



Kraemer Consulting Engineers, P.L.L.C.
Mechanical & Electrical Engineers

Submittal Review

SUBMITTAL REVIEW NOTES

1. Correction or comments made on the submittals during review do not relieve the contractor from compliance and requirements of the sealed contract design drawings and specifications.
2. This check is only for review of general conformance with the design concept of the project and general compliance with the information given in the contract documents.
3. The contractor is responsible for confirming and correlating all quantities and dimensions; coordinating his work with that of all other trades; and performing his work in a safe and satisfactory manner.
4. The contractor is responsible for confirming the electrical requirements of each piece of equipment with the electrical drawings, Electrical Engineer, and Architect prior to ordering equipment.
5. The General Contractor and the Architect are also responsible for reviewing submittals prior to issuing to the field or ordering of equipment or materials.
6. Each trade is responsible for coordinating submittal information with the other trades as required.
7. Please review submittal thoroughly for additional stamps and notes on subsequent pages. A stamp on the front page does not constitute acceptance of entire submittal.
8. Submittals returned marked "REVIEWED - MAKE CORRECTIONS NOTED" do not require resubmittal provided that the Contractor agrees to comply with all exceptions noted in the submittal, and so states in a letter to the Architect. Provide final record submittal to the general contractor.
9. Submittals marked "REVISE AND RESUBMIT" requires a subsequent review based on the submittal comments.
10. Submittals marked "REJECTED" requires a subsequent review of an alternate equipment manufacturer. The submitted manufacturer is not acceptable based on the project contract documents and/or was not prior approved.
11. Final approval of the submittal for equipment procurement is the responsibility of the submitting contractor.
12. **Equipment proposed for early release by the contractor or Owner, prior to the issuance of signed and sealed set of construction documents, are to be considered "released at risk" with the understanding that possible changes to this equipment may be required based upon (1) city comments from the authority having jurisdiction, (2) information obtained from the Owner or (3) design changes based upon final coordination of the drawing set. The design consultant shall be held-harmless if additional costs or time delays are incurred due to these changes.**

Job Name:

KCE Job Number:

Submittal Number:

Submittal Name:

Architect:



Reviewed - No Exceptions Taken



Reviewed - Make Corrections Noted



Reviewed – For Record Only



Revise and Resubmit



Rejected

Reviewed By:

Date:

KRAEMER CONSULTING ENGINEERS, PLLC.
2050 W WHISPERING WIND DR, SUITE 158
PHOENIX, AZ 85085
(PH): 602-285-1669
(FX): 602-285-9450

Submittal Register #: 239000-0001
Spec Section:
Name: Electric Heating Equipment
Type: Product Data
Supplier/Manufacturer:
Notes:

Date: May 12, 2025
Required By: 2025-05-26
Status: Open

Receiver: KRAEMER CONSULTING ENG PLLC
Wesley Colgan

THE CONTENT WITHIN HAS BEEN EVALUATED AND CHECKED FOR GENERAL CONFORMANCE AND COMPLIANCE WITH CONTRACT DOCUMENTS

THIS REVIEW DOES NOT RELIEVE THE SUBCONTRACTOR, FABRICATOR, OR VENDOR OF RESPONSIBILITY FOR COMPLIANCE WITH CONTRACT DOCUMENTS

ALSTON CONSTRUCTION COMPANY

Project Name

41-2501



REVIEWED

REJECTED

REVISE

NOT REVIEWED

BY SStokes

DATE 5/12/2025

SUBMITTAL# 239000-0001 **SPEC** 23-9000

This review is only for general conformance of the project and general compliance. Corrections or comments made on these drawings during this review do not relieve Subcontractor from compliance with the requirements of the plans and specifications. Subcontractor is responsible for all dimensions and fabrication to be confirmed and correlated at the job site

Quality People. Building Solutions.

Comfort Systems USA (Arkansas), Inc.
P.O. Box 16620
Little Rock, AR 72231
Phone 501-834-3320
Fax 501-834-5416

Date: 5/7/2025

Return Request: 5/17/2025

Project: Amazon – LIT 3

Supplier: Airetech

Manufacturer: Markel

Submittal: Electric Unit Heaters

Submittal Number: 23 90 00-01

Drawing # and Installation: Mechanical Drawings

ARCHITECT

SM Design & Consulting
855 Bloomfield Avenue, Suite 220
Glen Ridge, NJ 07028
973-259-9500

ENGINEER

Kreamer Consulting Eng, PLLC
2050 W. Whispering Wind Drive, Suite 158
Phoenix, AZ 85085
602-285-1669

GENERAL CONTRACTOR

Alston Construction
255 Schilling Blvd. Suite 110
Collierville, TN 38017
901-861-2000

MECHANICAL SUBCONTRACTOR

Comfort Systems USA (Arkansas), Inc.
9924 Landers Rd.
N. Little Rock, AR 72117
501-834-3320

Notes:

dpierce@comfortar.com

9924 Landers Rd.
No. Little Rock, AR 72117



SUBMITTAL DATA

EQUIPMENT: Markel Electric Heaters

SPEC SECTION: 23 9000

TAGS: EUH-GH (GH-1 thru 5), EUH-FP1, EWH-A
ECH-A (A1 thru A4)

PROJECT: Amazon LIT3 - Port of Little Rock

LOCATION: Little Rock, Arkansas

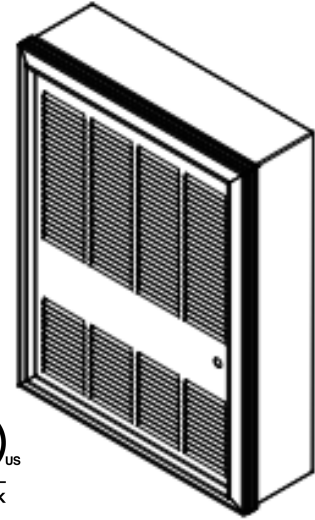
ENGINEER:  Kraemer Consulting Engineers, P.L.L.C.
Mechanical & Electrical Engineers

