

# Programmer Control Cross Reference

## CROSS REFERENCE

Honeywell has provided proprietary and/or “labelled” controls to certain Original Equipment Manufacturers (OEM) at their request. Proprietary controls are available only from the OEM, while “labelled” controls can, in some instances, be purchased directly from Honeywell. Where a control is available only from the OEM, we have placed a footnote in the “Replacement Control” column. Refer questions about a particular OEM control to the particular OEM (see list below):

**Cleaver Brooks Div.**  
Aqua—Chem Inc.  
ATTN: Parts Manager  
P.O. Box 421  
Milwaukee, WI 53201  
414-577-2710

**Fulton**  
972 Centerville Road  
Pulaski, NY13142  
315-298-5121

**Lennox Industries Inc.**  
Lennox Parts Center  
P.O. Box 7658  
4251 121st Street  
Urbandale, IA 50322  
515-251-4440

**Ray Burner Co.**  
Engineering & Sales Dept.  
401 Parr Boulevard  
Richmond, CA 94801  
610-236-4272

**Vapor Power International**  
551 S. County Line Road  
Franklin Park, IL 60131  
630-694-5500



# CROSS REFERENCE DATA

	Page
HONEYWELL R4126 PROGRAMMER CROSS REFERENCE .....	3
HONEYWELL R4127 PROGRAMMER CROSS REFERENCE .....	6
HONEYWELL R4140 PROGRAMMER CROSS REFERENCE. ....	9
HONEYWELL R4150 PROGRAMMER CROSS REFERENCE. ....	15
HONEYWELL R4181 PROGRAMMER CROSS REFERENCE. ....	21
HONEYWELL R8169 PROGRAMMER CROSS REFERENCE. ....	22
HONEYWELL PROGRAM MODULE PROGRAMMER CROSS REFERENCE. ....	23
HONEYWELL BC7000 PROGRAMMER CROSS REFERENCE. ....	26
HONEYWELL 7800 SERIES PROGRAMMER CROSS REFERENCE. ....	27
FIREYE® P SERIES TO HONEYWELL PROGRAMMER CROSS REFERENCE. ....	35
FIREYE® C SERIES TO HONEYWELL PROGRAMMER CROSS REFERENCE. ....	41
FIREYE® D SERIES PROGRAMMER TO HONEYWELL CROSS REFERENCE. ....	45
FIREYE® E SERIES TO HONEYWELL PROGRAMMER CROSS REFERENCE. ....	48

Table 1. HONEYWELL R4126 PROGRAMMER CROSS REFERENCE

Device to be Replaced	Closest 7800 Series Replacement 1 2 3 4 5 6 7 8 9 10 11 12	Replacement Purge Timer	Prepurge					Interlocks						PFEP	INTM Pilot	INTR Pilot	MFEP	Spark Term	Postpurge	Modulation	Voltage	Frequency	Comments
			Timing	Type				Start	Running	Lockout	Preignition	Hi-fire	Lo-fire										
				Lo-Fire On-Off	LHL	LHL PRV	OP Damp																
R4126A1008	RM7840G1014 or RM7840G1022	ST7800A1047	40		X			X	X				X	10		X	15,30		15	4-wire	120 208 240	60	With R7253A
R4126A1016	RM7840G1014 or RM7840G1022	ST7800A1047	40		X			X	X				X	10		X	15,30		15	4-wire	120 208 240	60	With Q535 and R7253A
R4126A1024	RM7840G1014 or RM7840G1022	ST7800A1047	40		X			X	X				X	10		X	15,30		15	4-wire	120 208 240	60	With Q536 and R7253A
R4126A1032	RM7840G1014 or RM7840G1022	ST7800A1047	40		X			X	X				X	10		X	15,30		15	4-wire	120 208 240	60	With Q535
R4126A1040	RM7840G1014 or RM7840G1022	ST7800A1047	40		X			X	X				X	10		X	15,30		15	4-wire	120 208 240	60	With Q536
R4126A1057	RM7840G1014 or RM7840G1022	ST7800A1047	40		X			X	X				X	10		X	15,30		15	4-wire	120 208 240	60	
R4126A1065	None		40		X			X	X				X	10		X	15,30		15	4-wire	120 208 240	50	With Q535 international model
R4126A1073	RM7840L1018 or RM7840L1075	ST7800A1054	60			X		X	X				X	10		X	15,30		15	4-wire	120 208 240	60	
R4126A1081	RM7840G1014 or RM7840G1022	ST7800A1047	40	HL				X	X				X	10		X	15,30		15	4-wire	120 208 240	60	
R4126A1099	None		10				X	X	X				X	5		X	10		3		120	60	Proprietary to Vapor Corporation

See footnotes on page 5.

Table 1. HONEYWELL R4126 PROGRAMMER CROSS REFERENCE

Device to be Replaced	Closest 7800 Series Replacement 1 2 3 4 5 6 7 8 9 10 11 12	Replacement Purge Timer	Prepurge					Interlocks					PFEP	INTM Pilot	INTR Pilot	MFEP	Spark Term	Postpurge	Modulation	Voltage	Frequency	Comments	
			Timing	Type				Start	Running	Lockout	Preignition	Hi-fire											Lo-fire
				Lo-Fire On-Off	LHL	LHL PRV	OP Damp																
R4126A1107	None																						Produced in Japan
R4126A1115	None																						Produced in Japan
R4126A1123	None																						Never Produced
R4126A1131	None																						Never Produced
R4126A1149	RM7840G1014 or RM7840G1022	ST7800A1047	40		X			X	X				X	10		X	15,30	15	4-wire	120	60		Produced in Canada
R4126A1156	None		10				X	X	X			X	5		X			3		120 208 240			Proprietary to Vapor Corporation
R4126A1164	RM7840L1018 or RM7840L1075	ST7800A1054	60			X		X	X			X	X	10		X	15,30	15	4-wire	120 208 240	60		
R4126A1172	RM7840L1018 or RM7840L1075	ST7800A1054	60			X			X	X	X	X	10		X	15,30	15	4-wire	120	60			
R4126A1180	RM7840L1018 or RM7840L1075	ST7800A1054	60			X			X	X	X	X	10		X	15,30	20	4-wire	120	60			Tamper resistant
R4126A1198	RM7840L1018 or RM7840L1075	ST7800A1054	60			X			X	X	X	X	10		X	10, 30	X	15	4-wire	120	60		

See footnotes on page 5.

**Table 1. HONEYWELL R4126 PROGRAMMER CROSS REFERENCE**

Device to be Replaced	Closest 7800 Series Replacement 1 2 3 4 5 6 7 8 9 10 11 12	Replacement Purge Timer	Prepurge				Interlocks						PFEP	INTM Pilot	INTR Pilot	MFEP	Spark Term	Postpurge	Modulation	Voltage	Frequency	Comments
			Timing	Type			Start	Running	Lockout	Preignition	Hi-fire	Lo-fire										
				Lo-Fire On-Off	LHL	OP PRV																
R4126A1206	None		10				X	X	X					X	10		3		120	60	Proprietary to Vapor Corporation, fungus proofed	
R4126B1006	RM7840G1014 or RM7840G1022	ST7800A1047	40		X			X	X				X	10		X	15,30	15	4-wire	120 208 240	60	With infrared amplifier
R4126B1014	RM7840G1014 or RM7840G1022	ST7800A1047	40		X			X	X				X	10		X	15,30	15	4-wire	120 208 240	60	With Q536 and infrared amplifier
R4126B1022	RM7840G1014 or RM7840G1022	ST7800A1047	40		X			X	X				X	10		X	15,30	15	4-wire	120 208 240	60	With Q535 and infrared amplifier
See footnotes on page 5.																						

5

**Table 1 Footnotes**

- <sup>1</sup> RM7840G meets current UL requirements.
- <sup>2</sup> RM7840L meets current insurance requirements.
- <sup>3</sup> R4126 Start Interlocks become RM7840 Preignition Interlocks.
- <sup>4</sup> Replacement controls are 120 Vac, 50/60 Hz.
- <sup>5</sup> RM7840G1014, G1022 MFEP is 10, 15, or 30 seconds.
- <sup>6</sup> RM7840L1018, L1075 MFEP is 10 or 15 seconds.
- <sup>7</sup> RM7840G1014, G1022, RM7840L1018 and L1075 PFEP is 4 or 10 seconds.
- <sup>8</sup> Select proper flame amplifier.
- <sup>9</sup> Use with existing Honeywell Flame Detectors.
- <sup>10</sup> With selectable air-flow switch check (AFSC).
- <sup>11</sup> Requires Q7800A or Q7800B Subbase.
- <sup>12</sup> Refer to conversion wiring diagrams in Modernization Wiring Information section.

Table 2. HONEYWELL R4127 PROGRAMMER CROSS REFERENCE

Device to be Replaced	Closest 7800 Series Replacement 1 2 3 4 5 6 7 8 9 10 11 12	Replacement Purge Timer	Prepurge					Interlocks					PFEP	INTM Pilot	INTR Pilot	MFEP	Spark Term	Postpurge	Modulation	Voltage	Frequency	Comments	
			Timing	Type				Start	Running	Lockout	Preignition	Hi-fire											Lo-fire
				Lo-Fire On-Off	LHL	LHL PRV	OP Damp																
R4127A1007	RM7840G1014 or RM7840G1022	ST7800A1039	30	X				X	X					10	X		15		15	3-wire	120 208 240	60	With R7253A
R4127A1015	RM7840G1014 or RM7840G1022	ST7800A1039	30	X				X	X					10	X		15		15	3-wire	120 208 240	60	With Q535 and R7253A
R4127A1023	RM7840G1014 or RM7840G1022	ST7800A1039	30	X				X	X					10	X		15		15	3-wire	120 208 240	60	With Q536 and R7253A
R4127A1031	RM7840G1014 or RM7840G1022	ST7800A1039	30	X				X	X					10	X		15		15	3-wire	120 208 240	60	With Q535
R4127A1049	RM7840G1014 or RM7840G1022	ST7800A1039	30	X				X	X					10	X		15		15	3-wire	120 208 240	60	With Q536
R4127A1056	RM7840G1014 or RM7840G1022	ST7800A1039	30	X				X	X					10		X	15, 60		15	3-wire	120	60	
R4127A1064	RM7840G1014 or RM7840G1022	ST7800A1039	30	X				X	X					10	X		15		15	3-wire	120 208 240	60	
R4127A1072	None	None	30	X				X	X					10	X		15		15	3-wire	120 208 240	50	With Q535 international model
R4127A1080	RM7840G1014 or RM7840G1022	ST7800A1039	30	X				X	X					10		X	15, 60		15	3-wire	120 208 240	60	Produced in Canada
R4127A1098	RM7840G1014 or RM7840G1022	ST7800A1039	30	X				X	X					10	X		15		15	3-wire	120	60	
R4127A1106	None	None																					International model

