

3A

EXH Series Explosionproof Electric Air Heaters

Cl. I, Div. 1 & 2, Groups C, D
Cl. II, Div. 1, Groups E, F, G
Cl. II, Div. 2, Groups F, G
NEMA 7CD, 9EFG

Explosionproof
Dust-Ignitionproof

Applications:

EXH explosionproof electric heaters are used:

- In areas made hazardous by the presence of flammable gases and vapors, and combustible dusts
- For rugged locations including: oil refineries, petrochemical plants, rigs, pumping stations, turbine compressors, pulp and paper mills, coal mines, grain elevators, etc.
- In areas where flammable vapors or gases or highly combustible dusts may be present due to accidental or abnormal conditions
- For standby heat to prevent process heat loss, or for personnel comfort during maintenance/repair operations

Features:

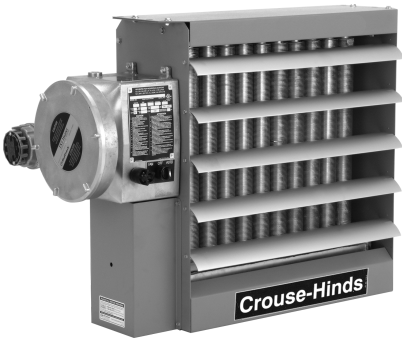
- Split fan guard for easy access to fan
- Compact design makes handling during installation easy
- Evacuated cores heat up quickly with even heat distribution
- Larger models offer greater kilowatt range providing more economical means to heat large areas
- Permanently sealed cores improve reliability and make field servicing easier
- Control box provides easy access for installation and maintenance

Certifications and Compliances:

- Class I, Division 1 & 2, Groups C, D
- Class II, Division 1, Groups E, F, G
- Class II, Division 2, Groups F, G
- NEMA: 7CD, 9EFG
- UL Standard: 823
- CSA Standard: C22.2 Nos. 25, 30, 46

Standard Materials and Finishes:

- Fan – Aluminum blade; steel spider and hub with 5/8 in. (15.875 mm.) bore
- Core – Steel with integral aluminum fins, vacuum charged and hermetically sealed
- Heating Elements – Three long life, low watt-density, high grade metal sheathed elements
- Heat Transfer Fluid – Long life formulated ethylene glycol and water, freeze protected to -49°F (-45°C)
- Cabinet Material – 14 gauge (0.075 in.) (1.90 mm) steel; epoxy coated with 5 stage pre-treatment including iron phosphate
- Conduit Material – Heavy walled, 0.122 in (3.1 mm.) steel cadmium plated



Heater shown has optional built-in thermostat.

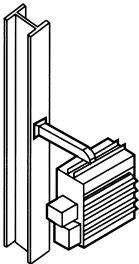
Options:

The following special options are available:

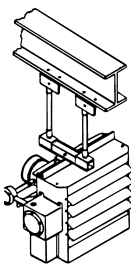
Description	Suffix
Built-in disconnect switch	D
Built-in pilot light	P
3-way switch	S
Built-in thermostat	T
Built-in HRC1 explosionproof thermostat	HRC

Accessories:

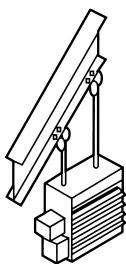
- Basic mounting kit – suitable for applications where the support arm can be bolted or welded directly to structural steel or concrete.
Cat. # BMK-EXH5 (insert fan size: 12, 16 or 20)
- Wall mounting kit – suitable for mounting on Z sections.
Cat. # WMK-EXH5 (insert fan size: 12, 16 or 20)
- Hanging mounting kit – simple and economical if adequate overhead structure exists. Requires 1/2" pipe, cut and threaded — not supplied.
Cat. # HMK-EXH5
- Swivel hanging mount kit – swivels 360°. Requires 1/2" pipe, cut and threaded – not supplied.
Cat. # SHMK-EXH5 (insert fan size: 12, 16 or 20)
- Pipe mounting kit – useful in buildings with insufficient strength to use other types of mounts. requires 3" pipe.
Cat. # PMKEXH5 (insert fan size: 12, 16 or 20)



