



BURNER SPEC & DATA SHEET

LC/LCE SERIES

GORDON-PIATT MODEL "R" BURNERS

FOR GAS, LIGHT OIL, AND GAS/LIGHT OIL

STANDARD EQUIPMENT

Standard Gas Control Systems:

- B - On-off operation with single position air. (LC-05 thru 08)
- H - Low-high-off operation with low fire start and two position air. (LC-09 thru LCE-22)
- E2 - Full modulation with proven low fire start. Requires proportional controller. (LCE-23 thru 24)

Standard Oil Control Systems:

- F4B - On-off operation with low fire start and two position air. (LC-05 thru 08)
- F4S - Low-high-off operation with low fire start and two position air. Low-high-low operation is optional with addition of SPST controller. (LC-09 thru LCE-22)
- F7T - Full modulation with proven low fire start. Requires proportional controller. (LCE-23 thru 24)

Standard Gas/Oil Control Systems:

- B/F4B - Gas is on-off operation with single position air. Oil is on-off operation with low fire start and two position air. (LC-05 thru 08)
- H/F4S - Low-high-off operation with low fire start and two position air. (LC-09 thru LCE-22)
- E2/F7T - Full modulation with proven low fire start. Requires proportional controller. (LCE-23 thru 24)

OPTIONAL EQUIPMENT

Optional Gas Control Systems:

- H - Low-high-off operation with low fire start and two position air. (LC-05 thru 08)
- HX - Low-high-off operation with proven low fire start and two position air. (LC-05 thru LCE-22)
- H4 - Low-high-low operation with low fire start and two position air. Requires SPST controller. (LC-05 thru LCE-22)
- H4X - Low-high-low operation with proven low fire start and two position air. Requires SPST controller (LC-05 thru LCE-22)
- E2 - Full modulation with proven low fire start. Requires proportional controller. (LC-05 thru LCE-22)

Optional Oil Control Systems:

- F4S - Low-high-off operation with low fire start and two position air. Low-high-low operation is optional with addition of SPST controller. (LC-05 thru 08)
- F4SX - Low-high-low operation with proven low fire start and two position air. Requires SPST controller (LC-05 thru LCE-22)
- F6R - Full modulation with proven low fire start. Requires proportional controller. (LC-05 thru LCE-22)

Optional Gas/Oil Control Systems:

- H/F4S - Low-high-off operation with low fire start and two position air. (LC-05 thru 08)
- HX/F4SX - Low-high-off operation proven with low fire start and two position air. (LC-05 thru LCE-22)
- H4/F4S - Low-high-low operation with low fire start and two position air. Requires SPST controller. (LC-05 thru LCE-22)
- H4X/F4SX - Low-high-low with proven low fire start and two position air. Requires SPST controller. (LC-05 thru LCE-22)
- E2/F6R - Full modulation with proven low fire start. Requires proportional controller. (LC-05 thru LCE-22)

GORDON-PIATT MODEL "R" BURNERS FOR GAS, LIGHT OIL, AND GAS/LIGHT OIL

BOILER MODEL	I=B=R INPUT (1)		OVERFIRE PRESSURE IN. W.C. (2)	STANDARD BURNER MODEL		
	GAS MBH	OIL GPH		GAS	OIL	GAS/OIL
LC-04	N/A	N/A	N/A	N/A	N/A	N/A
LC-05R	N/A	N/A	N/A	N/A	N/A	N/A
LC-05	881	6.10	+0.24	R6.2-G-05	R6.2-O-05	R6.2-GO-05
LC-06	1,077	7.50	+0.26	R6.3-G-05	R6.3-O-05	R6.3-GO-05
LC-07	1,273	8.80	+0.27	R8.1-G-07	R8.1-O-07	R8.1-GO-07
LC-08	1,469	10.20	+0.28	R8.1-G-07	R8.1-O-07	R8.1-GO-07
LC-09	1,664	11.60	+0.29	R8.2-G-07	R8.2-O-07	R8.2-GO-07
LC-10	1,860	12.80	+0.30	R8.2-G-07	R8.2-O-07	R8.2-GO-07
LC-11	2,056	14.20	+0.31	R8.2-G-07	R8.2-O-07	R8.2-GO-07
LC-12	2,252	15.60	+0.32	R8.3-G-10	R8.3-O-10	R8.3-GO-10
LCE-13	2,464	17.00	+0.24	R10.9-G-10	R10.9-O-10	R10.9-GO-10
LCE-14	2,657	18.40	+0.25	R10-G-20	R10-O-20	R10-GO-20
LCE-15	2,850	19.80	+0.26	R10-G-20	R10-O-20	R10-GO-20
LCE-16	3,043	21.00	+0.27	R10-G-20	R10-O-20	R10-GO-20
LCE-17	3,236	22.50	+0.28	R10-G-20	R10-O-20	R10-GO-20
LCE-18	3,429	24.00	+0.29	R10-G-20	R10-O-20	R10-GO-20
LCE-19	3,622	25.00	+0.30	R10.1-G-30	R10.1-O-30	R10.1-GO-30
LCE-20	3,815	26.50	+0.31	R10.1-G-30	R10.1-O-30	R10.1-GO-30
LCE-21	4,027	28.00	+0.31	R10.1-G-30	R10.1-O-30	R10.1-GO-30
LCE-22	4,239	29.50	+0.31	R10.1-G-30	R10.1-O-30	R10.1-GO-30
LCE-23	4,451	31.00	+0.32	R10.2-G-50	R10.2-O-50	R10.2-GO-50
LCE-24	4,663	32.50	+0.32	R10.2-G-50	R10.2-O-50	R10.2-GO-50