CONTRACTOR: **COMFORT SYSTEMS USA**
A R K A N S A S

DATE: 4/25/2025

SUBMITTED BY: Forrest Moseley
forrest@airetechcorp.com

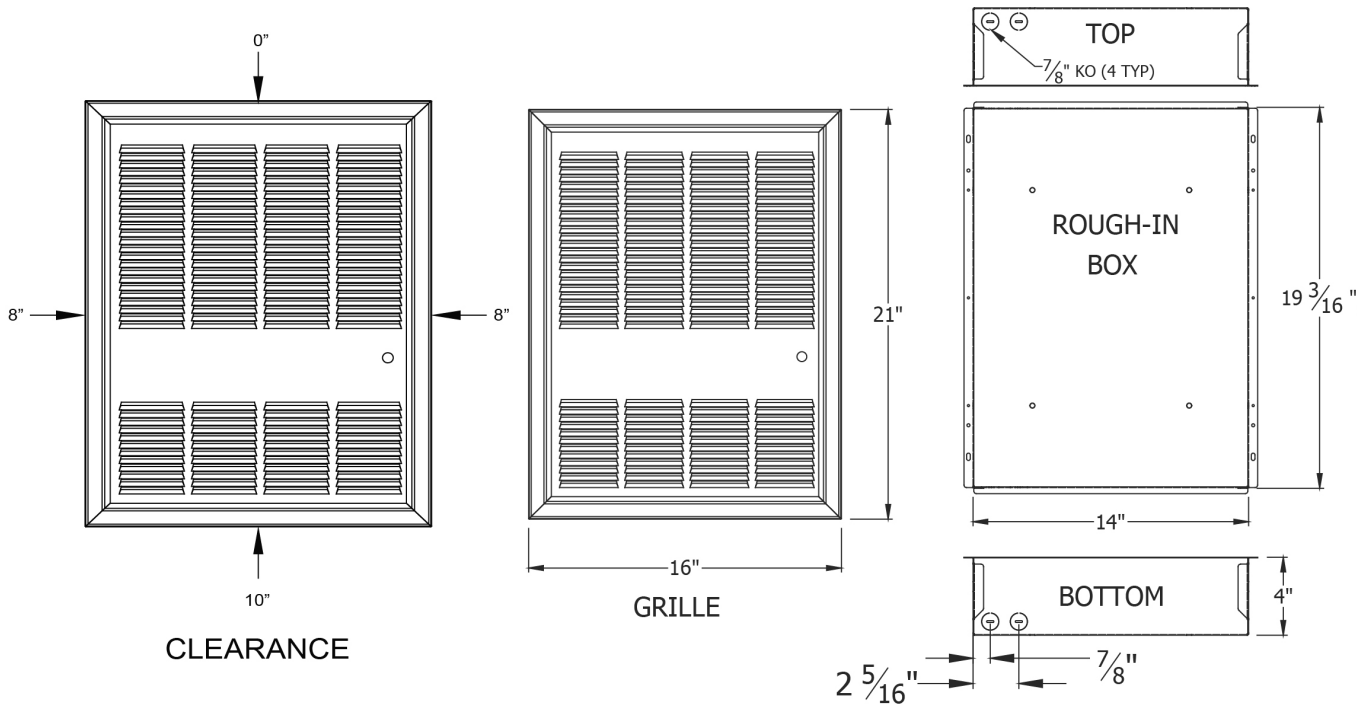
SALES ORDER NO.		QUOTE	539JB
CUSTOMER		DATE:	04/24/2025
PROJECT	Amazon LIT3		
SALES REP			
ENGINEER			
CONTRACTOR			
SUBMITTED BY	Airtechar		
APPROVED BY			
APPROVED BY			



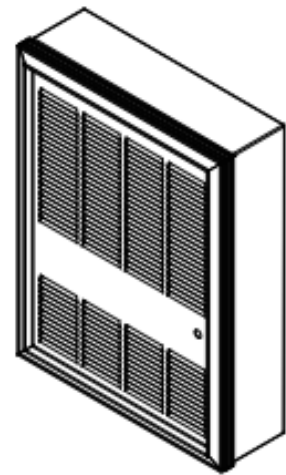
SUBMITTAL DATA SHEET

QTY	MODEL	TAG	WATTAGE	VOLTS	PHASE	AMPS	CFM	DISCONNECT	THERMOSTAT	OPTIONS
1	HF3326TD-RP	EWB-A	3000	208	1	14.4	175	Yes	Single Pole Tstat	None

NOTES/SPECIAL INSTRUCTIONS:



- Heavy 18 gauge steel construction (16 gauge grille optional)
- Powder coated paint finish
- Steel block fin element
- All units equipped with automatic over-heat limit protection
- Vane axial fan blade produces 175 CFM
- Dual wattage and voltage units available for 208/240 volts
- Surface Mounting Frame (shown) available for non-recessed applications
- Factory installed Tamper-Proof Thermostats, Fan Delay, and Disconnect included



MFG CATALOG NUMBER	MFG MODEL NUMBER	WATTS	BTUs	VOLTS	AMPS	WT. (LBS)
IN-BUILT SINGLE POLE TAMPERPROOF THERMOSTAT(0° - 110° TEMPERATURE RANGE) FOR DOUBLE POLE THERMOSTAT REPLACE "T" IN MODEL WITH "T2" - Add \$50						
03820502	E3321TD-RP	750	2560	120	6.25	26
03819902	E3322TD-RP	1000	3413		8.3	
03808802	E3323TD-RP	1500	5120		12.5	
03809302	F3326TD-RP	4000	13800	208	19.2	
03810202	F3327TD-RP	4800	16560		23	
03809402	HF3323TD-RP	1500 / 1125	5120 / 3840	240 / 208	6.2 / 5.4	27
03809502	HF3324TD-RP	2000 / 1500	6284 / 5120		8.3 / 7.2	
03809602	HF3325TD-RP	3000 / 2250	10350 / 7763		12.5 / 10.8	29
03809702	HF3326TD-RP	4000 / 3000	13800 / 10350		16.7 / 14.4	
03810302	HF3327TD-RP	4800	16560	240	20	29
03809802	G3323TD-RP	1500	5120	277	4.1	
03809902	G3324TD-RP	2000	6284		7.2	
03810002	G3325TD-RP	3000	10350		10.8	
03810102	G3326TD-RP	4000	13800		14.4	
03810402	G3327TD-RP	4800	16560		17.3	
03980702	J3326TD-RP*	4000	13800		208	11.11
03980802	J3327TD-RP*	4800	16560	13.33		
03980902	K3326TD-RP*	4000	13800	240	9.64	
03981002	K3327TD-RP*	4800	16560		11.57	

* Indicates 3-Phase models. All other models are 1-Phase.

