hz AC (kA RMS)	Short-Circuit Making Capacity (Icm)* 50/60 Hz AC (kA peak)	Short-Time Withstand Current, 1 sec. (Icw)* 50/60 Hz AC (kA RMS)
1600	40	84	40
2000	55	121	55
2500	55	121	55
3000	75	165	75
4000	75	165	75

*Icu, Icw, and Icm ratings according to IEC 947-2 and IEC 947-3.

Design Features

- Circuit breakers and switches are designed for continuous operation at 100 percent of their current rating, subject to derating for high altitudes and temperatures above 55°C. Check with the manufacturer for temperature derating information.
- Circuit breakers provide overcurrent protection for the load.
- Circuit breakers are rated according to IEC 947-2.
- Switches are rated according to IEC 947-3.
- Power sources and load are connected to rear bus bars. See submittal drawings for details.
- Two insulation barriers separate the front of the circuit breaker from the main contacts.
- Circuit breakers and switches can be locked in the OFF position.

Altitude Derating

Altitude (m)	Maximum Operational Voltage	Current Derating Factor*
2000	660	1.00
3000	590	0.99
4000	520	0.96
5000	460	0.94

*Multiply the current rating by this factor. The breaking capacities do not change.

Weights and Dimensions*

Switch Rating (amps)	Weight lbs. (kg)	Dimensions, H x W x D in. (mm)
1600	965 (434)	83 x 36 x 54 (2095 x 914 x 1372)
2000	1025 (461)	83 x 36 x 54 (2095 x 914 x 1372)
2500	1125 (506)	83 x 36 x 54 (2095 x 914 x 1372)
3000	1125 (506)	83 x 36 x 54 (2095 x 914 x 1372)
4000	1210 (545)	83 x 42 x 60 (2095 x 1067 x 1524)

*For the complete transfer switch in a NEMA type 1 enclosure

Transfer Switch Model Designations by Logic

Poles	Amps	E33+ Logic		S340+ Logic		M340+ Logic	
		Standard Switches	Programmed Transition Switches	Standard Switches	Programmed Transition Switches	Standard Switches	Programmed Transition Switches
Circuit Breakers							
3	1600	MMS-2xx341-1600	MMS-4xx341-1600	MMS-1xx341-1600	MMS-3xx341-1600	MMS-5xx341-1600	MMS-6xx341-1600
	2000	MMS-2xx341-2000	MMS-4xx341-2000	MMS-1xx341-2000	MMS-3xx341-2000	MMS-5xx341-2000	MMS-6xx341-2000
	2500	MMS-2xx341-2500	MMS-4xx341-2500	MMS-1xx341-2500	MMS-3xx341-2500	MMS-5xx341-2500	MMS-6xx341-2500
	3000	MMS-2xx341-3000	MMS-4xx341-3000	MMS-1xx341-3000	MMS-3xx341-3000	MMS-5xx341-3000	MMS-6xx341-3000
	4000	MMS-2xx341-4000	MMS-4xx341-4000	MMS-1xx341-4000	MMS-3xx341-4000	MMS-5xx341-4000	MMS-6xx341-4000
4	1600	MMS-2xx641-1600	MMS-4xx641-1600	MMS-1xx641-1600	MMS-3xx641-1600	MMS-5xx641-1600	MMS-6xx641-1600
	2000	MMS-2xx641-2000	MMS-4xx641-2000	MMS-1xx641-2000	MMS-3xx641-2000	MMS-5xx641-2000	MMS-6xx641-2000
	2500	MMS-2xx641-2500	MMS-4xx641-2500	MMS-1xx641-2500	MMS-3xx641-2500	MMS-5xx641-2500	MMS-6xx641-2500
	3000	MMS-2xx641-3000	MMS-4xx641-3000	MMS-1xx641-3000	MMS-3xx641-3000	MMS-5xx641-3000	MMS-6xx641-3000
	4000	MMS-2xx641-4000	MMS-4xx641-4000	MMS-1xx641-4000	MMS-3xx641-4000	MMS-5xx641-4000	MMS-6xx641-4000
Switches							
3	1600	MNS-2xx341-1600	MNS-4xx341-1600	MNS-1xx341-1600	MNS-3xx341-1600	MNS-5xx341-1600	MNS-6xx341-1600
	2000	MNS-2xx341-2000	MNS-4xx341-2000	MNS-1xx341-2000	MNS-3xx341-2000	MNS-5xx341-2000	MNS-6xx341-2000
	2500	MNS-2xx341-2500	MNS-4xx341-2500	MNS-1xx341-2500	MNS-3xx341-2500	MNS-5xx341-2500	MNS-6xx341-2500
	3000	MNS-2xx341-3000	MNS-4xx341-3000	MNS-1xx341-3000	MNS-3xx341-3000	MNS-5xx341-3000	MNS-6xx341-3000
	4000	MNS-2xx341-4000	MNS-4xx341-4000	MNS-1xx341-4000	MNS-3xx341-4000	MNS-5xx341-4000	MNS-6xx341-4000
4	1600	MNS-2xx641-1600	MNS-4xx641-1600	MNS-1xx641-1600	MNS-3xx641-1600	MNS-5xx641-1600	MNS-6xx641-1600
	2000	MNS-2xx641-2000	MNS-4xx641-2000	MNS-1xx641-2000	MNS-3xx641-2000	MNS-5xx641-2000	MNS-6xx641-2000
	2500	MNS-2xx641-2500	MNS-4xx641-2500	MNS-1xx641-2500	MNS-3xx641-2500	MNS-5xx641-2500	MNS-6xx641-2500
	3000	MNS-2xx641-3000	MNS-4xx641-3000	MNS-1xx641-3000	MNS-3xx641-3000	MNS-5xx641-3000	MNS-6xx641-3000
	4000	MNS-2xx641-4000	MNS-4xx641-4000	MNS-1xx641-4000	MNS-3xx641-4000	MNS-5xx641-4000	MNS-6xx641-4000

