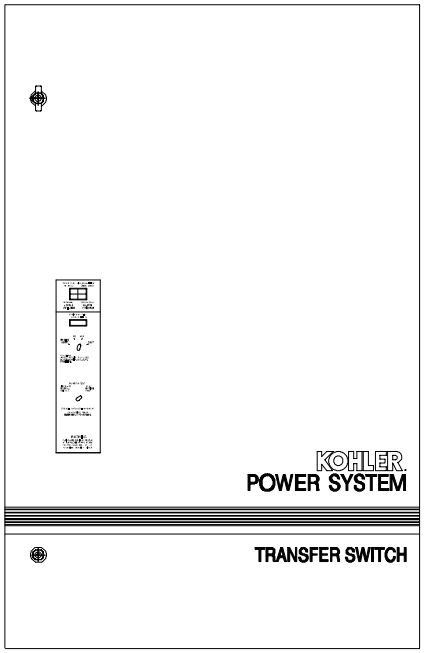
Model MMT/MNT

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 40 to 1250 amps at 40°C**
- **Fast five-cycle open/close operation on 40 to 630 amp circuit breakers/switches**
- **Provided with 3 or 4 fully rated poles; two-pole configurations also available**
- **Available with molded-case circuit breaker (short circuit and overload protection) or molded-case switch (no overload protection) power switching devices**
- **Available to 600 VAC, 50 or 60 Hz**
- **Provided 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 circuit breaker/switch position provided**
- **Power switching devices electrically or manually operated, 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 60°C**
- **Ambient storage temperature range from −55° to 100°C**
- **Humidity range from 5% to 95% noncondensing**

Ratings

Switch Rating (amps)	Circuit Breaker Ultimate Breaking Capacity (Icu)* (kA rms) AC 50/60 Hz					Admissible Short-time Current (Icw)*			
						Circuit Breakers		Switches	
	220/240 V	380/415 V	440 V	500 V	660/690 V	kA (rms)	Time (sec)	kA (rms)	Time (sec)
40	85	25	25	18	8	—	—	—	—
80	85	25	25	18	8	—	—	—	—
100	85	25	25	18	8	—	—	1.8	1.0
160	85	36	35	30	8	—	—	2.5	1.0
250	85	36	35	30	8	—	—	3.5	1.0
400	85	45	42	30	10	—	—	5.0	1.0
630	85	45	42	30	10	—	—	6.0	1.0
800	85	50	42	40	25	12	1.0	10.0	1.0
1000	85	50	42	40	25	12	1.0	15.0	1.0
1250	85	50	42	40	25	12	1.0	15.0	1.0

*Icw and circuit breaker Icu ratings according to IEC 947-2 and IEC 947-3

Temperature Derating

Switch Type	Switch Rating (amps)	Maximum Service Current (amps)			
		45°C	50°C	55°C	60°C
Molded-case circuit breakers	40	39	38	37	36
	80	78	76	74	72
	100	97	95	92	90
	160	156	152	147	144
	250	244	238	231	225
	400	400	400	390	380
	630	615	600	585	570
	800	790	780	770	760
	1000	975	950	925	900
	1250	1200	1150	1100	1050
Molded-case switches	100	100	100	100	100
	160	160	160	160	160
	250	250	250	237	237
	400	400	400	390	380
	630	615	600	585	570
	800	790	780	770	760
	1000	975	950	925	900
	1250	1200	1150	1100	1050

Altitude Derating

Altitude (m)	Maximum Operational Voltage	Current Derating Factor*
2000	690	1.00
3000	550	0.96
4000	480	0.93
5000	420	0.90

*Multiply the current rating by this factor after applying the temperature derating.

Weights and Dimensions*

Switch Rating (amps)	Weight lbs. (kg)	Dimensions, H x W x D in. (mm)
40, 80, 100, 160, 250	206 (93)	39 x 27 x 19 (991 x 686 x 483)
400, 630	314 (142)	51 x 33 x 21 (1295 x 838 x 533)
800, 1000, 1250	610 (277)	58 x 41 x 22 (1470 x 1040 x 559)

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

Application Data

Connections	Switch Rating (amps)	Strip Length in. (mm)	Range of Wire Sizes, Copper or Aluminum		Torque ft. lbs. (Nm)	Cables per Pole
			AWG/MCM	mm^2		
Source Connections, Normal and Emergency	40, 80, 100, 160	0.8 (20)	#16 to #6 AWG #4 to 3/0 AWG	1.5-16 25-95	9 (12) 15 (20)	1 1
	250	0.8 (20)	#6 to #2 AWG #1 AWG to 350 MCM	16-35 50-185	15 (20) 19 (26)	1 1
	400	0.8 (20)	#2 AWG to 600 MCM	35-300	23 (31)	1
	630	1.2 (30)*	3/0 AWG to 500 MCM	85-240	23 (31)	1 or 2
	800	1.5 (38)*	2/0 AWG to 350 MCM	70-185	23 (31)	1 to 3
	1000, 1250	1.5 (38)*	2/0 AWG to 500 MCM	70-240	31 (42)	1 to 4
Load Connections	40	0.8 (20)	#6 to 2/0 AWG	16-70	15 (20)	1
	80, 100, 160, 250	0.8 (20)	#6 AWG to 350 MCM	16-185	25 (34)	1
	400	0.8 (20)	#2 AWG to 600 MCM	35-300	23 (31)	1
	630	1.2 (30)*	3/0 AWG to 500 MCM	85-240	23 (31)	1 or 2
	800	1.5 (38)*	2/0 AWG to 350 MCM	70-185	23 (31)	1 to 3
	1000, 1250	1.5 (38)*	2/0 AWG to 500 MCM	70-240	31 (42)	1 to 4

