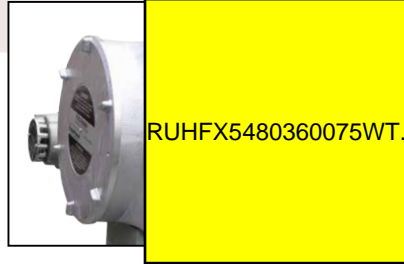


FX5 Explosion-Proof Electric Air Heaters

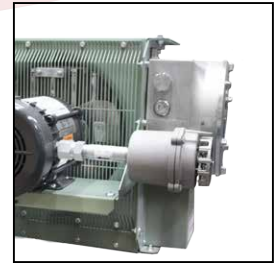
Ruffneck™ FX5 heaters are cULus certified for use in hazardous locations. They are designed for the harshest environments such as: dry indoor industrial applications, oil refineries, petrochemical plants, pulp and paper mills, grain elevators, hazardous waste storage facilities,



RUHFX5480360075WT

fasteners are zinc plated for corrosion protection.

Ruffneck™ heaters are built to meet the most demanding applications. Ruffneck™ products are subjected to exhaustive analysis and testing to ensure design and development,



and are manufactured under a registered quality assurance program. As a result, they have consistently proven their safety and reliability.

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:

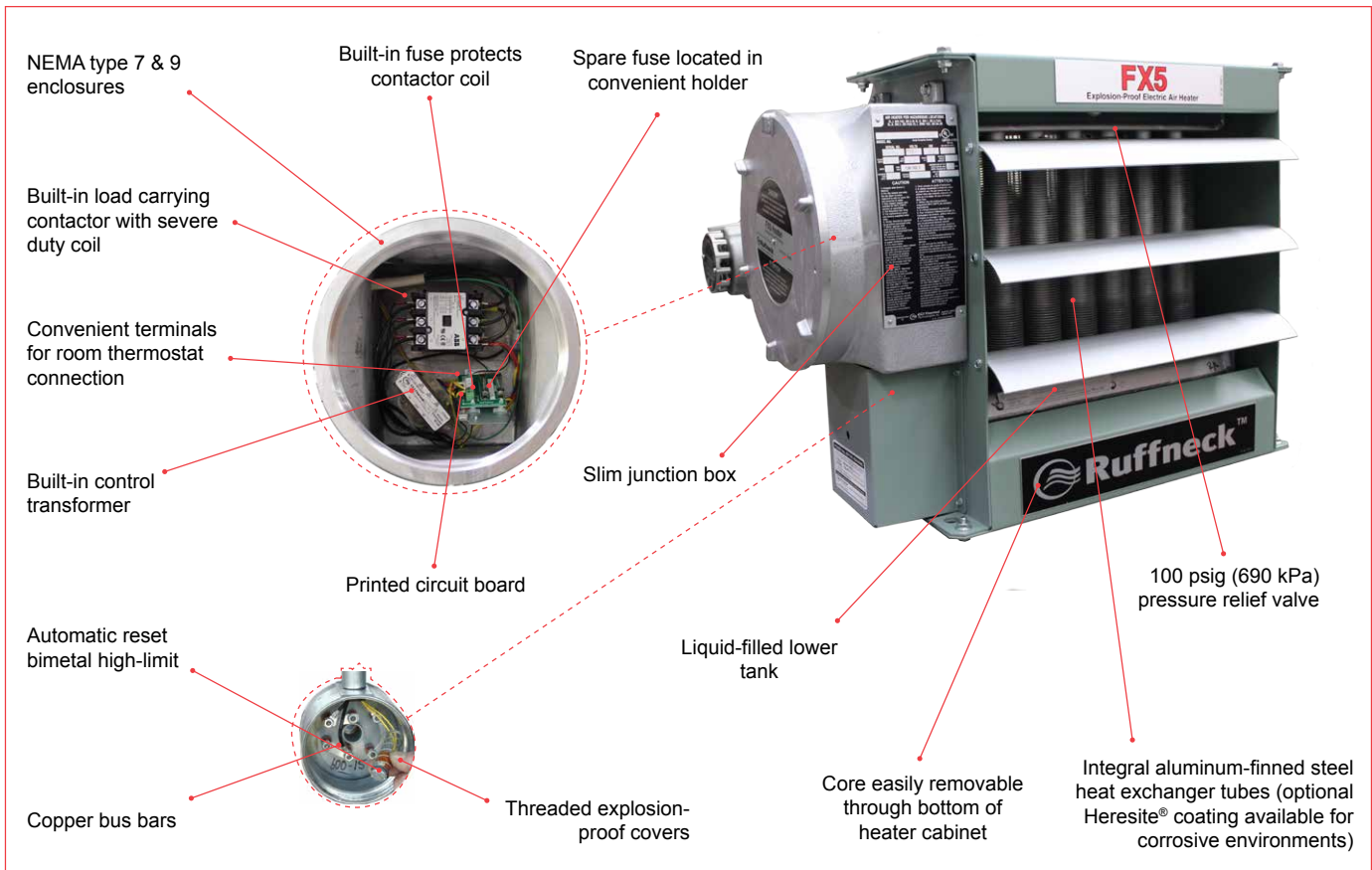
- Class I, Divisions 1 & 2, Groups C & D
- Class II, Division 1, Groups E, F & G
- Class II, Division 2, Groups F & G
- Class I, Zones 1 & 2, Groups IIA & IIB
- Temperature Code T3B 329°F (165°C)



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.

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



Heresite® is a registered trademark of Heresite® Protective Coatings Inc.

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:

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

Installation Conditions:

1. 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.
 2. The FX5 heaters are to be used only in atmospheres having an ignition temperature higher than 329°F (165°C).
 3. Altitude restrictions apply - see specifications on next page.
 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.
- Note: (*) Exceeds the 48 amp. circuit limit of NEC 424-22.**

FX5



Ruffneck™

Explosion-Proof Electric Unit Heaters