

SWITCH MODE TRANSFORMERS

WCM 409 Series



PRODUCT DESCRIPTION

West Coast Magnetics' 409 series power transformers can handle from 1.5 kW to 10.0 kW of power, depending on switching frequency. This custom switchmode transformer can be adapted to any input or output configuration. Typical topologies are forward converter, full bridge and push-pull. This switchmode transformer can also serve as an isolation transformer with some deviation of power from levels shown in the table below.

FEATURES • BENEFITS



High power • Compact size • Quick turnaround

DESIGN CONSTANTS

Size Code	A _l (+30%-20%)	A _e core area (cm ²)	l _e magnetic path length (cm)	V _e core volume (cm ³)	W _a bobbin winding area (cm ²)	W _a A _c core area x winding area (cm ⁴)	Bobbin window width (mm)	Bobbin window height (mm)	Mean length per turn (cm)	Weight (kg)
E 71	9710	6.76	14.9	102	4.95	33.5	43.8	11.3	16.4	1.0
E 72	19400	13.52	14.9	204	4.95	66.9	43.8	11.3	21.5	1.7
E 73	29150	20.28	14.9	306	4.95	100.5	43.8	11.3	26.6	2.4

OUTPUT POWER VS FREQUENCY OF OPERATION (WATTS)

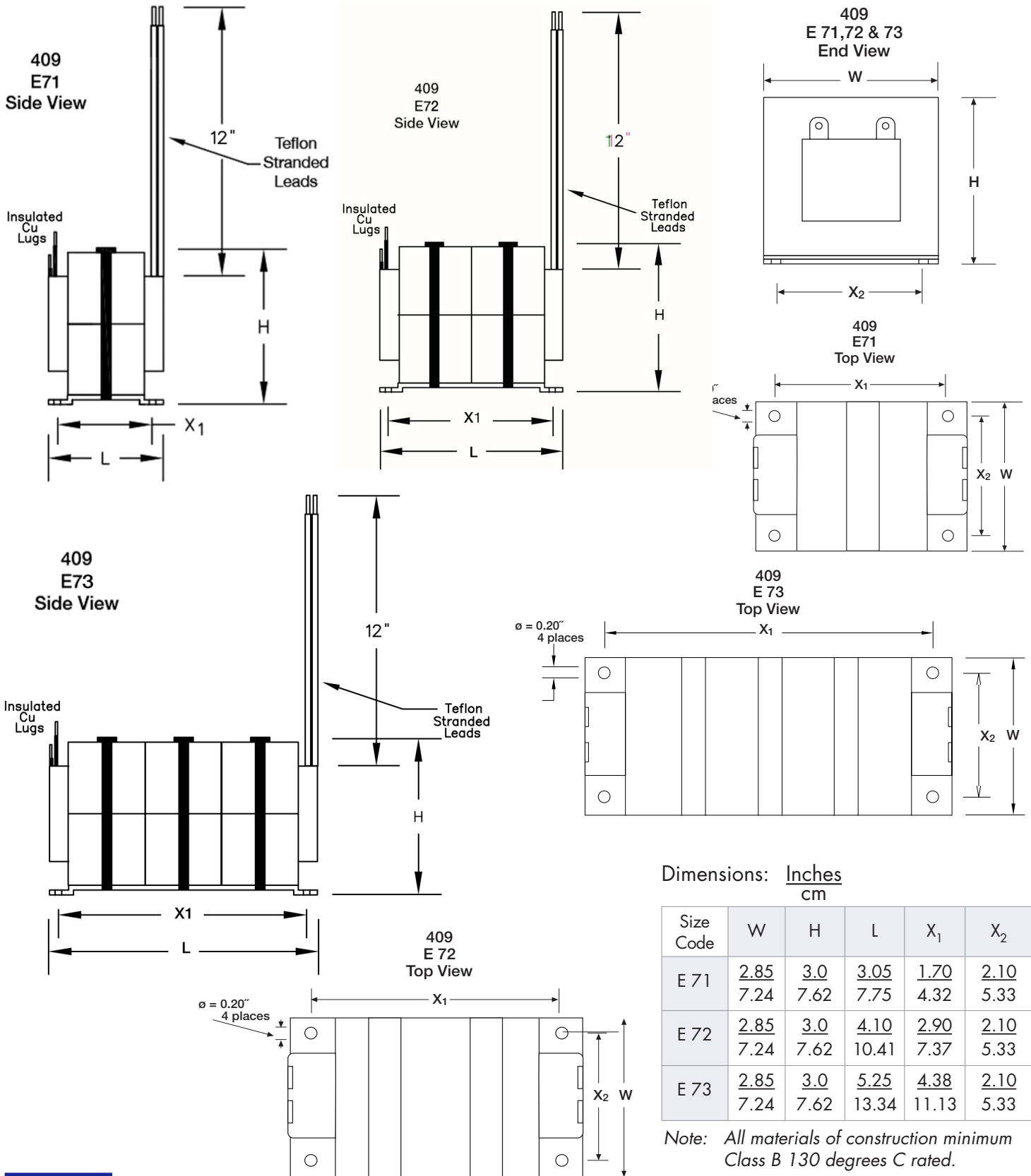
Size Code	10 kHz	25 kHz	50 kHz	100 kHz	200 kHz
E 71	1250	1600	2200	2900	3800
E 72	2000	2800	3800	5000	6500
E 73	3200	4400	6000	8000	10000

Note: Power ratings are estimates only. Final choice of a transformer size will depend on many variables including circuit topology, operating environment and isolation requirements.



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Dimensions: Inches
cm

Size Code	W	H	L	X ₁	X ₂
E 71	2.85	3.0	3.05	1.70	2.10
	7.24	7.62	7.75	4.32	5.33
E 72	2.85	3.0	4.10	2.90	2.10
	7.24	7.62	10.41	7.37	5.33
E 73	2.85	3.0	5.25	4.38	2.10
	7.24	7.62	13.34	11.13	5.33

Note: All materials of construction minimum Class B 130 degrees C rated.