See footnotes on page 8

Table 2. HONEYWELL R4127 PROGRAMMER CROSS REFERENCE (Continued)

Device to be Replaced	Closest 7800 Series Replacement 1 2 3 4 5 6 7 8 9 10 11 12	Replacement Purge Timer	Prepurge					Interlocks					PFEP	INTM Pilot	INTR Pilot	MFEP	Spark Term	Postpurge	Modulation	Voltage	Frequency	Comments	
			Timing	Type				Start	Running	Lockout	Preignition	Hi-fire											Lo-fire
				Lo-Fire On-Off	LHL	LHL PRV	OP Damp																
R4127A1114	None	None																					
R4127A1122	RM7840G1014 or RM7840G1022	ST7800A1039	30	X				X	X					10		X	15, 55	15	3-wire	120 208 240	60		
R4127A1130	RM7840G1014 or RM7840G1022	ST7800A1062	90	X				X	X					10	X		15	15	3-wire	120 208 240	60		
R4127A1148	RM7840G1014 or RM7840G1022	ST7800A1062	90	X				X	X							X	15, 55	15	3-wire	120 208 240	60		
R4127A1155	RM7840G1014 or RM7840G1022	ST7800A1054	60		X			X	X			X	8		X	15, 30	15	4-wire	120	60			
R4127A1163	None	None	30	X				X	X				10	X		15	15	3-wire	120 208 240	50	International model		
R4127A1171	RM7840G1014 or RM7840G1022	ST7800A1054	60		X			X	X			X	9		X	15, 30	15	4-wire	120	60	Ray Burner RC2D, uses special Q535/ Q536		
R4127A1189	RM7840G1014 or RM7840G1022	ST7800A1039	30	X				X	X				10	X		10	15	3-wire	120	60			
R4127A1197	RM7840G1014 or RM7840G1022	ST7800A1054	60		X			X	X			X	9		X	10, 30	15	4-wire	120	60			
R4127B1005	RM7840G1014 or RM7840G1022	ST7800A1039	30	X				X	X				10		X	15	15	3-wire	120 208 240	60			
R4127B1013	RM7840G1014 or RM7840G1022	ST7800A1039	30	X				X	X				10		X	15	15	3-wire	120 208 240	60	With Q535		
See footnotes on page 8																							

Table 2. HONEYWELL R4127 PROGRAMMER CROSS REFERENCE (Continued)

Device to be Replaced	Closest 7800 Series Replacement 1 2 3 4 5 6 7 8 9 10 11 12	Replacement Purge Timer	Prepurge					Interlocks					PFEP	INTM Pilot	INTR Pilot	MFEP	Spark Term	Postpurge	Modulation	Voltage	Frequency	Comments	
			Timing	Type				Start	Running	Lockout	Preignition	Hi-fire											Lo-fire
				Lo-Fire On-Off	LHL	LHL PRV	OP Damp																
R4127B1021	RM7840G1014 or RM7840G1022	ST7800A1039	30	X				X	X					10		X	15		15	3-wire	120 208 240	60	With Q536
R4127B1039	RM7840G1014 or RM7840G1022	ST7800A1039	30	X				X	X					10		X	15		15	3-wire	120	60	Ray Burner RC2A with R7254A, Q536
R4127B1047	RM7840G1014 or RM7840G1022	ST7800A1039	30	X				X	X					10		X	15		15	3-wire	120	60	Ray Burner RC2B with R7254A, Q535
R4127B1054	RM7840G1014 or RM7840G1022	ST7800A1039	30	X				X	X					10		X	15		15	3-wire	120	60	Ray Burner
R4127C1003	RM7840G1014 or RM7840G1022	ST7800A1039	30	X				X	X					10		X	15		15	3-wire	120	60	Ray Burner with R7255A

See footnotes on page 8

## Table 2 Footnotes

- <sup>1</sup> RM7840G meets current UL requirements.
- <sup>2</sup> RM7840L meets current insurance requirements.
- <sup>3</sup> R4127A,B,C Start Interlocks become RM7840 Preignition Interlocks.
- <sup>4</sup> Replacement controls are 120 Vac, 50/60 Hz.
- <sup>5</sup> RM7840G1014, G1022 MFEP is 10, 15, or 30 seconds.
- <sup>6</sup> RM7840L1018, L1075 MFEP is 10 or 15 seconds.
- <sup>7</sup> RM7840G1014, G1022, RM7840L1018 and L1075 PFEP is 4 or 10 seconds.
- <sup>8</sup> Select proper flame amplifier.
- <sup>9</sup> Use with existing Honeywell Flame Detectors.
- <sup>10</sup> With selectable air-flow switch check (AFSC).
- <sup>11</sup> Requires Q7800A or Q7800B Subbase.
- <sup>12</sup> Refer to conversion wiring diagrams in Modernization Wiring Information section.



Table 3. HONEYWELL R4140 PROGRAMMER CROSS REFERENCE.

Device to be Replaced	Replacement			Prepurge		Interlocks						PFEP	INTM Pilot	INTR Pilot	MFEP	Spark Term	Postpurge	Modulation	Voltage	Frequency	Comment
	Direct 2, 6, 7, 11	7800 Series 2, 6, 7, 8, 9	Purge Timer	Timing	Type	Start	Running	Lockout	Preignition	Hi-fire	Lo-fire										
R4140D1004	None	None		30		X	X					10	X		10	X	55	4-wire	120	60	Maxon special sequence for postpurge pilot systems. Uses special Q520A1196.
R4140E1001	None	None		31		X	X					3			10		15	4-wire	120	60	For direct spark ignition systems
R4140G1007	R7140G1000	RM7840G1014 or RM7840G1022	ST7800A1054	60	LHL, LF Proven		X		X			10		X	10, 30		16	4-wire	120	60	
R4140G1015	R7140G1000	RM7840G1014 or RM7840G1022	ST7800A1054	60	LHL, LF Proven		X		X			10		X	10, 30		16	4-wire	120	60	
R4140G1023	Consult Original Equipment Manufacturer			72	LHL, LF Proven		X		X			10		X	10, 15		16	4-wire	120	60	Proprietary to Cleaver Brooks CB20
R4140G1031	R7140G2008 <sup>1</sup>	RM7840G1014 or RM7840G1022 <sup>1</sup>	ST7800A1054	60	LHL, LF Proven	X	X					10		X	10, 30	X	16	4-wire	120	60	
R4140G1049	R7140G2008 <sup>1</sup>	RM7840G1014 or RM7840G1022 <sup>1</sup>	ST7800A1054	60	LHL, LF Proven	X	X					10		X	10, 30	X	16	4-wire	120	60	
R4140G1056	R7140G2008 <sup>1</sup>	RM7840G1014 or RM7840G1022 <sup>1</sup>	ST7800A1054	60	LHL, LF Proven	X	X					10	X		10	X	16	4-wire	120	60	
R4140G1064	R7140G2008 <sup>1</sup>	RM7840G1014 or RM7840G1022 <sup>1</sup>	ST7800A1054	60	LHL, LF Proven	X	X					10	X		10	X	16	4-wire	120	60	
R4140G1072	R7140G2008 <sup>1</sup>	RM7840G1014 or RM7840G1022 <sup>1</sup>	ST7800A1054	60	LHL, LF Proven	X	X					10	X		10		16	4-wire	120	60	
R4140G1080	R7140G2008 <sup>1</sup>	RM7840G1014 or RM7840G1022 <sup>1</sup>	ST7800A1054	60	LHL, LF Proven	X	X					10	X		10		16	4-wire	120	60	
R4140G1098	None	None		60	LHL, LF Proven	X	X					10	X		10, 30	X	16	4-wire	240	50	International model
R4140G1106	R7140G1000	RM7840G1014 or RM7840G1022	ST7800A1054	60	LHL, LF Proven		X		X			10		X	10, 15		16	4-wire	120	60	
R4140G1114	None	None		70	LHL, LF Proven	X	X					10		X	10, 30, 60	X	25	4-wire	240	60	
R4140G1122	None	None		70	LHL, LF Proven	X	X					10		X	10, 30, 60	X	25	4-wire	208	60	

See footnotes on page 14

Table 3. HONEYWELL R4140 PROGRAMMER CROSS REFERENCE. (Continued)

Device to be Replaced	Replacement			Prepurge		Interlocks						PFEP	INTM Pilot	INTR Pilot	MFEP	Spark Term	Postpurge	Modulation	Voltage	Frequency	Comment
	Direct 2, 6, 7, 11	7800 Series 2, 6, 7, 8, 9	Purge Timer	Timing	Type	Start	Running	Lockout	Preignition	Hi-fire	Lo-fire										
R4140G1130	R7140G2008 <sup>1</sup>	RM7840G1014 or RM7840G1022 <sup>1</sup>	ST7800A1054	60	LHL, LF Proven	X	X				X	10		X	10, 15	X	16	4-wire	120	60	
R4140G1148	R7140G2008 <sup>1</sup>	RM7840G1014 or RM7840G1022 <sup>1</sup>	ST7800A1054	60	LHL, LF Proven	X	X				X	10		X	10, 15	X	16	4-wire	120	60	
R4140G1155	None	EC7850A1122	ST7800A1054	60	LHL, LF Proven		X		X	X	X	5		X	5	X	15	4-wire	240	50	Proprietary to Gordon- Piatt Energy
R4140G1163	R7140G2008 <sup>1</sup>	RM7840G1014 <sup>1</sup>	ST7800A1054	60	LHL, LF Proven	X	X				X	10	X		10	X	16	4-wire	120	60	
R4140G1171	R7140G2008 <sup>1,3</sup>	RM7840G1014 <sup>1, 3</sup>	ST7800A1062 (90 seconds)	70	LHL, LF Proven	X	X				X	10		X	10, 30, 60	X	25	4-wire	120	60	
R4140G1189	R7140L1009 <sup>10</sup>	RM7840L1018 or RM7840L1075	ST7800A1054	60	LHL, HF-LF Proven		X		X	X	X	10		X	10	X	15	4-wire	120	60	Gordon-Piatt Energy GP201
R4140G1197	None	EC7850A1122	ST7800A1054	60	LHL, LF Proven	X	X				X	5		X	5, 10, 15	X	16	4-wire	240	50	International model
R4140L1006	R7140L1009	RM7840L1018 or RM7840L1075	ST7800A1054	60	LHL, HF-LF Proven			X	X	X	X	10		X	10, 15		16	4-wire	120	60	
R4140L1014	R7140L1009	RM7840L1018 or RM7840L1075	ST7800A1054	60	LHL, HF-LF Proven			X	X	X	X	10		X	10, 15		16	4-wire	120	60	
R4140L1022	Consult Original Equipment Manufacturer			72	LHL, HF-LF Proven			X	X	X	X	10		X	10, 15		15	4-wire	120	60	Cleaver Brooks CB40
R4140L1030	R7140L1009	RM7840L1018 or RM7840L1075	ST7800A1054	60	LHL, HF-LF Proven			X	X	X	X	10		X	10, 15	X	16	4-wire	120	60	With nonrotatable timer
R4140L1048	None	EC7850A1122	ST7800A1047 (40 seconds)	45	LHL, HF-LF Proven			X	X	X	X	10		X	2, 5, 10	X	15	4-wire	220	50	International model
R4140L1055	R7140L1009	RM7840L1018 or RM7840L1075	ST7800A1054	60	LHL, HF-LF Proven			X	X	X	X	10		X	10, 30		15	4-wire	120	60	

