



5100 Series Summer fan switch

Data Sheet

General Characteristics 5100 Series Horizontal or Vertical Mounted Fan Forced Unit Heater

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.

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

All units come equipped with automatic reset type limit controls to de-energize the heater should an over-temperature situation occur. 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. Fan over-ride purges unit of residual heat at shutdown.

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.

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.

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

Includes Summer Fan Switch.

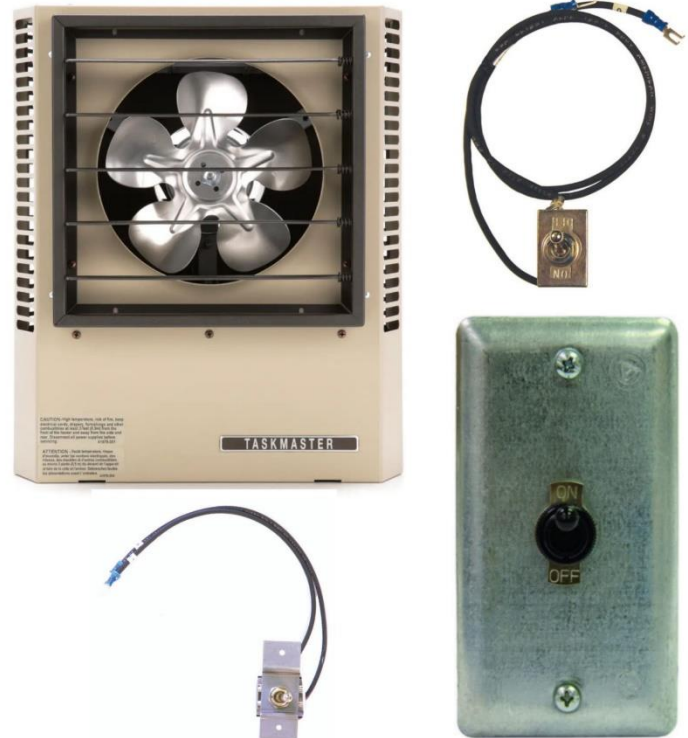
Made in U.S.A.

Product Applications 5100 Series Horizontal or Vertical Mounted Fan Forced Unit Heater

Recommended for all industrial, commercial, and residential. For indoor and outdoor use.

Warranties 5100 Series Horizontal or Vertical Mounted Fan Forced Unit Heater

Manufacturer's Limited Warranty: 1 Year.



Specific Characteristics 5100 Series Horizontal or Vertical Mounted Fan Forced Unit Heater

Item #	Watts	BTU's	Volts	PH	Amps	Control voltage	Temp Rise (°F)	Air Throw	CFM	Recom'd mounting ht.		Weight and Dimensions With Packaging (CM)	
										Horizontal	Vertical	Lbs	W, H, D
USSHH-001	3.3	11.2	208	1	15.9	208	26°F	12'	400	9'	9'	25	45,17,37
USSHH-002	3.3/2.5	11.2/8.5	240/208	1	13.7/12	240/208	26°F	12'	400	9'	9'	25	45,17,37
USSHH-003	3.3	11.2	208	1/3	15.9/9.17	208	26°F	12'	400	9'	9'	25	45,17,37
USSHH-004	3.3	11.2	208	1/3	15.9/9.17	208	26°F	12'	400	9'	9'	25	45,17,37



Specific Characteristics 5100 Series Horizontal or Vertical Mounted Fan Forced Unit Heater