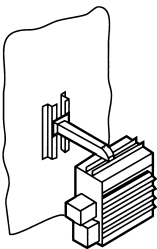
BMK Basic Mounting Kit



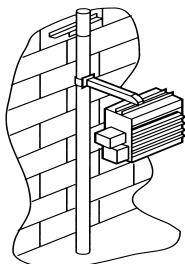
SHMK Swivel Hanging Mounting Kit



HMK Hanging Mounting Kit



WMK Wall Mounting Kit



PMK Pipe Mounting Kit

Crouse-Hinds
by **E.T.N**

EXH Series Explosionproof
Electric Air Heaters

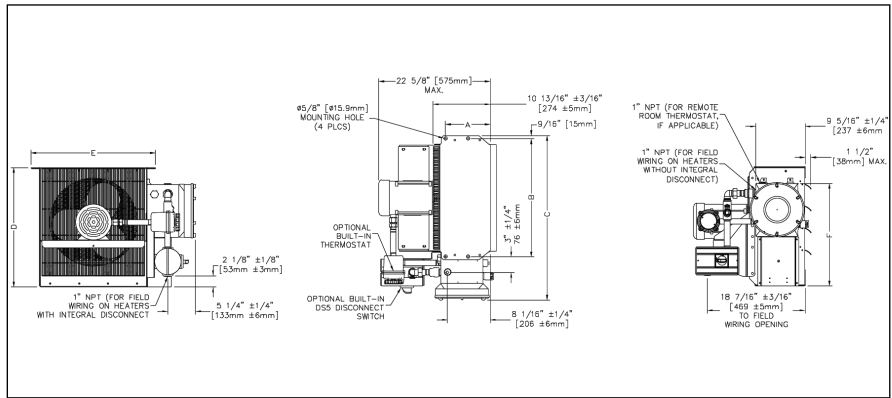
Cl. I, Div. 1 & 2, Groups C, D Explosionproof
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Specifications:

		EXH512				EXH516		EXH520		
	Nominal kW	3	5	7.5	10	15	20	25	30	35
Maximum Altitude	(ft.) (m.)	12,000 3,658	8,000 2,438	10,000 3,048	7,000 2,134	10,000 3,048	7,000 2,134	10,000 3,048	7,000 2,134	6,000 1,829
Air Delivery @70°F @ 21°C	(CFM) (m³/hr)	500 850	500 850	850 1444	850 1444	1750 2973	1750 2973	3600 6116	3600 6116	3,950 6,711
Horizontal Throw	(ft.) (m.)	15 4.6	15 4.6	30 9.1	30 9.1	40 12.2	40 12.2	70 21.3	70 21.3	70 21.3
Max. Mounting Height	(ft.) (m.)	7 2.1	7 2.1	10 3.0	10 3.0	10 3.0	10 3.0	20 6.1	20 6.1	20 6.1
Motor Power	(HP) (kW)	½ 0.187	½ 0.187	½ 0.187	½ 0.187	½ 0.187	½ 0.187	½ 0.373	½ 0.373	½ 0.373
Fan Diameter	(in.) (mm.)	12 305	12 305	12 305	12 305	16 406	16 406	20 508	20 508	20 508
Net Weight	(lbs.) (kg.)	140 63.5	140 63.5	140 63.5	140 63.5	168 76.2	168 76.2	201 91.2	201 91.2	201 91.2
Shipping Weight	(lbs.) (kg.)	194 88	194 88	194 88	194 88	218 98.9	218 98.9	252 114.3	252 114.3	252 114.3
Motor Type	Explosionproof. Thermally protected. Permanently lubricated ball bearings. 1725 RPM.									
Fan Guard	Split design with close wiring spacing. ¼ in. (6.3mm.) probe will not enter.									
Heating Elements	Three long-life, low watt-density, high grade metal-sheathed elements.									
Temperature High-Limit	Automatic reset type, snap-action bimetal, open on temperature rise. Rated 100,000 cycles at 10 amps, handles 0.128 amps.									
Control Circuit	120 Volts, 0.128 ams, 15 VA.									
Control Transformer	Multi-tap primary, 120V secondary, 50 VA.									
Contactor	60 or 100 amp. rated 1,000,000 cycles at maximum capacity, operating at not more than 84% full load. 120V, 15 VA fuse protected coil.									
Overpressure Protection	Fusible alloy plug 170 psi (1.17 MPa).									
Temperature Code Rating	T3B 165°C (329°F) Class I & II.									
Temperature Limitations	Operational; -49°F to 176°F (-45°C to 80°C), short term to 248°F (120°C).									