(1) Based on No. 2 fuel oil with a heating value of 140,000 BTU/gal. and Natural Gas with a heating value of 1000 BTU per cu. ft., 0.60 specific gravity at a maximum altitude of 2000 ft. Consult factory for higher altitudes.

(2) With + 0.10" W.C. at flue outlet when firing at I=B=R Input.

GORDON-PIATT MODEL "R" BURNERS FOR GAS, LIGHT OIL, AND GAS/LIGHT OIL

BOILER MODEL	GAS CONTROL TRAIN			INITIAL AIR SETTINGS (4)		NOZZLES - DELAVAN		
	INCHES IPS	PRESSURE - IN. W.C.		LOW FIRE	HIGH FIRE	QTY	GPH	PATTERN
		MIN.	MAX.					
LC-04	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
LC-05R	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
LC-05	1"	6.1	14	—	3/4"	2	2.00	60 B
LC-06	1 1/4"	6.2	14	—	2 1/4"	2	(1)2.25/(1)2.50	60 B
LC-07	1 1/4"	6.7	14	—	5/8"	2	3.00	80 B
LC-08	1 1/2"	6.1	14	—	7/8"	2	3.00	80 B
LC-09	1 1/2"	6.5	14	3/16"	9/16"	2	3.50	80 B
LC-10	1 1/2"	5.9	14	3/16"	7/8"	2	4.00	80 B
LC-11	1 1/2"	6.9	14	3/16"	1 1/16"	2	4.50	80 B
LC-12	2"	6.9	14	1/2"	1 1/2"	2	5.00	80 B
LCE-13	1 1/2"	5.5	14	1/2"	13/16"	2	5.00	60 B
LCE-14	1 1/2"	6.2	14	5/16"	5/8"	2	5.50	60 B
LCE-15	2"	5.8	14	13/32"	3/4"	2	6.00	60 B
LCE-16	2"	6.1	14	5/8"	1 3/16"	3	4.00	45 PLP
LCE-17	2"	6.7	14	5/8"	1 7/16"	3	(2)4.00/(1)5.00	45 PLP
LCE-18	2 1/2"	6.3	14	5/8"	1 9/16"	3	(1)4.00/(2)5.00	45 PLP
LCE-19	2 1/2"	6.8	14	3/4"	1 3/8"	2	7.50	60 B
LCE-20	3"	6.6	14	13/16"	1 3/8"	2	8.00	60 B
LCE-21	3"	7.2	14	13/16"	1 1/2"	2	8.50	60 B
LCE-22	3"	8.0	14	13/16"	1 1/2"	2	8.50	60 B
LCE-23	2 1/2"	5.8	14	5/8"	1 5/8"	3	(2)6.00/(1)6.50	60 VF
LCE-24	2 1/2"	6.3	14	5/8"	1 3/4"	3	6.50	60 VF

(4) Start-up settings only. Final settings must be determined using combustion test equipment.

