

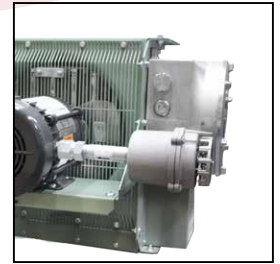
FX5 Explosion-Proof Electric Air Heaters

Ruffneck™ FX5 heaters are **cUL_{US}** certified for use in hazardous locations. They are designed for the harshest environments such as: dry indoor industrial applications, oil refineries, petrochemical plants, pulp and paper mills, grain elevators, hazardous waste storage facilities,



parts. All fasteners are zinc plated for corrosion protection.

Ruffneck™ heaters are built to last. All Ruffneck™ products are subjected to exhaustive technical analysis and testing during design and development, and are manufactured under a registered quality assurance program. As a result, they have consistently proven their safety and reliability.



wastewater treatment plants, etc., where specific explosive gases or dusts may be present.

The FX5 offers a larger junction box for easier installation, additional limit controls and a heavy duty core.

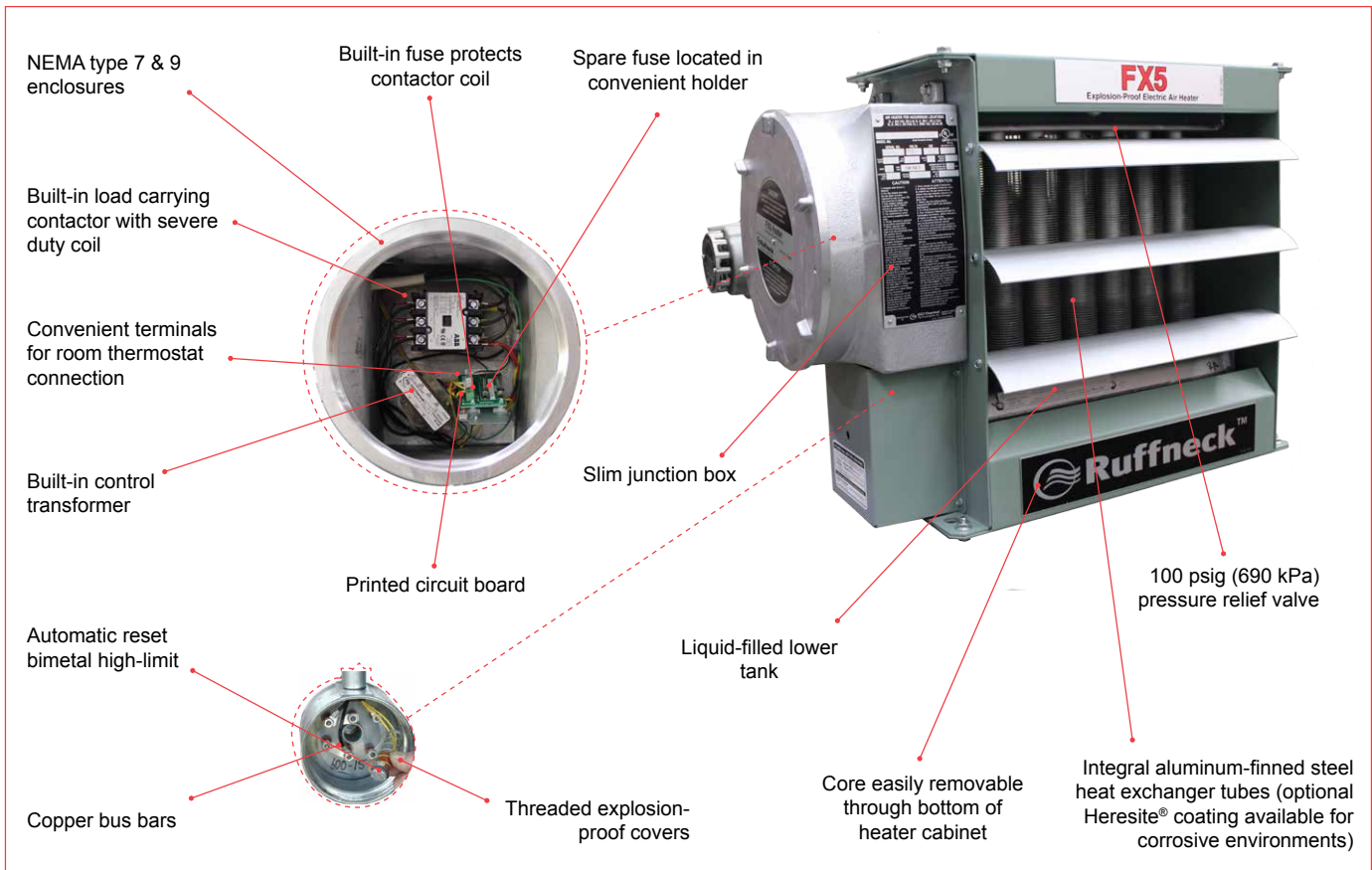
For hazardous location heating, rely on the Ruffneck™ FX5 heater for the most dependable, trouble-free service available.

