



BURNER SPEC & DATA SHEET

SERIES TC

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

STANDARD EQUIPMENT

Oil Burners:

1. On-off operation on Model TC-04 through TC-07 boilers.
2. Low-high-off operation on Models TC-08 through TC-18 boilers.
3. Burner mounted control panel with on/off control switch, power-on and main fuel lights and terminal strip – Models TC-10 through TC-18 boilers.
4. 15 second pre-purge/30 second post-purge – Models TC-04 through TC-09 boilers.
5. 30 second pre-purge/15 second post-purge – Models TC-10 through TC-18 boilers.
6. Direct spark ignition.

Gas Burners:

1. On-off operation on Model TC-04 and TC-05 boilers.
2. Low-high-off operation on Models TC-06 through TC-18 boilers.
3. Burner mounted control panel with on/off control switch, power-on and main fuel lights and terminal strip.
4. 30 second pre-purge/0 second post-purge – Model TC-04 through TC-08 boilers.
5. 30 second pre-purge/15 second post-purge – Model TC-09 through TC-18 boilers.
6. Spark ignited gas pilot.
7. Air flow safety switch.

Combination Gas/Oil Burners:

1. On-off operation on Model TC-04 through TC-06 boilers.
2. Low-high-off operation on Models TC-06 through TC-18 boilers.
3. Burner mounted control panel with on/off control switch, power-on and main fuel lights and terminal strip.
4. 30 second pre-purge/0 second post-purge – TC-04 through TC-09 boilers.
5. 30 second pre-purge/15 second post-purge – TC-10 through TC-18 boilers.
6. Spark ignited gas pilot.
7. Air flow safety switch.
8. Manual fuel changeover switch.

OPTIONAL EQUIPMENT

1. Proven low fire start for low-high-off burner operation.
2. Low-high-off burner operation for boilers with standard on-off operation.
3. Low-high-low and full modulation operation for boilers with standard low-high-off operation.
4. Automatic fuel changeover on combination gas/oil burners.
5. Air flow switch on oil burners.
6. Step-down control circuit transformer and control circuit fuse.
7. Controls to comply with FM, IRI, CSD-1, and other codes. Contact your local Peerless Representative or Peerless Boilers for availability.
8. Various combustion controls. Contact your local Peerless Representative or Peerless Boilers for availability.
9. Various burner motor voltages: 120/1/60, 230/1/60, 208-230/460/3/60.

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

BOILER MODEL	I=B=R INPUT (1)		OVERFIRE PRESSURE IN. W.C. (2)	Standard Burner Model			INITIAL AIR SETTINGS (3) INCHES	
	GAS MBH	OIL GPH		GAS	OIL	GAS/OIL	LOW FIRE	HIGH FIRE
TC-04	1154	8.0	0.34	R8-G	R8-O	1/4	1/4	5/8
TC-05	1491	10.4	0.35	R8.2-G	R8.2-O	R8.2-G	3/16	5/8
TC-06	1827	12.6	0.36	R8.2-G	R8.2-O	R8.2-G	1/4	3/4
TC-07	2163	15.0	0.37	R8.2-G	R8.2-O	R8.2-G	1/4	13/16
TC-08	2499	17.4	0.38	R8.4-G	R8.4-O	R8.4-G	1/4	15/16
TC-09	2836	19.6	0.39	R8.4-G	R8.4-O	R8.4-G	3/8	1-1/8
TC-10	3172	22.0	0.40	R10.1-G	R10.1-O	R10.1-G	3/8	15/16
TC-11	3508	24.5	0.41	R10.1-G	R10.1-O	R10.1-G	7/16	1-1/8
TC-12	3844	26.5	0.43	R10.1-G	R10.1-O	R10.1-G	1/2	1-3/8
TC-13	4180	29.0	0.44	R10.1-G	R10.1-O	R10.1-G	9/16	15/16
TC-14	4517	31.5	0.45	R10.2-G	R10.2-O	R10.2-G	7/8	1-3/4
TC-15	4583	33.5	0.46	R10.2-G	R10.2-O	R10.2-G	5/16	15/16
TC-16	5189	36.0	0.47	R10.2-G	R10.2-O	R10.2-G	5/16	1-9/16
TC-17	5525	38.5	0.48	R10.2-G	R10.2-O	R10.2-G	11/32	1-13/16
TC-18	5862	40.5	0.49	R10.2-G	R10.2-O	R10.2-G	3/8	2-1/8

(1) Based on Commercial Standard Number 2 fuel oil with a heating value of 140,000 BTU/gal. and Natural Gas with a heating value of 1000 BTU/cubic foot and 0.60 specific gravity at a maximum altitude of 2000 feet above mean sea level. Consult the factory for higher altitudes.

(2) With 0.10 inch W.C. at flue outlet and at I=B=R Input.

