Thermo Pride®

OIL FIRED UPFLOW FURNACE SPECIFICATIONS

MODEL NO.	OL8*A119T60 B			OL8*A119T60 R			OL8*A119T60 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)	156,250	140,000	119,000	156,250	140,000	119,000	156,250	140,000	119,000
OUTPUT BTUH[1]	132,000	119,000	101,000	132,000	119,000	101,000	132,000	119,000	101,000
SEASONAL EFFICIENCY[2]	85.0%			85.0%			85.0%		
LARGEST REC A/C[3]	5 Tons			5 Tons			5 Tons		
NOMINAL TEMP RISE	67°	67°	67°	67°	67°	67°	67°	67°	67°
BIO FUEL APPROVAL	B20			B5			B20		
CASING HEIGHT (IN.):	37-1/2"			37-1/2"			37-1/2"		
CASING WIDTH (IN.):	24-1/2"			24-1/2"			24-1/2"		
CASING DEPTH (IN.):	55-1/2"			55-1/2"			55-1/2"		
NOMINAL FLUE OUTLET DIA.	7"			7"			7"		
APPROX SHIPPING WEIGHT LBS	315			315			315		
APPROVAL STANDARDS	UL727			UL727			UL727		
QTY AND SIZE OF PERMANENT FILTERS	(2) 11-3/4" X 21-3/4"			(2) 11-3/4" X 21-3/4"			(2) 11-3/4" X 21-3/4"		
ELECTRICAL REQUIREMENTS VAC/HZ/PH	120/60/1			120/60/1			120/60/1		
MAX FUSE SIZE (AMPS)	20			20			20		
TOTAL CURRENT (AMPS)	16			16			16		
HEIGHT FROM FLOOR TO CENTER OF FLUE	30-1/4"			30-1/4"			30-1/4"		
SUPPLY AIR OUTLET SIZE (W-IN. X D-IN.)	20" X 20"			20" X 20"			20" X 20"		
RETURN AIR INLET OPENING SIZE (W-IN. X D-IN.)	20" X 16"			20" X 16"			20" X 16"		
	ACCESSORY ITEMS								
2-LINE SYSTEM KIT FOR RIELLO	N/A			380705			N/A		
COMBUSTION AIR INTAKE HOOD KIT	AOPS8397			AOPS8416			AOPS8433		
FIELD VENT TERMINATION KIT	AOPS8414			AOPS8414			AOPS8414		
SIDEWALL VENT ACCESSORIES KIT	AOPS8394			AOPS8395			AOPS8432		
OIL BURNER	BECKETT AFG 380754			RIELLO BF5 380756			CARLIN EZ-1HP 380836		
SUPPLY PLENUM	PK202X202			PK202X202			PK202X202		
RETURN PLENUM	PK161X201			PK161X201			PK161X201		
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.

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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	8	F	A	1	1	9	T	6	0	B
	O	L	8	F	A	1	1	9	T	6	0	R
	O	L	8	F	A	1	1	9	T	6	0	C
	O	L	8	R	A	1	1	9	T	6	0	B
	O	L	8	R	A	1	1	9	T	6	0	R
	O	L	8	R	A	1	1	9	T	6	0	C
O = Oil	O											
L=Lowboy		L										
8 = Heat Exchanger Size Identifier			8									
F = Front				F								
R = Rear				R								
A = Design Change					A							
Heating Capacity MBTUH (000's) with factory installed nozzle						1	1	9				
T=Constant Torque ECM									T			
Clg. Airflow: Example = 48MBTUH = 4 tons @ 400cfm/ton										6	0	
B = Beckett, R = Riello, C = Carlin												B