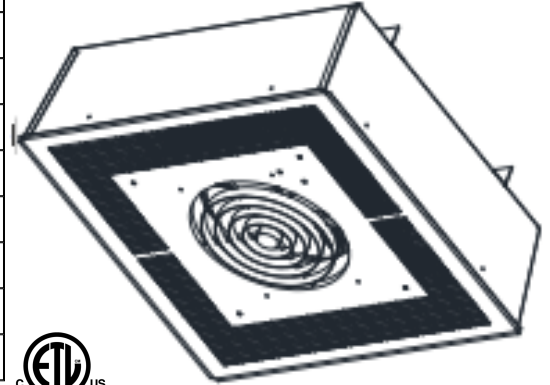
Accessories

MFG CATALOG NUMBER	MFG MODEL NUMBER	DESCRIPTION	TYPE	WT. (LBS)
03778502	BOX 3310	Additional Rough-in Box	Field Installed	3
03784502	3320EX33	4" Surface Mounting Frame		1
03829302	3320EX16	2" semi recess extender		1
-----	Suffix - HD	16 Gauge Steel Heavy Duty Grill	Factory Installed	2

Product Specifications

Furnish and install Heavy-Duty Forced Air wall heaters, where specified. The heaters shall be constructed of a heavy 18 gauge steel housing with an extruded Aluminum frame. The rough-in dimensions are 14 1/8" Wide x 19 1/2" High x 4" Deep. The units shall be available in ratings from 750 to 4800 Watts at 240, 208, and 277 Volts. The heaters shall have a low-speed 600 RPM, 4-pole motor which drives a vane axial blower to deliver a quiet 175 CFM of down flow air. The heating element shall be of the sealed tubular type with large, parallel steel fins for quick heat transfer. Unit shall have as a standard, a thermal overload cut-off for added safety, fan delay switch and builtin tamper proof thermostat which shall be calibrated to provide a range of 0°F. to 110°F. and manual disconnect switch. Optional accessories shall include a surface and semi-recess mounting adapter. All heaters shall be listed by ETL. The heating element shall be supplied with a manufacturers 1-year limited warranty

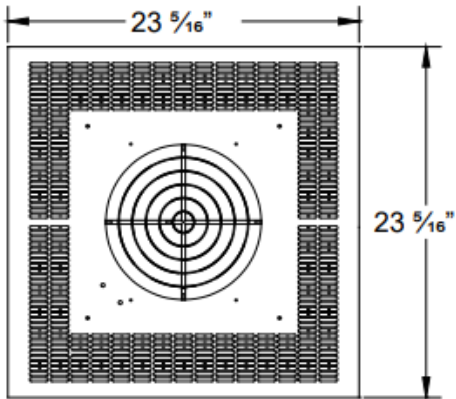
SALES ORDER NO.		QUOTE	539JB
CUSTOMER		DATE:	04/24/2025
PROJECT	Amazon LIT3		
SALES REP			
ENGINEER			
CONTRACTOR			
SUBMITTED BY	Airtechar		
APPROVED BY			
APPROVED BY			



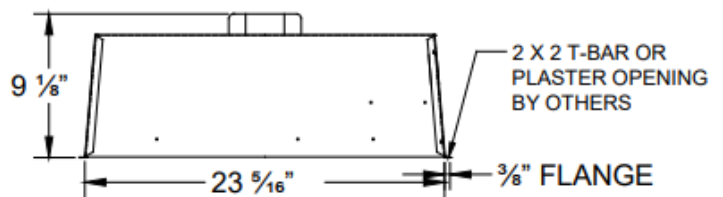
SUBMITTAL DATA SHEET

QTY	MODEL	TAG	WATTAGE	VOLTS	PHASE	AMPS	CFM	DISCONNECT	THERMOSTAT	OPTIONS
2	J3485R1S	EUH-GH1,GH	5	208	3	13.9	600	Yes	None	UT1001
2							600	None	None	None
7	J3483R1S	EUH-GH3, GH	3	208	3	8.3	600	Yes	None	UT1001
7							600	None	None	None

NOTES/SPECIAL
INSTRUCTIONS:

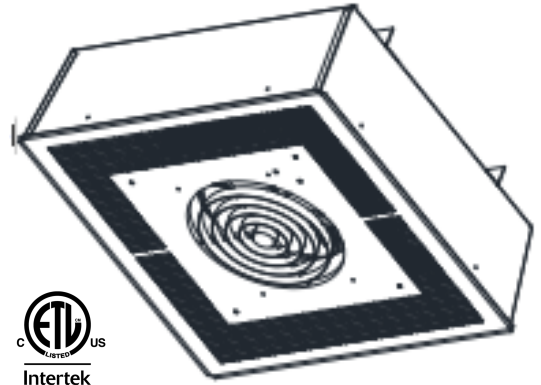


BOTTOM VIEW



SIDE VIEW
(ALL SIDES IDENTICAL)

- 20 gauge steel cabinet
- White powder coated paint finish
- All models have manual reset thermal limit, 24 volt control transformer and 24 volt relay (A1 Suffix) standard
- Enclosed steel fin sheathed element
- 12' maximum mounting height
- Optional louver available for exhaust outlet



MFG CATALOG NUMBER	MFG MODEL NUMBER	KW	BTUs	VOLTS	PH	AMPS	TEMP RISE
03153302	F3482A1	2	6826	208	1	9.6	15 °F
03152602	H3482A1			240		8.3	
03149702	G3482A1			277		7.2	
03184702	P3482A1			480		4.2	
04702802	J3482A1	2	6826	208	3	5.6	15 °F
03984902	K3482A1			240		4.8	
04702402	Y3482A1			480		2.4	
03153202	F3483A1	3	10200	208	1	14.4	22 °F
03148402	H3483A1			240		12.5	
03148102	G3483A1			277		10.8	
03184802	P3483A1			480		6.3	
04706402	J3483A1	3	10200	208	3	8.3	22 °F
03985002	K3483A1			240		7.2	
04702502	Y3483A1			480		3.6	
03153602	F3484A1	4	13600	208	1	19.2	30 °F
03155402	H3484A1			240		16.8	
03148002	G3484A1			277		14.4	
03185002	P3484A1			480		8.3	
03148702	J3484A1	4	13600	208	3	11.1	30 °F
03148202	K3484A1			240		9.7	
03185802	Y3484A1			480		4.8	
03154802	F3485A1	5	17000	208	1	24.1	37 °F
03155102	H3485A1			240		20.8	
03149602	G3485A1			277		18.1	
03185402	P3485A1			480		10.4	
03150802	J3485A1	5	17000	208	3	13.9	37 °F
03180902	K3485A1			240		12.1	
03184002	Y3485A1			480		6.1	
03661002	PT3480	Recess Frame = Weight 5 lbs.					