See footnotes on page 14

Table 3. HONEYWELL R4140 PROGRAMMER CROSS REFERENCE. (Continued)

Device to be Replaced	Replacement			Prepurge		Interlocks						PFEP	INTM Pilot	INTR Pilot	MFEP	Spark Term	Postpurge	Modulation	Voltage	Frequency	Comment
	Direct 2, 6, 7, 11	7800 Series 2, 6, 7, 8, 9	Purge Timer	Timing	Type	Start	Running	Lockout	Preignition	Hi-fire	Lo-fire										
R4140L1063	Consult Original Equipment Manufacturer			9.5	LHL, HF-LF Proven			X	X	X	X	6.5	X		8		3.5	2-wire	120	60	Vapor Corporation
R4140L1071	None	RM7840L1018 or RM7840L1075	ST7800A1054	60	LHL, HF-LF Proven			X	X	X	X	10		X	10, 15, 30	X	15	4-wire	240	50	International model
R4140L1089	R7140L1009 <sup>10</sup>	RM7840L1018 or RM7840L1075	ST7800A1054	60	LHL, HF-LF Proven			X	X	X	X	10		X	10	X	15	4-wire	120	60	Gordon-Piatt Energy GP301
R4140L1097	R7140L1009	RM7840L1018 or RM7840L1075	ST7800A1054	60	LHL, HF-LF Proven			X	X	X	X	10		X	10, 15	X	15	4-wire	120	60	
R4140L1105	R7140L1009	RM7840L1018 or RM7840L1075	ST7800A1054	60	LHL, HF-LF Proven			X	X	X	X	10		X	10, 15	X	16	4-wire	120	60	
R4140L1113	None	EC7840L1014 <sup>12</sup> or EC7850A1122	ST7800A1054	60	LHL, HF-LF Proven			X	X	X	X	5		X	5, 10, 15	X	15	4-wire	240	50	International model
R4140L1121	Consult Original Equipment Manufacturer			5.5	LHL, HF-LF Proven			X	X	X	X						8				ICI Model
R4140L1139	R7140L1009	RM7840L1018 or RM7840L1075	ST7800A1054	60	LHL, HF-LF Proven			X	X	X	X	10		X	10, 15	X	15	4-wire	120	60	
R4140L1147	R7140L1009	RM7840L1018 or RM7840L1075	ST7800A1054	60	LHL, HF-LF Proven			X	X	X	X	10		X	10, 15, 30	X	15	4-wire	120	60	
R4140L1154	None	EC7850A1122	Check R4140 for purge timing	Selectable	LHL, HF-LF Proven			X	X	X	X	10		X	5, 10	X	15	4-wire	240	50	Approved by Australian Gas Association
R4140L1162	Consult Original Equipment Manufacturer			60	LHL, HF-LF Proven			X	X	X	X	10		X	5, 15		16	4-wire	120	60	Fulton Special

See footnotes on page 14

Table 3. HONEYWELL R4140 PROGRAMMER CROSS REFERENCE. (Continued)

Device to be Replaced	Replacement			Prepurge		Interlocks						PFEP	INTM Pilot	INTR Pilot	MFEP	Spark Term	Postpurge	Modulation	Voltage	Frequency	Comment
	Direct 2, 6, 7, 11	7800 Series 2, 6, 7, 8, 9	Purge Timer	Timing	Type	Start	Running	Lockout	Preignition	Hi-fire	Lo-fire										
R4140L1170	None	EC7850A1122	ST7800A1054	60	LHL, HF-LF Proven		X	X	X	X	10		X	5, 10	X	15	4-wire	240	50		
R4140M1004	R7140M1007 <sup>1</sup>	RM7840M1017 <sup>1</sup>	ST7800A1039 (30 seconds)	31	On-Off, LF Proven	X	X				10	X		10		15		120	60		
R4140M1012	R7140M1007 <sup>1</sup>	RM7840M1017 <sup>1</sup>	ST7800A1039 (30 seconds)	31	On-Off, LF Proven	X	X				10	X		10		15		120	60		
R4140M1020	R7140M1007 1, 4, 5	RM7840M1017 <sup>1, 4</sup>	ST7800A1047 (40 seconds)	42	On-Off, LF Proven	X	X			X	10	X		10	X	15		120	60	Isolated damper motor contact	
R4140M1038	R7140M1007 1, 4, 5	RM7840M1017 <sup>1, 4</sup>	ST7800A1047 (40 seconds)	42	On-Off, LF Proven	X	X			X	10	X		10	X	15		120	60	Isolated damper motor contact	
R4140M1046	R7140M1007 1, 4, 5	RM7840M1017 <sup>1, 4</sup>	ST7800A1062 (90 seconds)	96	On-Off, LF Proven	X	X			X	10	X		10	X	25		120	60	Isolated damper motor contact	
R4140M1053	R7140M1007 1, 4, 5	RM7840M1017 <sup>1, 4</sup>	ST7800A1062 (90 seconds)	96	On-Off, LF Proven	X	X			X	10	X		10	X	25		120	60	Isolated damper motor contact	
R4140M1061	None	None		31	On-Off, LF Proven	X	X				10		X	5, 10	X	15		240	50	International model	
R4140M1079	R7140M1007	RM7840M1017	ST7800A1062	90	On-Off, LF Proven	X			X		10	X		10	X	25		120	60	Gordon-Piatt Energy GP101	
R4140M1087	None	None		31	On-Off, LF Proven	X	X				10		X	5, 10, 15	X	15		240	50	International model	
R4140M1095	Never produced																			Never produced	
R4140M1103	R7140M1007 <sup>1</sup>	RM7840M1017 <sup>1</sup>	ST7800A1039 (30 seconds)	31	On-Off, LF Proven	X	X				10		X	10, 30		15		120	60		

See footnotes on page 14

Table 3. HONEYWELL R4140 PROGRAMMER CROSS REFERENCE. (Continued)

Device to be Replaced	Replacement			Prepurge		Interlocks						MFEP	Spark Term	Postpurge	Modulation	Voltage	Frequency	Comment				
	Direct 2, 6, 7, 11	7800 Series 2, 6, 7, 8, 9	Purge Timer	Timing	Type	Start	Running	Lockout	Preignition	Hi-fire	Lo-fire								PFEF	INTM Pilot	INTR Pilot	
R4140M1111	R7140M1007 <sup>1</sup>	RM7840M1017 <sup>1</sup>	ST7800A1039 (30 seconds)	31	On-Off, LF Proven	X	X					10		X	10, 30		15		120	60		
R4140M1129	Never produced																					
R4140M1137	Never produced																					
R4140M1145	R7140M1007 1, 4, 5	RM7840M1017 <sup>1, 4</sup>	ST7800A1047 (40 seconds)	42	On-Off, LF Proven	X	X		X		X	10	X		10	X	15		120	60	Isolated damper motor contact	
R4140M1152	R7140M1007 1, 4, 5	RM7840M1017 <sup>1, 4</sup>	ST7800A1047 (40 seconds)	42	On-Off, LF Proven	X	X		X		X	10	X		10	X	15		120	60	Isolated damper motor contact	
R4140M1160	R7140M1007 <sup>4, 5</sup>	RM7840M1017 <sup>4</sup>	ST7800A1062 (90 seconds)	96	On-Off, LF Proven		X		X		X	10	X		10	X	25		120	60	Isolated damper motor contact	
R4140M1178	R7140M1007 <sup>4, 5</sup>	RM7840M1017 <sup>4</sup>	ST7800A1062 (90 seconds)	96	On-Off, LF Proven		X		X		X	10	X		10	X	25		120	60	Isolated damper motor contact	
R4140M1186	R7140M1007 <sup>1, 5</sup>	RM7840M1017 <sup>1</sup>	ST7800A1047 (40 seconds)	42	On-Off, LF Proven	X	X				X	10	X		10	X	15		120	60		
R4140M1194	R7140M1007 <sup>1, 5</sup>	RM7840M1017 <sup>1</sup>	ST7800A1062 (90 seconds)	96	On-Off, LF Proven	X	X				X	10	X		10	X	15		120	60		
R4140M1202	None	None		31	On-Off, LF Proven	X	X				X	5		X	5, 10	X	15		240	50	Approved by Australian Gas Association	
R4140M1210	Consult Original Equipment Manufacturer			31	On-Off, LF Proven	X	X					10	X		10		25		120	60	Fulton Special	
R4140P1007	None	RM7896C1010 or RM7897C1000	ST7800A1062	90	On-Off	X	X					10		X	15		15		120	60	Gordon Piatt GP001	
R4140Y1005	None	RM7896A1012 or RM7897A1002	ST7800A1013	7	On-Off	X	X					10		X	15		15		120	60		
R4140Y1013	None	RM7896A1012 or RM7897A1002 <sup>12</sup>	ST7800A1013	7	On-Off	X	X					4		X	15		15		120	60		

See footnotes on page 14

Table 3. HONEYWELL R4140 PROGRAMMER CROSS REFERENCE. (Continued)

