POWERED AIRE Inc.
AIRE CURTAINS
888-321-AIRE (2473)
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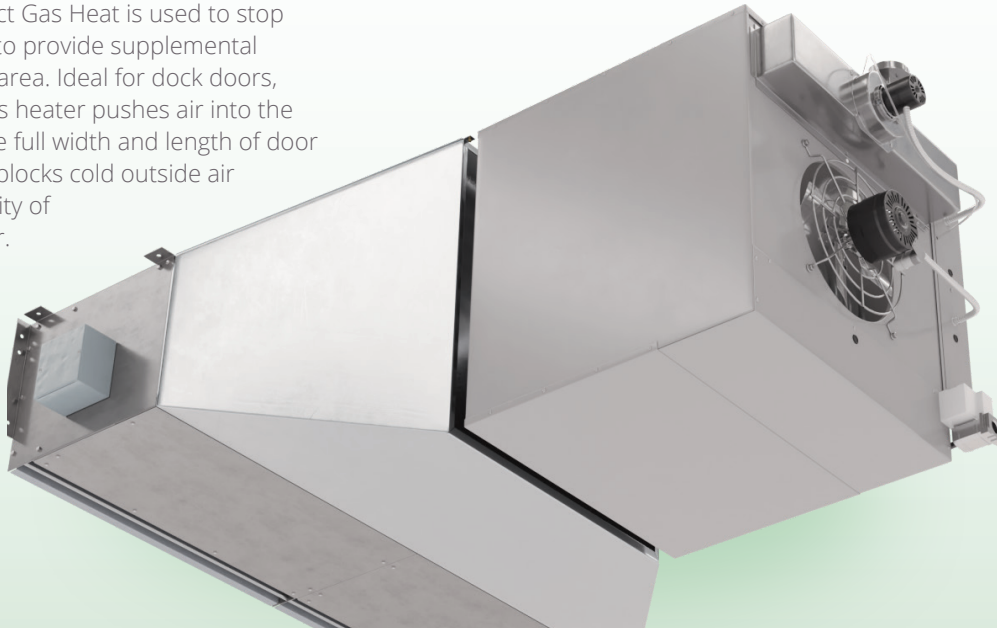
TIG

The TIG model for Climate Control with Indirect Gas Heat is used to stop cold drafts from entering door openings and to provide supplemental heat around what can be a very cold working area. Ideal for dock doors, warehouses and busy industrial doors, the gas heater pushes air into the stainless steel duct transition and blankets the full width and length of door with a warm curtain of air. The TIG effectively blocks cold outside air and helps improve the comfort and productivity of those working around a busy warehouse door. The TIG provides a temperature rise of 34°F – 44°F to the ambient entering air, depending on the model.



OPTIONS

HEATING

Closed combustion heaters are available upon request.

AT A GLANCE

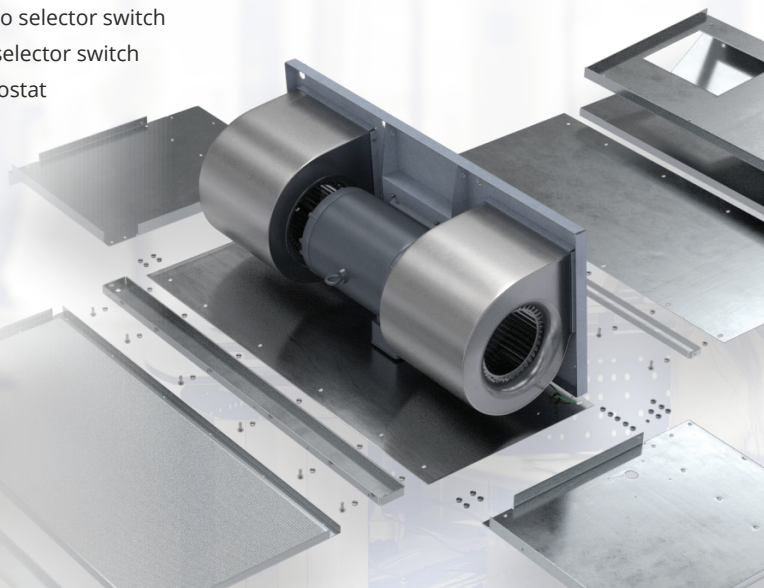
Single Incremental Widths	Max Installation Height	Heavy Duty Motors
3' to 12'	12'	¾ HP