Notes

- Optional controls must be factory installed. Field installation is not acceptable and violates listing and factory warranty.
- Degree F air rise is measured at 1,000 F.P.M. and 600 CFM Throw designed for 8 to 12 foot ceilings AFF.
- Unit Weight: 50 lbs.
- Low Voltage: UT1001

Factory Installed Control Sections

SUFFIX	DESCRIPTION
S	Disconnect Switch
T	Single Pole Thermostat (40°-110°F)
RELAYS FOR FIELD SUPPLIED NIGHTLY SETBACK	
R*	Relay Control Voltage Same as Heater, *208/240V models only (control voltage field supplied)
R1	Relay 24V Control Voltage (control voltage field supplied)
R2	Relay 120V Control Voltage (control voltage field supplied)

Product Specifications

Contractor shall supply and install heavy duty ceiling mounted forced air electric heater(s) of the wattage, voltage and phase as indicated on the plans. The heater shall be so designed to provide an even distribution of heated air to the space to be heated by drawing return air in the periphery of the heater, across and through the element and 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 and mounted flush with the finished ceiling. The return grille assembly shall be constructed of a one piece heavy gauge steel with 1/4" slots for return air and concentric rings for uniform air discharge. Grille assembly shall be attached to chassis by tamper-resistant (allen head) machine screws. All parts of enclosure shall be heavy gauge steel, zinc coated both sides and finished in neutral off white powder coat paint.

Enclosure shall be constructed of 1/6" x 3/8" rounded edge horizontal steel louvers which shall be spaced for maximum opening of 5/16". Louvers shall be welded at every intersection to evenly spaced 1/8" diameter vertical members. Discharge grille to have concentric rings for uniform air discharge. Grille assembly shall be attached to chassis by tamper-resistant (allen head) machine screws. All part of enclosure shall be heavy gauge steel, Zinc coated both sides and finished in neutral off white colored powder coat finish.

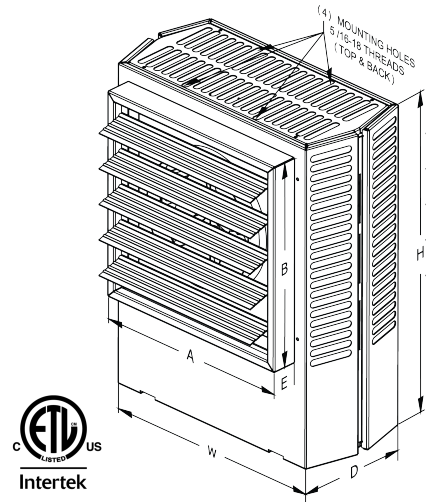
Motor shall be permanently lubricated, unit bearing, totally enclosed, with impedance protection. Motors shall operate at no more than 1300 RPM and shall be same voltage as the heater.

Heaters shall have a rating of 600 CFM at 1,000 F.P.M. with a maximum temperature rise of 44°F and sound level 63.9 dB.

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 sheath and shall have a density of no more than 60 Watts per inch

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. Heaters shall be ETL listed.

SALES ORDER NO.		QUOTE	539JB
CUSTOMER		DATE:	04/24/2025
PROJECT	Amazon LIT3		
SALES REP			
ENGINEER			
CONTRACTOR			
SUBMITTED BY	Airtechar		
APPROVED BY			
APPROVED BY			

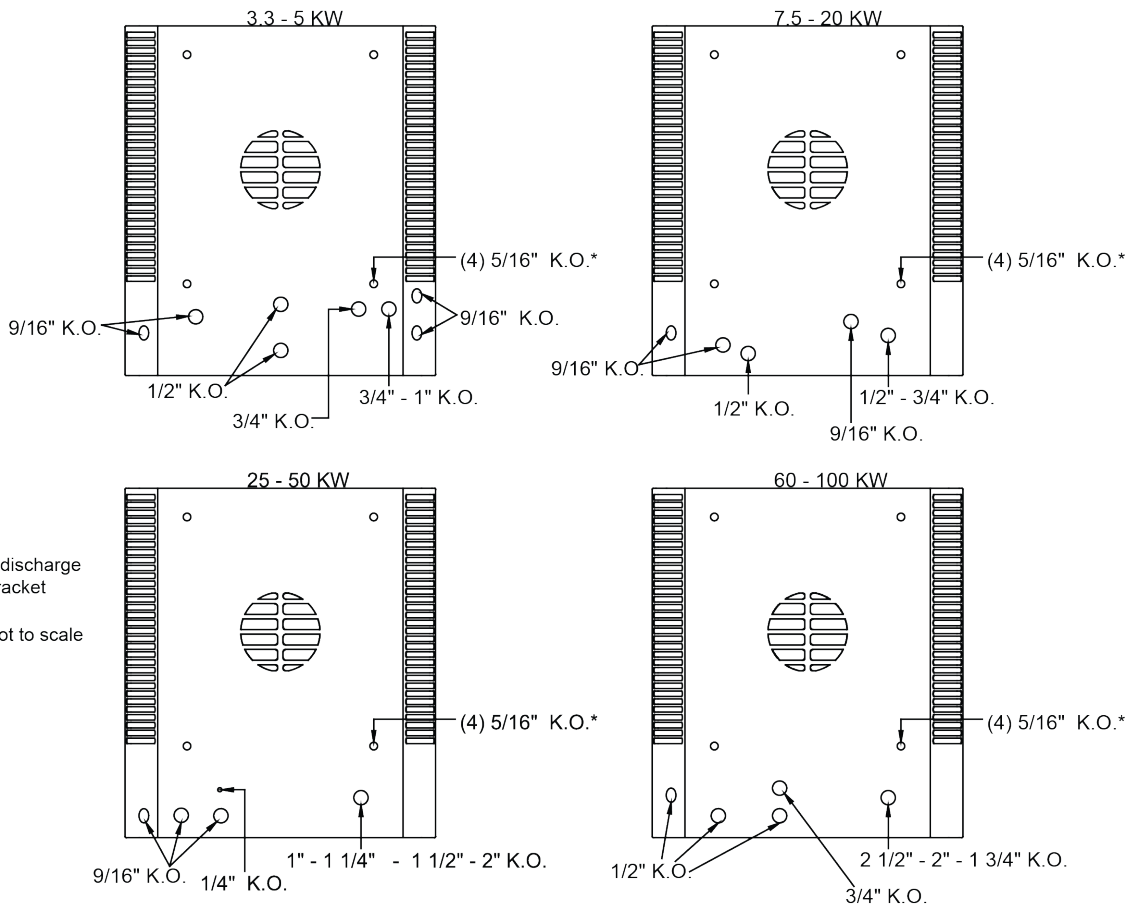
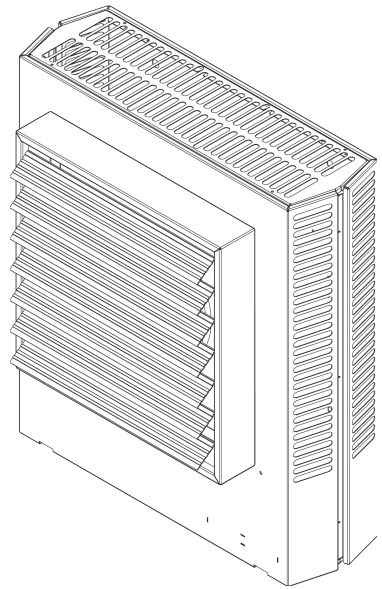