Suitable for the following hazardous location classifications:

- Class I, Divisions 1 & 2, Groups C & D
- Class II, Division 1, Groups E, F & G
- Class II, Division 2, Groups F & G
- Class I, Zones 1 & 2, Groups IIA & IIB
- Temperature Code T3B 329°F (165°C)



The heater core assembly is contained in a sturdy, epoxy-coated 12-gauge steel cabinet, which also carries the motor and fan assembly. Adjustable louvres allow directional control of the airflow. A narrow gap, two-piece fan guard is provided to shield all moving



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FX5

Performance Data for 60 Hertz FX5
c UL_{us} Temperature Code T3B 165°C (329°F)

NOMINAL WATTAGE (kW)	MODEL	VOLTAGE	PHASE	TOTAL CURRENT (A)	OPTIONAL BUILT-IN DISCONNECT SWITCH	AIR TEMPERATURE RISE		Btu/hr
						°F	°C	
3	FX5-208160-030	208	1	18.5	DS5	19.0	10.5	10,250
	FX5-208360-030	208	3	10.6				
	FX5-240160-030	240	1	16.6				
	FX5-240360-030	240	3	9.6				
	FX5-480160-030 °	480	1	7.1				
	FX5-480360-030	480	3	4.8				
	FX5-600360-030	600	3	3.6				
5	FX5-208160-050	208	1	28.1	DS5	31.6	17.6	17,050
	FX5-208360-050	208	3	16.2				
	FX5-240160-050	240	1	24.9				
	FX5-240360-050	240	3	14.4				
	FX5-480160-050 °	480	1	11.2				
	FX5-480360-050	480	3	7.2				
	FX5-600360-050	600	3	5.5				
7.5	FX5-208160-075	208	1	40.2	DS5	27.9	15.5	25,600
	FX5-208360-075	208	3	23.1				
	FX5-240160-075	240	1	35.4				
	FX5-240360-075	240	3	20.5				
	FX5-480160-075 °	480	1	16.4				
	FX5-480360-075	480	3	10.2				
	FX5-600360-075	600	3	7.9				
10	FX5-208160-100*	208	1	52.2	Not Available	37.2	20.6	34,100
	FX5-208360-100	208	3	30.1	DS5			
	FX5-240160-100	240	1	45.8	DS5			
	FX5-240360-100	240	3	26.5	DS5			
	FX5-480160-100 °	480	1	21.6	DS5			
	FX5-480360-100	480	3	13.2	DS5			
	FX5-600360-100	600	3	10.3	DS5			
15	FX5-208360-150	208	3	44	DS5	27.1	15.1	51,200
	FX5-240160-150*	240	1	66.6	Not Available			
	FX5-240360-150	240	3	38.5	DS5			
	FX5-480160-150 °	480	1	32.1	DS5			
	FX5-480360-150	480	3	19.3	DS5			
	FX5-600360-150	600	3	15.2	DS5			
20	FX5-480160-200 °	480	1	42.5	DS5	36.1	20.1	68,250
	FX5-480360-200	480	3	25.3	DS5			
	FX5-600360-200	600	3	20	DS5			
25	FX5-480360-250	480	3	31.3	DS5	22.0	12.2	85,300
	FX5-600360-250	600	3	24.8	DS5			
30	FX5-480360-300	480	3	37.3	DS5	26.4	14.6	102,350
	FX5-600360-300	600	3	29.6				
35	FX5-480360-350	480	3	43.3	DS5	30.7	17.1	119,450
	FX5-600360-350	600	3	34.4				

Consult Terms & Conditions of Sale (or the FX5 Owner's Manual) for warranty information.