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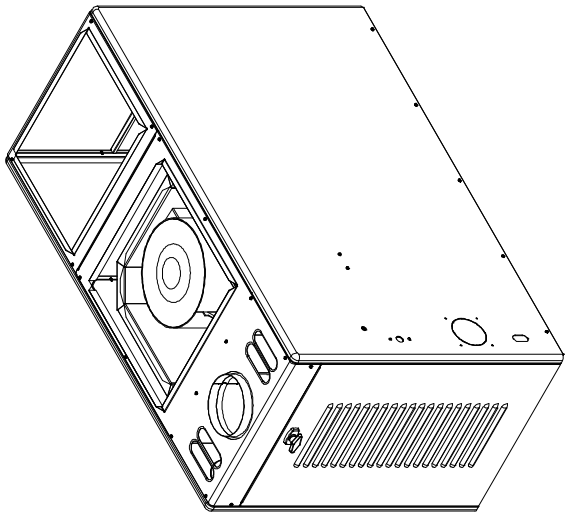
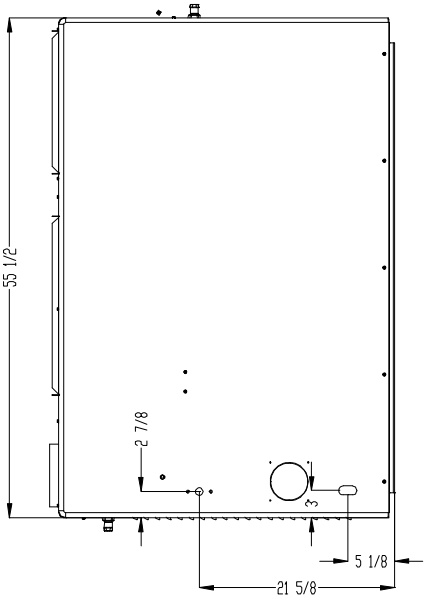
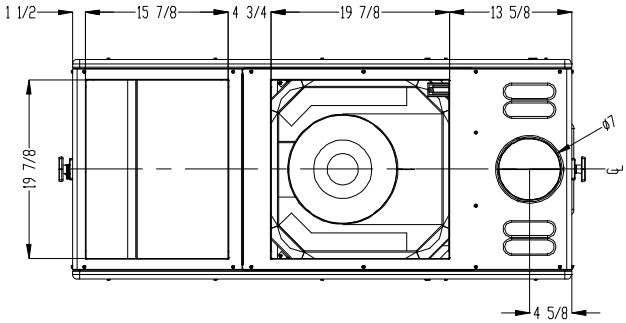
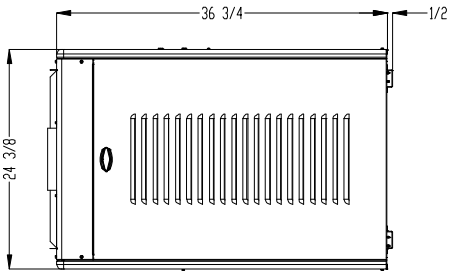
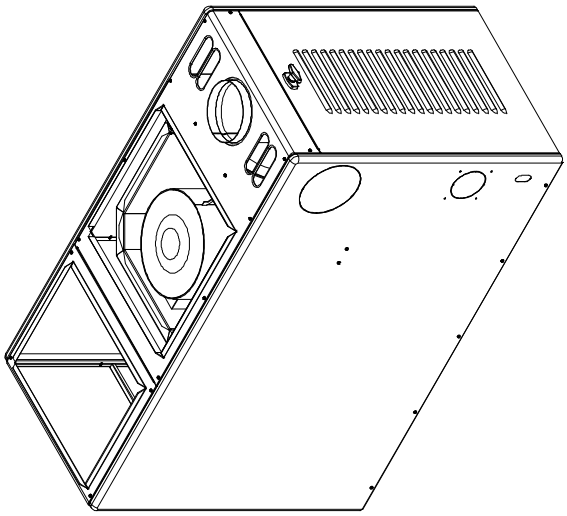
OL8FA119T60

