

5100 Series Horizontal or Vertical Mounted Fan Forced Unit Heater

Standard Taskmaster Models & Series Notes

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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						
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						
06451602	HF2B5105N	5.0	17.1	240	1 / 3	20.8 / 18.1	240						
06458402	G1G5105N	5.0	17.1	208	1 / 3	12.1 / 10.4	208						
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							
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							
06456402	G1G5110CA1N	10.0	34.1	480	3	12.1							
06453002	P3P5110CA1N	10.0	34.1	480	3	12.1							
06453202	F3F5115CA1L	15.0	51.2	208	3	41.7							
06453402	HF3B5115CA1L	15.0/11.2	51.2 / 38.4	240/208	3	36.1 / 31.3							
06453602	P3P5115CA1N	15.0	51.2	480	3	18.1							
06453802	HF3B5120CA1L	19.7/14.8	67.2 / 50.5	240/208	3	47.8 / 41.1							
06454002	P3P5120CA1N	20.0	68.3	480	3	24.1							
06458802	F3F5125CA1L	25.0	85.3	208	3	69.5							
06459402	HF3B5125CA1L	25.0/18.7	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	30.0/22.5	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	40.0/30.0	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	50.0/37.5	170.6/128.0	240/208	3	120.5/104.3							
06455202	P3P5150CA1N	50.0	170.6	480	3	60.3							

International 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		
07153002	Q3H5103CA1	3.3	11263	380	3	5.02	24	26	12'	400	9'	9'	25	
07249202	R3H5103CA1			415		4.6		40					120	27
07249302	Q3H5105CA1			380		7.6								
04249402	R3H5105CA1	5.0	17065	415		6.96		34	22'	700	10'	12'	54	
07171302	Q3H5107CA1			380		11.4								
07249502	R3H5107CA1			415		10.5					45	10'	14'	55
06865702	Q3H5110CA1	380	15.2											
07249602	R3H5110CA1	10.0	34130	415		13.9		43	32'	1100	11'	20'	64	
07249702	Q3H5115CA1	15.0	51195	380		22.8		57					12'	18'
07249802	R3H5115CA1			415		20.9								
07041702	Q3H5120CA1	20.0	68260	380		30.4		40/44	45'	2000/1800	12'	22'	120	
07249902	R3H5120CA1			415		27.85								
07191902	Q3H5125CA1	25.0	85325	380		38.0		47/53	40'	3100/2800	15'	24'	120	
07106102	R3H5125CA1			415		34.8								
07250002	Q3H5130CA1	30.0	102390	380		45.6		40/45	55'	3100/2800	15'	24'	120	
07106202	R3H5130CA1			415		41.8								
07250102	Q3H5140CA1	40.0	136520	380		60.85		40/45	55'	3100/2800	15'	24'	120	
07098302	R3H5140CA1			415		55.7								

†)RU 9 FRQWURO DGG ³&\$ ´ VXi¿[†)RU 9 FRQWURO DGG ³&\$ ´ VXi¿[

NOTES:

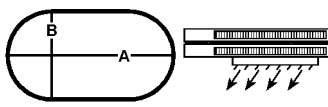
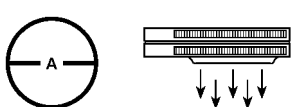
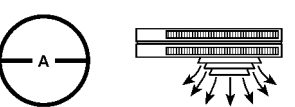
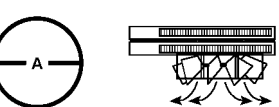
- 25-50KW models are wired for single or two stage heating and have two speed motors.
 - 600 Volt models available in 5 KW through 30 KW. Contact factory for delivery.
 - Supply wire on 40 and 50 KW models should have rated insulation of minimum.
 - Use T5122 for two stage control.
 - Use TW123 for two stage control.
 - Use TFS5102 for two stage control.
- † :DOO WKHUPRVWDW PXVW EH XVHG ZKHQ EXLOW LQ VWUDWL¿FDWLRQ WKHUPRVWDW

