

# **KMT/KM Kiln Specifications**

**USA** and Canada

# **KMT & KM Models**

Model	Phase	Volts	Amps	Watts	Max Temp ∘F	Copper Wire Size*	NEMA Receptacle	Safety Listing
KMT/KM614-3	1	115	20	2300	2250	10	5-20	Not Listed
KMT/KM614-3	1	115	20	2300	2250	10	5-30	CSA Only
KMT/KM714	1	208-240	20	3600	2300	10	14-30	UL Only
KMT/KM818/KM818-3	1	240	26.7	6400	2350	8	6-50	c (ŲL) us
KMT/KM818/KM818-3	1	208	26.7	5550	2350	8	6-50	¢ <b>Ϣ</b> ⊔սs
KMT/KM818-30A	1	240	21.7	5200	2300	10	6-30	:(Å)"
KMT/KM818-30A	1	208	24.0	4900	2300	10	6-30	c <b>ŲL</b> ∪s
KMT/KM822/KM822-3	1	240	33.4	8000	2350	8	6-50	c (M) us
KMT/KM822/KM822-3	1	208	38.5	8000	2350	8	6-50	: (M) us
KMT/KM1018/KM1018-3	1	240	39.4	9460	2350	8	6-50	r (M) us
KMT/KM1018/KM1018-3	1	208	40	8320	2350	8	6-50	c (M) us
KMT/KM1022/KM1022-3	1	240	48	11520	2350	6	6-50	c (VL) us
KMT/KM1022/KM1022-3	1	208	48	9984	2350	6	6-50	c (VL) us
KMT/KM1022/KM1022-3	3	240	34.6	11520	2350	8	15-50	£ (ŲL) us
KMT/KM1022/KM1022-3	3	208	34.6	9984	2350	8	15-50	¢ <b>(</b> L)∪s
KMT/KM1027/KM1027-3	1	240	48	11520	2350	6	6-50	¢∰us
KMT/KM1027/KM1027-3	1	208	48	9984	2250/2350	6	6-50	¢(ŲL) us
KMT/KM1027/KM1027-3	3	240	29.3	11520	2350	8	15-50	r (M) us
KMT/KM1027/KM1027-3	3	208	31.3	11000	2350	8	15-50	¢(ŲL)us
KMT/KM1218-3	1	240	48	11520	2350	6	6-50	¢ <b>(ŲL</b> )∪s
KMT/KM1218-3	1	208	48	9984	2350	6	6-50	ւ (Մ) us
KMT/KM1218-3	3	240	29.3	11520	2350	8	15-50	c (ŲL) us
KMT/KM1218-3	3	208	29.5	9984	2350	8	15-50	c (VL) us
KMT/KM1222-3	1	240	48	11520	2350	6	6-50	c (ŲL) us
KMT/KM1222-3	1	208	48	9984	2300	6	6-50	: (II) us
KMT/KM1222-3	3	240	34.6	11520	2350	8	15-50	c (V) us
KMT/KM1222-3	3	208	40	11520	2350	8	15-50	: (ŲL) us
KMT/KM1227-3	1	240	48	11520	2300	6	6-50	ε <b>ŲL</b> us
KMT/KM1227-3	1	208	48	9984	2185	6	6-50	¢ŲLus
KMT/KM1227-3	3	240	29.3	11520	2300	8	15-50	c (VL) us
KMT/KM1227-3	3	208	31.7	11000	2300	8	15-50	c (VL) us
KM-1	1	208-240	Switches up to 50 Amps		Determined by kiln model		6-50	c(VL)us
KM-1	3	208-240	Switches up to 50 Amps		Determined by kiln model		15-50	¢ŲLus