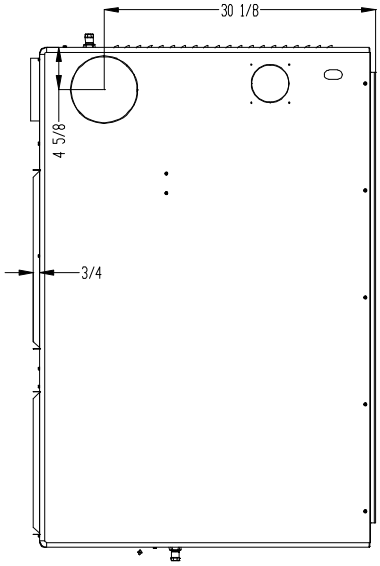


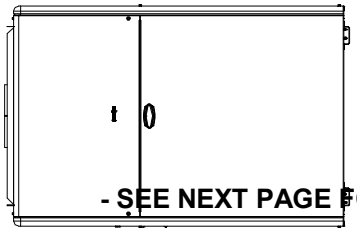












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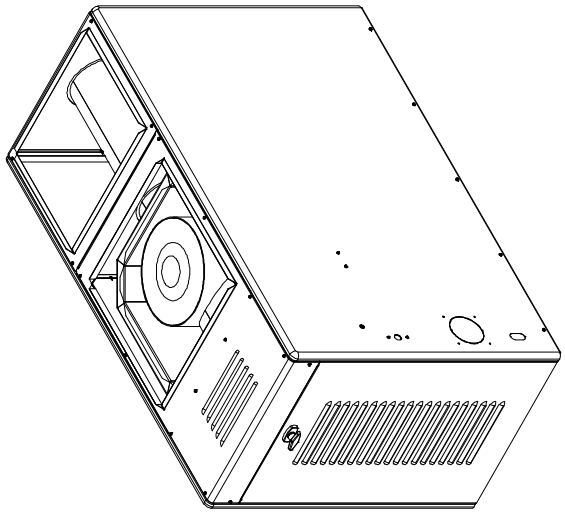
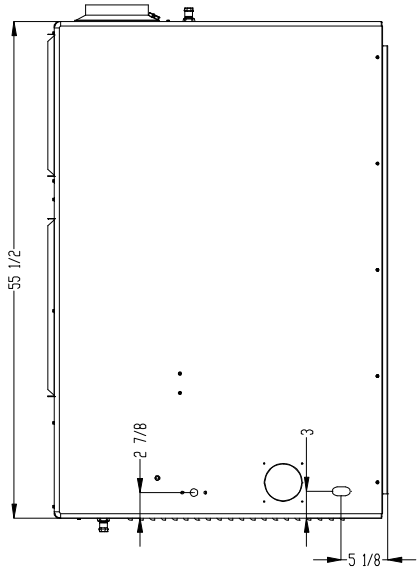
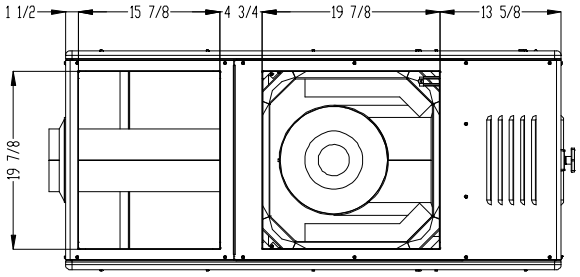
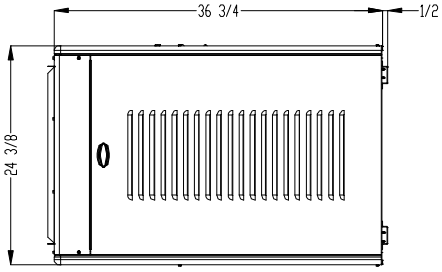
OIL FIRED UPFLOW FURNACE SPECIFICATIONS