Device to be Replaced	Replacement			Prepurge		Interlocks						PFEP	INTM Pilot	INTR Pilot	MFEP	Spark Term	Postpurge	Modulation	Voltage	Frequency	Comment
	Direct 2, 6, 7, 11	7800 Series 2, 6, 7, 8, 9	Purge Timer	Timing	Type	Start	Running	Lockout	Preignition	Hi-fire	Lo-fire										
R4140Y1021	None	RM7896A1012 or RM7897A1002	ST7800A1039	30	On-Off	X	X					10		X	15		15		120	60	
R4140Y1039	None	RM7896A1012 or RM7897A1002 <sup>12</sup>	ST7800A1039	30	On-Off	X	X					4		X	15		15		120	60	
R4140Y1047	None	RM7896A1012 or RM7897A1002	ST7800A1054	60	On-Off	X	X					10		X	15		15		120	60	
R4140Y1054	None	RM7896A1012 or RM7897A1002 <sup>12</sup>	ST7800A1054	60	On-Off	X	X					4		X	15		15		120	60	
R4140Y1062	None	RM7896A1012 or RM7897A1002	ST7800A1062	90	On-Off	X	X					10		X	15		15		120	60	
R4140Y1070	None	RM7896A1012 or RM7897A1002 <sup>12</sup>	ST7800A1062	90	On-Off	X	X					4		X	15		15		120	60	

See footnotes on page 14

### Table 3 Footnotes

- <sup>1</sup> R4140 Start Interlocks become Pre-Ignition Interlock (must remain closed throughout purge)
- <sup>2</sup> 4 or 10 Second PFEP
- <sup>3</sup> 60 second MFEP is not available with replacement device
- <sup>4</sup> Spring return Firing Rate Motor (damper motor)
- <sup>5</sup> Remove Jumper J1 and J2
- <sup>6</sup> Select Proper Amplifier:

Old Amplifier	Replacement Amplifier
R7247A1005	R7847A1033
R7247A1021	R7847A1025
R7247B1003	R7847B1031
R7247C1001	R7861A1026 See Note 8
R7248A1004	R7848A1008
R7248B1028	R7848B1006
R7249A1003	R7849A1023
R7476A1007	R7886A1001

- <sup>7</sup> With Selectable Airflow Switch Check (AFC)
- <sup>8</sup> Used with Existing Flame Detectors - EXCEPT - C7012E, F - Replace with C7061A, F and appropriate R7861 Flame Amplifier
- <sup>9</sup> Requires Q7800A or B Wiring Subbase
- <sup>10</sup> Locate High Fire (or Purge Rate Switch) connection on Terminal D. Remove Wire and Connect onto Terminal M
- <sup>11</sup> Check the wiring base - if 3 terminal strips - system must be updated to the 7800 SERIES option - do not use the R7140 option.
- <sup>12</sup> Clip JR1

Table 4. HONEYWELL R4150 PROGRAMMER CROSS REFERENCE.

Device to be Replaced	Replacement			Prepurge		Interlocks						Spark Term	Postpurge	Modulation	Voltage	Frequency	Comment				
	Direct	7800 Series	Purge Timer	Timing	Type	Start	Running	Lockout	Preignition	Hi-fire	Lo-fire							PFEP	INTM Pilot	INTR Pilot	MFEP
	1, 2, 6, 7, 8, 10																				
R4150A1007	None	RM7840M1017	ST7800A1039	30	On-Off	X	X					10	X		15		15	120	60	Includes R7257 Amplifier.	
R4150A1015	None	RM7840M1017	ST7800A1039	30	On-Off	X	X					10	X		15		15	120	50		
R4150A1023	None	RM7840M1017	ST7800A1039	30	On-Off	X	X					10	X		15		15	120	60		
R4150A1031	None	RM7840M1017	ST7800A1039	30	On-Off	X	X					10		X	15, 30	X	15	120	60	Kewanee label.	
R4150A1049	International Model			30	On-Off	X	X					10		X	5	X	15	200	60	Includes R7257 International model.	
R4150A1056	None	RM7840M1017	ST7800A1039	30	On-Off	X	X					15	X		15	X	15	120	60		
R4150A1064	None	RM7840M1017	ST7800A1039	30	On-Off	X	X					10	X		15, 30		15	120	60		
R4150A1072	International Model			30	On-Off	X	X					10	X		15		15	200	60	International model.	
R4150A1080	None	RM7840M1017	ST7800A1039	30	On-Off	X	X					10	X		15, 30	X	15	120	60	Kewanee label.	
R4150A1098	Never Produced																			Never produced	
R4150A1106	None	RM7840M1017	ST7800A1039	30	On-Off	X	X					15	X		5	X	15	120	60		
R4150A1114	None	RM7840M1017	ST7800A1054	60	On-Off	X	X					10	X		15			120	60		
R4150A1122	None	RM7840M1017	ST7800A1062	90	On-Off	X	X					10	X		15		15	120	60		
R4150A1130	None	RM7840M1017	ST7800A1054	60	On-Off	X	X					10		X	15, 30		20	120	60		
R4150A1148	None	RM7840M1017	ST7800A1062	90	On-Off	X	X					10	X		15, 30		15	120	60		
R4150A1155	None	RM7840M1017	ST7800A1062	90	On-Off	X	X					10	X		15, 30	X	15	120	60	Kewanee label.	
R4150A1163	None	RM7840M1017	ST7800A1039	30	On-Off	X	X					15	X		15	X	15	120	60		
R4150A1171	None	RM7840M1017	ST7800A1062	90	On-Off	X	X					15	X			X	15	120	60		
R4150A1189	None	RM7840M1017	ST7800A1062	90	On-Off	X	X					15	X		15	X	20	120	60		
R4150A1197	None	RM7840M1017	ST7800A1039	30	On-Off	X	X					10	X		15		15	120	50	International model	
R4150A1205	International Model			37	On-Off	X	X					10	X		2		20	220	50	International model	
R4150A1213	International Model			37	On-Off	X	X					10	X		5		20	220	50	International model	
R4150A1221	International Model			37	On-Off	X	X					10	X		5		20	240	50	International model	
R4150A1239	None	RM7840M1017	ST7800A1062	90	On-Off	X	X					15	X		15	X	20	120	60		
R4150A1247	None	RM7840M1017	ST7800A1039	30	On-Off	X	X					10	X		15		15	120	60		
R4150A1254	None	RM7840M1017	ST7800A1062	90	On-Off	X	X					10	X		15		20	120	60		
R4150A1262	International Model			30	On-Off	X	X					10	X		15	X	15	220	50	International model	
R4150A1270	None	RM7840M1017	ST7800A1039	30	On-Off	X	X					30	X		15		15	120	60		
See footnotes on page 20																					

Table 4. HONEYWELL R4150 PROGRAMMER CROSS REFERENCE. (Continued)

Device to be Replaced	Replacement			Prepurge		Interlocks						MFEP	Spark Term	Postpurge	Modulation	Voltage	Frequency	Comment			
	Direct 1, 2, 6, 7, 8, 10	7800 Series 1, 2, 6, 7, 8, 9	Purge Timer	Timing	Type	Start	Running	Lockout	Preignition	Hi-fire	Lo-fire								PFEP	INTM Pilot	INTR Pilot
R4150A1288	None	RM7840M1017	ST7800A1047 (40 seconds)	35	On-Off	X	X					10	X		15		15		120	60	5 second stabilization before PFEP.
R4150A1296	International Model			30	On-Off	X	X					10	X		15		15		220	50	International model. Ignition on 3 secs before pilot valve.
R4150B1005	None	RM7840M1017	ST7800A1039	30	On-Off	X	X					10	X		15		15		120	60	R7258A included
R4150B1013	Never Produced																				Never produced
R4150C1003	None	RM7840M1017	ST7800A1039	30	On-Off	X	X					10	X		15		15		120	60	R7259A included
R4150C1011	Never Produced																				
R4150C1029	None	RM7840M1017	ST7800A1039	30	On-Off		X	X				10		X	10		15		120	60	R7259A included
R4150D1001	Never Produced																				Never produced
R4150E1008	None	None		30		X	X					3			15				120	60	For direct spark ignition applications
R4150F1006	International Model																				International - Japan
R4150F1014	International Model																				International - Japan
R4150G1004	R7140G2008	RM7840G1014 or RM7840G1022	ST7800A1054 (60 seconds)	50	LHL, LF Proven	X	X				X	9	X		15		8	3- wire	120	60	
R4150G1012	R7140M1007 4,5	RM7840M1017	ST7800A1062 (90 seconds)	72	On- Off, LF Proven	X	X				X	13	X		15	X	15		120	60	
R4150G1020	R7140G2008	RM7840G1014 or RM7840G1022	ST7800A1054 (60 seconds)	50	LHL, LF Proven	X	X				X	9	X		10		8	3- wire	120	60	Kewanee label
R4150G1038	International Model			50	LHL, LF Proven	X	X				X	9	X		15		8	3- wire	220	50	International model
R4150G1046	R7140G2008	RM7840G1014 or RM7840G1022	ST7800A1054 (60 seconds)	50	LHL, LF Proven	X	X				X	9	X		10		8	3- wire	120	60	
R4150G1053	Consult Original Equipment Manufacturer			72	LHL, LF Proven	X	X				X	10	X		10, 15		9	3- wire	120	60	Cleaver Brooks CB2
R4150G1061	Consult Original Equipment Manufacturer			72	LHL, LF Proven			X	X	X	X	10	X		10, 15		15	3- wire	120	60	Cleaver Brooks CB4, CB4-1

See footnotes on page 20



Table 4. HONEYWELL R4150 PROGRAMMER CROSS REFERENCE. (Continued)

Device to be Replaced	Replacement			Prepurge		Interlocks							MFEP	Spark Term	Postpurge	Modulation	Voltage	Frequency	Comment		
	Direct	7800 Series 1, 2, 6, 7, 8, 9	Purge Timer	Timing	Type	Start	Running	Lockout	Preignition	Hi-fire	Lo-fire	PFEP								INTM Pilot	INTR Pilot
	1, 2, 6, 7, 8, 10																				
R4150G1079	R7140M1007	RM7840M1017	ST7800A1062 (90 seconds)	72	LHL, LF Proven	X	X				X	13	X		15	X	15		120	60	
R4150G1087	Consult Original Equipment Manufacturer			72	LHL, LF Proven	X	X				X	10	X		10, 15		15	4- wire	120	60	Cleaver Brooks CB2-1
R4150G1095	Never Produced																				Never produced
R4150G1103	R7140G2008	RM7840G1014 or RM7840G1022	ST7800A1054	60	LHL, LF Proven	X	X				X	10	X		10, 30		15	3- wire	120	60	
R4150G1111	R7140G2008	RM7840G1014 or RM7840G1022	ST7800A1054	60	LHL, LF Proven	X	X				X	10	X		15		15	4- wire	120	60	
R4150G1129	None	RM7840L1018 or RM7840L1075	ST7800A1054	60	LHL, LF Proven		X		X	X	X	10	X		10		15	4- wire	120	60	Gordon-Piatt Energy GP200
R4150G1137	R7140G2008	RM7840G1014 or RM7840G1022	ST7800A1054	60	LHL, LF Proven	X	X				X	10		X	10, 30		15	4- wire	120	60	
R4150G1145	R7140G2008	RM7840G1014 or RM7840G1022	ST7800A1054	60	LHL, LF Proven	X	X				X	10	X		10		15	4- wire	120	60	
R4150G1152	Never Produced																				Never produced
R4150G1160	Consult Original Equipment Manufacturer			72	LHL, LF Proven		X	X			X	10		X	10, 15		15	4- wire	120	60	Cleaver Brooks CB2-1A
R4150G1178	R7140G2008	RM7840G1014 or RM7840G1022	ST7800A1054	60	LHL, LF Proven	X	X				X	10	X		15		15	4- wire	120	60	
R4150G1186	R7140G1000	RM7840G1014 or RM7840G1022	ST7800A1054	60	LHL, LF Proven		X		X		X	10		X	10, 15		15	4- wire	120	60	
R4150G1194	Never Produced																				Never produced
See footnotes on page 20																					