KEY DESIGN FEATURES

- Outer cabinet constructed of 18-gauge 304 stainless steel with #3 finish
- 3/4 HP ODP (Open Drip Proof) direct-drive dual-speed motor(s)
- High-efficiency discharge plenum with adjustable air foil vane (+/-20˚)
- Top and bottom access panels for servicing and removal of motor-blower assembly
- NEMA 12 control panel
- Factory mounted 18-gauge 304 stainless steel transition duct(s)
- AGA/CGA labeled gas heater(s) with power exhaust, direct spark ignition, and tubular heat exchangers
- Convertible open and closed combustion
- Natural gas or propane fuel types
- Standard single point power connection

RECOMMENDED CONTROLS

- Activation by 24V magnetic door switch
- Toggle disconnect switch
- Hand/Off/Auto selector switch
- Heat On/Off selector switch
- Digital thermostat



TIG | PERFORMANCE

TIG | Performance Table

MODEL	Nozzle Width (In.)	Max. FPM at Nozzle	Max. CFM at Nozzle	Avg. FPM at Nozzle	CFM at Nozzle	Outlet Velocity Uniformity	Number of Motors	Motor HP	Number of Heaters	Input mbtu / hr per Heater	Total Output mbtu / hr	Temp. Rise (˚F)	Weight (lbs)
TIG-1-36	**36**	4218	2899	3695	2541	95%	1	3/4	1	150	120	44	250
TIG-1-48	**48**	4218	3867	2771	2559	92%	1	3/4	1	150	120	43	282
TIG-1-60	**60**	4218	4374	2218	2528	91%	1	3/4	1	150	120	44	337
TIG-2-72	**72**	4218	5803	3696	5082	95%	2	3/4	1	250	200	36	496
TIG-2-84	**84**	4218	6766	3169	5063	93%	2	3/4	1	250	200	37	526
TIG-2-96	**96**	4218	7732	2773	5081	92%	2	3/4	1	250	200	36	569
TIG-3-108	**108**	4218	8702	3702	7623	92%	3	3/4	1	350	280	34	638
TIG-3-120	**120**	4218	9668	3174	7614	95%	3	3/4	2	200	320	39	679
TIG-3-132	**132**	4218	10853	2792	7589	94%	3	3/4	2	200	320	39	833
TIG-4-144	**144**	4218	11606	3696	10164	95%	4	3/4	2	250	400	36	992

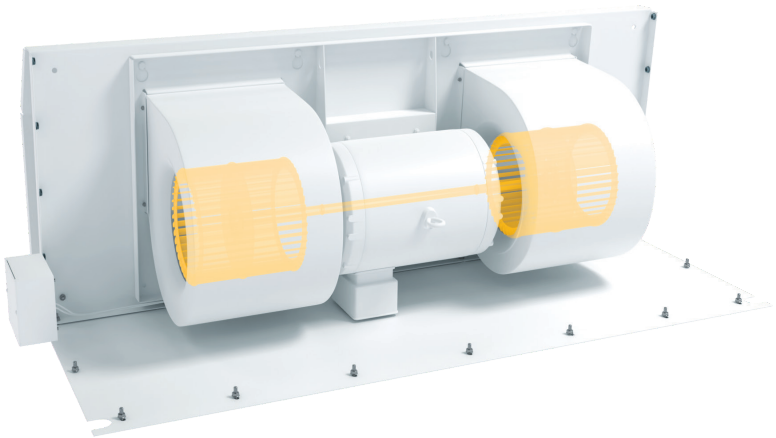
! **For a unit over 12 feet long, consult factory.**

TIG | Sound Levels

High Speed	63 dBA	Measured 10 ft. from unit in a free field based on a 1 motor unit

TIG | Amp Draw and Breaker Options

Motors	**120V** Amp Draw (Breaker size)	**208V** Amp Draw (Breaker size)	**240V** Amp Draw (Breaker size)	**480V** Amp Draw (Breaker size)	**575V** Amp Draw (Breaker size)
TIG-1-36, 48, 60	20.5 (30)	10.8A (15)	9.9A (15)	5.1A (15)	4.1A (15)
TIG-2-72, 84, 96	28.5 (40)	14.4A (20)	13.5A (20)	7.1A (15)	5.6A (15)
TIG-3-108	-	25.2A (35)	23.3A (30)	12.3A (20)	9.7A (15)
TIG-3-120, 132	-	25.2A (35)	23.3A (30)	12.3A (20)	9.7A (15)
TIG-4-144	-	38.4A (50)	35.2A (45)	18.4A (25)	14.7A (20)



Performance Highlight

The air curtain is direct drive, which avoids misalignment of couplers and outboard bearings and eliminates periodic belt replacement.