Item #	Watts	BTU's	Volts	PH	Amps	Control voltaje	Temp Rise (°F)	Air Throw	CFM	Recom'd mounting ht.		Weight and Dimensions With Packaging (CM)	
										Horizontal	Vertical	Lbs	W, H, D
USSHH-005	3.3/2.5	11.2/8.5	240/208	1/3	13.7/11.9	240/208	26°F	12'	400	9'	9'	25	45,17,37
USSHH-006	3.3/2.6	11.2/8.6	240/209	3	7.9/6.9	240/209	26°F	12'	400	9'	9'	25	45,17,37
USSHH-007	3.3	11.2	277	1	11.9	277	26°F	12'	400	9'	9'	25	45,17,37
USSHH-008	3.3	11.2	480	3	4	24	26°F	12'	400	9'	9'	25	45,17,37
USSHH-009	5	17.1	208	1	24.1	208	40°F	12'	400	9'	9'	25	45,17,37
USSHH-010	5/3.7	17.1/12.8	240/208	1	20.9/18.1	240/208	40°F	12'	400	9'	9'	25	45,17,37
USSHH-011	5	17.1	208	1/3	24.1	208	40°F	12'	400	9'	9'	25	45,17,37
USSHH-012	5	17.1	208	3	13.9	208	40°F	12'	400	9'	9'	25	45,17,37
USSHH-013	5	17.1	240	1/3	20.8/18.1	240	40°F	12'	400	9'	9'	27	45,17,37
USSHH-014	3.7	12.8	208	1/3	17.1/10.4	208	40°F	12'	400	9'	9'	27	45,17,37
USSHH-015	5	17.1	277	1	18.1	277	40°F	12'	400	9'	9'	27	45,17,37
USSHH-016	5	17.1	480	3	6.1	24	40°F	12'	400	9'	9'	27	45,17,37
USSHH-017	7.5	25.6	208	1/3	36.1/20.8	24	34°F	22'	700	10'	12'	54	62,17,55
USSHH-018	7.5	25.6	208	1/3	36.1/20.8	24	34°F	22'	700	10'	12'	54	62,17,55
USSHH-019	7.5	25.6	240	1/3	27.1/16.04	24	34°F	22'	700	10'	12'	54	62,17,55
USSHH-020	5.6	19.2	208	1/3	31.3/27.1	24	34°F	22'	700	10'	12'	54	62,17,55
USSHH-021	7.5	25.6	277	1	27.1	24	34°F	22'	700	10'	12'	54	62,17,55
USSHH-022	7.5	25.6	480	3	9.1	24	34°F	22'	700	10'	12'	54	62,17,55
USSHH-023	9.9	33.8	208	1/3	47.8/27.4	24	45°F	22'	700	10'	14'	55	62,17,55
USSHH-024	9.9	33.8	208	1/3	47.8/27.4	24	45°F	22'	700	10'	14'	55	62,17,55
USSHH-025	10	34.1	240	1/3	41.2/24	24	45°F	22'	700	10'	14'	55	62,17,55
USSHH-026	7.5	25.6	208	1/3	36.1/20.7	24	45°F	22'	700	10'	14'	55	62,17,55
USSHH-027	10	34.1	277	1	36.1	24	45°F	22'	700	10'	14'	55	62,17,55
USSHH-028	10	34.1	480	3	12.4	24	45°F	22'	700	10'	14'	55	62,17,55
USSHH-029	15	51.2	208	3	41.7	24	43°F	32'	1100	11'	20'	64	73,17,55
USSHH-030	15/11.2	51.2/38.4	240/208	3	36.1/31.3	24	43°F	32'	1100	11'	20'	64	73,17,55
USSHH-031	15	51.2	480	3	18.1	24	43°F	32'	1100	11'	20'	64	73,17,55
USSHH-032	19.7/14.8	67.2/50.5	240/208	3	47.8/41.1	24	57°F	32'	1100	12'	18'	65	73,17,55
USSHH-033	20	68.3	480	3	24.1	24	57°F	32'	1100	12'	18'	65	73,17,55
USSHH-034	25	85.3	208	3	69.5	24	40/44°F	45'	2000/1800	12'	22'	120	87,26,75