# KMT/KM KILN SPECIFICATIONS CONTINUED

#### **PK Models**

Model	Phase	Volts	Amps	Watts	Max Temp ∘F	Copper Wire Size*	NEMA Receptacle	Safety Listing
KMT/KM1627-3PK	3	240	66	23600	2350	3	Direct Wire	c (UL) us
KMT/KM1627-3PK	3	208	76	23600	2350	3	Direct Wire	c (UL) us
KMT/KM1627-3PK-LF	1	240	68	16300	2100	3	Direct Wire	c (UL) us
KMT/KM1627-3PK-LF	1	208	69	14300	2100	3	Direct Wire	c (ŲL) us
KMT/KM1627-3PK-LF	3	240	46	16300	2100	6	Direct Wire	c (VL) us
KMT/KM1627-3PK-LF	3	208	47	14300	2100	6	Direct Wire	c (UL) us
KMT/KM1231PK	1	240	72	17300	2350	3	Direct Wire	c (VL) us
KMT/KM1231PK	1	208	80	16640	2350	3	Direct Wire	c (UL) us
KMT/KM1231PK	3	240	44.5	17300	2350	6	Direct Wire	c (ŲL) us
KMT/KM1231PK	3	208	51.5	17300	2350	4	Direct Wire	c (ՄL) us
KMT/KM1227PK	1	240	60	14300	2350	4	Direct Wire	c (UL) us
KMT/KM1227PK	1	208	69	14300	2350	3	Direct Wire	c (UL) us
KMT/KM1227PK	3	240	40	14300	2350	8	Direct Wire	c (ՄL) us
KMT/KM1227PK	3	208	46.7	14300	2350	6	Direct Wire	c (ՄL) us

### **Models With KMLT Controller**

Model	Phase	Volts	Amps	Watts	Max Temp ∘F	Copper Wire Size*	NEMA Receptacle	Safety Listing
GlazeTech	1	240	17	4000	2350	12	6-20	Not Listed
GlazeTech	1	208	20	4000	2350	10	6-30	Not Listed
FireBox 8x4/8x6	1	115	15	1800	2350	12	5-15	c (UL) us
FireBox 8x6	1	115	15	1800	2250	12	5-20 Canada	¢ <b>(∳</b> Lus

- Kiln Electrical Requirements listed in Skutt literature or on the Skutt website are intended as a general guideline only for the recommended minimum copper circuit wire sizes.
- Use of aluminum wire for kiln circuits is not recommended.
- Wire size listed is based on recommended circuit breaker or fuse size and not the kiln's amperage rating.
- Wire size listed is based on using equipment terminations and insulated wiring conductors that are rated for use at 167° F (75° C) or better.
- Wire size listed is based on not more than three current-carrying conductors in raceway, cable, or earth (directly buried), and based on ambient temperature of 86° F (30° C).
- Using cable type circuit wiring or connecting to older type electrical equipment or installing in higher ambient temperature locations may require using a heavier gauge wire size.
- To minimize a low voltage condition to kiln, use heavier gauge wire for each additional 50 feet (15 meters) of circuit length.
- Local Electrical Codes can vary and will supersede Skutt recommendations.
- Consult a Qualified Electrician for your specific installation.

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## KMT/KM KILN SPECIFICATIONS CONTINUED

#### **ADDITIONAL POWER NOTES**

An electrician will need to make the electrical connection on PK Kilns. The kilns are "Hard wired" to allow for greater amperage. For runs longer than 50 feet use heavier wire, numerically two numbers lower - for example, instead of #10, use #8. If you anticipate installing any larger kiln in the future, use the wire gauge recommended for the larger kiln.

**Three-phase operation.** Only kilns ordered to operate on a three-phase supply may be connected to three-phase power supplies. However, any 208V or 240V single-phase Skutt kiln can be properly powered via unbalanced connection to two of the three hot wires of a three-phase supply. Of course, the green safety ground connection provided in all Skutt power cords is also used. Always make sure the wires used from the breaker box are sized for the amperage rating of the kiln you are connecting.

**208 versus 240 supplies.** As you can see from the chart, most Skutt models are available in either 208 or 240 volt versions. The exception is Model KM-714 which is universal, and will fire with 240V or 208V power.

The "120/208V" supply is increasingly encountered in schools and newly-built communities, because it's more efficient for heavy 120V loads. This affects Models KM-818, KM-1018, KM-1027 and KM-1227 because their elements receive the full 208 (or 240) applied volts. The 208V versions should never be fired on a 240V supply without first installing a full set of 240V elements. Otherwise, all components will be seriously overtaxed.

**Important! Connecting and testing Model KM-714.** The wall outlets for Model KM-714 must be powered by 3-wire 120/240-208V solid neutral supply—as for an electric range. Only No. 10 wire is required (or No. 8 for runs over 50 feet). 30 Amp fuses or circuit breakers only—no larger or smaller—are recommended. The U-shaped fourth blade of the 4W30 Amp grounding plug is for the green ground wire and the blade opposite this U-shaped blade takes the white neutral wire.

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