Thermo Pride®

OIL FIRED UPFLOW FURNACE SPECIFICATIONS

MODEL NO.	OL6*A072D48/T60 B			OL6*A072D48/T60 R			OL6*A072D48/T60 C		
HEATING CAPACITY	High Fire	Med Fire	Low Fire	High Fire	Med Fire	Low Fire	High Fire	Med Fire	Low Fire
HEAT INPUT RATE (BTUH)	106,250	85,000	70,000	106,250	85,000	70,000	106,250	85,000	70,000
OUTPUT BTUH[1]	89,000	72,000	60,000	90,000	73,000	60,000	89,000	72,000	60,000
SEASONAL EFFICIENCY[2]	86.5%			87.0%			86.0%		
LARGEST REC A/C[3]	4 Tons / 5 Tons			4 Tons / 5 Tons			4 Tons / 5 Tons		
NOMINAL TEMP RISE	66°	66°	66°	66°	66°	66°	66°	66°	66°
BIO FUEL APPROVAL	B20			B5			B20		
CASING HEIGHT (IN.):	34-3/4"			34-3/4"			34-3/4"		
CASING WIDTH (IN.):	20"			20"			20"		
CASING DEPTH (IN.):	50"			50"			50"		
NOMINAL FLUE OUTLET DIA.	5"			5"			5"		
APPROX SHIPPING WEIGHT LBS	250			250			250		
APPROVAL STANDARDS	UL727 CAN/CSA B140.4			UL727 CAN/CSA B140.4			UL727 CAN/CSA B140.4		
QTY AND SIZE OF PERMANENT FILTERS	(2) 19-3/4" X 13-3/4"			(2) 19-3/4" X 13-3/4"			(2) 19-3/4" X 13-3/4"		
ELECTRICAL REQUIREMENTS VAC/HZ/PH	120/60/1			120/60/1			120/60/1		
MAX FUSE SIZE (AMPS) PSC/ECM	15 / 20			15 / 20			15 / 20		
TOTAL CURRENT (AMPS) PSC/ECM	8.7 /13.2			8.7 / 13.2			8.7 / 13.2		
HEIGHT FROM FLOOR TO CENTER OF FLUE	28-3/8"			28-3/8"			28-3/8"		
SUPPLY AIR OUTLET SIZE (W-IN. X D-IN.)	18" X 20" (20" X 20")[5]			18" X 20" (20" X 20")[5]			18" X 20" (20" X 20")[5]		
RETURN AIR INLET OPENING SIZE (W-IN. X D-IN.)	18" X 18" (20" X 18")[5]			18" X 18" (20" X 18")[5]			18" X 18" (20" X 18")[5]		
	ACCESSORY ITEMS								
2-LINE SYSTEM KIT FOR RIELLO	N/A			380705			N/A		
COMBUSTION AIR KIT	AOPS8397			AOPS8416			AOPS8433		
FIELD VENT TERMINATION KIT	AOPS8393			AOPS8393			AOPS8393		
SIDEWALL VENT ACCESSORIES KIT	AOPS8394			AOPS8395			AOPS8432		
BLOCKED VENT KIT[4]	350156			350156			350156		
OIL BURNER	BECKETT AFG (380692)			RIELLO BF3 (380693)			CARLIN EZ-1HP (380835)		
SUPPLY PLENUM	PK202X202			PK202X202			PK202X202		
RETURN PLENUM	PK181X201			PK181X201			PK181X201		
CASED COIL 2-3 TON	HE33936PA212			HE33936PA212			HE33936PA212		
CASED COIL 2-3 TON HIGH EFF.	HE47936PA212			HE47936PA212			HE47936PA212		
CASED COIL 3.5-5 TON	HE50960PA212			HE50960PA212			HE50960PA212		