USSHH-035	25/18.7	85.3/64	240/208	3	60.2/52.1	24	40/44°F	45'	2000/1800	12'	22'	120	87,26,75
USSHH-036	25	85.3	480	3	30.1	24	40/44°F	45'	2000/1800	12'	22'	120	87,26,75
USSHH-037	30	102.4	208	3	83.4	24	47/53°F	40'	2000/1800	12'	20'	120	87,26,75
USSHH-038	30/22.5	102.4/76.8	240/208	3	72.3/62.5	24	47/53°F	40'	2000/1800	12'	20'	120	87,26,75
USSHH-039	30	102.4	480	3	36.2	24	47/53°F	40'	2000/1800	12'	20'	120	87,26,75
USSHH-040	40	136.5	208	3	111.2	24	40/45°F	55'	3100/2800	15'	24'	120	87,26,75
USSHH-041	40/30	136.5/102.4	240/208	3	96.4/83.4	24	40/45°F	55'	3100/2800	15'	24'	120	87,26,75
USSHH-042	39	133.1	480	3	47	24	40/45°F	55'	3100/2800	15'	24'	120	87,26,75
USSHH-043	49.6	169.3	208	3	139	24	51/56°F	50'	3100/2800	15'	27'	120	87,26,75
USSHH-044	50/37.5	170.6/128	240/208	3	120.5/104.3	24	51/56°F	50'	3100/2800	15'	27'	120	87,26,75
USSHH-045	50	170.6	480	3	60.3	24	51/56°F	50'	3100/2800	15'	27'	120	87,26,75
USSHH-046	3.3	11.2	208	1	15.9	208	26°F	12'	400	9'	9'	25	45,17,37
USSHH-047	3.3/2.5	11.2/8.5	240/208	1	13.7/12	240/208	26°F	12'	400	9'	9'	25	45,17,37
USSHH-048	3.3	11.2	208	1/3	15.9/9.17	208	26°F	12'	400	9'	9'	25	45,17,37
USSHH-049	3.3	11.2	208	1/3	15.9/9.17	208	26°F	12'	400	9'	9'	25	45,17,37
USSHH-050	3.3/2.5	11.2/8.5	240/208	1/3	13.7/11.9	240/208	26°F	12'	400	9'	9'	25	45,17,37
USSHH-051	3.3/2.6	11.2/8.6	240/209	3	7.9/6.9	240/209	26°F	12'	400	9'	9'	25	45,17,37
USSHH-052	3.3	11.2	277	1	11.9	277	26°F	12'	400	9'	9'	25	45,17,37
USSHH-053	3.3	11.2	480	3	4	24	26°F	12'	400	9'	9'	25	45,17,37
USSHH-054	5	17.1	208	1	24.1	208	40°F	12'	400	9'	9'	25	45,17,37
USSHH-055	5/3.7	17.1/12.8	240/208	1	20.9/18.1	240/208	40°F	12'	400	9'	9'	25	45,17,37
USSHH-056	5	17.1	208	1/3	24.1	208	40°F	12'	400	9'	9'	25	45,17,37
USSHH-057	5	17.1	208	3	13.9	208	40°F	12'	400	9'	9'	25	45,17,37
USSHH-058	5	17.1	240	1/3	20.8/18.1	240	40°F	12'	400	9'	9'	27	45,17,37
USSHH-059	3.7	12.8	208	1/3	17.1/10.4	208	40°F	12'	400	9'	9'	27	45,17,37
USSHH-060	5	17.1	277	1	18.1	277	40°F	12'	400	9'	9'	27	45,17,37
USSHH-061	5	17.1	480	3	6.1	24	40°F	12'	400	9'	9'	27	45,17,37
USSHH-062	7.5	25.6	208	1/3	36.1/20.8	24	34°F	22'	700	10'	12'	54	62,17,55
USSHH-063	7.5	25.6	208	1/3	36.1/20.8	24	34°F	22'	700	10'	12'	54	62,17,55
USSHH-064	7.5	25.6	240	1/3	27.1/16.04	24	34°F	22'	700	10'	12'	54	62,17,55
USSHH-065	5.6	19.2	208	1/3	31.3/27.1	24	34°F	22'	700	10'	12'	54	62,17,55
USSHH-066	7.5	25.6	277	1	27.1	24	34°F	22'	700	10'	12'	54	62,17,55



