



## OIL FIRED UPFLOW FURNACE SPECIFICATIONS

MODEL NO.	OL20*A151T60 B	OL20*A151T60 R
HEATING CAPACITY		
HEAT INPUT RATE (BTUH)	185,000	185,000
OUTPUT BTUH <sup>1</sup>	153,000	153,000
SEASONAL EFFICIENCY <sup>2</sup>	85.0%	85.0%
LARGEST REC A/C <sup>3</sup>	5 Tons	5 Tons
NOMINAL TEMP RISE	70°	70°
BIO FUEL APPROVAL	B20	B5
CASING HEIGHT (IN.):	50-1/2"	50-1/2"
CASING WIDTH (IN.):	27"	27"
CASING DEPTH (IN.):	58-1/2"	58-1/2"
NOMINAL FLUE OUTLET DIA.	7"	7"
APPROX SHIPPING WEIGHT LBS	600	600
APPROVAL STANDARDS	UL727	UL727
QTY AND SIZE OF PERMANENT FILTERS	(2) 14" X 25"	(2) 14" X 25"
ELECTRICAL REQUIREMENTS VAC/HZ/PH	120/60/1	120/60/1
MAX FUSE SIZE (AMPS)	20	20
TOTAL CURRENT (AMPS)	18.9	18.9
HEIGHT FROM FLOOR TO CENTER OF FLUE	44-1/4"	44-1/4"
SUPPLY AIR OUTLET SIZE (W-IN. X D-IN.)	22" X 22"	22" X 22"
RETURN AIR INLET OPENING SIZE (W-IN. X D-IN.)	22" X 18"	22" X 18"
	<b>ACCESSORY ITEMS</b>	
COMBUSTION AIR INTAKE HOOD KIT	PVB-2	N/A
OIL BURNER	BECKETT AFG 380739	RIELLO F5 ROB-20
UNCASED COIL 3 TON	HE33936UA200	HE33936UA200
UNCASED COIL 3 TON HIGH EFF.	HE47936UA205	HE47936UA205
CASED COIL 3.5-5 TON <sup>4</sup>	HE50960CH230	HE50960CH230

<sup>1</sup> OUTPUT BTUH BASED ON ANNUAL FUEL UTILIZATION EFFICIENCY RATED BY MANUFACTURER.

<sup>2</sup> SEASONAL EFFICIENCY (ALSO CALLED AFUE - ANNUAL FUEL UTILIZATION EFFICIENCY) RATINGS ARE BASED ON TESTS FOLLOWING U.S. DEPARTMENT OF ENERGY TEST PROCEDURES.

<sup>3</sup> TO PERMIT LARGEST RECOMMENDED AIR CONDITIONING (AT .5 STATIC PRESSURE), SELECTION OF THE HIGHEST MOTOR SPEED IS REQUIRED.