5100 Series Horizontal or Vertical Mounted Fan Forced Unit Heater

Diffuser Options

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DESCRIPTION		UPC# 686334	MODEL NUMBER	KW USED	MAX MOUNTING HEIGHT (ft.)		DIMENSION A (feet)		DIMENSION B (feet)		WT. (lbs.)	LIST
1	Louver Diffuser (Standard). Louvers can be individually adjusted for rectangular coverage over doorways as an air curtain, NA requirements.		Standard	3.3-5	9	20	10	NA	NA			
				7.5-10	12	40	22					
				25-30	18	52	30					
				40-50	22	75	42					
					24	84	47					
2	General Distribution (No Diffuser). The 5100 air chute venturi permits general down higher mounting height.	NA	Not Required	3.3-5	9	15	NA	NA	NA			
				7.5-10	12	30						
				25-30	18	40						
				40-50	22	55						
					24	64						
3	Anemostat Diffuser (Optional). For applications where draft restriction is required at lower unit mounting heights.	692687	AD5120	7.5-10	15	38	NA	10	372			
		681186	AD5150	25-30	17	50		12	555			
		681186	AD5150	40-50	20	60		37	598			
		722070	AD5175	60-70	31	-						
4	Radial Diffuser (Optional). Individually coverage at 45° open. Additional throw is (Please allow for higher mounting heights)	692663	RD5120	7.5-20	45°	90°	45°	90°	NA	12	412	
		692668	RD5120H	7.5-20	10	14	36	30		NA	14	481
		692670	RD5150	25-50	14	21	42	35				
		692670	RD5150	25-50	20	30	62	44				
		722087	RD5175	60-70	18	28	68	54				
			26	36	72	60						

 Description 1 Louver Diffuser	 Description 2 No Diffuser	 Description 3 Anemostat Diffuser	 Description 4 Radial Diffuser
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Mounting Brackets & Model Designator

MOUNTING BRACKETS				
UPC#	MODEL	MODEL SIZE	WT.	LIST
686334				
692694	A5105	3.3 KW TO 5.0 KW	9 lbs.	96
692700	A5120	7.5 KW TO 20.0 KW	13 lbs.	117
692717	A5150	25.0 KW TO 50.0 KW	16 lbs.	131
688628	B5105*	3.3 KW TO 20.0 KW	3 lbs.	52
688635	B5150*	25.0 KW TO 50.0 KW	8 lbs.	77
692847	V5105	3.3 KW TO 5.0 KW	9 lbs.	183
692854	V5120	7.5 KW TO 20.0 KW	13 lbs.	224
692861	V5150	25.0 KW TO 50.0 KW	16 lbs.	236
DUST SHIELD				
692878	DS5105	3.3 KW TO 5.0 KW	3 lbs.	33
692885	DS5120	7.5 KW TO 20.0 KW	4 lbs.	38
681223	DS5150	25.0 KW TO 50.0 KW	5 lbs.	40
FAN GUARD				
706544	OFG5101	3.3 KW TO 5.0 KW	3 lbs.	53
706551	OFG5102	7.5 KW TO 20.0 KW	4 lbs.	58
706568	OFG5103	25.0 KW TO 50.0 KW	5 lbs.	66

(*Included with A5100 bracket.)

Not actual colors. Red & yellow shading is for diagram clarity only

HOW TO DESIGNATE A MODEL:

HF	2	B	51	10	C	A	1
Element Volts	Phase	Motor Voltage	Model Series	Element KW	Control System	Transformer	Control Volts
F = 208	1 = 1-Phase	F = 208	51		Blank = None	Blank = None	1 = 24
H = 240	2 = 1 or 3-Ph.	H = 240			C = Contactor	A = Included	2 = 120
HF = 240/208	3 = 3-Phase	B = 240 / 208					(with CA option)
G = 277		G = 277					
P = 480		P = 480					

5100 Series Horizontal or Vertical Mounted Fan Forced Unit Heater

3.3 KW THROUGH 50 KW SUSPENDED FAN FORCED UNIT HEATERS AVAILABLE IN 1 OR 3 PHASE FOR ALL STANDARD VOLTAGES FROM 208V TO 480V THAT CAN BE MOUNTED TO PROVIDE HORIZONTAL OR VERTICAL DISCHARGE.

