




## General Specifications for all FE1 Models

<b>Approvals</b>	ATEX Approved (Directive 94/9/EC), GosStandart Certificate of Conformity (GOST)
<b>Hazardous Location Classifications</b>	CE ITS07ATEXQ5657  II 2 G, Ex d IIB T3 Zone 1
<b>Enclosures</b>	NEMA Type 7 & 9. For indoor use only. Do not immerse in water. Do not store or use in areas exposed to rain or snow.
<b>Motor Type</b>	Explosion-proof. Thermally protected. Permanently lubricated ball bearings.
<b>Fan</b>	Aluminum blades with steel spider and hub, 15.9 mm bore.
<b>Fan Guard</b>	Split design with close wire spacing. 6.3 mm diameter probe will not enter.
<b>Mounting Holes</b>	Two 14.3 mm diameter holes at top of heater.
<b>Heating Elements</b>	Three long-life, low watt-density, high grade metal-sheathed elements.
<b>Temperature High-Limit</b>	Automatic reset type, snap-action bimetal, open on temperature rise. Rated 100,000 cycles at 10 amps.
<b>Control Circuit</b>	120 Volts, 0.128 amps, 15VA. (Grounded)
<b>Optional Built-in Thermostat</b>	Flame-proof. 2°C to 28°C.
<b>Control Transformer</b>	Multiple primary, 120 volts secondary, 25 VA.
<b>Contactors</b>	40 or 75 amp. Rated for 500,000 mechanical operations. 120 Volts, 15 VA coil (separately fuse-protected).
<b>Heat Transfer Fluid</b>	Long-life formulated PROPYLENE glycol and water, freeze protected to -45°C.
<b>Cabinet Material</b>	14 gauge (1.90 mm) Steel. Epoxy coated with five-stage pretreatment, including iron phosphate. Optional Heresite® coating available for corrosive atmospheres.
<b>Core</b>	Core Steel with integral aluminum fins, vacuum charged and sealed. Optional Heresite® coating available for corrosive atmospheres.
<b>Conduit Material</b>	Heavy wall, 3.1 mm (0.122 in.) steel.
<b>Overpressure Protection</b>	Preset 690 kPa (100 psig) pressure relief valve, aluminum body, no serviceable parts.
<b>Operational Temperature Limitations</b>	-20°C to 40°C
<b>Storage Limitations</b>	-45°C to 80°C, short term to 150°C (302°F) maximum 16 hours continuous. Do not immerse in water. Do not store in areas exposed to rain or snow.





## Specifications for 60 Hertz FE1

60 HERTZ		FE1							
		NOMINAL kW	2.5 to 3.0	3.7 to 5.0	6.3 to 7.5	8.4 to 10	12.5 to 13.9	14.9 to 20	20.9 to 21
Maximum Altitude	(ft)	12,000	8,000	10,000	7,000	10,000	7,000	10,000	7,000
	(m)	3,658	2,438	3,048	2,134	3,048	2,134	3,048	2,134
Air Delivery @70°F	(CFM)	500		850		1,750		3,600	
	@21°F (m <sup>3</sup> /hr)	850		1,444		2,973		6,116	
Horizontal Throw	(ft)	15		30		40		70	
	(m)	4.6		9.1		12.2		21.3	
Maximum Mounting Height (to underside)	(ft)	7		10		10		20	
	(m)	2.1		3.0		3.0		6.1	
Motor Speed	(RPM)	1,725				1,725		1,725	
Fan Diameter	(in)	12				16		20	
	(mm)	305				406		508	
Net Weight	(lbs)	131				153		192	
	(kg)	59.5				69.5		87.3	
Shipping Weight	(lbs)	180				202		241	
	(kg)	81.8				91.8		109.5	

Weights are an approximate maximum.

## Specifications for 50 Hertz FE1

50 HERTZ		FE1							
		NOMINAL kW	2.5 to 3.0	3.7 to 5.0	6.3 to 7.5	8.4 to 10	12.5 to 13.9	14.9 to 20	20.9 to 21
Maximum Altitude	(ft)	12,000	8,000	10,000	7,000	10,000	7,000	10,000	7,000
	(m)	3,658	2,438	3,048	2,134	3,048	2,134	3,048	2,134
Air Delivery @70°F	(CFM)	400		700		1,450		3,000	
	@21°F (m <sup>3</sup> /hr)	679		1,189		2,463		5,096	
Horizontal Throw	(ft)	13		25		35		60	
	(m)	4.0		7.6		10.7		18.2	
Maximum Mounting Height (to underside)	(ft)	7		10		10		20	
	(m)	2.1		3.0		3.0		6.1	
Motor Speed	(RPM)	1,425				1,425		1,425	
Fan Diameter	(in)	12				16		20	
	(mm)	305				406		508	
Net Weight	(lbs)	131				153		192	
	(kg)	59.5				69.5		87.3	
Shipping Weight	(lbs)	180				202		241	
	(kg)	81.8				91.8		109.5	

Weights are an approximate maximum.

1. Minimum conductor size for 30°C (86°F) ambient. Derate conductor for ambient temperature. Use minimum 90°C (194°F) insulation.
2. Operation at lower voltage will result in reduced heat output and amp draw.
3. Add "T" to model number when adding a built-in thermostat.

### Installation Conditions:

1. The FE1 Series Electric Air Heaters are for dry indoor use only. Do not immerse in water. Do not store or use in areas exposed to rain or snow.
2. The FE1 heaters are to be used only in atmospheres having an ignition temperature higher than Temperature Code T3 200°C (329°F) for Class I & II.
3. Altitude restrictions apply – see specifications above.
4. Heaters should be connected to a fixed power supply and must be permanently mounted in a level, upright position during operation.
5. Read and be aware of the terms of our Warranty located in the owner's manual.
6. Refer to Owner's Manual.