Dimensions
In Inches:



		2.5 -	12.5 -	20.9 -	Dim.
Dimension	10 kW	20 kW	35 kW	Tolerance	±
A	in. mm	8 7/16 215	8 7/16 215	8 7/16 215	1/8 3
B	in. mm	18 3/16 462	22 5/16 566	26 1/4 667	1/8 3
C	in. mm	27 686	31 787	35 889	3/16 4
D	in. mm	18 1/2 470	22 1/2 572	26 1/2 674	1/8 3
E	in. mm	19 7/15 494	23 7/16 596	27 7/16 697	3/8 10
F	in. mm	17 1/2 444	19 1/2 495	21 13/16 554	5/16 8

Dimensional tolerances ±1/8" (3.2mm) unless otherwise specified.

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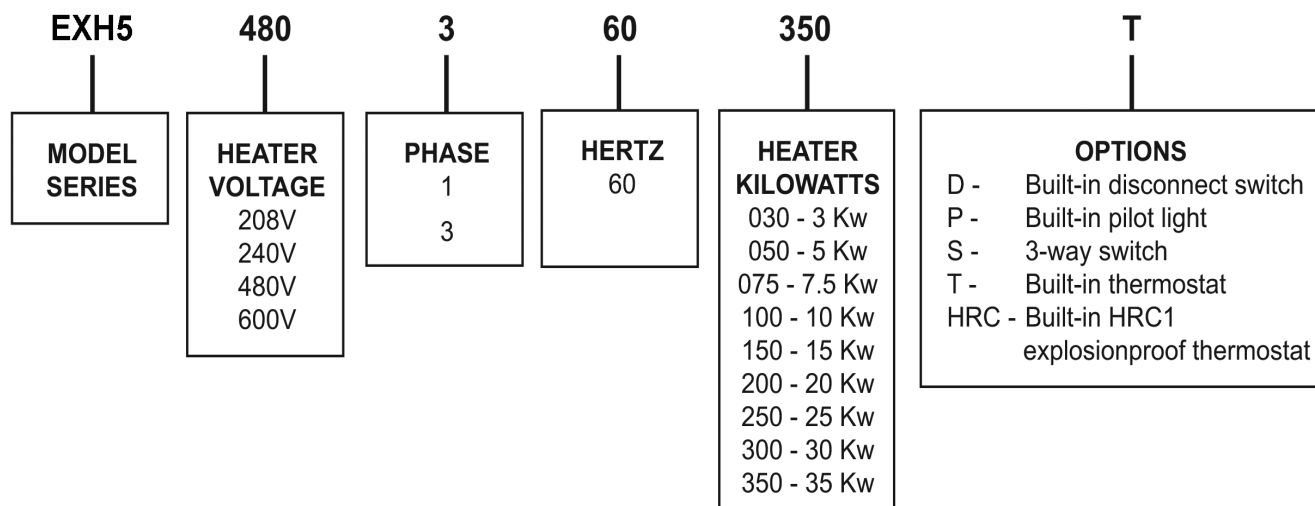
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Ordering Information:

	Nominal Wattage (kW)	Voltage	Phase	Cat. #	Maximum Total Current (Amperes)	Temperature Rise		Heat Output BTU/Hr.
3A	3.0	208	1	EXH5-208160-030	14.4	11.2	6.2	10,250
	3.0	208	3	EXH5-208360-030	8.3	11.2	6.2	10,250
	3.0	240	1	EXH5-240160-030	12.5	11.2	6.2	10,250
	3.0	240	3	EXH5-240360-030	7.2	11.2	6.2	10,250
	3.0	480	1	EXH5-480160-030	6.3	11.2	6.2	10,250
	3.0	480	3	EXH5-480360-030	3.6	11.2	6.2	10,250
	3.0	600	3	EXH5-600360-030	2.9	11.2	6.2	10,250
	5.0	208	1	EXH5-208160-050	24.0	18.6	10.3	17,100
	5.0	208	3	EXH5-208360-050	13.9	18.6	10.3	17,100
	5.0	240	1	EXH5-240160-050	20.8	18.6	10.3	17,100
	5.0	240	3	EXH5-240360-050	12.0	18.6	10.3	17,100
	5.0	480	1	EXH5-480160-050	10.4	18.6	10.3	17,100
	5.0	480	3	EXH5-480360-050	6.0	18.6	10.3	17,100
	5.0	600	3	EXH5-600360-050	4.8	18.6	10.3	17,100
	7.5	208	1	EXH5-208160-075	36.1	27.9	15.5	26,600
	7.5	208	3	EXH5-208360-075	20.8	27.9	15.5	26,600
	7.5	240	1	EXH5-240160-075	31.3	27.9	15.5	26,600
	7.5	240	3	EXH5-240360-075	18.0	27.9	15.5	26,600
	7.5	480	1	EXH5-480160-075	15.6	27.9	15.5	26,600
	7.5	480	3	EXH5-480360-075	9.0	27.9	15.5	26,600
	7.5	600	3	EXH5-600360-075	7.2	27.9	15.5	26,600
	10.0	208	3	EXH5-208360-100	27.8	37.2	20.7	34,150
	10.0	240	1	EXH5-240160-100*	41.7	37.2	20.7	34,150
	10.0	240	3	EXH5-240360-100	24.1	37.2	20.7	34,150
	10.0	480	1	EXH5-480160-100	20.8	37.2	20.7	34,150
	10.0	480	3	EXH5-480360-100	12.0	37.2	20.7	34,150
	10.0	600	3	EXH5-600360-100	9.6	37.2	20.7	34,150
EXH516	15.0	240	3	EXH5-240360-150	36.1	27.1	15.1	51,200
	15.0	480	1	EXH5-480160-150	31.3	27.1	15.1	51,200
	15.0	480	3	EXH5-480360-150	18.0	27.1	15.1	51,200
	15.0	600	3	EXH5-600360-150	14.4	27.1	15.1	51,200
	20.0	480	1	EXH5-480160-200	41.7	36.1	20.1	68,300
	20.0	480	3	EXH5-480360-200	24.1	36.1	20.1	68,300
	20.0	600	3	EXH5-600360-200	19.2	36.1	20.1	68,300
EXH520	25.0	480	3	EXH5-480360-250	30.1	45.2	25.1	85,400
	25.0	600	3	EXH5-600360-250	24.1	45.2	25.1	85,400
	30.0	480	3	EXH5-480360-300	36.1	26.4	14.6	102,360
	30.0	600	3	EXH5-600360-300	28.9	26.4	14.6	102,360
	35.0	480	3	EXH5-480360-350	42.1	30.7	17.1	119,450
	35.0	600	3	EXH5-600360-350	33.7	30.7	17.1	119,450

Catalog Number Example:



* Not available with built-in disconnect switch (option D).