KEY xx = Voltage Frequency: 60 = 600 V 60 Hz 62 = 120 V 60 Hz 63 = 220 V 50 Hz 64 = 240 V 60 Hz
66 = 480 V 60 Hz 68 = 208 V 60 Hz 71 = 380 V 50 Hz 72 = 380 V 60 Hz

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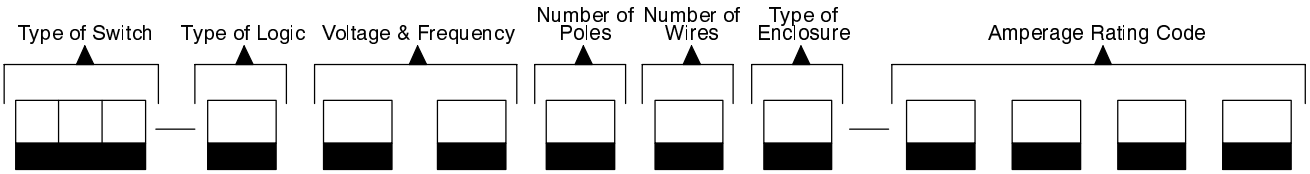
Record the transfer switch model number in the boxes below. The transfer switch model number defines ratings and characteristics as explained in the accompanying chart.



Kohler Model Number Key
This chart explains the Kohler transfer switch model numbering code system. The sample model number shown is for a switch (no overcurrent protection) with E33+ logic rated at 480 volts, 60 hertz, 3 phases, 3 poles, and 4 wires in a NEMA type 1 enclosure with a switch rating of 1600 amperes. Not all possible combinations are available.

SAMPLE MODEL NUMBER

MNS-266341-1600

Transfer Switch Family
M: Model M ATS

Type of Power Switch
M: Circuit Breaker
N: Switch (no overcurrent protection)

Frame
S: 1600–4000 Amperes

Type of Electrical Controls (Logic Controller)
1: S340+
2: E33+
3: S340+ with Programmed Transition
4: E33+ with Programmed Transition
5: M340+
6: M340+ with Programmed Transition

Voltage Code

60: 600 Volt, 60 Hz	66: 480 Volt, 60 Hz
62: 120 Volt, 60 Hz	68: 208 Volt, 60 Hz
63: 220 Volt, 50 Hz	71: 380 Volt, 50 Hz
64: 240 Volt, 60 Hz	72: 380 Volt, 60 Hz

Other voltages available

Number of Poles
3: 3 Pole, 3 Phase
4: 3 Pole, 1 Phase (also used for 2-pole, 1-phase applications)
6: 4 Pole, 3 Phase (fully rated poles, no overlapping neutral)

Number of Wires
3: 3 Wire 4: 4 Wire

Enclosure
1 = NEMA type 1

Amperes
Numbers indicate switch rating in amperes.

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