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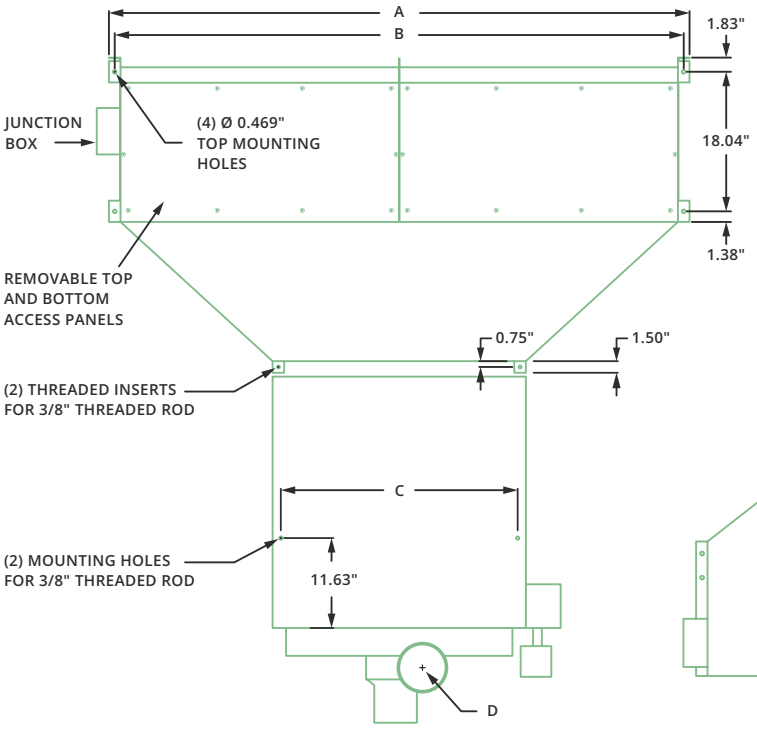
TIG | MECHANICAL DETAILS & DRAWINGS (1 HEATER)

TIG | 1-Heater Mechanical Information Table

MODEL	Air Curtain Width - A (in.)	Mounting Width - B (in.)	Hanging Width - C (in.)	Flue □ - D (in.)	Heater Size	Gas Inlet
TIG-1-36	39.00	37.50	18.63	5	150	0.5
TIG-1-48	51.00	49.50	18.63	5	150	0.5
TIG-1-60	63.00	61.50	18.63	5	150	0.5
TIG-2-72	75.07	73.57	30.63	5	250	0.75
TIG-2-84	87.07	85.57	30.63	5	250	0.75
TIG-2-96	99.07	97.57	30.63	5	250	0.75
TIG-3-108	111.15	109.65	48.63	5	350	0.75

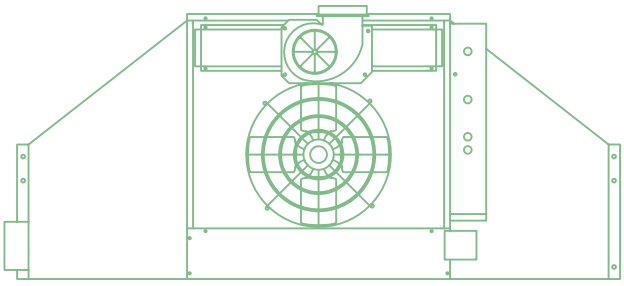
NOTES

1. Heater independently supported 2 inches away from duct transition.
2. Duct transition bolted to air curtain and will need to be supported.
3. Installer responsible for structurally sound mounting of the unit.
4. Verify that overall dimensions will fit in the opening.
5. Air curtain to be installed so that the air stream is unobstructed.