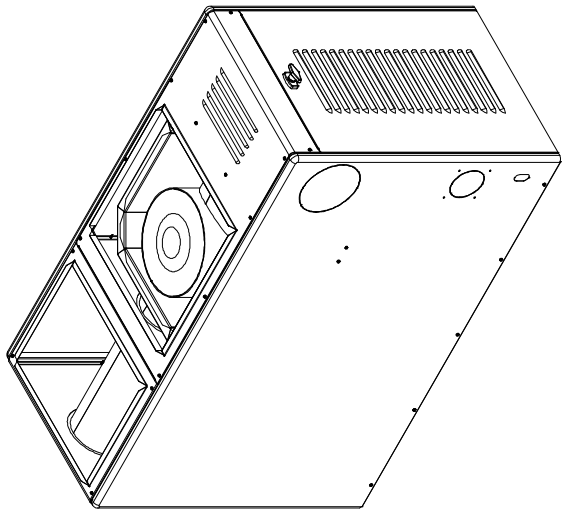
OL8RA19T60

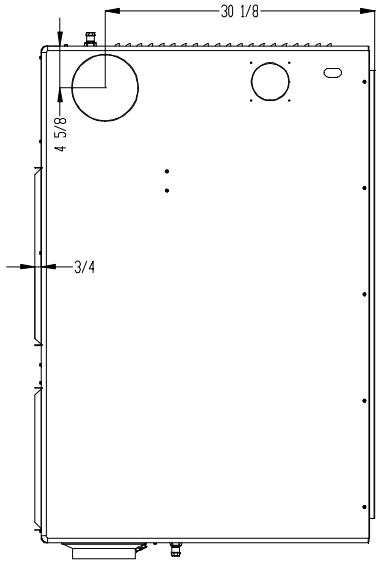


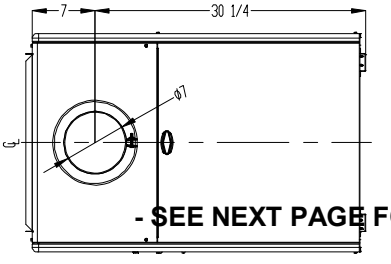












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OIL FIRED UPFLOW FURNACE SPECIFICATIONS

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	8”
TOP PLENUM	1”
SIDES PLENUM	1”

BLOWER DATA:	OL8*A119T60
BLOWER MODEL (DIRECT DRIVE)	**DD 12-11T**
MOTOR H.P.	1 HP
MOTOR TYPE & NUMBER OF SPEEDS	ECM - CONSTANT TORQUE
Diameter x Width (IN.)	11 x 11

BURNER DATA	RIELLO “BF5” WITH CERA-FELT SLEEVE		
AIR TUBE LENGTH (IN.)	**4 ½”**		
BURNER HEAD TYPE:	Fixed		
FUEL TYPE / BIO APPROVAL:	#2 / B5		
NOZZLE RATING (GPH):	1.00	.85	.75
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 3383 (2 3/4” U) 31517 CERAMIC		
AIR TUBE LENGTH (IN.)	4 ½”		
BURNER HEAD TYPE:	F-6		
FUEL TYPE / BIO APPROVAL:	#2 / B20		
NOZZLE RATING (GPH):	1.10	1.00	0.85
SPRAY ANGLE (DEG.):	80°	80°	80°
SPRAY PATTERN:	SOLID (B)	SOLID (B)	SOLID (B)
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):	.90	.85	.75
SPRAY ANGLE (DEG.):	60º	60º	60º
SPRAY PATTERN:	HOLLOW (A)	HOLLOW (A)	HOLLOW (A)
OIL PUMP PRESSURE (PSIG):	140 PSI		
COMBUSTION CHAMBER TYPE:	REFRACTORY (SOFT CHAMBER)		

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OIL FIRED UPFLOW FURNACE SPECIFICATIONS
OL8FA119T60

ALTERATIONS REQ'D FOR A/C @ DESIGN EXTERNAL STATIC PRESSURE				
COOLING UNIT	HTG Speed by Input			Recommended CLG Speed
	Low Fire	Mid Fire	High Fire	
36,000	LOW	MED	MH	LOW
42,000	LOW	MED	MH	MED LOW
48,000	LOW	MED	MH	MED HIGH
AS SHIPPED CLG. → **60,000**	LOW	MED	MH	HIGH