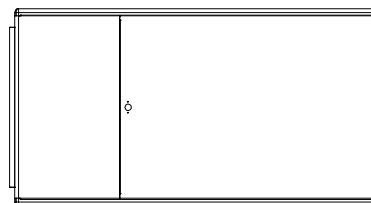
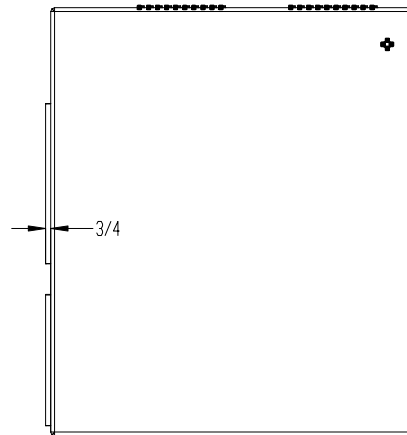
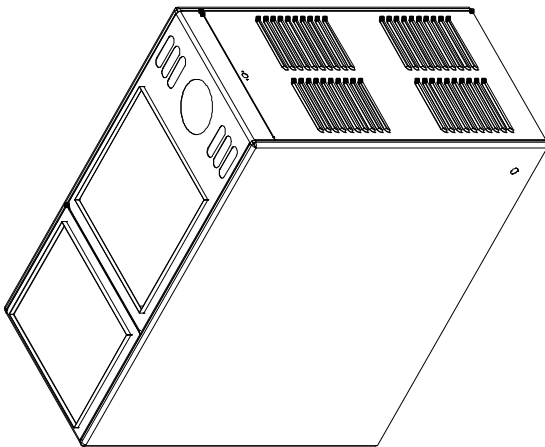
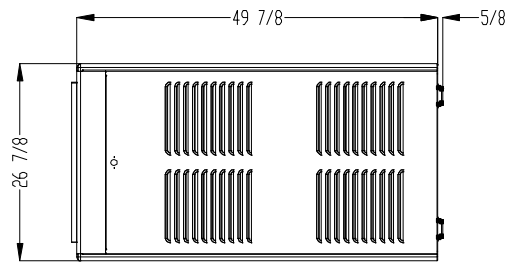
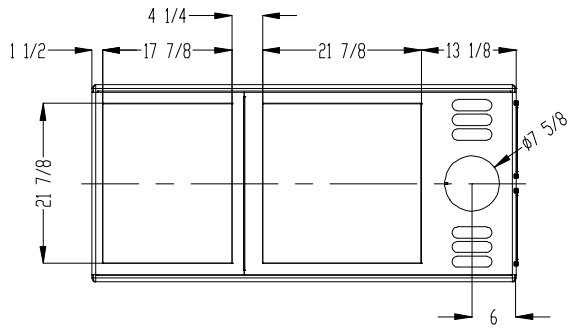
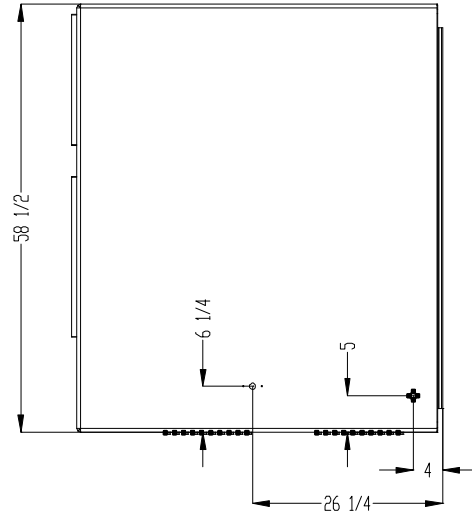
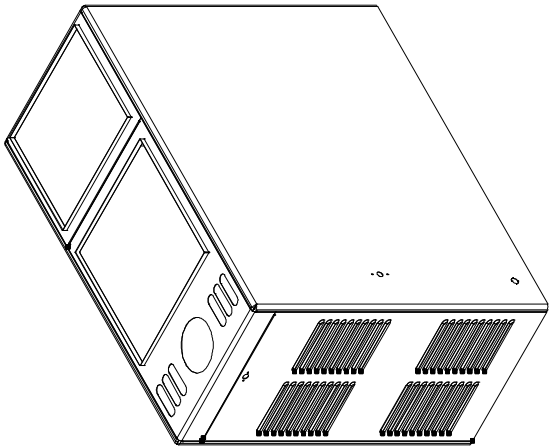
<sup>4</sup> WILL NEED FIELD SUPPLIED TRANSITION TO CONNECT CASED COIL TO FURNACE.

Model Number Digit	1	2	3	4	5	6	7	8	9	10	11	12
	Fuel	Configuration	Heat Exchanger Identifier	Flue	Design Change	Capacity	Capacity	Capacity	Blower Type	Cfg Airflow Cap.	Cfg Airflow Cap.	Burner
Oil Furnace Model Nomenclature Example Model Numbers	O	L	20	F	A	1	5	1	T	6	0	B
	O	L	20	F	A	1	5	1	T	6	0	R
	O	L	20	R	A	1	5	1	T	6	0	B
	O	L	20	R	A	1	5	1	T	6	0	R
O = Oil	O											
L=Lowboy		L										
20 = Heat Exchanger Size Identifier			20									
F = Front				F								
R = Rear				R								
A = Design Change					A							
Heating Capacity MBTUH (000's) with factory installed nozzle						1	5	1				
T=Constant Torque ECM									T			
Cfg. Airflow: Example = 48MBTUH = 4 tons @ 400cfm/ton										6	0	
B = Beckett, R = Riello												B