Table 4. HONEYWELL R4150 PROGRAMMER CROSS REFERENCE. (Continued)

Device to be Replaced	Replacement			Prepurge		Interlocks						Spark Term	Postpurge	Modulation	Voltage	Frequency	Comment				
	Direct	7800 Series 1, 2, 6, 7, 8, 9	Purge Timer	Timing	Type	Start	Running	Lockout	Preignition	Hi-fire	Lo-fire							PFEP	INTM Pilot	INTR Pilot	MFEP
	1, 2, 6, 7, 8, 10																				
R4150G1202	International Model			62	LHL, LF Proven	X		X	X	X	10		X	5	X	15	4-wire	240	50	International model to Gordon-Piatt Energy Specifications.	
R4150H1002	International Model			30	On-Off	X	X					9	X	13, 58		15	3-wire	120	60	International model	
R4150H1010	International Model			30	On-Off	X	X					9	X	13, 58		15	3-wire	240	60	International model	
R4150H1028	International Model			30	On-Off	X	X					9	X	13, 58		15	3-wire	220	50	International model	
R4150H1036	International Model			30	On-Off	X	X					9	X	13, 58		15	3-wire	208	60		
R4150J1007	International Model			37	On-Off	X						5	X	2		20		220	50	International model	
R4150K1005	International Model			37	On-Off	X						5	X	5		20		220	50	International model	
R4150L1003	R7140L1009	RM7840L1018 or RM7840L1075	ST7800A1062 (90 seconds)	72	LHL, HF-LF Proven			X	X	X	X	10	X	10, 15		15	3-wire	120	60		
R4150L1011	R7140L1009	RM7840L1018 or RM7840L1075	ST7800A1062 (90 seconds)	72	LHL, HF-LF Proven			X	X	X	X	10	X	10, 15		15	3-wire	120	60		
R4150L1029	R7140L1009	RM7840L1018 or RM7840L1075	ST7800A1054	60	LHL, HF-LF Proven			X	X	X	X	10	X	10		15	4-wire	120	60	Gordon-Piatt Energy GP300 (original)	
R4150L1037	R7140L1009	RM7840L1018 or RM7840L1075	ST7800A1062 (90 seconds)	72	LHL, HF-LF Proven			X	X	X	X	10	X	10, 15		15	4-wire	120	60		
R4150L1045	R7140L1009	RM7840L1018 or RM7840L1075	ST7800A1062 (90 seconds)	72	LHL, HF-LF Proven			X	X	X	X	10	X	10, 15		15	4-wire	120	60		
R4150L1052	Never Produced																			Never produced	
R4150L1060	Consult Original Equipment Manufacturer			72	LHL, HF-LF Proven			X	X	X	X	10	X	10, 15		15	4-wire	120	60	Cleaver Brooks CB4-1A	
R4150L1078	R7140L1009	RM7840L1018 or RM7840L1075	ST7800A1054	60	LHL, HF-LF Proven			X	X	X	X	10	X	10		15	4-wire	120	60	Gordon-Piatt Energy GP300	

See footnotes on page 20

Table 4. HONEYWELL R4150 PROGRAMMER CROSS REFERENCE. (Continued)

Device to be Replaced	Replacement			Prepurge		Interlocks						MFEP	Spark Term	Postpurge	Modulation	Voltage	Frequency	Comment			
	Direct	7800 Series 1, 2, 6, 7, 8, 9	Purge Timer	Timing	Type	Start	Running	Lockout	Preignition	Hi-fire	Lo-fire								PFEP	INTM Pilot	INTR Pilot
	1, 2, 6, 7, 8, 10																				
R4150M1001	R7140M1007	RM7840M1017	ST7800A1062	90	On-Off	X	X					10	X		10		20	120	60	Ray Burner	
R4150M1019	None	RM7840M1017	ST7800A1062	90	On-Off	X	X					10	X		10		20	120	60	Ray Burner - Special Base	
R4150M1027	R7140M1007	RM7840M1017	ST7800A1039	30	On-Off	X	X					10	X		15		15	120	60		
R4150M1035	R7140M1007	RM7840M1017	ST7800A1039	30	On-Off	X	X					10	X		15		15	120	60		
R4150M1043	R7140M1007	RM7840M1017	ST7800A1039	30	On-Off	X	X					10		X	15	X	15	120	60		
R4150M1050	R7140M1007	RM7840M1017	ST7800A1039	30	On-Off	X	X					10		X	15, 30		15	120	60		
R4150M1068	R7140M1007	RM7840M1017	ST7800A1062	90	On-Off	X	X					10	X		15		15	120	60		
R4150M1076	R7140M1007	RM7840M1017	ST7800A1062	90	On-Off	X	X					10		X	15	X	15	120	60		
R4150M1084	R7140M1007	RM7840M1017	ST7800A1062	90	On-Off	X	X					10	X		15		15	120	60		
R4150M1092	None	RM7840M1017	ST7800A1062	90	On-Off		X		X			10	X		15	X	20	120	60	Gordon-Piatt Energy GP100 (original)	
R4150M1100	R7140M1007	RM7840M1017	ST7800A1039	30	On-Off	X	X					10		X	10, 30		15	120	60		
R4150M1118	None	RM7840M1017	ST7800A1039	30	On-Off	X	X					15		X	15	X	15	120	60		
R4150M1126	R7140M1007	RM7840M1017	ST7800A1039	30	On-Off	X	X					10		X	10	X	15	120	60		
R4150M1134	R7140M1007	RM7840M1017	ST7800A1039	30	On-Off	X	X					10	X		10		15	120	60		
R4150M1142	R7140M1007	RM7840M1017	ST7800A1062	90	On-Off	X	X					10		X	10	X	20	120	60		
R4150M1159	R7140M1007	RM7840M1017	ST7800A1062	90	On-Off	X	X					10	X		10		20	120	60		
R4150M1167	Never Produced																			Never produced	
R4150M1175	None	RM7840M1017	ST7800A1062	90	On-Off		X		X			10	X		10	X	20	120	60	Gordon-Piatt Energy GP100	
R4150X1004	International Model			30	On-Off	X	X					5		X	5	X	15	220	50	International model	
R4150X1012	International Model			30	On-Off	X	X					5		X	5	X	15	240	50	International model	
R4150X1020	International Model																			International model	
See footnotes on page 20																					

## Table 4 Footnotes

- <sup>1</sup> R4150 Start Interlocks become Pre-Ignition Interlock (must remain closed throughout purge)
- <sup>2</sup> 4 or 10 Second PFEP
- <sup>3</sup> 60 second MFEP is not available with replacement device
- <sup>4</sup> Spring return Firing Rate Motor (damper motor)
- <sup>5</sup> Remove Jumper J1 and J2
- <sup>6</sup> Select Proper Amplifier

Old Amp	Replacement Amp.
R7257A1028	R7847A1033
R7258A1001	R7848A1008
R7259A1000	R7849A1023

- <sup>7</sup> With Selectable Airflow Switch Check (AFC)
- <sup>8</sup> Used with Existing Flame Detectors - EXCEPT - C7012E, F - Replace with C7061A, F and appropriate R7861 Flame Amplifier
- <sup>9</sup> Requires Q7800A or B Wiring Subbase
- <sup>10</sup> Check the wiring base - if 3 terminal strips - update to the 7800 Series option - Do not use the R7140 option.

Table 5. HONEYWELL R4181 PROGRAMMER CROSS REFERENCE.

Device to be Replaced	Replacement		Prepurge				Interlocks										Voltage	Frequency	Comments				
	7800 Series Replacement <sup>1</sup>	Purge Timer	Timing	Type				Start	Running	Lockout	Preignition	Hi-fire	Lo-fire	PFEP	INTM Pilot	INTR Pilot				MFEP	Spark Term	Postpurge	Modulation
				Lo-Fire On-Off	LHL	LHL PRV	OP Damp																
R4181A1000	RM7840G1014 or RM7840G1022	ST7800A1047	40		LF PRV			X	X				X	10		X	15, 30		15	4-wire	120 208 240	60	
R4181A1018	RM7840L1018 or RM7840L1075	ST7800A1054	60			X		X	X			X	X	10		X	15, 30		15	4-wire	120 208 240	60	
R4181A1026	RM7840G1014 or RM7840G1022	ST7800A1047	40		LF PRV			X	X				X	10		X	15, 30		15	4-wire	120 208 240	60	
R4181A1034	RM7840L1018 or RM7840L1075	ST7800A1054	60			X		X	X			X	X	10		X	10, 15		15	4-wire	120 208 240	60	
R4181A1042	RM7840L1018 or RM7840L1075	ST7800A1054	60			X				X	X	X	X	10		X	10, 15	X	20	4-wire	120	60	
R4181A1059	RM7840L1018 or RM7840L1075	ST7800A1054 (60 seconds)	55			X				X	X	X	X	7		X	10, 30	X	16	4-wire	120	60	

**Table 5 Footnotes**

<sup>1</sup> Replacement suggestion is 120Vac, 50/60 Hz.

Table 6. HONEYWELL R8169 PROGRAMMER CROSS REFERENCE.