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	1454	1392	1321	1255	1158	1074	932
ML	1620	1567	1499	1413	1349	1282	1202
Med	1674	1613	1560	1502	1429	1370	1287
MH	1778	1737	1666	1613	1551	1487	1417
High	2148	2091	2029	1973	1928	1884	1834
	Furnace Motor Current Draw (Amps/Watts) vs. External Static pressure (in. WC.)						
Low	3.4 / 266	3.6 / 280	3.7 / 292	3.9 / 306	4.0 / 321	4.2 / 331	4.3 / 344
ML	4.4 / 351	4.6 / 366	4.7 / 381	4.9 / 399	5.1 / 413	5.2 / 424	5.3 / 435
Med	4.9 / 400	5.1 / 416	5.3 / 429	5.4 / 445	5.6 / 462	5.8 / 471	5.9 / 485
MH	5.8 / 475	5.9 / 486	6.1 / 502	6.2 / 518	6.5 / 537	6.6 / 553	6.8 / 565
High	9.3 / 806	9.4 / 815	9.6 / 837	9.8 / 855	10.0 / 874	10.2 / 891	10.4 / 912

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	84	88	93	98	106	114	132
ML	76	78	82	87	91	96	102
Med	73	76	79	82	86	90	95
MH	69	71	74	76	79	83	87
High	57	59	61	62	64	65	67

Speed Tap\ Static Pressure	Mid Fire Temperature Rise vs. External Static pressure (in. WC.)						
	0.1	0.2	0.3	0.4	0.5	0.6	0.7
Low	76	79	83	88	95	103	118
ML	68	70	73	78	82	86	92
AS SHIPPED HTG. → **Med**	66	68	71	73	77	80	86
MH	62	63	66	68	71	74	78
High	51	53	54	56	57	58	60

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	64	67	71	75	81	87	101
ML	58	60	62	66	69	73	78
Med	56	58	60	62	66	68	73
MH	53	54	56	58	60	63	66
High	44	45	46	47	49	50	51

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OIL FIRED UPFLOW FURNACE SPECIFICATIONS
OL8RA119T60

ALTERATIONS REQ'D FOR A/C @ DESIGN EXTERNAL STATIC PRESSURE				
COOLING UNIT	HTG Speed by Input			Recommended CLG Speed
	Low Fire	Mid Fire	High Fire	
36,000	LOW	MED	MH	LOW
42,000	LOW	MED	MH	MED LOW
48,000	LOW	MED	MH	MED HIGH
AS SHIPPED CLG. → **60,000**	LOW	MED	MH	HIGH

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	1489	1434	1395	1326	1279	1218	1150
ML	1678	1623	1570	1530	1472	1418	1362
Med	1788	1733	1678	1656	1601	1538	1483
MH	1868	1825	1772	1734	1680	1637	1579
High	2298	2249	2185	2151	2126	2090	2040
	Furnace Motor Current Draw (Amps/Watts) vs. External Static pressure (in. WC.)						
Low	3.2 / 256	3.3 / 266	3.4 / 279	3.5 / 290	3.6 / 301	3.7 / 311	3.8 / 319
ML	4.1 / 348	4.2 / 358	4.4 / 373	4.5 / 385	4.6 / 395	4.7 / 406	4.8 / 417
Med	4.8 / 416	4.9 / 429	5.1 / 442	5.2 / 451	5.4 / 466	5.5 / 477	5.6 / 491
MH	5.4 / 474	5.6 / 492	5.7 / 500	5.9 / 515	6.0 / 529	6.1 / 538	6.3 / 550
High	9.5 / 867	9.6 / 890	9.7 / 899	10.0 / 928	10.1 / 933	10.3 / 945	10.4 / 959

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	83	86	88	93	96	101	107
ML	73	76	78	80	84	87	90
Med	69	71	73	74	77	80	83
MH	66	67	69	71	73	75	78
High	54	55	56	57	58	59	60

Speed Tap\ Static Pressure	Mid Fire Temperature Rise vs. External Static pressure (in. WC.)						
	0.1	0.2	0.3	0.4	0.5	0.6	0.7
Low	74	77	79	83	86	90	96
ML	66	68	70	72	75	78	81
AS SHIPPED HTG. → **Med**	62	64	66	67	69	72	74
MH	59	60	62	64	66	67	70
High	48	49	50	51	52	53	54

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	63	65	67	71	73	77	81
ML	56	58	60	61	64	66	69
Med	52	54	56	57	58	61	63
MH	50	51	53	54	56	57	59
High	41	42	43	44	44	47	46