SUBMITTAL DATA SHEET										
QTY	MODEL	TAG	WATTAGE	VOLTS	PHASE	AMPS	DISCONNECT	THERMOSTAT	BRACKET	OPTIONS
1	P3P5105CA1/ DCS403	EUH-FP1	5.0 KW	480	3	6.1	DCS403	None	A5105	None
1							None	None		None

Product Dimensions

UNIT SIZE (KW)	DIMENSION (INCHES)						WEIGHT (LBS)
	H	W	D	E	A	B	
3.3 & 5	17 ³ / ₄	14 ¹⁵ / ₃₂	6 ¹ / ₂	1 ⁵ / ₈	11 ¹ / ₂	11 ¹ / ₂	25
7.5 & 10	24 ⁵ / ₁₆	21 ¹ / ₂	6 ¹ / ₂	2 ⁷ / ₃₂	15 ¹ / ₄	15 ¹ / ₄	54
15 & 20	28 ¹¹ / ₁₆	21 ¹ / ₂	6 ¹ / ₂	2 ⁷ / ₃₂	15 ¹ / ₄	15 ¹ / ₄	65
25 THRU 50	34	29 ¹ / ₄	10 ¹ / ₁₆	2 ⁵ / ₈	20 ¹ / ₄	20 ¹ / ₄	120
60 & 70	35 ¹ / ₂	30 ¹ / ₂	14 ¹ / ₂	5	23 ¹ / ₂	23 ¹ / ₂	141
80 - 90 - 100	39 ¹ / ₂	37 ⁵ / ₈	18 ¹ / ₂	5	27 ¹ / ₂	27 ¹ / ₂	202

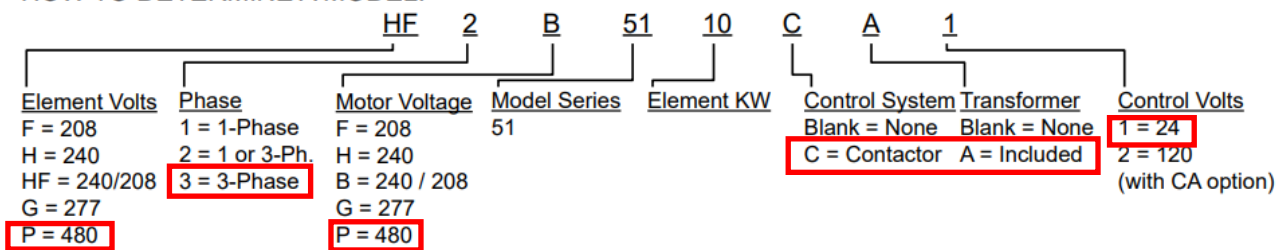
- Heavy 18 gauge steel construction
- Powder coated paint finish
- Copper clad steel sheath element with brazed fins and Nichrome element wire
- Totally enclosed fan motors
- Louvers are individually adjustable for directional air flow
- Optional remote and unit mounted controls include thermostats, disconnects, and fan switches
- Optional accessories include mounting brackets, louvers, fan guards, and dust shields



* For vertical discharge mounting bracket

Diagrams not to scale

HOW TO DETERMINE A MODEL:



* 600 Volt units 5KW - 50KW available on special order, consult factory for pricing & availability

Product Specifications

CONSTRUCTION:

Heavy 18 gauge welded steel cabinet with powder coated finish and control compartment housing a master terminal board with a hinged and latched access door, simplifying wiring, installation & maintenance.

HEATING ELEMENT:

Copper clad steel sheath element with continuously brazed steel fins formed to allow side draw through air flow.

OVERHEAT PROTECTION:

All units come equipped with automatic reset type limit controls to de-energize the heater should an over-temperature situation occur.

FAN and MOTOR:

Totally enclosed, 1-speed, 1-phase, permanently lubricated, thermally protected motors with unit bearings on 3 KW - 20 KW models. Totally enclosed, 2-speed, 1-phase, permanently lubricated, thermally protected motors with sleeve bearings on 25 KW - 50 KW models. All motors mounted with rubber insulators to minimize vibration & noise. Fan over-ride purges unit of residual heat at shutdown.

LOUVER ASSEMBLY:

Louvers are individually adjustable for directional control of air flow up to 15° from straight horizontal. Optional diffusers available for down flow (vertical discharge) applications

TEMPERATURE CONTROLS:

Optional low voltage and line voltage thermostats available with an adjustable temperature range of 40°F to 110° F. Units with model numbers ending in CA1 are factory wired for low voltage controls. 25 KW through 50 KW units are designed for two stage heating operation.

INSTALLATION:

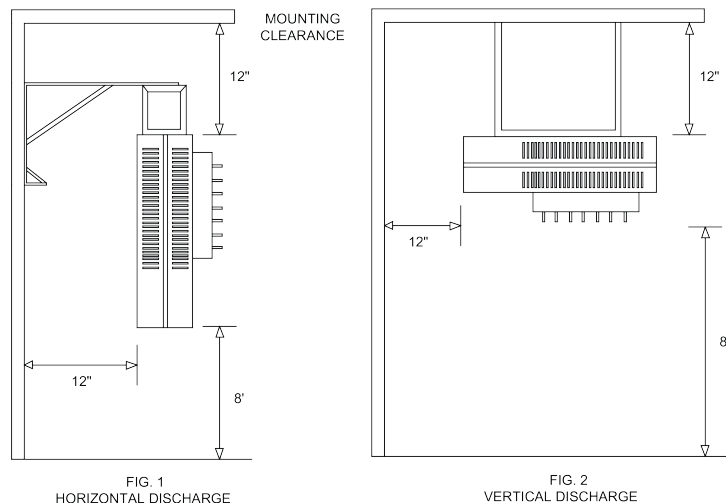
Unit Heaters can be mounted for horizontal or vertical discharge. Applications up to 6000 Ft. See UH Series above 6000 Ft

FEATURES:

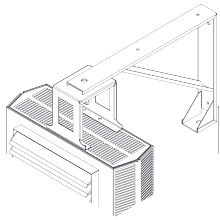
- Made in U.S.A.