*Connecting lug front holes only; for rear holes, 2.25 (58)

Additional Features

- Circuit breakers and switches are designed for continuous operation at 100 percent of their current rating, subject to derating for temperature and altitude.
- Circuit breakers and switches can be padlocked in the OFF position.
- Circuit breakers require manual resetting after tripping.

Transfer Switch Model Designations by Logic

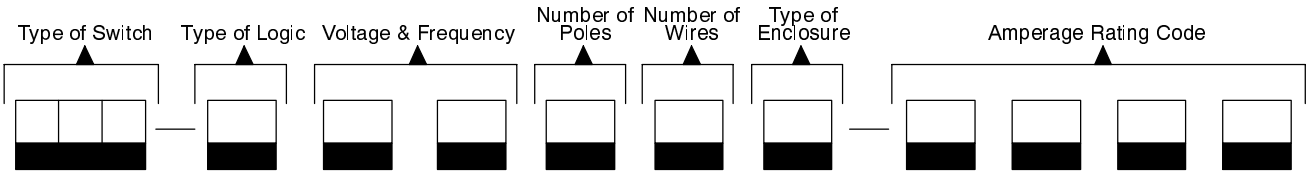
Poles	Amps	E33+ Logic		S340+ Logic		M340+ Logic	
		Standard Switches	Programmed Transition Switches	Standard Switches	Programmed Transition Switches	Standard Switches	Programmed Transition Switches
Molded-Case Circuit Breakers							
3	40	MMT-2xx341-0040	MMT-4xx341-0040	MMT-1xx341-0040	MMT-3xx341-0040	MMT-5xx341-0040	MMT-6xx341-0040
	80	MMT-2xx341-0080	MMT-4xx341-0080	MMT-1xx341-0080	MMT-3xx341-0080	MMT-5xx341-0080	MMT-6xx341-0080
	100	MMT-2xx341-0100	MMT-4xx341-0100	MMT-1xx341-0100	MMT-3xx341-0100	MMT-5xx341-0100	MMT-6xx341-0100
	160	MMT-2xx341-0160	MMT-4xx341-0160	MMT-1xx341-0160	MMT-3xx341-0160	MMT-5xx341-0160	MMT-6xx341-0160
	250	MMT-2xx341-0250	MMT-4xx341-0250	MMT-1xx341-0250	MMT-3xx341-0250	MMT-5xx341-0250	MMT-6xx341-0250
	400	MMT-2xx341-0400	MMT-4xx341-0400	MMT-1xx341-0400	MMT-3xx341-0400	MMT-5xx341-0400	MMT-6xx341-0400
	630	MMT-2xx341-0630	MMT-4xx341-0630	MMT-1xx341-0630	MMT-3xx341-0630	MMT-5xx341-0630	MMT-6xx341-0630
	800	MMT-2xx341-0800	MMT-4xx341-0800	MMT-1xx341-0800	MMT-3xx341-0800	MMT-5xx341-0800	MMT-6xx341-0800
	1000	MMT-2xx341-1000	MMT-4xx341-1000	MMT-1xx341-1000	MMT-3xx341-1000	MMT-5xx341-1000	MMT-6xx341-1000
	1250	MMT-2xx341-1250	MMT-4xx341-1250	MMT-1xx341-1250	MMT-3xx341-1250	MMT-5xx341-1250	MMT-6xx341-1250
4	40	MMT-2xx641-0040	MMT-4xx641-0040	MMT-1xx641-0040	MMT-3xx641-0040	MMT-5xx641-0040	MMT-6xx641-0040
	80	MMT-2xx641-0080	MMT-4xx641-0080	MMT-1xx641-0080	MMT-3xx641-0080	MMT-5xx641-0080	MMT-6xx641-0080
	100	MMT-2xx641-0100	MMT-4xx641-0100	MMT-1xx641-0100	MMT-3xx641-0100	MMT-5xx641-0100	MMT-6xx641-0100
	160	MMT-2xx641-0160	MMT-4xx641-0160	MMT-1xx641-0160	MMT-3xx641-0160	MMT-5xx641-0160	MMT-6xx641-0160
	250	MMT-2xx641-0250	MMT-4xx641-0250	MMT-1xx641-0250	MMT-3xx641-0250	MMT-5xx641-0250	MMT-6xx641-0250
	400	MMT-2xx641-0400	MMT-4xx641-0400	MMT-1xx641-0400	MMT-3xx641-0400	MMT-5xx641-0400	MMT-6xx641-0400
	630	MMT-2xx641-0630	MMT-4xx641-0630	MMT-1xx641-0630	MMT-3xx641-0630	MMT-5xx641-0630	MMT-6xx641-0630
	800	MMT-2xx641-0800	MMT-4xx641-0800	MMT-1xx641-0800	MMT-3xx641-0800	MMT-5xx641-0800	MMT-6xx641-0800
	1000	MMT-2xx641-1000	MMT-4xx641-1000	MMT-1xx641-1000	MMT-3xx641-1000	MMT-5xx641-1000	MMT-6xx641-1000
	1250	MMT-2xx641-1250	MMT-4xx641-1250	MMT-1xx641-1250	MMT-3xx641-1250	MMT-5xx641-1250	MMT-6xx641-1250