Device to be Replaced	Current Replacement <sup>1</sup>	7800 Series Replacement	Prepurge					Interlocks						INTR Pilot	MFEP	Spark Term	Postpurge	Modulation	Voltage	Frequency	Comments			
			Timing	Type				Start	Running	Lockout	Preignition	Hi-fire	Lo-fire									PFEP		
				Lo-Fire On-Off	LHL	LHL PRV	OP Damp																	
R8169A1007	Consult Original Equipment	None	60	X				X	X						7	X		13		80		120	60	Proprietary to Lennox
R8169A1015	Consult Original Equipment	None	60	X				X	X						7	X		13		80		240	50	Proprietary to Lennox
R8169B1005	Consult Original Equipment	None	60		HL			X	X						7	X		13		80		120	60	Proprietary to Lennox
R8169B1013	Consult Original Equipment	None	60		HL			X	X						7	X		13		80		240	50	Proprietary to Lennox

## Table 6 Footnotes

<sup>1</sup> Contact OEM for replacement suggestions.

**Table 7. HONEYWELL PROGRAM MODULE PROGRAMMER CROSS REFERENCE.**

Device to be Replaced		Replacement			Purge		Interlocks										Comments					
Program Module	Used With	Direct 1 3 4 5	7800 Series Replacement 1 2 3 4 5 6 7	Purge Timer	Timing	Type	Start	Running	Lockout	Preignition	Hi-fire	Lo-fire	PFEP	INTM Pilot	INTR Pilot	MFEP		Spark Term	Postpurge	Voltage	Frequency	
PM720G1197	BC7000L1042	Consult Original Equipment Manufacturer				40	4-wire LHL, LF Proven			X	X	X	X	10		X	10,15		15	120	60	Proprietary to York-Shiple, LWCO annunciation on terminal 18
PM720G1205	BC7000L1042	Consult Original Equipment Manufacturer				40	4-wire LHL, LF Proven			X	X	X	X	10		X	10,15		15	120	60	Proprietary to York-Shiple, LWCO annunciation on terminal 18
PM720G2005	BC7000L1000	R7140G2008	RM7800G1018 or RM7840G1022	ST7800A1047	40	4-wire LHL, LF Proven		X		X		X	10		X	10,15, 30	X	15	120	60		
PM720G2013	BC7000L1000	R7140G2008	RM7800G1018 or RM7840G1022	ST7800A1047	40	4-wire LHL, LF Proven		X		X		X	10		X	10*	X	15	120	60	* 10 sec MFEP or intermittent pilot	
PM720G2021	BC7000L1000	Consult Original Equipment Manufacturer				60	4-wire LHL, LF Proven		X		X		7		X	13*		30	120	60	* 13 sec MFEP or intermittent pilot proprietary to Lennox	
PM720G2039	BC7000L1000	R7140G2008	RM7800G1018 or RM7840G1022	ST7800A1047	40	4-wire LHL, LF Proven		X		X		X	10		X	10,15, 30	X	15	120	50		
PM720L1022	BC7000L1018	Consult Original Equipment Manufacturer				30	4-wire LHL, HF-LF Proven			X	X	X	X	7		X	8		4	120	60	Proprietary to Cleaver Brooks
PM720L1030	BC7000L1000	R7140L2007	RM7800L1012 or RM7800L1087	ST7800A1039	30	4-wire LHL, HF-LF Proven			X	X	X	X	10		X	10,15	X	15	120	60		
PM720L1063	BC7000L1034	Consult Original Equipment Manufacturer				8	4-wire LHL, HF-LF Proven			X	X	X	X	7		X	8		4	120	60	Proprietary to Vapor Corporation
PM720L1089	NEVER PRODUCED																					
PM720L1097	BC7000L1018	Consult Original Equipment Manufacturer				30	4-wire LHL, HF-LF Proven			X	X	X	X	7		X	8		4	120	50	Proprietary to Cleaver Brooks
PM720L1105	BC7000L1034	Consult Original Equipment Manufacturer				8	4-wire LHL, HF-LF Proven			X	X	X	X	7		X	8		4	120	50	Proprietary to Vapor Corporation
PM720L1113	BC7000L1042	Consult Original Equipment Manufacturer				30	4-wire LHL, HF-LF Proven			X	X	X	X	10		X	10,15		15	120	60	Proprietary to York-Shiple, LWCO annunciation on terminal 18
See footnotes on page 25																						

Table 7. HONEYWELL PROGRAM MODULE PROGRAMMER CROSS REFERENCE. (Continued)

Device to be Replaced		Replacement			Prepurge		Interlocks										Comments				
Program Module	Used With	Direct 1 3 4 5	7800 Series Replacement 1 2 3 4 5 6 7	Purge Timer	Timing	Type	Start	Running	Lockout	Preignition	Hi-fire	Lo-fire	PFEP	INTM Pilot	INTR Pilot	MFEP		Spark Term	Postpurge	Voltage	Frequency
PM720L1121	BC7000L1042	Consult Original Equipment Manufacturer			30	4-wire LHL, HF-LF Proven			X	X	X	X	10		X	10,15		15	120	60	Proprietary to York-Shipley, LWCO annunciation on terminal 18, energy saving prepurge (ESP)
PM720L1139	BC7000L1000	R7140L2007	RM7800L1012 or RM7800L1087	ST7800A1039	30	4-wire LHL, HF-LF Proven			X	X	X	X	10		X	10,15	X	15	120	60	Reduced sensitivity to line noise
PM720L2004	BC7000L1000	None	RM7800E1010	ST7800A1039	30	4-wire LHL, HF-LF Proven			X	X	X	X	10		X	10,15	X	15	120	60	Energy saving prepurge (ESP)
PM720L2012	BC7000L1000	R7140L2007	RM7800L1012 or RM7800L1087	ST7800A1039	30	4-wire LHL, HF-LF Proven			X	X	X	X	10		X	10,15	X	15	120	50	
PM720L2020	BC7000L1000	R7140L2007	RM7800L1012 or RM7800L1087	ST7800A1021	10	4-wire LHL, HF-LF Proven			X	X	X	X	10		X	10,15	X	15	120	60	
PM720M2002	BC7000L1000	R7140M1007	RM7800M1011	ST7800A1039 (30 seconds), ST7800A1062 (90 seconds)	30, 90	2-wire On-Off, LF Proven		X		X		X	10		X	10*	X	15	120	60	* 10 second MFEP or intermittent pilot
PM720M2010	BC7000L1000	R7140M1007	RM7800M1011	ST7800A1013 (7 seconds)	7	2-wire On-Off, LF Proven		X		X		X	10		X	10*	X	15	120	60	* 10 second MFEP or intermittent pilot
PM720M2036	BC7000L1000	R7140M1007	RM7800M1011	ST7800A1013 (7 seconds), ST7800A1039 (30 seconds)	7, 30	2-wire On-Off, LF Proven		X		X		X	10		X	10*	X	15	120	60	* 10 second MFEP or intermittent pilot
PM720M2044	BC7000L1000	R7140M1007	RM7800M1011	ST7800A1039 (30 seconds), ST7800A1062 (90 seconds)	30, 90	2-wire On-Off, LF Proven		X		X		X	10		X	10*	X	15	120	50	* 10 second MFEP or intermittent pilot
PM720M2051	BC7000L1000	R7140M1007	RM7800M1011	ST7800A1013 (7 seconds), ST7800A1039 (30 seconds)	7, 30	2-wire On-Off, LF Proven		X		X		X	10		X	10*	X	15	120	50	* 10 second MFEP or intermittent pilot

See footnotes on page 25



## Table 7 Footnotes

- <sup>1</sup> 4 or 10 second PFEP  
<sup>2</sup> With S7800A1001 Keyboard Display Module  
<sup>3</sup> Select Proper Amplifier

Old Amplifier	Replacement Amplifier
R7247A1005	R7847A1033
R7247A1021	R7847A1025
R7247B1003	R7847B1031
R7247C1001	R7861A1026 See Note 5
R7248A1004	R7848A1008
R7248B1028	R7848B1006
R7249A1003	R7849A1023
R7476A1007	R7886A1001

- <sup>4</sup> With Selectable Airflow Switch Check  
<sup>5</sup> Used with Existing Flame Detectors - EXCEPT - C7012E, F - Replace with C7061A, M, F and appropriate R7861 Flame Amplifier  
<sup>6</sup> Requires Q7800A or B Wiring Subbase  
<sup>7</sup> For RM7840, order S7800A1142 display seperately

Table 8. HONEYWELL BC7000 PROGRAMMER CROSS REFERENCE.

Device to be Replaced	Current Replacement	7800 Series Replacement	Prepurge				Interlocks						PFEP	INTM Pilot	INTR Pilot	MFEP	Spark Term	Postpurge	Modulation	Voltage	Frequency	Comments
			Timing	Type			Start	Running	Lockout	Preignition	Hi-fire	Lo-fire										
				Lo-Fire On-Off	LHL	LHL PRV																
BC7000L1000	None	See Program Module for Current Replacements																	120			
BC7000L1018	None	Consult Original Equipment Manufacturer																	120		Proprietary to Cleaver Brooks	
BC7000L1034	None	Consult Original Equipment Manufacturer																	120		Proprietary to Vapor Corporation	
BC7000L1042	None	Consult Original Equipment Manufacturer																	120		Proprietary to York-Shiple, LWCO annunciation on terminal 18	