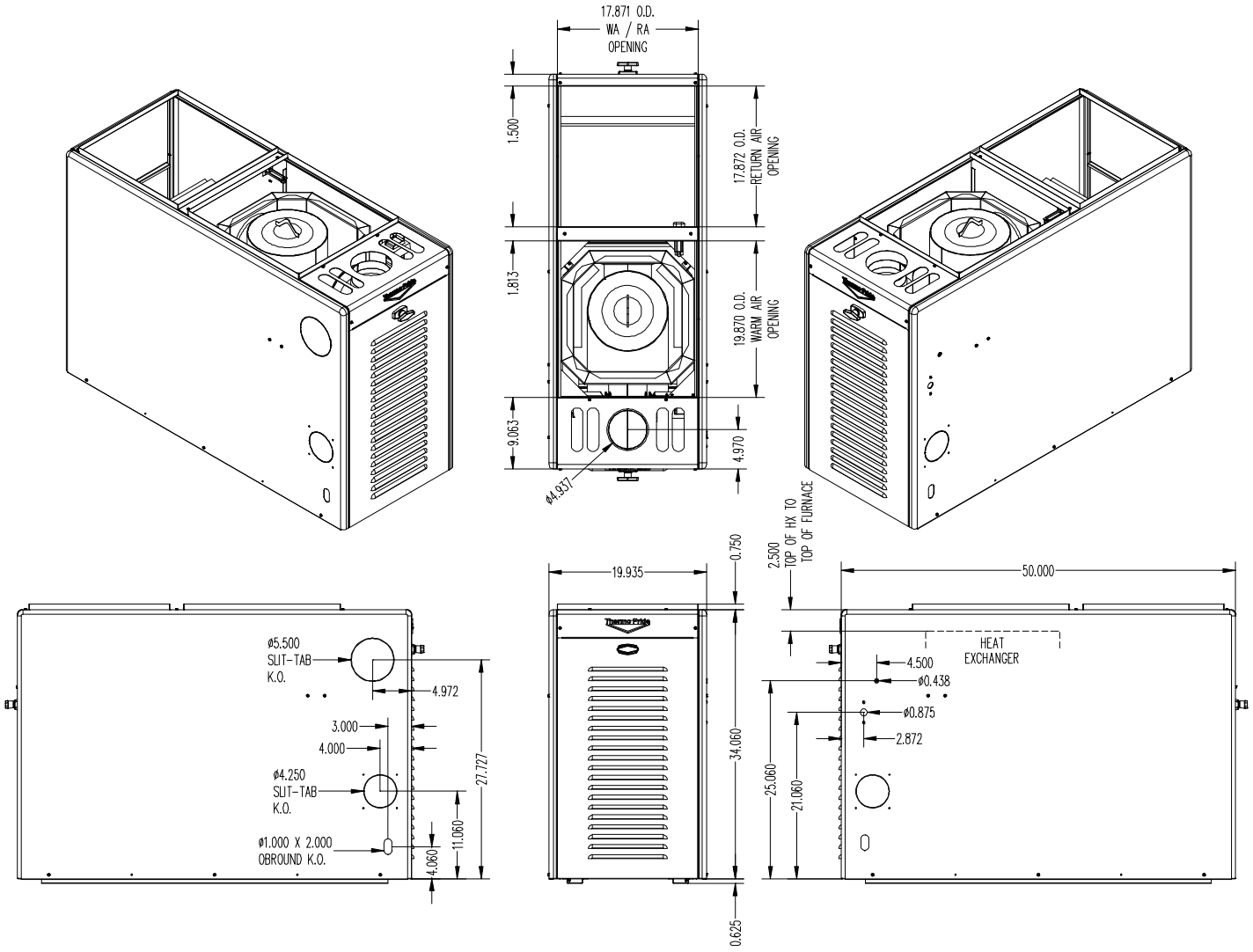
[1] OUTPUT BTUH BASED ON ANNUAL FUEL UTILIZATION EFFICIENCY RATED BY MANUFACTURER.
[2] SEASONAL EFFICIENCY (ALSO CALLED AFUE - ANNUAL FUEL UTILIZATION EFFICIENCY) RATINGS ARE BASED ON TESTS FOLLOWING U.S. DEPARTMENT OF ENERGY TEST PROCEDURES.
[3] TO PERMIT LARGEST RECOMMENDED AIR CONDITIONING (AT .5 STATIC PRESSURE), SELECTION OF THE HIGHEST MOTOR SPEED IS REQUIRED.
[4] NOT TO BE USED IN SIDEWALL VENT APPLICATIONS, USE ONLY WHEN CHIMNEY VENTED.
[5] PLENUM ADAPTERS, INCLUDED WITH UNIT, MUST BE INSTALLED FOR 20" PLENUM WIDTH.