Note: (*) Exceeds the 48 amp circuit limit of NEC 424-22

(*) 480V 1 Phase units are certified Class I, Div. 1, Group D and Class II, Div.1, Groups F and G.

- Minimum conductor size for 86°F (30°C) ambient. Derate conductor for ambient temperature. Use minimum 194°F (90°C) insulation.
- Heater is functioning normally if at rated voltage the amp draw is within 10% of the value in this table.
- Operation at lower voltages will result in reduced heat output and amp draw
- Add "T" to model number when adding a built-in thermostat
- Add "D" to model number when adding a built-in disconnect switch
- Add "P" to model number when adding a built-in pilot light
- Add "S" to model number when adding a 3-way switch
- Add "H" to model number for units with high "off" (deenergized) ambient temperatures
- Add "U" to model number for units with continuous fan option.
- Add "A" to model number for units with stainless steel cabinet.
- Add "L" to model number for units with pilot and 3-way switch or large box option.
- Add "B" to model number for units with low ambient option (down to -58°F or -50°C).

See page 10 for model coding.

See page 8 for installation conditions.

FX5

Performance Data for 50 Hertz FX5

NOMINAL WATTAGE (kW)	MODEL	VOLTAGE	PHASE	TOTAL CURRENT (A)	OPTIONAL BUILT-IN DISCONNECT SWITCH	AIR TEMPERATURE RISE		Btu/hr
						°F	°C	
2.5	FX5-220150-025	220	1	16.1	DS5	19.7	11.0	8,550
4.2	FX5-220150-042			23.8	DS5	33.2	18.4	14,350
6.3	FX5-220150-063			33.3	DS5	28.5	15.7	21,500
8.4	FX5-220150-084			42.9	DS5	37.8	21.1	28,700
12.6	FX5-220150-126*			62.0	Not Available	27.5	15.2	43,000
2.8	FX5-230150-028	230	1	16.3	DS5	22.1	12.3	9,550
4.6	FX5-230150-046			24.1	DS5	36.4	20.2	16,000
6.9	FX5-230150-069			34.1	DS5	31.1	17.2	23,550
13.8	FX5-230150-138*			64.1	Not Available	30.1	16.6	47,100
2.5	FX5-380350-025	380	3	4.9	DS5	19.7	11.0	8,550
4.2	FX5-380350-042			7.5		33.2	18.4	14,350
6.3	FX5-380350-063			10.7		28.5	15.7	21,500
8.4	FX5-380350-084			13.9		37.8	21.1	28,700
12.5	FX5-380350-125			20.1		27.2	15.1	42,700
20.9	FX5-380350-209			32.9		22.0	12.1	71,350
2.8	FX5-400350-028	400	3	5.1	DS5	22.1	12.3	9,550
4.6	FX5-400350-046			7.7		36.4	20.2	15,700
6.9	FX5-400350-069			11.1		31.1	17.2	23,550
9.3	FX5-400350-093			14.5		42.0	23.2	31,750
13.9	FX5-400350-139			21.2		30.2	16.7	74,450
18.5	FX5-400350-185			27.8		40.2	22.3	63,150
23.1	FX5-400350-231			34.5		24.2	13.5	78,850
3.7	FX5-415350-037	415	3	6.4	DS5	29.3	16.3	12,650
7.5	FX5-415350-075			11.6		33.8	18.7	25,600
14.9	FX5-415350-149			22.0		32.5	18.1	50,850
22.4	FX5-415350-224			32.4		23.5	13.1	76,450
4.2	FX5-440350-042	440	3	6.7	DS5	33.2	18.4	14,350
8.4	FX5-440350-084			12.2		37.8	21.1	28,700
16.8	FX5-440350-168			23.3		36.5	20.3	57,350
20.9	FX5-440350-209			28.7		22.1	12.2	71,350

Notes:

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- Add "B" to model number for units with low ambient option (down to -58°F or -50°C).

Installation Conditions:

- The FX5 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.
 - The FX5 heaters are to be used only in atmospheres having an ignition temperature higher than 329°F (165°C).
 - Altitude restrictions apply - see specifications on next page.
 - Heaters should be connected to a fixed power supply and must be permanently mounted in a level, upright position during operation.
 - Read and be aware of the terms of our Warranty located in the owner's manual.
 - Refer to Owner's Manual.
- Note: (*) Exceeds the 48 amp. circuit limit of NEC 424-22.**

FX5



Ruffneck™

Explosion-Proof Electric Unit Heaters