

3420 & 3450 Series Heavy-Duty Fan Forced Wall Heaters

Features



- Powder coated bar stock steel tamper proof grille, with extruded Aluminum frame and 16 gauge housing.
- In-Built double pole tamper proof thermostat with a 60°-120°F temperature range & positive off; 3 phase heaters have 3 pole thermostat for positive off position with a 60°-165° temperature range
- Manual reset thermal limit switch.
- Corrosion resistant steel tubular element with brazed steel fins.
- Permanently lubricated, unit bearing, shaded pole motor with impedance protection.
- Propeller type fan blade:
 - Made in U.S.A.
- 1400 RPM motor; 245 CFM
- Factory installed options:
 - contactors (3420 & 3450 series)
 - circuit breakers (3450 series)
 - control transformers (3450 series)

Note: Wall box required - may be ordered early for rough in purposes.

Standard Models

HEATER		WALL BOX		WATTS	BTUs	VOLTS	PH	AMPS	WT. (LBS)			
MFG CATALOG NUMBER	MFG MODEL NUMBER	MFG CATALOG NUMBER	MFG MODEL NUMBER									
SERIES 3420 - ROUGH-IN DIMENSIONS: 19 3/8" H x 14 1/4" W x 4 1/4" D GRILL DIMENSIONS: 21 1/2" H x 17 1/16" W												
06911302	F3422T	06915702	Box 3420	2000	6826	208	1	9.6	41			
06911902	H3422T					240		8.3				
06911702	G3422T					277		7.2				
03846202	J3422T			2000	6826	208	3	5.6				
03846402	K3422T					240		4.8				
06912302	F3423T			3000	10239	208	1	14.4				
06913102	H3423T					240		12.5				
06912702	G3423T					277		10.8				
03846302	J3423T			3000	10239	208	3	8.3				
03846502	K3423T					240		7.3				
06913302	F3424T			4000	13652	208	1	19.2				
06913802	H3424T					240		16.7				
06913602	G3424T					277		14.4				
06914002	J3424T					208	3	11.1				
06914102	K3424T					240		9.6				
06914302	F3425T					5000	17065	208				
06915102	H3425T			240	20.8							
06914802	G3425T			277	18.1							
06915302	J3425T	5000	17065	208	3	13.9						
06915602	K3425T			240		12.0						

HEATER		WALL BOX		WATTS	BTUs	VOLTS	PH	AMPS	WT. (LBS)			
MFG CATALOG NUMBER	MFG MODEL NUMBER	MFG CATALOG NUMBER	MFG MODEL NUMBER									
SERIES 3450 - ROUGH-IN DIMENSIONS: 23 1/8" H x 14 1/4" W x 4 1/4" D GRILL DIMENSIONS: 25 1/2" H x 17 1/16" W												
06916102	F3452T	06919102	Box 3450	2000	6826	208	1	9.6	55			
06916802	H3452T					240		8.3				
03122902	G3452T					277		7.2				
03846602	J3452T			2000	6826	208	3	5.6				
03846801	K3452T					240		4.8				
06876802	F3453T			3000	10239	208	1	14.4				
06917702	H3453T					240		12.5				
03122802	G3453T					277		10.8				
03846702	J3453T			3000	10239	208	3	8.3				
03846901	K3453T					240		7.3				
06917802	F3454T			4000	13652	208	1	19.2				
06918102	H3454T					240		16.7				
03119902	G3454T					277		14.4				
06918502	J3454T					208	3	11.1				
03166502	K3454T					240		9.6				
03129802	F3455T					5000	17065	208				
03121302	H3455T			240	20.8							
03123802	G3455T			277	18.1							
06919002	J3455T	5000	17065	208	3	13.9						
03130702	K3455T			240		12.0						

Note: Please see page 60 for custom color availability - add 10% to net heater cost.

Note: Products listed in this section are custom built and subject to 100% cancellation/restocking charges.

Product Specifications

Contractor shall supply and install heavy duty wall mounted forced air electric heaters of the wattage, voltage and phase as specified. The heater shall so be designed to provide an even distribution of heated air to the space to be heated by drawing return air in the peripheral area of the heater across and through the element which shall then be discharged from the center section of the heater by means of an electric motor and axial flow fan blade. Heaters shall be recessed type to extend no more than 1 ½" from the finished wall or surface mounted to extend no more than 5 ¾" from the finished wall or semi-recessed type to extend no more than 3 ½" from finished wall or semi-recessed type to extend no more than 2 ½" from finished wall.