- SEE NEXT PAGE FOR MORE DATA -

# OIL FIRED UPFLOW FURNACE SPECIFICATIONS

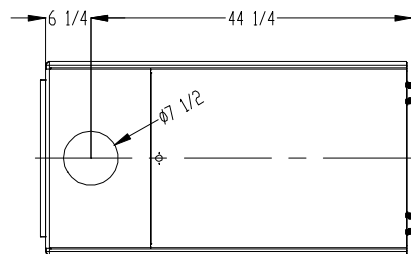
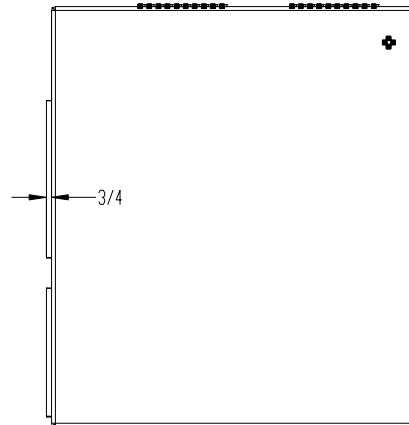
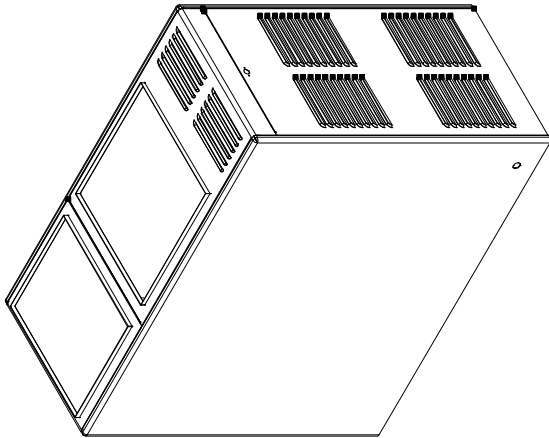
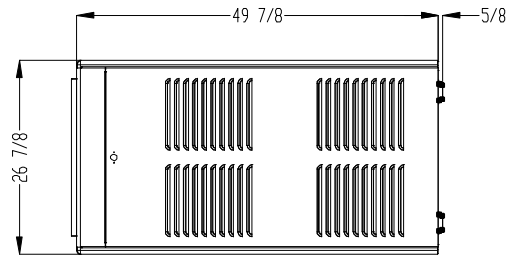
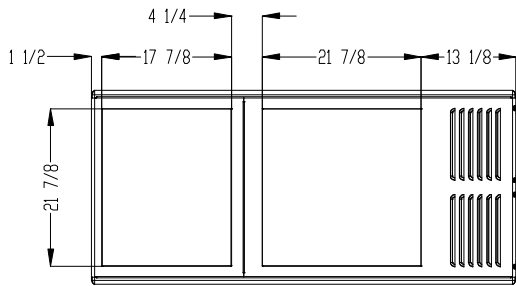
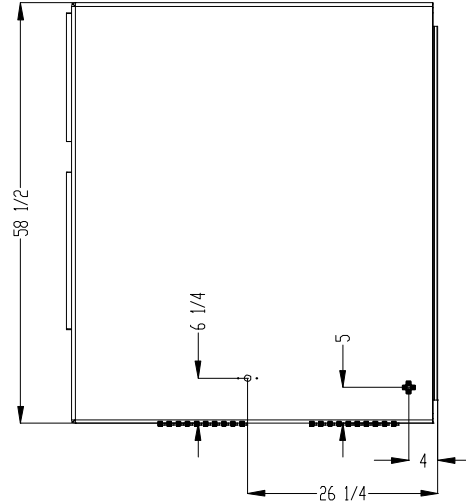
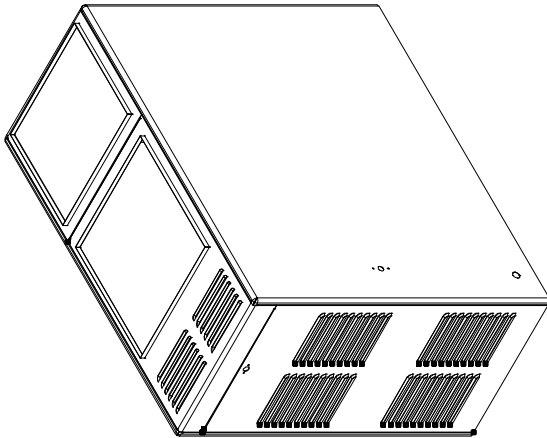
OL20FA151T60