**Table 9. HONEYWELL 7800 SERIES PROGRAMMER CROSS REFERENCE.**

Device to be Replaced	Current Replacement	Enhanced Replacement option	Flame Amplifier 2	Prepurge			Interlocks							PFEP	INTM Pilot	INTR Pilot	MFEP	Postpurge	Voltage	Frequency	Comments	
				Timing 1	Type		Start	Running	Lockout	Preignition	Hi-fire	Lo-fire	Dynamic Air-Flow SW Check									Run/Test Switch <sup>3</sup>
					Damper Position	Air-flow																
EC7810A1001	EC7810A1027		Selectable	Selectable using ST7800B	2-wire LF Proven		X	X	X		X	Configurable <sup>4</sup>	X	5, 10	X	X	5, 8		220 to 240	50	With 5 second Pilot and 5 second Main Stabilization Time. FFRT 1.0 or 2.0 seconds Less Fan Output CE Listed	
EC7810A1019	EC7810A1035		Selectable	Selectable using ST7800B	2-wire LF Proven		X	X	X		X	Configurable <sup>4</sup>	X	5, 10	X	X	5, 8		220 to 240	50	With 5 second Pilot and 5 second Main Stabilization Time. FFRT 1.0 or 2.0 seconds Less Fan Output CE Listed	
EC7810A1027	EC7810A1027		Selectable	Selectable	2-wire LF Proven		X	X	X		X	Configurable <sup>4</sup>	X	5, 10	X	X	5, 8		220 to 240	50/60	With 5 second Pilot and 5 second Main Stabilization Time. FFRT 1.0 or 2.0 seconds Less Fan Output CE Listed	
EC7810A1035	EC7810A1035		Selectable	Selectable	2-wire LF Proven		X	X	X		X	Configurable <sup>4</sup>	X	5, 10	X	X	5, 8		220 to 240	50/60	With 5 second Pilot and 5 second Main Stabilization Time. FFRT 1.0 or 2.0 seconds Less Fan Output CE Listed	
EC7820A1000	EC7820A1026		Selectable	Selectable using ST7800B	2-wire LF Proven	Proven	X	X	X		X	Configurable <sup>4</sup>	X	5, 10	X	X	5, 8		220 to 240	50	With 5 second Pilot and 5 second Main Stabilization Time. FFRT 1.0 or 2.0 seconds With Fan Output CE Listed	
EC7820A1018	EC7820A1034		Selectable	Selectable using ST7800B	2-wire LF Proven	Proven	X	X	X		X	Configurable <sup>4</sup>	X	5, 10	X	X	5, 8		220 to 240	50	With 5 second Pilot and 5 second Main Stabilization Time. FFRT 1.0 or 2.0 seconds With Fan Output CE Listed	
EC7820A1026	EC7820A1026		Selectable	Selectable	2-wire LF Proven	Proven	X	X	X		X	Configurable <sup>4</sup>	X	5, 10	X	X	5, 8		220 to 240	50/60	With 5 second Pilot and 5 second Main Stabilization Time. FFRT 1.0 or 2.0 seconds With Fan Output CE Listed	
EC7820A1034	EC7820A1034		Selectable	Selectable	2-wire LF Proven	Proven	X	X	X		X	Configurable <sup>4</sup>	X	5, 10	X	X	5, 8		220 to 240	50/60	With 5 second Pilot and 5 second Main Stabilization Time. FFRT 1.0 or 2.0 seconds With Fan Output CE Listed	
EC7810A1001	EC7810A1027		Selectable	Selectable using ST7800B	2-wire LF Proven		X	X	X		X	Configurable <sup>4</sup>	X	5, 10	X	X	5, 8		220 to 240	50	With 5 second Pilot and 5 second Main Stabilization Time. FFRT 1.0 or 2.0 seconds Less Fan Output CE Listed	
EC7830A1009	EC7830A1033		Selectable	Selectable using ST7800B	LF Proven	Proven	X	X	X		X	Configurable <sup>4</sup>	X	3 or 5	X	X	3 or 5	2	220 to 240	50	With 5 second Pilot Stabilization Time. FFRT 1.0 or 2.0 seconds CE Listed	
See footnotes on page 34																						

Table 9. HONEYWELL 7800 SERIES PROGRAMMER CROSS REFERENCE. (Continued)

Device to be Replaced	Current Replacement	Enhanced Replacement option	Flame Amplifier 2	Prepurge			Interlocks								PFEP	INTM Pilot	INTR Pilot	MFEP	Postpurge	Voltage	Frequency	Comments
				Timing 1	Type		Start	Running	Lockout	Preignition	Hi-fire	Lo-fire	Dynamic Air-Flow SW Check	Run/Test Switch <sup>3</sup>								
					Damper Position	Air-flow																
EC7830A1017	EC7830A1041		Selectable	Selectable using ST7800B	LF Proven	Proven		X	X	X		X	Configurable <sup>4</sup>	X	3 or 5	X	X	3 or 5	30	220 to 240	50	With 5 second Pilot Stabilization Time. FFRT 1.0 or 2.0 seconds CE Listed
EC7830A1025	EC7830A1066		Selectable	Selectable using ST7800B	LF Proven	Proven		X	X	X		X	Configurable <sup>4</sup>	X	3 or 5	X	X	3 or 5	15	220 to 240	50	With 5 second Pilot Stabilization Time. FFRT 1.0 or 2.0 seconds CE Listed Fulton Proprietary
EC7830A1033	EC7830A1033		Selectable	Selectable	LF Proven	Proven		X	X	X		X	Configurable <sup>4</sup>	X	3 or 5	X	X	3 or 5	2	220 to 240	50/60	With 5 second Pilot Stabilization Time. FFRT 1.0 or 2.0 seconds CE Listed
EC7830A1041	EC7830A1041		Selectable	Selectable	LF Proven	Proven		X	X	X		X	Configurable <sup>4</sup>	X	3 or 5	X	X	3 or 5	30	220 to 240	50/60	With 5 second Pilot Stabilization Time. FFRT 1.0 or 2.0 seconds CE Listed
EC7830A1058	EC7830A1058		Selectable	Selectable	LF Proven	Proven		X	X	X		X	Configurable <sup>4</sup>	X	3 or 5	X	X	3 or 5	30	220 to 240	50/60	With 5 second Pilot Stabilization Time. FFRT 1.0 or 2.0 seconds CE Listed Fulton Proprietary
EC7830A1066	EC7830A1066		Selectable	Selectable	LF Proven	Proven		X	X	X		X	Configurable <sup>4</sup>	X	3 or 5	X	X	3 or 5	15	220 to 240	50/60	With 5 second Pilot Stabilization Time. FFRT 1.0 or 2.0 seconds CE Listed
EC7840L1014	EC7840L1014	EC7840L1014	Selectable	Selectable	4-wire LHL HF, LF PRV	Proven			X	X	X	X	Configurable <sup>4</sup>	X	4, 10		X	10, 15	15	240	50/60	Programmer control with Valve Proving Feature and Programmable Post Purge. Requires S7800A1142 Display Module to program. With Blinkum Fault Messaging.
EC7850A1007	EC7850A1072		Selectable	Selectable using ST7800B	4-wire LHL HF, LF PRV	Proven		X	X	X		X	Configurable <sup>4</sup>	X	3 or 5	X	X	3 or 5	2	220 to 240	50	With 5 second Pilot Stabilization Time. FFRT 1.0 or 2.0 seconds CE Listed
EC7850A1015	EC7850A1080		Selectable	Selectable using ST7800B	4-wire LHL HF, LF PRV	Proven		X	X	X		X	Configurable <sup>4</sup>	X	3 or 5	X	X	3 or 5	30	220 to 240	50	With 5 second Pilot Stabilization Time. FFRT 1.0 or 2.0 seconds CE Listed
EC7850A1031	EC7850A1106		Selectable	Selectable using ST7800B	4-wire LHL HF, LF PRV	Proven		X	X	X		X	Configurable <sup>4</sup>	X	3 or 5	X	X	3 or 5	2	220 to 240	60	With 5 second Pilot Stabilization Time. FFRT 1.0 or 2.0 seconds CE Listed
EC7850A1049	EC7850A1114		Selectable	Selectable using ST7800B	4-wire LHL HF, LF PRV	Proven		X	X	X		X	Configurable <sup>4</sup>	X	3 or 5	X	X	3 or 5	30	220 to 240	60	With 5 second Pilot Stabilization Time. FFRT 1.0 or 2.0 seconds CE Listed

See footnotes on page 34

Table 9. HONEYWELL 7800 SERIES PROGRAMMER CROSS REFERENCE. (Continued)

Device to be Replaced	Current Replacement	Enhanced Replacement option	Flame Amplifier 2	Purge			Interlocks								PFEP	INTM Pilot	INTR Pilot	MFEP	Postpurge	Voltage	Frequency	Comments
				Timing 1	Type		Start	Running	Lockout	Preignition	Hi-fire	Lo-fire	Dynamic Air-Flow SW Check	Run/Test Switch <sup>3</sup>								
					Damper Position	Air-flow																
EC7850A1056	EC7850A1098		Selectable	Selectable	4-wire LHL HF, LF PRV	Proven	X	X	X		X	Configurable <sup>4</sup>	X	3 or 5	X	X	3 or 5	30	220 to 240	60	With 5 second Pilot Stabilization Time. FFRT 1.0 or 2.0 seconds CE Listed Fulton Proprietary	
EC7850A1064	EC7850A1064		Selectable	Selectable	4-wire LHL HF, LF PRV	Proven	X	X	X		X	Configurable <sup>4</sup>	X	3 or 5	X	X	3 or 5	30	220 to 240	50/60	With 5 second Pilot Stabilization Time. FFRT 1.0 or 2.0 seconds CE Listed	
EC7850A1072	EC7850A1072		Selectable	Selectable	4-wire LHL HF, LF PRV	Proven	X	X	X		X	Configurable <sup>4</sup>	X	3 or 5	X	X	3 or 5	2	220 to 240	50/60	With 5 second Pilot Stabilization Time. FFRT 1.0 or 2.0 seconds CE Listed	
EC7850A1080	EC7850A1080		Selectable	Selectable	4-wire LHL HF, LF PRV	Proven	X	X	X		X	Configurable <sup>4</sup>	X	3 or 5	X	X	3 or 5	30	220 to 240	50/60	With 5 second Pilot Stabilization Time. FFRT 1.0 or 2.0 seconds CE Listed	
EC7850A1098	EC7850A1098		Selectable	Selectable	4-wire LHL HF, LF PRV	Proven	X	X	X		X	Configurable <sup>4</sup>	X	3 or 5	X	X	3 or 5	30	220 to 240	50/60	With 5 second Pilot Stabilization Time. FFRT 1.0 or 2.0 seconds CE Listed Fulton Proprietary	
EC7850A1106	EC7850A1072		Selectable	Selectable	4-wire LHL HF, LF PRV	Proven	X	X	X		X	Configurable <sup>4</sup>	X	3 or 5	X	X	3 or 5	2	220 to 240	50/60	With 5 second Pilot Stabilization Time. FFRT 1.0 or 2.0 seconds CE Listed	
EC7850A1114	EC7850A1080		Selectable	Selectable	4-wire LHL HF, LF PRV	Proven	X	X	X		X	Configurable <sup>4</sup>	X	3 or 5	X	X	3 or 5	30	220 to 240	50/60	With 5 second Pilot Stabilization Time. FFRT 1.0 or 2.0 seconds CE Listed	
EC7850A1122	EC7850A1122		Selectable	Selectable	4-wire LHL HF, LF PRV	Proven	X	X	X		X	Configurable <sup>4</sup>	X	3 or 5	X	X	3 or 5	15	220 to 240	50/60	With 5 second Pilot Stabilization Time. FFRT 1.0 or 2.0 seconds CE Listed	
EC7850A1148	EC7850A1072		Selectable	Selectable	4-wire LHL HF, LF PRV	Proven	X	X	X		X	Configurable <sup>4</sup>	X	3 or 5	X	X	3 or 5	2	220 to 240	50/60	With 5 second Pilot Stabilization Time. FFRT 1.0 or 2.0 seconds PFEP with Early Spark Termination (2 or 6 seconds based on Configuration Resistor. CE Listed	
EC7865A1005	EC7865A1005																	220 to 240	50/60		Fulton Proprietary Pulse Firing	
RM7800E1002	RM7800E1010		Selectable	Selectable	4-wire LHL HF, LF PRV	Proven		X	X	X	X	Configurable <sup>4</sup>	X	4, 10		X	10, 15	15	120	50	with Energy Saving Purge and display module	
RM7800E1010	RM7800E1010		Selectable	Selectable	4-wire LHL HF, LF PRV	Proven		X	X	X	X	Configurable <sup>4</sup>	X	4, 10		X	10, 15	15	120	50/60	with Energy Saving Purge and display module	