FIELD INSTALLED OPTIONS:

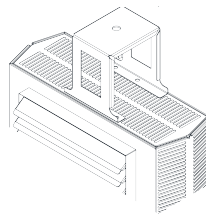
- In-unit or wall mounted temperature control thermostats low or line voltage.
- Summer fan switch to operate the fan only.
- Power disconnect switch.
- Heat stratification thermostat.



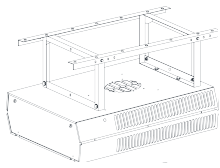
Accessories & Options



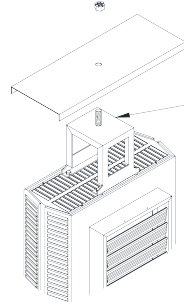
A5100 BRACKET			
WALL BRACKET & HEATER BRACKET	HEATER KW	BRACKET	WT (LBS)
	3.3 - 5	A5105	9
	7.5 - 20	A5120	13
	25 - 50	A5150	16
	60 - 70	A5175	25
	80 - 100	A51100	36



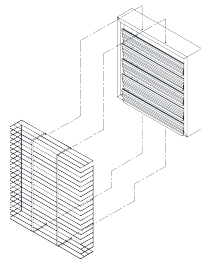
B5100 BRACKET			
HEATER BRACKET	HEATER KW	BRACKET	WT (LBS)
	3.3 - 5	B5105	2
	25 - 50	B5150	3
	60 - 70	B5170	5
	80 - 100	B51100	12



V5100 BRACKET			
VERTICAL MOUNT BRACKET	HEATER KW	BRACKET	WT (LBS)
	3.3 - 5	V5105	9
	7.5 - 20	V5120	13
	25 - 50	V5150	16
	60 - 70	V5175	19
	80 - 100	V51100	22



DS5100 DUST SHIELD			
DUST SHIELD	HEATER KW	BRACKET	WT (LBS)
	3.3 - 5	DS5105	3
	7.5 - 20	DS5120	4
	25 - 50	DS5150	5
	60 - 70	DS5175	10
	80 - 100	DS51100	17



OFG5100 FAN GUARD			
FAN GUARD	HEATER KW	BRACKET	WT (LBS)
	3.3 - 5	OFG5101	1
	7.5 - 20	OFG5102	1
	25 - 50	OFG5103	2
	60 - 70	OFG5175	4
	80 - 100	OFG51100	5

DISCONNECT SWITCH	DISCONNECT SWITCH MUST BE DERATED FOR USE AT MAX 80% OF TOTAL HEATER RATED AMPERAGE
--------------------------	---

THERMOSTATS		(BUILT IN) FACTORY SUPPLIED AND FIELD INSTALLED (EXCEPT SD MODEL THERMOSTAT)
T5100	40°-100°F	SINGLE POLE SINGLE STAGE FIELD MOUNTED IN CONTROL SECTION KNOCKOUT PROVIDED
T5102	60°-120°F	DPST FIELD INSTALLED - USED WITH 3.3 AND 5 KW UNITS LINE VOLTAGE WITH THREE PHASE POWER
T5122	45°-90°F	LOW VOLTAGE TWO STAGE FIELD INSTALLED FOR USE WITH UNITS 25 TO 50 KW
RK120EAA	50°-90°F	WALL MOUNTED SINGLE STAGE LOW VOLTAGE
TW123	40°-90°F	WALL MOUNTED TWO STAGE LOW VOLTAGE (25 TO 50 KW UNITS)
ET9SS	50°-90°F	WALL MOUNTED LINE VOLTAGE SINGLE POLL 22 AMP 120-277 VOLT
TW1512	50°-90°F	DPST WALL MOUNTED LINE VOLTAGE 25 AMP 120-277 VOLT (303-5 KW ON THREE PHASE POWER)
SD	50°-90°F	SETACK SONTROL WITH OCCUPANCY SENSOR AND DIGITAL DISPLAY

STEP CONTROLLER	60 TO 100 KW UNITS ONLY
	SEQUENCES ON THE STAGING IN THE 60 TO 100 KW HEATERS USING FIELD SUPPLIED SIGNAL OR C1025 WALL THERMOSTAT
C1025 THERMOSTAT	WALL THERMOSTAT WITH 0-10 VDC PULSING SIGNAL FOR STEP CONTROLLER

FAN CONTROL	(BUILT IN) FACTORY INSTALLED OR FIELD INSTALLED
FS	SUMMER FAN SWITCH FACTORY INSTALLED IN HEATER
TFS	SUMMER FAN SWITCH REMOTE WALL MOUNTED
TC5102 OR TC5103	STRATIFICATION THERMOSTAT FACTORY INSTALLED IN HEATER
TC1602	STRATIFICATION THERMOSTAT REMOTE WALL MOUNTED