CONSTRUCTION:

+HDY\ *DXJH ZHOGHG VWHHO FDELQHW ZLWK SRZGHU FRDV
a master terminal board with a hinged and latched access door, simplifying wiring, installation & maintenance.

HEATING ELEMENT:

Copper clad steel sheath element
ZLWK FRQWLQRRXVO\ EUDJH
formed to allow side draw through
DLU ARZ

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:

/RXYHUV DUH LQGLYLGXDOO\ DGMXVWDEOH IRU GLUHFWRUQ
KRULJRWDO 2SWLRQDO GLIIXVHUV DYDLODEOH IRU GRZQ A

TEMPERATURE CONTROLS:

Optional low voltage and line voltage thermostats available with an adjustable temperature range of 40°F to 90°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.
UL (American Bureau of Shipping) type approved.

Installing the Taskmaster Series

DETERMINING HEATER REQUIREMENTS

Calculate the heating loads using the NEMA handbook or ASHRAE guide. Then determine the quantity and
VLJH RI XQLW KHDWHUV WR EH XVHG 7R PDLQWDLQ XQLRUP KHDW DQG U
total CFM of the units turn the air over approximately 3 times per hour. In instances where a large group of
people are located and normally in the same area, use a large number of lower KW unit heaters. In warehouse
areas or storage rooms where heat distribution and constant temperatures are less important, use fewer heaters
of higher capacity.

HORIZONTAL MOUNT

Small rooms can be heated by one unit heater. Where two walls are exposed, heaters should be mounted as
shown in Figure A. In larger rooms, units should be located so their air streams wipe exposed walls without
blowing at them. Units should be located so that the air stream of one supports that of another thus setting
up a circulatory air movement shown in Figure B. (Distance between units to be approximately 1-1/2 times
published air throw.) Units should not be mounted horizontally in areas having ceiling heights in excess of
15-18 ft.

VERTICAL MOUNT

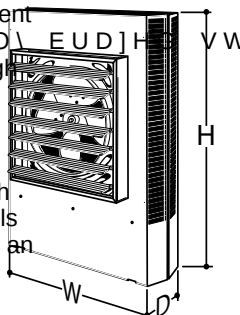
Units should be mounted vertically in high bay areas, or where heater location would not interfere with plant
RSHUDWLRQ RU WUDI\ +HDWHUV VKRXOG EH VLWXDWHG WR SURYLGH IUH
be based on recommended mounting height. Optional diffusers may best be employed to reduce high air
velocity and at the same time disperse heated air in a uniform pattern. When unit heaters are used to combat
cold air inrush from opened loading dock doors, one or more units should be arranged to blow warm air across
opening (Figure C).

DUAL MOUNTING

Where square footage is large and comfort essential, both horizontal and vertical installations may best serve
your requirements as Figure D demonstrates.

Note: Products in this section with factory installed controls are subject to 100% cancellation/restocking charges.

Taskmaster Dimensions



KW RATING	DIMENSIONS (inches)		
	H	W	D
3.3 - 5.0	17 3/4	14 15/32	6 1/2
7.5 - 10.0	24 5/16	21 1/2	6 1/2
15.0 - 20.0	28 11/16	21 1/2	6 1/2
25.0 - 50.0	34	29 1/4	10 1/16

Horizontal Discharge



Vertical Discharge

Manufactured in U.S.A.

FIELD INSTALLED OPTIONS:

± Q XQLW RU ZDOO 40°F to 90°F
temperature control thermostats
low or line voltage.
± 6XPPHU IDQ VZLWFK WR PSHUDWH
the fan only.

± 3RZHU GLVFRQQHF WYVZLWFK
± +HDW VWUDWL FDUW
UL (American Bureau of Shipping) type approved.

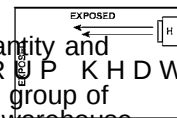


Figure A



Figure B

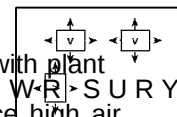


Figure C

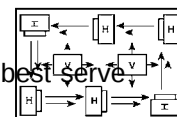


Figure D