ENCLOSURE:

Heater front shall withstand 10.8 ft. lbs. (324 pounds) impact and 400 lbs. static force applied to an 8 sq. in. area at center grille location with less than ¼" permanent distortion. The combination return and supply grille assembly shall be constructed of ¼" x ¾" rounded edge horizontal steel louvers which shall be spaced for maximum opening of ¼". Louvers shall be welded at every intersection to three evenly spaced 1/16" diameter vertical members and completely framed in a heavy gauge natural anodized Aluminum extrusion. Front assembly shall be attached to the chassis by hidden tamper-resistant (Allen-head) machine screws. All other parts shall be 16 gauge steel Zinc coated, both sides finished in a high gloss or bronze colored baked powder coat finish.

MOTOR:

Motor shall be a permanently lubricated unit bearing, totally enclosed shaded pole type with impedance protection. Motors shall operate at no more than 1400 RPM and shall be same voltage as the heater. A protective shield shall surround the motor to separate return air from heated air.

PERFORMANCE:

Heaters shall have a rating of 245 CFM at 660 F.P.M. with a maximum temperature rise of 73°F.

ELEMENTS:

Element assemblies shall consist of two or three corrosion resistant steel sheathed type elements mechanically bonded to common corrosion resistant steel fins. Each sheathed element shall consist of helically coiled Nickel Chromium alloy resistant wire completely embedded in and surrounded by Magnesium Oxide, enclosed and wedged into corrosion resistant steel sheaths. Elements shall have 2" cold conductor pins extending into the sheath and shall have a density of no more than 60 Watts per inch.

THERMAL OVERLOAD:

Heaters shall be equipped with a "manual reset" thermal overload which disconnects elements and motor in the event normal operating temperatures are exceeded. For safety, if opened due to abnormal temperature, thermal overload shall remain open until manually reset. Automatic reset thermal overloads which allow the element to continue to cycle under abnormal conditions will not be accepted.

APPROVAL:

Heaters shall be ETL Listed.

OPTIONAL CONTROL SYSTEMS:

Heaters shall be operated from wall-mounted, line voltage, heavy-duty (tamper-proof) thermostats. Heaters with built-in, pre-wired contactors shall be operated from wall-mounted, line voltage, pilot duty (tamper-proof) thermostats. Heaters built with, pre-wired contactors (and control transformers) shall be operated from wall-mounted, pilot duty (24V) or (120V) wall-mounted tamper-proof thermostats. Heaters shall be controlled by integrally mounted thermostats. Thermostats shall be heavy-duty, hydraulic type with a temperature range of 60°F to 120°F for double pole units and 60°F-165°F for three pole units and with remote sensing bulb placed in the return air. Thermostats shall be electrically rated at least 125% of heater rating. Thermostats shall be electrically rated at least 125% of heater rating. Thermostats shall also act as a disconnect by breaking all ungrounded conductors in the OFF position. (Thermostat control knob shall be covered by a 16 gauge tamper-proof access plate to prevent adjustment by unauthorized personnel.)

CONTACTORS:

Where required, heaters shall be equipped with heavy-duty, definite purpose contactors with flame path separators and dust covers. Contactors shall cycle all ungrounded conductors. Contactors shall have holding coils (of the same voltage as the heater) or (120 Volts) or (24 Volts).

CONTROL TRANSFORMERS:

Heater shall be equipped with a Class 2 control transformer, sealed rating of 20 VA, to supply control circuits of (24 Volts) or (120 Volts). (120 Volt secondaries not available in single phase heaters over 3 KW).

CIRCUIT BREAKERS (3450 Series Only):

Heaters shall be equipped with built-in circuit breakers in order to allow the heaters to be supplied from feeder taps. A separate switch providing a positive off for control circuits shall be included where required. Circuit breakers and control switches shall be arranged so that all line side conductors will be separately enclosed when heater front is removed for servicing so that no current carrying parts are accessible without the use of additional tools.

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Factory Installed Accessories

Units with transformers must have a contactor. A control transformer with 120V secondary is available on all 3-phase models, 208V/240V 1-phase units up to 3KW, and up to 4KW on 277V. All heaters must be installed with a wall box.

MFG MODEL NUMBER	DESCRIPTION	SERIES OPTIONS	
		3420	3450
Suffix - R	Contactors with Coil same as heater	YES	YES
Suffix - R1	Contactors with 24V Coil	YES	YES
Suffix - R2	Contactors with 120V Coil	YES	YES
Suffix - C	Circuit Breakers - all models	NO	YES
Suffix - A1	Control Transformers With 24V Secondary	NO	YES
Suffix - A2	Control Transformers With 120V Secondary	NO	YES

MFG CATALOG NUMBER	MFG MODEL NUMBER	DESCRIPTION	WT. (LBS)
06919402	3450EX34	4" Surface Mounting Sleeve	6
06919302	3450EX16	2" Semi-Recessing Sleeve	4
06919202	3450EX8	1" Semi-Recessing Sleeve	4
06916002	3420EX34	4" Surface Mounting Sleeve	5
06915902	3420EX16	2" Semi-Recessing Sleeve	4
06915802	3420EX8	1" Semi-Recessing Sleeve	3