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	Clg Airflow Cap.	Clg Airflow Cap.	Burner
Oil Furnace Model Nomenclature Example Model Numbers	O	L	6	F	A	0	7	2	D	4	8	B
	O	L	6	F	A	0	7	2	T	6	0	B
	O	L	6	R	A	0	7	2	T	6	0	R
O = Oil	O											
L=Lowboy		L										
6 = Heat Exchanger Size Identifier			6									
F = Front, R = Rear				F								
A = Design Change					A							
Heating Capacity MBTUH (000's) with factory installed nozzle						0	7	2				
D = Direct Drive PSC, T = Direct Drive ECM Constant Torque									D			
Clg. Airflow: Example = 48MBTUH = 4 tons @ 400cfm/ton										4	8	
B = Beckett, R = Riello, C = Carlin												B

- SEE NEXT PAGE FOR MORE DATA -

OIL FIRED UPFLOW FURNACE SPECIFICATIONS

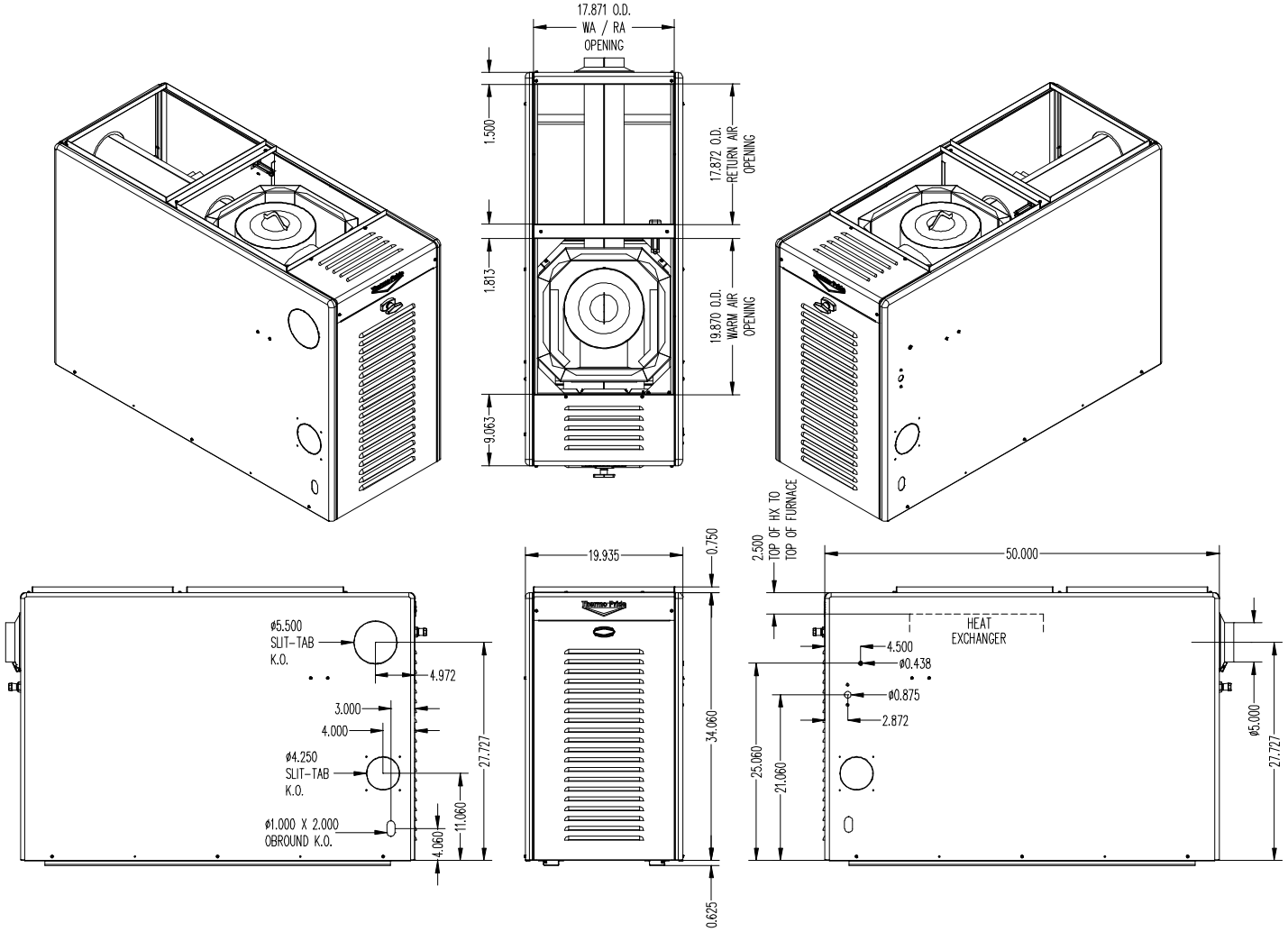
OL6FA072***



- SEE NEXT PAGE FOR MORE DATA -

OIL FIRED UPFLOW FURNACE SPECIFICATIONS

OL6RA072***



CLEARANCES	
	MINIMUM CLEARANCES TO COMUSTIBLE MATERIALS:
SIDES	0”
FRONT (SERVICE ACCESS)	(Clearance to Combustibles) 6”/ 24” (Service)
REAR	(Clearance to Combustibles) 0”/ 24” (Service)
FLUE	7”
TOP PLENUM	1”
SIDES PLENUM	1”

- SEE NEXT PAGE FOR MORE DATA -

OIL FIRED UPFLOW FURNACE SPECIFICATIONS

BLOWER DATA:	OL6*A072D48	OL6*A072T60
BLOWER MODEL (DIRECT DRIVE)	DD 120-9T	DD 120-9T
MOTOR H.P.	½ HP	1 HP
MOTOR TYPE & NUMBER OF SPEEDS	PSC - 5	ECM Constant Torque – 5
HIGH SPEED AIRFLOW (SCFM) @ 0.5 IN. W.G. EXTERNAL STATIC PRESSURE:	1566	2000
