FT SERIES



Available at:

Residential Hydronic Combination Boiler

900 - 100 etc.)	1000000	h
5		

MFTCW Wall Mounted	Combination
Boiler / Water Heater Indoor Sizes 140, 199	
Submittal Data	LAARS Heating Systems Company
Project Name:	
Location:	
Contractor:	
	Indoor Sizes 140, 199 Submittal Data Project Name: Location:

Standard Equipment

- Stainless steel heat exchanger with finned aluminum core fire tubes
- · ASME "H" stamp
- ASME 30 psi (207kPa) working pressure
- 95% AFUE
- Full modulation with 10:1 turndown ratio (10-100% of full fire)
- Stainless Steel indirect DHW tank
- · DHW priority
- · Inlet DHW filter
- · Boiler pump wired and mounted
- 30 psi (207kPa) ASME pressure relief valve

- Pressure gauge
- Sealed combustion chamber
- Pre-mix ceramic fiber burner
- Low NOx system exceeds the most stringent regulations for air quality
- · Horizontal or vertical direct vent
- Vent and air pipe lengths up to 100 equivalent feet (each)
- Electronic PID modulating control
- · Large user-interface and display
- Outdoor reset (sensor included)
- 0-10VDC external setpoint connections
- · Manual reset high limit
- Customizable Freeze Protection

- · Direct spark ignition
- · Gas leak detection
- Built-in condensate trap and drain
- · Automatic air vent
- · Boiler water pressure switch
- · Blocked vent pressure switch
- Blocked condensate pressure switch
- · Burner site glass
- · Wall mount bracket
- Screens for vent and air pipe
- Propane conversion kit
- 10-Year limited heat exchanger warranty
- · 5-Year limited parts warranty

Boiler Data

Number of Units:



Field Installed Accessory Kits Piping Manifold KitNeutralizer Kit

Horizontal Concentric Vent/Air Termination

2"

3"

Concentric Flush-Mount Vent/Air Termination

2"

3"









Sizing Data

ata									G	02X	HZ.A	T.	CC	
				AHRI (Certified F	Ratings			•					
		Inp	ut	Heating (Capacity	Net F	Rating	Certified	Gas	Heating	DHW	Shippin	g Weight	
	Model	MBH	kW	MBH	kW	MBH	kW	AFUE	Conn Size	Conn Size	Conn Size	lbs	kg	
	MFTCW140	140	41	129	38	112	33	95.0%	¾" NPT	1" NPT	3/4" NPT	111	50	
	MFTCW199	199	58	181	53	157	46	95.0%	¾" NPT	1" NPT	3/4" NPT	130	59	

NOTES:

1. For other boiler ratings:

Boiler Horsepower: HP = Output Radiation Surface: EDR sq. ft. = Output 33,475

Domestic Hot Water Capacity

Model	35°F Rise	45°F Rise	77°F Rise	Stored DHW Gallons / liters
MFTCW140	7.1 27	5.5 21	3.2 12	0.5 1.9
MFTCW199	9.8 37	7.7 29	4.8 18	0.5 1.9

Clearances

Appliance Surface	Clearance from Combustibles and Non-combustible Surfaces	Suggested Service Clearance
TOP	9 in (23 cm)	18 in (46 cm)
BACK	0 in (0 cm)	0 in (0 cm)
FRONT	24 in (61 cm)	40 in (101 cm)
SIDE	3 in (7 cm)	8 in (20 cm)
воттом	12 in (30 cm)	24 in (61 cm)

Electrical Data

		Max Power		
Size	Volts	Consumption		
140 and 199	120	Single	4	160W

Minimum 15A circuit required

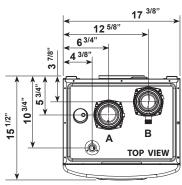
Vent System

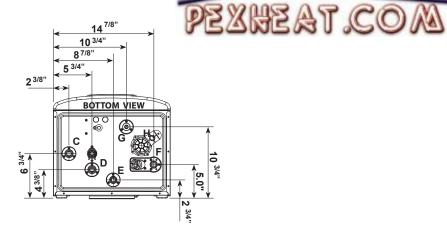
INTAKE / EXHAUST Max Equivalent Vent and Air Pipe Length (each)							
	STANDARD 2-PIPE			STANDARD 2-PIPE			
SIZES	DIA.	FT.	m	DIA.	FT.	m	
(all sizes)	2" *	50	15.2	3"	100	30.5	

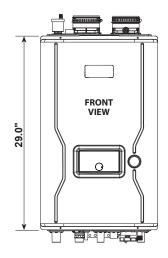
^{*} Must use 3x2 adapter within 1ft (30 cm) of boiler. Reference the Installation and Operation Manual for more details.

Available at: 888-4

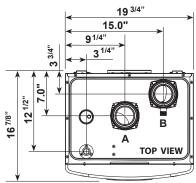
Dimensional Data

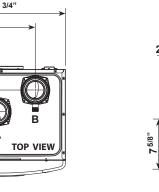


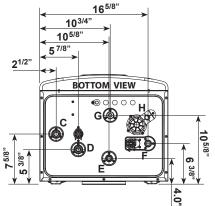




	Description	Diameter
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Α	Air Intake collar	3"
В	Vent Pipe Collar	3"
С	'CH' Supply	1" NPT
D	'CH' Return	1" NPT
Е	'DHW' Outlet	3/4" NPT
F	'DHW' Inlet	3/4" NPT
G	Gas Inlet	3/4" NPT
Н	Condensate Line	1/2" NPT







M	F٦	ГС	W	1	9	9
1 7 1			v v		•	•

32.0"	FRONT

	Description	Diameter
Α	Air Intake collar	3"
В	Vent Pipe Collar	3"
С	'CH' Supply	1" NPT
D	'CH' Return	1" NPT
Е	'DHW' Outlet	3/4" NPT
F	'DHW' Inlet	3/4" NPT
G	Gas Inlet	3/4" NPT
Н	Condensate Line	1/2" NPT

Available at: 888-470-2757