5100 Series Summer fan switch

Data Sheet

Specific Characteristics 5100 Series Horizontal or Vertical Mounted Fan Forced Unit Heater

Item #	Watts	BTU's	Volts	PH	Amps	Control voltaje	Temp Rise (°F)	Air Throw	CFM	Recom'd mounting ht.		Weight and Dimensions With Packaging (CM)	
										Horizontal	Vertical	Lbs	W, H, D
USSHH-067	7.5	25.6	480	3	9.1	24	34°F	22'	700	10'	12'	54	62,17,55
USSHH-068	9.9	33.8	208	1/3	47.8/27.4	24	45°F	22'	700	10'	14'	55	62,17,55
USSHH-069	9.9	33.8	208	1/3	47.8/27.4	24	45°F	22'	700	10'	14'	55	62,17,55
USSHH-070	10	34.1	240	1/3	41.2/24	24	45°F	22'	700	10'	14'	55	62,17,55
USSHH-071	7.5	25.6	208	1/3	36.1/20.7	24	45°F	22'	700	10'	14'	55	62,17,55
USSHH-072	10	34.1	277	1	36.1	24	45°F	22'	700	10'	14'	55	62,17,55
USSHH-073	10	34.1	480	3	12.4	24	45°F	22'	700	10'	14'	55	62,17,55
USSHH-074	15	51.2	208	3	41.7	24	43°F	32'	1100	11'	20'	64	73,17,55
USSHH-075	15/11.2	51.2/38.4	240/208	3	36.1/31.3	24	43°F	32'	1100	11'	20'	64	73,17,55
USSHH-076	15	51.2	480	3	18.1	24	43°F	32'	1100	11'	20'	64	73,17,55
USSHH-077	19.7/14.8	67.2/50.5	240/208	3	47.8/41.1	24	57°F	32'	1100	12'	18'	65	73,17,55
USSHH-078	20	68.3	480	3	24.1	24	57°F	32'	1100	12'	18'	65	73,17,55
USSHH-079	25	85.3	208	3	69.5	24	40/44°F	45'	2000/1800	12'	22'	120	87,26,75
USSHH-080	25/18.7	85.3/64	240/208	3	60.2/52.1	24	40/44°F	45'	2000/1800	12'	22'	120	87,26,75
USSHH-081	25	85.3	480	3	30.1	24	40/44°F	45'	2000/1800	12'	22'	120	87,26,75
USSHH-082	30	102.4	208	3	83.4	24	47/53°F	40'	2000/1800	12'	20'	120	87,26,75
USSHH-083	30/22.5	102.4/76.8	240/208	3	72.3/62.5	24	47/53°F	40'	2000/1800	12'	20'	120	87,26,75
USSHH-084	30	102.4	480	3	36.2	24	47/53°F	40'	2000/1800	12'	20'	120	87,26,75
USSHH-085	40	136.5	208	3	111.2	24	40/45°F	55'	3100/2800	15'	24'	120	87,26,75
USSHH-086	40/30	136.5/102.4	240/208	3	96.4/83.4	24	40/45°F	55'	3100/2800	15'	24'	120	87,26,75
USSHH-087	39	133.1	480	3	47	24	40/45°F	55'	3100/2800	15'	24'	120	87,26,75
USSHH-088	49.6	169.3	208	3	139	24	51/56°F	50'	3100/2800	15'	27'	120	87,26,75
USSHH-089	50/37.5	170.6/128	240/208	3	120.5/104.3	24	51/56°F	50'	3100/2800	15'	27'	120	87,26,75
USSHH-090	50	170.6	480	3	60.3	24	51/56°F	50'	3100/2800	15'	27'	120	87,26,75