Diameter x Width (IN.)	12 x 9	12 x 9

BURNER DATA	RIELLO "BF3" WITH CERA-FELT SLEEVE		
AIR TUBE LENGTH (IN.)	4 ½"		
BURNER HEAD TYPE:	Fixed		
FUEL TYPE / BIO APPROVAL:	#2 / B5		
NOZZLE RATING (GPH):	.70	.60	.50
SPRAY ANGLE (DEG.):	80°	80°	80°
SPRAY PATTERN:	HOLLOW (A)	HOLLOW (A)	HOLLOW (A)
OIL PUMP PRESSURE (PSIG):	140 PSI		
COMBUSTION CHAMBER TYPE:	REFRACTORY (SOFT CHAMBER)		

BURNER DATA	BECKETT "AFG" S - PLATE 3912 (3 5/8") 31517 CERAMIC		
AIR TUBE LENGTH (IN.)	4 ½"		
BURNER HEAD TYPE:	F-3		
FUEL TYPE / BIO APPROVAL:	#2 / B20		
NOZZLE RATING (GPH):	.75	.60	.50
SPRAY ANGLE (DEG.):	70°	70°	70°
SPRAY PATTERN:	SOLID (B)	SOLID (B)	HOLLOW (A)
OIL PUMP PRESSURE (PSIG):	120 PSI		
COMBUSTION CHAMBER TYPE:	REFRACTORY (SOFT CHAMBER)		

BURNER DATA:	CARLIN "EZ-1HP"		
AIR TUBE LENGTH (IN.)	4 ½"		
BURNER HEAD TYPE:	N/A		
FUEL TYPE / BIO APPROVAL:	#2 / B20		
NOZZLE RATING (GPH):	.75	.60	.50
SPRAY ANGLE (DEG.):	60º	60º	60º
SPRAY PATTERN:	HOLLOW (A)	HOLLOW (A)	HOLLOW (A)
OIL PUMP PRESSURE (PSIG):	120 PSI		
COMBUSTION CHAMBER TYPE:	REFRACTORY (SOFT CHAMBER)		

- SEE NEXT PAGE FOR MORE DATA -

OIL FIRED UPFLOW FURNACE SPECIFICATIONS

OL6*A072D48

ALTERATIONS REQ'D FOR A/C @ DESIGN EXTERNAL STATIC PRESSURE				
	HTG Speed by Input			
COOLING UNIT	Low fire	Mid Fire	High Fire	Recommended CLG Speed
24,000	ML	MED	MH	Med Low (ML)
30,000	ML	MED	MH	Med (M)
36,000	ML	MED	MH	Med High (MH)
42,000	ML	MED	MH	High (H)
48,000	ML	MED	MH	High (H)