- SEE NEXT PAGE FOR MORE DATA -

# OIL FIRED UPFLOW FURNACE SPECIFICATIONS

OL20RA151T60



- SEE NEXT PAGE FOR MORE DATA -

## OIL FIRED UPFLOW FURNACE SPECIFICATIONS

<b>CLEARANCES</b>	
	<b>MINIMUM CLEARANCES TO COMUSTIBLE MATERIALS:</b>
<b>SIDES</b>	1"
<b>FRONT</b>	24"
<b>REAR</b>	(Clearance to Combustibles) 1"/ 24" (Service)
<b>FLUE</b>	18"
<b>TOP PLENUM</b>	1"
<b>SIDES PLENUM</b>	1"

<b>BLOWER DATA:</b>	<b>OL20*A151T60</b>
<b>BLOWER MODEL (DIRECT DRIVE)</b>	<b>DD 10-9R</b>
<b>MOTOR H.P.</b>	1 HP
<b>MOTOR TYPE &amp; NUMBER OF SPEEDS</b>	ECM - CONSTANT TORQUE
<b>Diameter x Width (IN.)</b>	10 x 9

<b>BURNER DATA</b>	<b>RIELLO F5 (380216)</b>
<b>AIR TUBE LENGTH (IN.)</b>	8"
<b>BURNER HEAD TYPE:</b>	Fixed
<b>FUEL TYPE / BIO APPROVAL:</b>	#2 / B5
<b>NOZZLE RATING (GPH):</b>	1.10
<b>SPRAY ANGLE (DEG.):</b>	60°
<b>SPRAY PATTERN:</b>	HOLLOW (A)
<b>OIL PUMP PRESSURE (PSIG):</b>	145 PSI
<b>COMBUSTION CHAMBER TYPE:</b>	REFRACTORY (SOFT CHAMBER)

<b>BURNER DATA</b>	<b>BECKETT AFG TP1031 (380739)</b>
<b>AIR TUBE LENGTH (IN.)</b>	7 3/4"
<b>BURNER HEAD TYPE:</b>	F-12
<b>FUEL TYPE / BIO APPROVAL:</b>	#2 / B20
<b>NOZZLE RATING (GPH):</b>	1.35
<b>SPRAY ANGLE (DEG.):</b>	80°
<b>SPRAY PATTERN:</b>	SOLID (B)
<b>OIL PUMP PRESSURE (PSIG):</b>	100 PSI
<b>COMBUSTION CHAMBER TYPE:</b>	REFRACTORY (SOFT CHAMBER)

- SEE NEXT PAGE FOR MORE DATA -

## OIL FIRED UPFLOW FURNACE SPECIFICATIONS OL20FA151T60

ALTERATIONS REQ'D FOR A/C @ DESIGN EXTERNAL STATIC PRESSURE		
COOLING UNIT	HTG Speed	Recommended CLG Speed
	High Fire	
36,000	MH	LOW
42,000	MH	ML
48,000	MH	MED
60,000	MH	HIGH