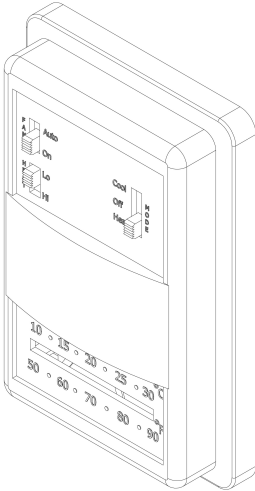
Standard Models

MFG CATALOG NUMBER	MFG MODEL NUMBER	KW	BTUs/H	VOLTS	PH	AMPS	CONTROL VOLTAGE	TEMP RISE	AIR THROW	CFM	RECOMMENDED MOUNTING HT.		WT. (LBS)					
											Horizontal	Vertical						
06450802	F1F5103N	3.3	11.2	208	1	15.9 / 9.17	208	26° F	12'	400	9'	9'	25					
06451002	HF1B5103N	3.3/2.5	11.2 / 8.5	240/208	1	13.7 / 11.9	240 / 208											
06456802	F2F5103N	3.3	11.2	208	1/3	15.9 / 9.17	208											
06457002	HF2B5103N	3.3/2.5	11.2 / 8.5	240/208	1/3	13.7 / 11.9	240 / 208											
					3	7.9/6.9												
06457202	G1G5103N	3.3	11.2	277	1	11.9	277											
06451202	P3P5103CA1N*			480	3	4.0	24											
06455402	F1F5105N	5.0	17.1	208	1	24.1	208	40° F	12'	400	9'	9'	25					
06455602	HF1B5105N	5.0/3.7	17.1 / 12.8	240/208	1	20.9 / 18.1	240 / 208											
06451402	F2F5105N	5.0	17.1	208	1/3	24.1	208											
					3	13.9												
06451602	HF2B5105N	5.0	17.1	240	1/3	20.8 / 18.1	240											
		3.7	12.8	208	1/3	17.1 / 10.4	208											
06458402	G1G5105N	5.0	17.1	277	1	18.1	277											
06451802	P3P5105CA1N*	5.0	17.1	480	3	6.1	24											
06452002	F2F5107CA1L*	7.5	25.6	208	1/3	36.1 / 20.8	24						34° F	22'	700	10'	12'	54
06452202	HF2B5107CA1L	7.5	25.6	240	1/3	27.1 / 31.3												
		5.6	19.2	208	1/3	31.3 / 27.1												
06459202	G1G5107CA1L*	7.5	25.6	277	1	27.1												
06452402	P3P5107CA1N*	7.5	25.6	480	3	9.1												
06452602	F2F5110CA1L*	9.9	33.8	208	1/3	47.8 / 27.4												
06452802	HF2B5110CA1L	10.0	34.1	240	1/3	41.2 / 24.0												
		7.5	25.6	208	1/3	36.1 / 20.8												
06456402	G1G5110CA1N*	10.0	34.1	277	1	36.1												
06453002	P3P5110CA1N*	10.0	34.1	480	3	12.4												
06453202	F3F5115CA1L*	15.0	51.2	208	3	41.7												
06453402	HF3B5115CA1L	15.0/11	51.2 / 38.4	240/208	3	36.1 / 31.3												
06453602	P3P5115CA1N*	15.0	51.2	480	3	18.1												
06453802	HF3B5120CA1L	19.7/14	67.2 / 50.5	240/208	3	47.8 / 41.1												
06454002	P3P5120CA1N*	20.0	68.3	480	3	4124.1.7												
06458802	F3F5125CA1L*	25.0	85.3	208	3	69.5												
06459402	HF3B5125CA1L	25.0/18	85.3 / 64.0	240/208	3	60.2 / 52.1												
06459802	P3P5125CA1N*	25.0	85.3	480	3	30.1												
06454202	F3F5130CA1L*	30.0	102.4	208	3	83.4												
06454402	HF3B5130CA1L	30.0/22	102.4 / 76.8	240/208	3	72.3 / 62.5												
06454602	P3P5130CA1N*	30.0	102.4	480	3	36.2												
06440402	F3F5140CA1L*	40.0	136.5	208	3	111.2												
06440602	HF3B5140CA1L	40.0/30	136.5 / 102.4	240/208	3	96.4 / 83.4												
06440802	P3P5140CA1N*	39.0	133.1	480	3	47.0												
06454802	F3F5150CA1L*	49.6	169.3	208	3	139.0												
06455002	HF3B5150CA1L	50.0/37	170.6 / 128.0	240/208	3	120.5 / 104.3												
06455202	P3P5150CA1N	50.0	170.6	480	3	60.3												
								51/56° F	50'	3100/2800	15'	22'	120					

Recommended Control Options, Control Accessory Options, & Control Accessories

MFG MODEL NUMBER	DISCONNECT SWITCH		THERMOSTAT		SUMMER FAN SWITCH		THERMOSTAT & SUMMER FAN SWITCH WALL MOUNTED	STRATIFICATION THERMOSTAT	
	1 Ø	3 Ø	IN-BUILT	WALL MOUNTED	IN-BUILT	WALL MOUNTED		IN-BUILT	WALL MOUNTED
F1F5103N	DCS 202	NA	T5100	ET9STS	FS5101	FSW51111	NA	TC5103	TC1602
HF1B5103N									
F2F5103N									
F2F5103N	NA	DCS 403	T5102	TW 1512	FS5101	FSW51111	NA	TC5103	TC1602
HF2B5103N	DCS 202	NA	T5100	ET5SS					
	NA	DCS 403	T5102	TW 1512					
G1G5103N	DCS 202	NA	T5100	ET5SS				NA	
P3P5103CA1N	NA	DCS 403		RK120EAA	FS5102	FSW5112	TF55101	TC5102	NA
F1F5105N	DCS 403	NA		S2025	FS5101	FSW5111	NA	TC5103	TC1602
HF1B5105N			ET5SS						
F2F5105N			NA	DCS 403					
HF2B5105N	DCS 403	NA	T5100	ET5SS					
	NA	DCS 403	T5102	TW 1512					
G1G5105N	DCS 403	NA	T5100	S2025				NA	
P3P5105CA1N	NA	DCS 403		RK120EAA	FS5102	FSW5112	TF55101	TC5102	NA
F2F5107CA1L	DCS 403	NA	T5100	RK120EAA	FS5101	FSW5111	TC5103	TC1602	
HF2B5107CA1L	DCS 403	NA							
	NA	DCS 403							
G1G5107CA1L	DCS 403	NA	T5100	RK120EAA	FS5102	FSW5112	TC5102	NA	
P3P5107CA1L	NA	DCS 403							
F2F5110CA1L	DCS 603	NA	T5100	RK120EAA	FS5101	FSW5111	TC5103	TC1602	
HF2B5110CA1L	NA	DCS 403							
	DCS 603	NA							
G1G5110CA1N	DCS 603	NA	T5100	RK120EAA	FS5102	FSW5112	TC5102	NA	
P3P5110CA1N	NA	DCS 403							
F3F5115CA1L	NA	DCS 403	T5100	TW123	FS5101	FSW5111	TC5103	TC1602	
HF3B5115CA1L		DCS 603							
P3P5115CA1L		DCS 603							
HF3B5120CA1L		DCS 403							
P3P5120CA1N		DCS 603							
F3F5125CA1L		DCS 403							
HF3B5125CA1L		DCS 603							
P3P5125CA1N		DCS 1003							
F3F5130CA1L		DCS 403							
HF3B5130CA1L		DCS 603							
P3P5130CA1N		DCS 1003							
F3F5140CA1L		DCS 603							
HF3B5140CA1L	DCS 403								
P3P5140CA1N	DCS 603								
F3F5150CA1L	DCS 1003								
HF3B5150CA1L	DCS 603								
P3P5150CA1N	DCS 1003								