Recommended Control Options, Control Accessory Options, & Control Accessories						
Specific Characteristics 5100 Series Horizontal or Vertical Mounted Fan Forced Unit Heater						
Item #	Thermostat		Item #	Thermostat		Lbs
	IN-BUILT	Description		WALL MOUNTED	Description	
USSHH-001	FS5101	SPST; LINE VOLT ;120-277V	USSHH-046	FSW5111	SPST; LINE VOLT; 120-277V	0.75
USSHH-002	FS5101	SPST; LINE VOLT ;120-277V	USSHH-047	FSW5111	SPST; LINE VOLT; 120-277V	0.75
USSHH-003	FS5101	SPST; LINE VOLT ;120-277V	USSHH-048	FSW5111	SPST; LINE VOLT; 120-277V	0.75
USSHH-004	FS5101	SPST; LINE VOLT ;120-277V	USSHH-049	FSW5111	SPST; LINE VOLT; 120-277V	5
USSHH-005	FS5101	SPST; LINE VOLT ;120-277V	USSHH-050	FSW5111	SPST; LINE VOLT; 120-277V	0.75
USSHH-006	FS5101	SPST; LINE VOLT ;120-277V	USSHH-051	FSW5111	SPST; LINE VOLT; 120-277V	5
USSHH-007	FS5101	SPST; LINE VOLT ;120-277V	USSHH-052	FSW5111	SPST; LINE VOLT; 120-277V	0.75
USSHH-008	FS5102	SPST; LINE VOLT ; 480-600V	USSHH-053	FSW5112	SPST; LOW VOLT; (W/RELAY)	5
USSHH-009	FS5101	SPST; LINE VOLT ;120-277V	USSHH-054	FSW5111	SPST; LINE VOLT; 120-277V	5
USSHH-010	FS5101	SPST; LINE VOLT ;120-277V	USSHH-055	FSW5111	SPST; LINE VOLT; 120-277V	0.75
USSHH-011	FS5101	SPST; LINE VOLT ;120-277V	USSHH-056	FSW5111	SPST; LINE VOLT; 120-277V	5
USSHH-012	FS5101	SPST; LINE VOLT ;120-277V	USSHH-057	FSW5111	SPST; LINE VOLT; 120-277V	5
USSHH-013	FS5101	SPST; LINE VOLT ;120-277V	USSHH-058	FSW5111	SPST; LINE VOLT; 120-277V	0.75
USSHH-014	FS5101	SPST; LINE VOLT ;120-277V	USSHH-059	FSW5111	SPST; LINE VOLT; 120-277V	5
USSHH-015	FS5101	SPST; LINE VOLT ;120-277V	USSHH-060	FSW5111	SPST; LINE VOLT; 120-277V	5
USSHH-016	FS5102	SPST; LINE VOLT ; 480-600V	USSHH-061	FSW5112	SPST; LOW VOLT; (W/RELAY)	5
USSHH-017	FS5101	SPST; LINE VOLT ;120-277V	USSHH-062	FSW5111	SPST; LINE VOLT; 120-277V	5
USSHH-018	FS5101	SPST; LINE VOLT ;120-277V	USSHH-063	FSW5111	SPST; LINE VOLT; 120-277V	5
USSHH-019	FS5101	SPST; LINE VOLT ;120-277V	USSHH-064	FSW5111	SPST; LINE VOLT; 120-277V	5
USSHH-020	FS5101	SPST; LINE VOLT ;120-277V	USSHH-065	FSW5111	SPST; LINE VOLT; 120-277V	5
USSHH-021	FS5101	SPST; LINE VOLT ;120-277V	USSHH-066	FSW5111	SPST; LINE VOLT; 120-277V	5
USSHH-022	FS5102	SPST; LINE VOLT ; 480-600V	USSHH-067	FSW5112	SPST; LOW VOLT; (W/RELAY)	5
USSHH-023	FS5101	SPST; LINE VOLT ;120-277V	USSHH-068	FSW5111	SPST; LINE VOLT; 120-277V	5
USSHH-024	FS5101	SPST; LINE VOLT ;120-277V	USSHH-069	FSW5111	SPST; LINE VOLT; 120-277V	5
USSHH-025	FS5101	SPST; LINE VOLT ;120-277V	USSHH-070	FSW5111	SPST; LINE VOLT; 120-277V	5
USSHH-026	FS5101	SPST; LINE VOLT ;120-277V	USSHH-071	FSW5111	SPST; LINE VOLT; 120-277V	5



