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ENGINEERING DATA

The following load calculations and recommended operating ranges are based on standard 75ºF entering air (comforting heating). Consult factory for other applications.

1.	Conversion:	1 KW =	3413 B.T.U.
2.	Load Requirement:	KW =	(cubic Feet per Min. x Temperature Rise) / 3160
3.	Ohm's Law:	Watts =	$(Volts)^2$ / Resistance = Volts x Amps
4.	Line Current, 1 phase:	Amps =	Watts / Volts
5.	Line Current, 3 phase:	Amps =	Watts / (Volts x 1.73)
6.	Pressure Drop:	Inches	H_2O = [(KW / ft^2) / 760] x [(velocity in f.p.m.) / 500] ^{2}
7.	C.F.M. / F.P.M. Velocity Relationship	VEL./F.P.M. =	C.F.M. / (Duct Area/$Ft.^2$)
8.	KW per square foot:	KW / sq. ft =	KW / [(Duct width {inches} x Duct height {inches}) / 144]

HEAT-VELOCITY RELATIONSHIP

The following graph shows the recommended ranges for combinations of heat and velocity, which will result in safe operating temperatures.