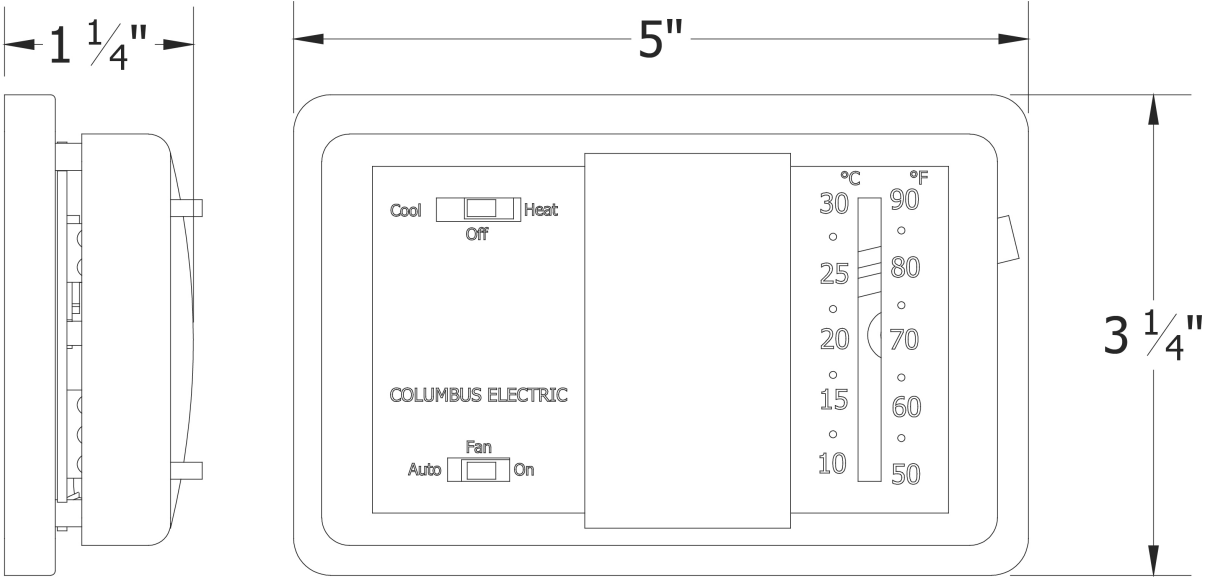
SALES ORDER NO.		QUOTE	539JB
CUSTOMER		DATE:	04/24/2025
PROJECT	Amazon LIT3		
SALES REP			
ENGINEER			
CONTRACTOR			
SUBMITTED BY	Airtechar		
APPROVED BY			
APPROVED BY			



SUBMITTAL DATA SHEET

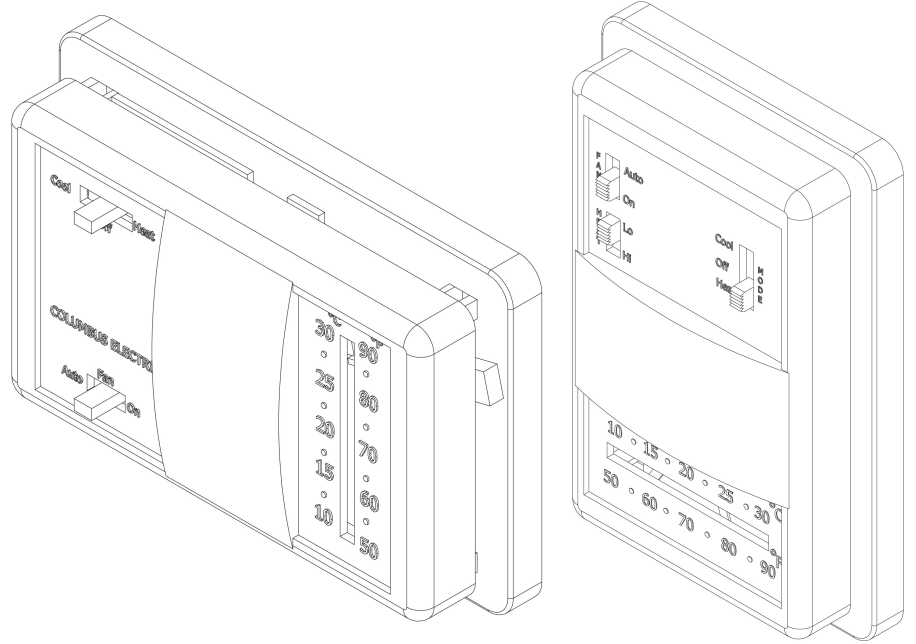
QTY	MODEL	TAG	RANGE	CONNECTIONS	POS. OFF	ANTICIPATOR
2	UT1001		50-90°F	R & W	None	Yes
7	UT1001		50-90°F	R & W	None	Yes

NOTES/SPECIAL INSTRUCTIONS:



Features

- Vertical or horizontal mounting
- Long life sealed contacts
- Leveling not required
- Does not contain mercury
- Fahrenheit & Celsius temperature scales
- Off-white product color



Operational Specifications

Setpoint Temperature Range

50-90°F 10-32°C

Rated Differential

2-3°F with anticipation

Voltage

Millivolt, and 24 VAC (20 -30V)

Amp Rating

1.0 Amp Max

Thermometer

50-90°F Bi-metal

Anticipation

Packaging Specifications

Case Size

3.25"H x 5"W x 1.38"D

Individual Carton Size

5.25"L x 3.38"W x 1.5"D

Individual Carton Weight

4.6 OZ

Master Carton Qty

50 Pcs

Master Carton Size

19"L x 11.5"W x 9"H

Carton Weight

17 LBS

Models

MFG MODEL NUMBER	MFG CATALOG NUMBER	DESCRIPTION	VOLTAGE	RANGE	CONNECTIONS	ANTICIPATOR	SWITCHES
UT1001	05230502	Heat only	24VAC & MV	50°-90°F	R & W	Yes	None
UT3001	05230602	Cool only	24 VAC	50°-90°F	R, Y & G	Yes	Cool/Off Fan/Auto
UT8001	05230702	Heat/Cool	24 VAC	50°-90°F	RC, RH, W,Y, & G	Yes	Heat/Off/Cool Fan/Auto
UT8003	05235202	Heat/Cool Hotpod	24 VAC	50°-90°F	R, Y, G, W1,W2	Yes	Heat/Off/Cool Fan/Auto/Lo/Hi
UT9001*	05231102	Heat only	Millivolt	50°-90°F	R & W	No	None

*Not UL Listed