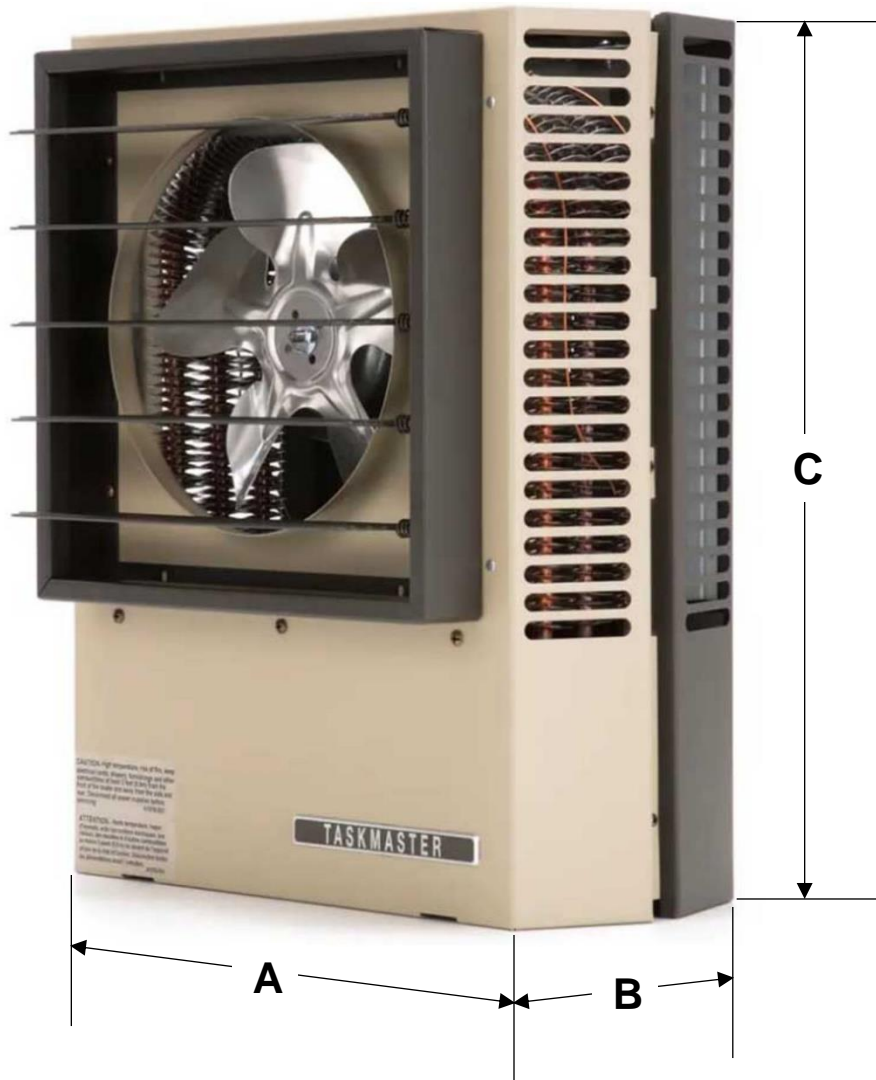
Recommended Control Options, Control Accessory Options, & Control Accessories						
Specific Characteristics 5100 Series Horizontal or Vertical Mounted Fan Forced Unit Heater						
Item #	Thermostat		Item #	Thermostat		Lbs
	IN-BUILT	Description		WALL MOUNTED	Description	
USSHH-027	FS5101	SPST; LINE VOLT ;120-277V	USSHH-072	FSW5111	SPST; LINE VOLT; 120-277V	5
USSHH-028	FS5102	SPST; LINE VOLT ; 480-600V	USSHH-073	FSW5112	SPST; LOW VOLT; (W/RELAY)	5
USSHH-029	FS5101	SPST; LINE VOLT ;120-277V	USSHH-074	FSW5111	SPST; LINE VOLT; 120-277V	5
USSHH-030	FS5101	SPST; LINE VOLT ;120-277V	USSHH-075	FSW5111	SPST; LINE VOLT; 120-277V	5
USSHH-031	FS5102	SPST; LINE VOLT ; 480-600V	USSHH-076	FSW5112	SPST; LOW VOLT; (W/RELAY)F	5
USSHH-032	FS5101	SPST; LINE VOLT ;120-277V	USSHH-077	FSW5111	SPST; LINE VOLT; 120-277V	5
USSHH-033	FS5102	SPST; LINE VOLT ; 480-600V	USSHH-078	FSW5112	SPST; LOW VOLT; (W/RELAY)	5
USSHH-034	FS5101	SPST; LINE VOLT ;120-277V	USSHH-079	FSW5111	SPST; LINE VOLT; 120-277V	5
USSHH-035	FS5101	SPST; LINE VOLT ;120-277V	USSHH-080	FSW5111	SPST; LINE VOLT; 120-277V	5
USSHH-036	FS5102	SPST; LINE VOLT ; 480-600V	USSHH-081	FSW5112	SPST; LOW VOLT; (W/RELAY)	5
USSHH-037	FS5101	SPST; LINE VOLT ;120-277V	USSHH-082	FSW5111	SPST; LINE VOLT; 120-277V	5
USSHH-038	FS5101	SPST; LINE VOLT ;120-277V	USSHH-083	FSW5111	SPST; LINE VOLT; 120-277V	5
USSHH-039	FS5102	SPST; LINE VOLT ; 480-600V	USSHH-084	FSW5112	SPST; LOW VOLT; (W/RELAY)	5
USSHH-040	FS5101	SPST; LINE VOLT ;120-277V	USSHH-085	FSW5111	SPST; LINE VOLT; 120-277V	5
USSHH-041	FS5101	SPST; LINE VOLT ;120-277V	USSHH-086	FSW5111	SPST; LINE VOLT; 120-277V	5
USSHH-042	FS5102	SPST; LINE VOLT ; 480-600V	USSHH-087	FSW5112	SPST; LOW VOLT; (W/RELAY)	5
USSHH-043	FS5101	SPST; LINE VOLT ;120-277V	USSHH-088	FSW5111	SPST; LINE VOLT; 120-277V	5
USSHH-044	FS5101	SPST; LINE VOLT ;120-277V	USSHH-089	FSW5111	SPST; LINE VOLT; 120-277V	5
USSHH-045	FS5102	SPST; LINE VOLT ; 480-600V	USSHH-090	FSW5112	SPST; LOW VOLT; (W/RELAY)	5