Speed Tap\ Static Pressure	Furnace Airflow (CFM) vs. External Static pressure (in. WC.)				
	0.2	0.3	0.4	0.5	0.6
Low	712	691	682	667	664
ML	902	899	896	883	874
MED	1113	1113	1109	1091	1073
MH	1270	1266	1250	1239	1215
High	1670	1637	1605	1566	1527
	Motor Current Draw (Amps/Watts) vs. External Static pressure (in. WC.)				
Low	4.1/408	4.0/398	4.0/395	3.9/385	3.8/378
ML	5.3/540	5.3/535	5.2/527	5.1/512	4.9/500
MED	6.6/665	6.4/644	6.2/634	5.9/609	5.6/584
MH	7.6/772	7.2/739	6.9/713	6.6/682	6.4/663
High	9.6/951	84/830	9.0/887	8.8/869	8.4/835

Speed Tap\ Static Pressure	High Fire Temperature Rise vs. External Static pressure (in. WC.)				
	0.2	0.3	0.4	0.5	0.6
Low	119	122	124	127	127
ML	94	94	94	96	97
MED	76	76	76	77	79
MH	66	67	68	68	70
High	51	52	53	54	55

Speed Tap\ Static Pressure	Mid Fire Temperature Rise vs. External Static pressure (in. WC.)				
	0.2	0.3	0.4	0.5	0.6
Low	96	99	100	102	103
ML	75	76	76	77	78
MED	61	61	61	62	63
MH	54	54	54	55	56
High	41	42	42	43	45

Speed Tap\ Static Pressure	Low Fire Temperature Rise vs. External Static pressure (in. WC.)				
	0.2	0.3	0.4	0.5	0.6
Low	79	81	83	84	85
ML	62	63	63	64	64
MED	51	51	51	52	53
MH	44	44	45	45	46
High	34	34	35	36	37

= Recommended operation range

- SEE NEXT PAGE FOR MORE DATA -

OIL FIRED UPFLOW FURNACE SPECIFICATIONS

OL6*A072T60

Alterations Req'd for A/C @ Design External Statice Pressure				
	HTG Speed by Input			
Cooling Unit	Low Fire	Mid Fire	Hi Fire	Reccommended CLG Speed
30,000	Low	Low	ML	Low (L)
36,000	Low	Low	ML	Med Low (ML)
42,000	Low	Low	ML	Med (M)
48,000	Low	Low	ML	Med High (MH)
60,000	Low	Low	ML	High (H)

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
Low	1196	1137	1087	1047	997	956	908
ML	1416	1359	1318	1283	1230	1175	1141
Med	1573	1528	1481	1437	1394	1364	1331
MH	1749	1712	1681	1652	1603	1556	1520
High	2055	2018	1987	1947	1907	1886	1852

Speed Tap/Static Pressure	Blower Motor Current Draw (Amps)/Watts vs. External Static Pressure (in. WC)						
	0.1	0.2	0.3	0.4	0.5	0.6	0.7
Low	2.5/184	2.6/193	2.7/201	2.8/206	2.9/215	3.0/223	3.1/233
ML	3.6/278	3.7/289	3.8/297	3.9/286	4.0/309	4.1/321	4.2/329
Med	4.7/376	4.8/385	4.9/396	5.0/406	5.2/415	5.2/426	5.4/440
MH	6.1/506	6.3/515	6.4/525	6.5/538	6.6/555	6.8/564	6.9/575
High	9.1/791	9.3/808	9.5/822	9.7/840	9.8/855	9.9/868	10/883

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
Low	70	74	77	80	84	87	92
ML	59	62	63	65	68	71	73
Med	53	55	56	58	60	61	63
MH	48	49	50	51	52	54	55
High	41	42	43	43	44	45	46

Speed Tap/Static Pressure	Medium Fire Temperature Rise vs. External Static Pressure (in. WC)						
	0.1	0.2	0.3	0.4	0.5	0.6	0.7
Low	56	59	62	64	67	70	74
ML	47	49	51	52	54	57	59
Med	43	44	45	47	48	49	50
MH	38	39	40	40	42	43	44
High	34	35	36	36	37	38	38

Speed Tap/Static Pressure	Low Fire Temperature Rise vs. External Static Pressure (in. WC)						
	0.1	0.2	0.3	0.4	0.5	0.6	0.7
Low	46	48	51	53	55	58	61
ML	39	41	42	43	45	47	48
Med	35	36	37	38	40	40	41
MH	31	32	33	33	34	35	36
High	27	28	28	29	29	30	30

= Recommended operation range