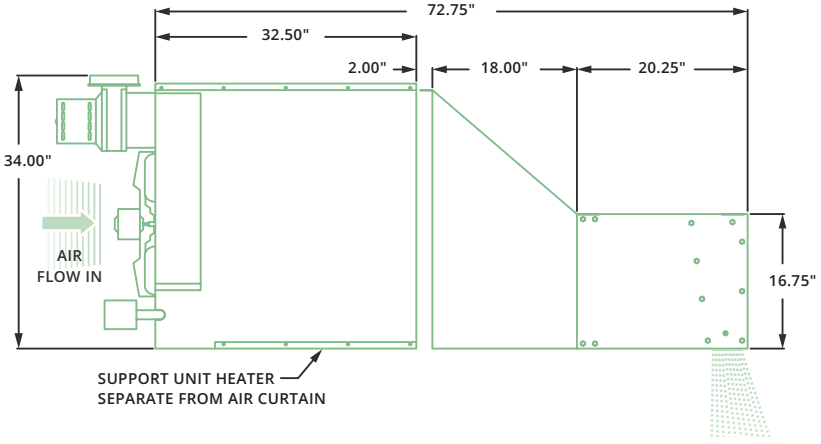


TOP

FRONT



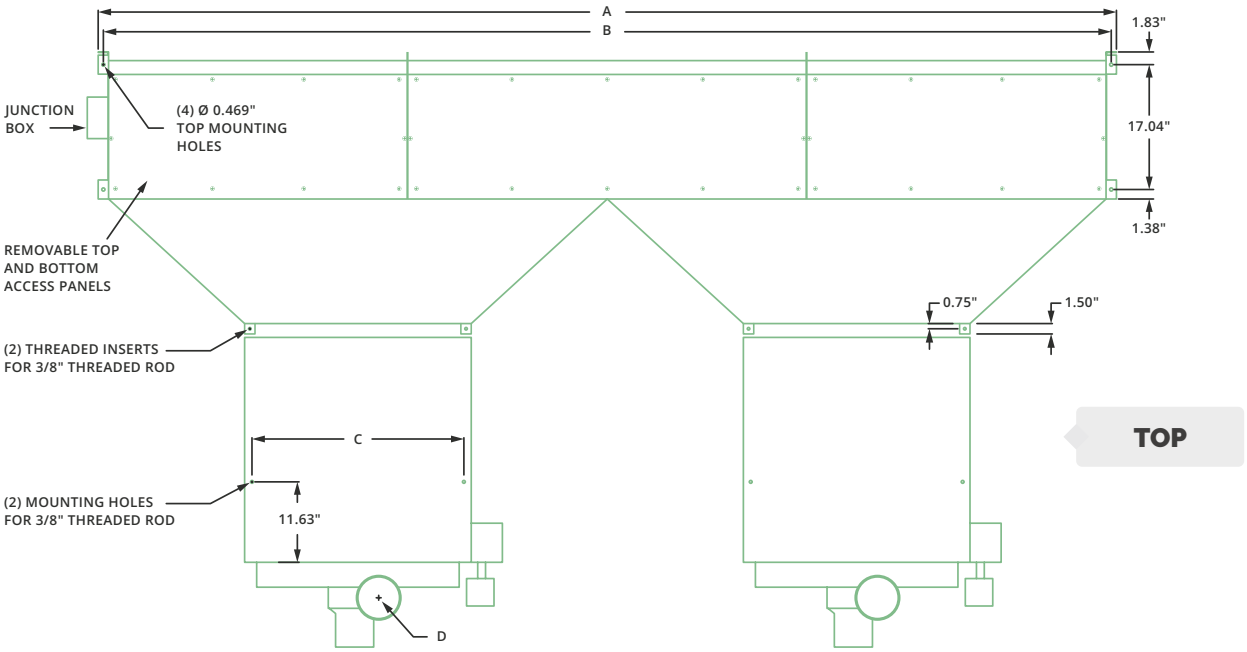
SIDE

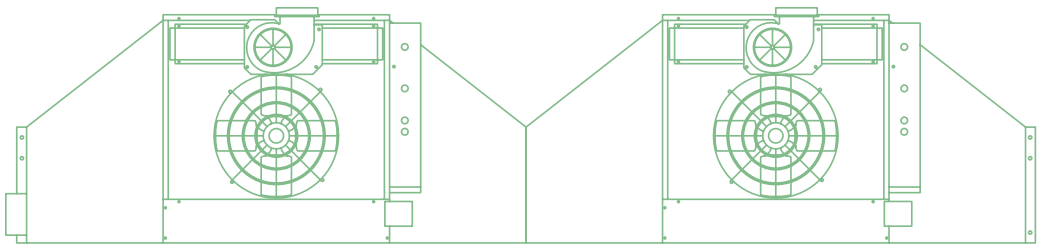


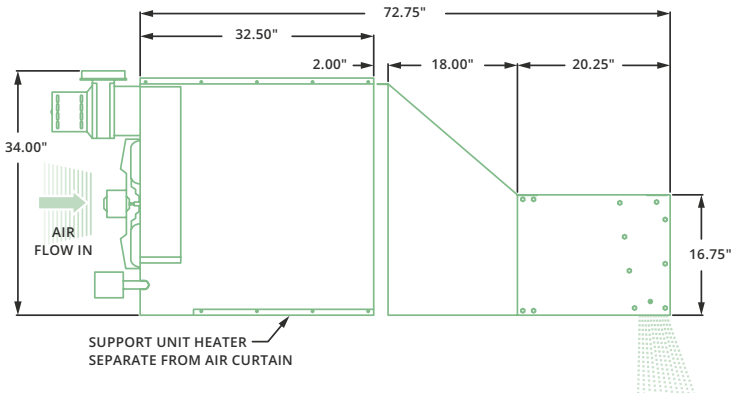
TIG | MECHANICAL DETAILS & DRAWINGS (2 HEATER)

TIG | 2-Heater Mechanical Information Table

MODEL	Air Curtain Width - A (in.)	Mounting Width - B (in.)	Hanging Width - C (in.)	Flue Diameter - D (in.)	Heater Size	Gas Inlet
TIG-3-120	123.15	121.65	30.63	5	2 × 200	0.5
TIG-3-132	135.15	133.65	30.63	5	2 × 200	0.5
TIG-4-144	147.22	145.72	30.63	5	2 × 200	0.5







TIG | INSTALLATION

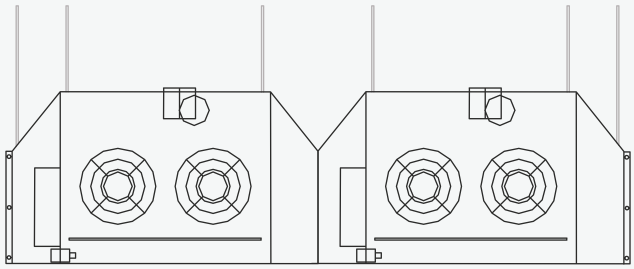
MOUNTING

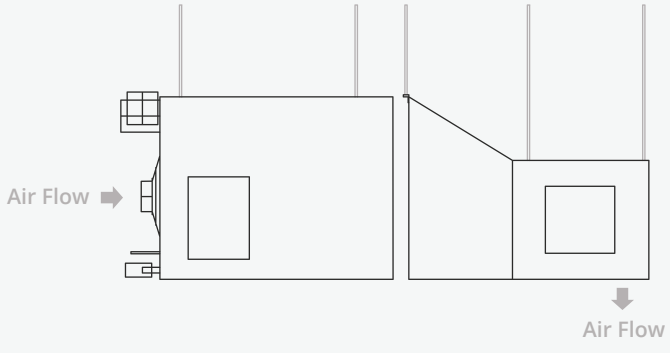
- Unit will be suspended with threaded rods. Air curtain has two holes on each end for installing one end of threaded rods.
- Model TIG requires 7/16" threaded rod. Washers and lock washers or locknuts are recommended. Mounting structure should be of sufficient strength to hold unit, and hardware (supplied by others) should be of sufficient strength and quality to support the unit safely.
- Each transition duct has two 3/8 – 16 spotnuts
- Each heater has two or four 3/8 – 16 spotnuts depending on the model.
- The other ends of the threaded rods can be attached to the ceiling.
- Additional mounting holes are provided on larger units for buildings where structural support is not adequate for supporting the air curtain from ends only.

POSITIONING

- Heater is to be mounted separately, 2" from air curtain/transition assembly.

FRONT



SIDE

Support unit heater separate from air curtain