(3) Start-up settings only. Final settings are to be determined using combustion analysis equipment.

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

BOILER MODEL	STANDARD COMBUSTION CONTROL			3450 RPM MOTOR HP	STANDARD VOLTAGE VOLTS/PHASE/HERTZ
	GAS	OIL	GAS/OIL		
TC-04	RM7895A	R8184G	RM7895C	1/2	115/1/60
TC-05	RM7895A	R8184G	RM7895C	3/4	230/1/60
TC-06	RM7895A	R8184G	RM7895C	3/4	230/1/60
TC-07	RM7895A	R8184G	RM7895C	3/4	230/1/60
TC-08	RM7895C	R8184G	RM7895C	2	208-230/460/3/60
TC-09	RM7895C	R8184G	RM7896C	2	208-230/460/3/60
TC-10	RM7895C	RM7896C	RM7896C	2	208-230/460/3/60
TC-11	RM7895C	RM7896C	RM7896C	3	208-230/460/3/60
TC-12	RM7895C	RM7896C	RM7896C	3	208-230/460/3/60
TC-13	RM7895C	RM7896C	RM7896C	3	208-230/460/3/60
TC-14	RM7895C	RM7896C	RM7896C	5	208-230/460/3/60
TC-15	RM7895C	RM7896C	RM7896C	5	208-230/460/3/60
TC-16	RM7895C	RM7896C	RM7896C	5	208-230/460/3/60
TC-17	RM7895C	RM7896C	RM7896C	5	208-230/460/3/60
TC-18	RM7895C	RM7896C	RM7896C	5	208-230/460/3/60

GORDON-PIATT FLAME MODEL "R" BURNER - GAS BURNER CHARACTERISTICS

BOILER MODEL	GAS ORIFICE SIZE	GAS CONTROL TRAIN			GAS MANIFOLD PRESSURE (IN. W.C.)	GAS TRAIN PRESSURE DROP (IN. W.C.)
	(QTY) SIZE	INLET SIZE NPS	INLET PRESSURE (IN. W.C.)			
			MINIMUM	MAXIMUM		
TC-04	Primary (12) 0.1875 Secondary (6) 0.3050	1.00	6.03	14.00	2.93	3.10
TC-05		1.25	6.63	14.00	3.83	2.80
TC-06		1.50	6.80	14.00	4.73	2.07
TC-07	Primary (18) 0.1875 Secondary (9) 0.1940	1.50	9.60	14.00	5.43	4.17
TC-08	Primary (18) 0.2500	2.00	5.86	14.00	4.05	1.81
TC-09		3.00	6.56	14.00	5.78	0.78
TC-10	Primary (20) 0.2188 Secondary (10) 0.4020 Tertiary (9) 0.1940	1.50	7.75	14.00	2.29	5.46
TC-11		2.00	6.59	14.00	3.02	3.57
TC-12	Primary (20) 0.2500 Secondary (10) 0.4020 Tertiary (9) 0.1940	2.00	7.23	14.00	2.95	4.28
TC-13		2.50	6.18	14.00	3.45	2.73
TC-14	Primary (20) 0.2344 Secondary (10) 0.4020 Tertiary (9) 0.1940	2.50	7.14	14.00	3.95	3.19
TC-15		2.50	6.61	14.00	2.93	3.68
TC-16		2.50	7.56	14.00	3.35	4.21
TC-17		3.00	7.14	14.00	4.18	2.96
TC-18		3.00	8.05	14.00	4.71	3.34

GORDON-PIATT FLAME MODEL "R" BURNER - GAS BURNER CHARACTERISTICS

BOILER MODEL	OIL NOZZLES - DELAVAN			OIL PRESSURE PSIG		STANDARD FUEL UNIT		
	QTY	SIZE GPH	PATTERN	LOW FIRE	HIGH FIRE	MODEL	MANUFACTURER	GEARSET GPH
TC-04	2	2.3	90B	100	300	B2TA-8249	Suntec	33
TC-05	2	3.0	80B	100	295	B2TA-8249	Suntec	33
TC-06	2	4.0	70B	100	250	B2TA-8249	Suntec	33
TC-07	2	4.5	70B	100	280	B2TA-8930	Suntec	33
TC-08	2	5.0	60B	100	300	B2TA-8930	Suntec	33
TC-09	2	6.0	60B	100	265	B2TA-8930	Suntec	33
TC-10	2	6.5	60B	100	285	B2TA-8930	Suntec	33
TC-11	2	7.0	60B	100	300	B2TA-8930	Suntec	33
TC-12	2	7.5	60B	100	295	22R322D	Webster	105
TC-13	2	5.5	60B	100	300	22R322D	Webster	105
TC-14	2	6.0	60B	100	300	22R322D	Webster	105
TC-15	2	7.0	60B	80	300	22R623	Webster	135

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