*Disconnect must be rated at 80% of total amload.



Dimensions (in) 5100 Series Horizontal or Vertical Mounted Fan Forced Unit Heater

Item #	Wide	Deep	High
	A	B	C
USSHH-001 a USSHH-011	17 3/4	14 15/32	6 1/2
USSHH-012 a USSHH-025	24 5/16	21 1/2	6 1/2
USSHH-026 a USSHH-030	28 11/16	21 1/2	6 1/2
USSHH-031 a USSHH-045	34	29 1/4	10 1/16





5100 Series Summer fan switch

Data Sheet

FS5101



FS5102



FSW5111



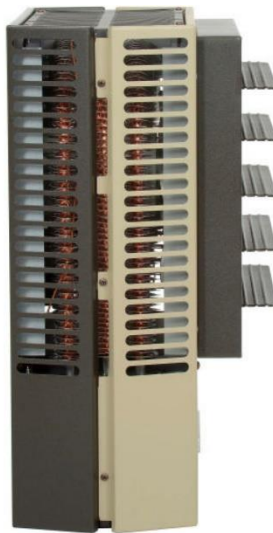
FSW5112





5100 Series Summer fan switch

Data Sheet





Installing the Taskmaster Series

Installing the Taskmaster Series

DETERMINING HEATER REQUIREMENTS

Calculate the heating loads using the NEMA handbook or ASHRAE guide. Then determine the quantity and size of unit heaters to be used. To maintain uniform heat and reduce stratified air, it is recommended that the 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 operation or traffic. Heaters should be situated to provide free air circulation. Size and selection of units should 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.

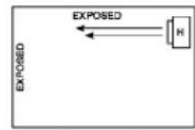


Figure A

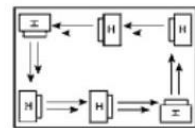


Figure B

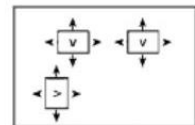


Figure C

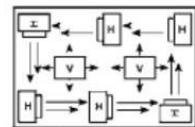


Figure D

ID	Author	Description Error	Description Update	Supervisor Name
V1	Angelica Romero	New Data Sheet	New Data Sheet	Jessica Lorenzo