Molded-Case Switches							
3	100	MNT-2xx341-0100	MNT-4xx341-0100	MNT-1xx341-0100	MNT-3xx341-0100	MNT-5xx341-0100	MNT-6xx341-0100
	160	MNT-2xx341-0160	MNT-4xx341-0160	MNT-1xx341-0160	MNT-3xx341-0160	MNT-5xx341-0160	MNT-6xx341-0160
	250	MNT-2xx341-0250	MNT-4xx341-0250	MNT-1xx341-0250	MNT-3xx341-0250	MNT-5xx341-0250	MNT-6xx341-0250
	400	MNT-2xx341-0400	MNT-4xx341-0400	MNT-1xx341-0400	MNT-3xx341-0400	MNT-5xx341-0400	MNT-6xx341-0400
	630	MNT-2xx341-0630	MNT-4xx341-0630	MNT-1xx341-0630	MNT-3xx341-0630	MNT-5xx341-0630	MNT-6xx341-0630
	800	MNT-2xx341-0800	MNT-4xx341-0800	MNT-1xx341-0800	MNT-3xx341-0800	MNT-5xx341-0800	MNT-6xx341-0800
	1000	MNT-2xx341-1000	MNT-4xx341-1000	MNT-1xx341-1000	MNT-3xx341-1000	MNT-5xx341-1000	MNT-6xx341-1000
	1250	MNT-2xx341-1250	MNT-4xx341-1250	MNT-1xx341-1250	MNT-3xx341-1250	MNT-5xx341-1250	MNT-6xx341-1250
4	100	MNT-2xx641-0100	MNT-4xx641-0100	MNT-1xx641-0100	MNT-3xx641-0100	MNT-5xx641-0100	MNT-6xx641-0100
	160	MNT-2xx641-0160	MNT-4xx641-0160	MNT-1xx641-0160	MNT-3xx641-0160	MNT-5xx641-0160	MNT-6xx641-0160
	250	MNT-2xx641-0250	MNT-4xx641-0250	MNT-1xx641-0250	MNT-3xx641-0250	MNT-5xx641-0250	MNT-6xx641-0250
	400	MNT-2xx641-0400	MNT-4xx641-0400	MNT-1xx641-0400	MNT-3xx641-0400	MNT-5xx641-0400	MNT-6xx641-0400
	630	MNT-2xx641-0630	MNT-4xx641-0630	MNT-1xx641-0630	MNT-3xx641-0630	MNT-5xx641-0630	MNT-6xx641-0630
	800	MNT-2xx641-0800	MNT-4xx641-0800	MNT-1xx641-0800	MNT-3xx641-0800	MNT-5xx641-0800	MNT-6xx641-0800
	1000	MNT-2xx641-1000	MNT-4xx641-1000	MNT-1xx641-1000	MNT-3xx641-1000	MNT-5xx641-1000	MNT-6xx641-1000
	1250	MNT-2xx641-1250	MNT-4xx641-1250	MNT-1xx641-1250	MNT-3xx641-1250	MNT-5xx641-1250	MNT-6xx641-1250

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
Other voltages may be available.

KOHLER CO., Kohler, Wisconsin 53044 U.S.A.
Phone 920-565-3381, Web site www.kohlergenerators.com
Fax 920-459-1646 (U.S.A. Sales), Fax 920-459-1614 (International)
For the nearest sales and service outlet in U.S.A. and Canada
Phone 1-800-544-2444

Kohler® Power Systems
Asia Pacific Headquarters
7 Jurong Pier Road
Singapore 619159
Phone (65)264-6422, Fax (65)264-6455

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 molded-case switch 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 250 amperes. Not all possible combinations are available.

SAMPLE MODEL NUMBER

MNT-266341-0250

Transfer Switch Family
M: Model M ATS

Type of Power Switch
M: Molded-Case Circuit Breaker
N: Molded-Case Switch (No Protection)

Frame
T: 40–1250 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 may be 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.

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 Co. generator distributor for availability.