AS SHIPPED CLG. →

Speed Tap\ Static Pressure	Furnace Airflow (CFM) vs. External Static pressure (in. WC.)						
	0.1	0.2	0.3	0.4	0.5	0.6	0.7
<b>Low</b>	1416	1353	1282	1225	1159	1101	1029
<b>ML</b>	1621	1553	1486	1432	1383	1313	1255
<b>Med</b>	1821	1744	1695	1647	1584	1539	1476
<b>MH</b>	2136	2067	2005	1952	1906	1863	1810
<b>High</b>	2317	2240	2197	2150	2101	2047	2008
Furnace Motor Current Draw (Amps/Watts) vs. External Static pressure (in. WC.)							
<b>Low</b>	2.8 / 202	3.0 / 217	3.2 / 231	3.3 / 245	3.4 / 257	3.5 / 267	3.7 / 280
<b>ML</b>	3.6 / 279	3.9 / 297	4.0 / 311	4.3 / 327	4.5 / 342	4.6 / 357	4.7 / 371
<b>Med</b>	4.8 / 379	5.0 / 398	5.3 / 415	5.5 / 432	5.7 / 460	5.8 / 476	6.0 / 491
<b>MH</b>	7.3 / 609	7.4 / 633	7.8 / 654	8.1 / 675	8.3 / 695	8.4 / 711	8.6 / 730
<b>High</b>	8.9 / 761	9.1 / 781	9.3 / 808	9.6 / 830	9.8 / 853	10.1 / 874	10.2 / 892

Speed Tap\ Static Pressure	High Fire Temperature Rise vs. External Static pressure (in. WC.)						
	0.1	0.2	0.3	0.4	0.5	0.6	0.7
<b>Low</b>	102	107	113	118	125	132	141
<b>ML</b>	89	93	97	101	105	110	116
<b>Med</b>	79	83	85	88	91	94	98
<b>MH</b>	68	70	72	74	76	78	80
<b>High</b>	62	65	66	67	69	71	72

AS SHIPPED HTG. →

- SEE NEXT PAGE FOR MORE DATA -

## OIL FIRED UPFLOW FURNACE SPECIFICATIONS OL20RA151T60

ALTERATIONS REQ'D FOR A/C @ DESIGN EXTERNAL STATIC PRESSURE		
COOLING UNIT	HTG Speed	Recommended CLG Speed
	High Fire	
<b>36,000</b>	MH	LOW
<b>42,000</b>	MH	ML
<b>48,000</b>	MH	MED
<b>60,000</b>	MH	HIGH

AS SHIPPED CLG. →

Speed Tap\ Static Pressure	Furnace Airflow (CFM) vs. External Static pressure (in. WC.)						
	0.1	0.2	0.3	0.4	0.5	0.6	0.7
<b>Low</b>	1416	1353	1282	1225	1159	1101	1029
<b>ML</b>	1621	1553	1486	1432	1383	1313	1255
<b>Med</b>	1821	1744	1695	1647	1584	1539	1476
<b>MH</b>	2136	2067	2005	1952	1906	1863	1810
<b>High</b>	2317	2240	2197	2150	2101	2047	2008
Furnace Motor Current Draw (Amps/Watts) vs. External Static pressure (in. WC.)							
<b>Low</b>	2.8 / 202	3.0 / 217	3.2 / 231	3.3 / 245	3.4 / 257	3.5 / 267	3.7 / 280
<b>ML</b>	3.6 / 279	3.9 / 297	4.0 / 311	4.3 / 327	4.5 / 342	4.6 / 357	4.7 / 371
<b>Med</b>	4.8 / 379	5.0 / 398	5.3 / 415	5.5 / 432	5.7 / 460	5.8 / 476	6.0 / 491
<b>MH</b>	7.3 / 609	7.4 / 633	7.8 / 654	8.1 / 675	8.3 / 695	8.4 / 711	8.6 / 730
<b>High</b>	8.9 / 761	9.1 / 781	9.3 / 808	9.6 / 830	9.8 / 853	10.1 / 874	10.2 / 892

Speed Tap\ Static Pressure	High Fire Temperature Rise vs. External Static pressure (in. WC.)						
	0.1	0.2	0.3	0.4	0.5	0.6	0.7
<b>Low</b>	102	107	113	118	125	132	141
<b>ML</b>	89	93	97	101	105	110	116
<b>Med</b>	79	83	85	88	91	94	98
<b>MH</b>	68	70	72	74	76	78	80
<b>High</b>	62	65	66	67	69	71	72

AS SHIPPED HTG. →