

Specification Sheet

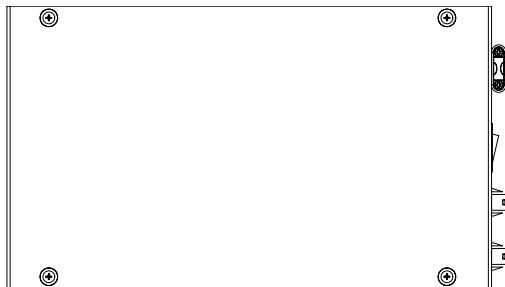
SoHo Hub Power & Control Box

Description

SoHo Hub Power & Control Box houses primary power and controls for SoHo hydronic fan-boosted heating terminals. The housing is 20 gauge (1mm) galvanized steel, pre-painted black.

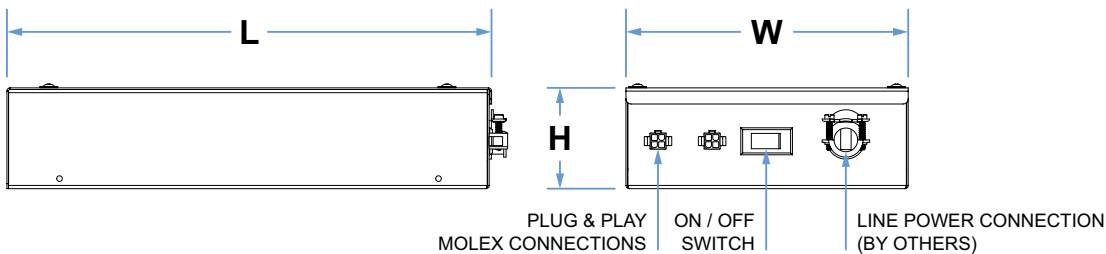
Electrical supply is compatible with 120V / 208V / 277V. Up to sixteen (16) SoHo units can be connected to each Hub (varies based on size / quantity of cross-flow fans in each unit; refer to example zone diagram on Page 4 for details). Power and control signals are transmitted via Plug & Play connection.

An optional integrated 24 VAC transformer is available (specify on order).



CONFIGURATION	H (HEIGHT)		W (WIDTH)		L (LENGTH)	
	(in)	(mm)	(in)	(mm)	(in)	(mm)
Standard	2.5	65	7	178	12	305
Integrated XFMR	4	102	10	254	12	305

ALL DIMENSIONS NOMINAL ± 0.1" (2.5mm)



ELECTRICAL SUPPLY	MCA	MOP	Single Phase units require 3 conductors: Line / Neutral / Ground
120V (120/1/60)	3.8	5	
208V (208/1/60)	2.1	5	
277V (277/1/60)	1.9	5	

Specification Sheet

SoHo Hub Power & Control Box

Sequence of Operation

MODE	HEATING DEMAND	FAN SPEED	WATER VALVE	
			(MODULATING 0-10V)	(2-POSITION)
HEAT DEADBAND	0%	OFF	OFF	OFF
HEATING STAGE 1	20%	ON 50% ¹	OPEN 50%	OPEN
HEATING STAGE 2	50%	ON 75% ¹	OPEN 75%	OPEN
HEATING STAGE 3	70%	ON MAX ²	OPEN 100%	OPEN

Notes

- Fan Speed Max in Heating Mode (2) set by Adj2 Pot (R8 on right)
- Range: 20% (CCW) to 100% (CW) of Full EC Fan Speed
- Factory set to Job Specified Heating fan speed
- Incremental Speed (1) are 50% and 75% of Max Speed

Heating Only (2-Pipe)

Heating Mode (Option #1)	Thermostat (controller) to send 0–10VDC heating signal. Water valve to open (modulate open); fan shall run at constant speed. Fan max speed is factory set, field adjusted.
Heating Mode (Option #2)	Thermostat (controller) to send 0–10VDC heating signal. Water valve to open (modulate open); fan shall modulate speed. Fan max speed is factory set, field adjusted.
Cooling Mode	Water valve to close; fan is off.

Heating / Cooling (2-Pipe)

Aquastat	Aquastat (factory furnished loose; field installed and wired by contractor) to verify if cooling chilled water or heating hot water is present in pipe.
Heating Mode (Option #1)	After confirmation that heating hot water is present in pipe, thermostat (controller) to send 0–10VDC heating signal. Water valve to open (modulate open); fan shall run at constant speed. Fan max speed is factory set, field adjusted.
Heating Mode (Option #2)	After confirmation that heating hot water is present in pipe, thermostat (controller) to send 0–10VDC heating signal. Water valve to open (modulate open); fan shall modulate speed. Fan max speed is factory set; field adjusted.
Cooling Mode	After confirmation that cooling chilled water is present in pipe, thermostat (controller) to send 0–10VDC cooling signal. Water valve to open (modulate open); fan shall modulate speed. Fan max speed is factory set, field adjusted.

(Continued on Next Page)

Specification Sheet

SoHo Hub Power & Control Box

Sequence of Operation (Continued)

Heating / Cooling (4-Pipe)	
Heating Mode	Thermostat (controller) to send 0–10VDC heating signal. Heating hot water valve to open (modulate open); fan shall run at constant speed. Fan max speed is factory set, field adjusted.
Cooling Mode	Thermostat (controller) to send 0–10VDC cooling signal. Cooling chilled water valve to open (modulate open); fan shall modulate speed to maintain cooling setpoint. Fan max speed is factory set, field adjusted.

Specifications

Application:	SoHo Power & Control
Construction:	Galvanized Steel 20 Gauge (1mm) Pre-Painted Black
Dimensions:	Standard 12" x 7" x 2.5" (305mm x 178mm x 65mm)
LxWxH (Nominal)	Integrated XFMR 12" x 10" x 4" (305mm x 254mm x 102mm)

Specification Sheet

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Example Zone

TERMINAL LENGTH		MAXIMUM SOHO TERMINALS SUPPORTED PER HUB *
(in)	(mm)	
33	838	16
48	1219	12
62	1575	9
78	1981	6

* Based on Maximum Number of Cross-Flow Fans Supported per Terminal Length