BOILER MODEL	STANDARD COMBUSTION CONTROL			STANDARD CONTROL SYSTEM		3450 RPM MOTOR HP	STANDARD MOTOR VOLTAGE (3)
	GAS	OIL	GAS/OIL	GAS	OIL		
LC-04	N/A	N/A	N/A	N/A	N/A	N/A	N/A
LC-05R	N/A	N/A	N/A	N/A	N/A	N/A	N/A
LC-05	RM7897A	R8184G	RM7897C	B	F4B	1/2	120/60/1
LC-06	RM7897A	R8184G	RM7897C	B	F4B	1/2	120/60/1
LC-07	RM7897A	R8184G	RM7897C	B	F4B	3/4	120/60/1
LC-08	RM7897A	R8184G	RM7897C	B	F4B	3/4	120/60/1
LC-09	RM7897A	R8184G	RM7897C	H	F4S	3/4	120/60/1
LC-10	RM7897A	R8184G	RM7897C	H	F4S	3/4	120/60/1
LC-11	RM7897A	R8184G	RM7897C	H	F4S	3/4	120/60/1
LC-12	RM7897A	R8184G	RM7897C	H	F4S	1	120/60/1
LCE-13	RM7897A	R8184G	RM7897C	H	F4S	1	120/60/1
LCE-14	RM7897C	R8184G	RM7897C	H	F4S	2	3 Phase
LCE-15	RM7897C	R8184G	RM7897C	H	F4S	2	3 Phase
LCE-16	RM7897C	RM7897C	RM7897C	H	F4S	2	3 Phase
LCE-17	RM7897C	RM7897C	RM7897C	H	F4S	2	3 Phase
LCE-18	RM7897C	RM7897C	RM7897C	H	F4S	2	3 Phase
LCE-19	RM7897C	RM7897C	RM7897C	H	F4S	3	3 Phase
LCE-20	RM7897C	RM7897C	RM7897C	H	F4S	3	3 Phase
LCE-21	RM7897C	RM7897C	RM7897C	H	F4S	3	3 Phase
LCE-22	RM7897C	RM7897C	RM7897C	H	F4S	3	3 Phase
LCE-23	RM7840L	RM7840L	RM7840L	E2	F7T	5	3 Phase
LCE-24	RM7840L	RM7840L	RM7840L	E2	F7T	5	3 Phase

(3) For 3 phase, specify 208/60/3, 230/60/3 or 460/60/3.

BOILER MODEL	OIL PRESSURE - PSIG		STANDARD FUEL UNIT	
	LOW FIRE	HIGH FIRE	SUNTEC	GEARSET GPH (5)
LC-04	N/A	N/A	N/A	N/A
LC-05R	N/A	N/A	N/A	N/A
LC-05	100	235	B2TA-8249	33
LC-06	100	250	B2TA-8249	33
LC-07	100	215	B2TA-8249	33
LC-08	100	290	B2TA-8249	33
LC-09	100	275	B2TA-8249	33
LC-10	100	260	B2TA-8249	33
LC-11	100	250	B2TA-8249	33
LC-12	100	245	B2TA-8930	33
LCE-13	100	290	B2TA-8930	33
LCE-14	100	280	B2TA-8930	33
LCE-15	100	275	B2TA-8930	33
LCE-16	100	300	B2TA-8930	33
LCE-17	100	300	B2TA-8930	33
LCE-18	100	295	22R322D-5AA14	104
LCE-19	100	280	22R322D-5AA14	104
LCE-20	100	275	22R322D-5AA14	104
LCE-21	100	270	22R322D-5AA14	104
LCE-22	100	300	22R322D-5AA14	104
LCE-23	80	300	22R623D-5AA14	125
LCE-24	80	300	22R623D-5AA14	125

(5) For sizing filters, piping and remote pump sets. Not a U.L. nozzle rating.

Standard equipment:

1. Burner mounted control panel including on/off control switch, power-on and fuel-on lamps, control circuit fuse and terminal strip. (LC-05 thru LCE-24)
2. Air flow safety switch on gas and gas/oil burners. Optional on oil.
3. Spark ignited gas pilot on gas and gas/oil burners. Direct spark ignition on oil.
4. Manual fuel changeover switch for gas/oil burners.

Optional equipment:

1. Air flow safety switch on oil burners.
2. Step-down control circuit transformer.
3. Automatic fuel changeover on gas/oil burners.
4. Controls to comply with FM, IRI and other codes. Contact your local Peerless Representative or Peerless Boilers for availability.
5. Various combustion controls. Contact your local Peerless Representative or Peerless Boilers for availability.
6. Burner motor voltages: 120/60/1 (LCE-14 thru 18), 230/60/1 (LC-05 thru LCE-24), 208/230/460/60/3 (LC-05 thru LCE-13).

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