See footnotes on page 34

Table 9. HONEYWELL 7800 SERIES PROGRAMMER CROSS REFERENCE. (Continued)

Device to be Replaced	Current Replacement	Enhanced Replacement option	Flame Amplifier 2	Prepurge			Interlocks								PFEP	INTM Pilot	INTR Pilot	MFEP	Postpurge	Voltage	Frequency	Comments
				Timing 1	Type		Start	Running	Lockout	Preignition	Hi-fire	Lo-fire	Dynamic Air-Flow SW Check	Run/Test Switch <sup>3</sup>								
					Damper Position	Air-flow																
RM7800G1000	RM7800G1018	RM7840G1022 add S7800A1142 Display	Selectable	Selectable	4-wire LHL LF PRV	Proven	X		X		X	Configurable <sup>4</sup>	X	4, 10	X	X	10, 15, 30	15	120	50	With display module	
RM7800G1018	RM7800G1018	RM7840G1022 add S7800A1142 Display	Selectable	Selectable	4-wire LHL LF PRV	Proven	X		X		X	Configurable <sup>4</sup>	X	4, 10	X	X	10, 15, 30	15	120	50/60	With display module	
RM7800L1004	RM7800L1012	RM7800L1087	Selectable	Selectable	4-wire LHL HF, LF PRV	Proven		X	X	X	X	Configurable <sup>4</sup>	X	4, 10		X	10, 15	15	120	50	With display module	
RM7800L1012	RM7800L1012	RM7800L1087	Selectable	Selectable	4-wire LHL HF, LF PRV	Proven		X	X	X	X	Configurable <sup>4</sup>	X	4, 10		X	10, 15	15	120	50/60	With display module	
RM7800L1038	RM7800L1038		Contact OEM	Contact OEM	4-wire LHL HF, LF PRV	Proven		X	X	X	X	Configurable <sup>4</sup>	X	4, 10		X	10, 15	15	120	50/60	Fulton Proprietary	
RM7800L1046	RM7800L1046		Contact OEM	Contact OEM	4-wire LHL HF, LF PRV	Proven		X	X	X	X	Configurable <sup>4</sup>	X	4, 10		X	10, 15	15	120	50/60	Vapor Proprietary (49320086)	
RM7800L1053	RM7800L1053		Selectable	Selectable	4-wire LHL HF, LF PRV	Proven		X	X	X	X	Configurable <sup>4</sup>	X	4, 10	X	X	10, 15	15	120	50/60	With display module-Intermittent Pilot	
RM7800L1061	RM7800L1079		Contact OEM	Contact OEM	4-wire LHL HF, LF PRV	Proven		X	X	X	X	Configurable <sup>4</sup>	X	4, 10		X	10, 15	15	120	50/60	Cleaver Brook Proprietary (833-2719)	
RM7800L1079	RM7800L1079		Contact OEM	Contact OEM	4-wire LHL HF, LF PRV	Proven		X	X	X	X	Configurable <sup>4</sup>	X	4, 10		X	10, 15	15	120	50/60	Cleaver Brook Proprietary (833-2718)	
RM7800L1087	RM7800L1087		Selectable	Selectable	4-wire LHL HF, LF PRV	Proven		X	X	X	X	Configurable <sup>4</sup>	X	4, 10		X	10, 15	15	120	50/60	Programmer control with Valve Proving Feature and Programmable Post Purge comes with S7800A1142 display module, With Blinkum Fault Messaging.	
RM7800L1095	RM7800L1095		Contact OEM	Contact OEM	4-wire LHL HF, LF PRV	Proven		X	X	X	X	Configurable <sup>4</sup>	X	4, 10		X	10, 15	15	120	50/60	Programmer control with Valve Proving Feature and Programmable Post Purge comes with S7800A1142 display module, With Blinkum Fault Messaging. Cleaver Brook Proprietary (833-03517)	

See footnotes on page 34

**Table 9. HONEYWELL 7800 SERIES PROGRAMMER CROSS REFERENCE. (Continued)**

Device to be Replaced	Current Replacement	Enhanced Replacement option	Flame Amplifier 2	Purge			Interlocks								PFEP	INTM Pilot	INTR Pilot	MFEP	Postpurge	Voltage	Frequency	Comments
				Timing 1	Type		Start	Running	Lockout	Preignition	Hi-fire	Lo-fire	Dynamic Air-Flow SW Check	Run/Test Switch <sup>3</sup>								
					Damper Position	Air-flow																
RM7800M1003	RM7800M1011		Selectable	Selectable	2-wire On-Off, LF PRV	Proven	X		X		X	Configurable <sup>4</sup>	X	4, 10	X	X	10	15	120	50	With display module	
RM7800M1011	RM7800M1011		Selectable	Selectable	2-wire On-Off, LF PRV	Proven	X		X		X	Configurable <sup>4</sup>	X	4, 10	X	X	10	15	120	50/60	With display module	
RM7800M1037	RM7800M1037		Contact OEM	Contact OEM	2-wire On-Off, LF PRV	Proven	X		X		X	Configurable <sup>4</sup>	X	4, 10	X	X	10	15	120	50/60	Fulton Proprietary	
RM7830A1003	RM7830A1003		Selectable	Selectable	LF Proven	Proven	X	X	X		X	Configurable <sup>4</sup>	X	3 or 5	X	X	3 or 5	2	120	50/60	With 5 second Pilot Stabilization Time. FFRT 1.0 or 2.0 seconds CE Listed	
RM7830A1011	RM7830A1011		Selectable	Selectable	LF Proven	Proven	X	X	X		X	Configurable <sup>4</sup>	X	3 or 5	X	X	3 or 5	15	120	50/60	With 5 second Pilot Stabilization Time. FFRT 1.0 or 2.0 seconds CE Listed	
RM7830A1029	RM7830A1029		Selectable	Selectable	LF Proven	Proven	X	X	X		X	Configurable <sup>4</sup>	X	3 or 5	X	X	3 or 5	30	120	50/60	With 5 second Pilot Stabilization Time. FFRT 1.0 or 2.0 seconds CE Listed	
RM7840E1008	RM7840E1016		Selectable	Selectable	4-wire LHL HF, LF PRV	Proven		X	X	X	X	Configurable <sup>4</sup>	X	4, 10		X	10, 15	15	120	50	with Energy Saving Purge	
RM7840E1016	RM7840E1016		Selectable	Selectable	4-wire LHL HF, LF PRV	Proven		X	X	X	X	Configurable <sup>4</sup>	X	4, 10		X	10, 15	15	120	50/60	with Energy Saving Purge	
RM7840G1006	RM7840G1014	RM7840G1022	Selectable	Selectable	4-wire LHL LF PRV	Proven	X		X		X	Configurable <sup>4</sup>	X	4, 10	X	X	10, 15, 30	15	120	50		
RM7840G1014	RM7840G1014	RM7840G1022	Selectable	Selectable	4-wire LHL LF PRV	Proven	X		X		X	Configurable <sup>4</sup>	X	4, 10	X	X	10, 15, 30	15	120	50/60		
RM7840G1022	RM7840G1022		Selectable	Selectable	4-wire LHL LF PRV	Proven	X		X		X	Configurable <sup>4</sup>	X	4, 10	X	X	10, 15, 30	15	120	50/60	Programmer control with Valve Proving Feature and Programmable Post Purge. Requires S7800A1142 Display Module to program. With Blinkum Fault Messaging.	
RM7840L1000	RM7840L1018	RM7840L1075	Selectable	Selectable	4-wire LHL HF, LF PRV	Proven		X	X	X	X	Configurable <sup>4</sup>	X	4, 10		X	10, 15	15	120	50		

See footnotes on page 34

Table 9. HONEYWELL 7800 SERIES PROGRAMMER CROSS REFERENCE. (Continued)

Device to be Replaced	Current Replacement	Enhanced Replacement option	Flame Amplifier 2	Prepurge			Interlocks								PFEP	INTM Pilot	INTR Pilot	MFEP	Postpurge	Voltage	Frequency	Comments
				Timing 1	Type		Start	Running	Lockout	Preignition	Hi-fire	Lo-fire	Dynamic Air-Flow SW Check	Run/Test Switch <sup>3</sup>								
					Damper Position	Air-flow																
RM7840L1018	RM7840L1018	RM7840L1075	Selectable	Selectable	4-wire LHL HF, LF PRV	Proven			X	X	X	X	Configurable <sup>4</sup>	X	4, 10		X	10, 15	15	120	50/60	
RM7840L1026	RM7840L1026		Selectable	Selectable	4-wire LHL HF, LF PRV	Proven			X	X	X	X	Configurable <sup>4</sup>	X	4, 10	X	X	10, 15	15	120	50/60	Intermittent Pilot
RM7840L1034	RM7840L1042		Contact OEM	Contact OEM	4-wire LHL HF, LF PRV	Proven			X	X	X	X	Configurable <sup>4</sup>	X	4, 10		X	10, 15	15	120	50	Cleaver Brook Proprietary (833-2721)
RM7840L1042	RM7840L1042		Contact OEM	Contact OEM	4-wire LHL HF, LF PRV	Proven			X	X	X	X	Configurable <sup>4</sup>	X	4, 10		X	10, 15	15	120	50/60	Cleaver Brook Proprietary (833-2720)
RM7840L1059	Never Produced																					Never Produced
RM7840L1067	Never Produced																					Never Produced
RM7840L1075	RM7840L1075		Selectable	Selectable	4-wire LHL HF, LF PRV	Proven			X	X	X	X	Configurable <sup>4</sup>	X	4, 10		X	10, 15	15	120	50/60	Programmer control with Valve Proving Feature and Programmable Post Purge. Requires S7800A1142 Display Module to program. With Blinkum Fault Messaging.
RM7840L1083	RM7840L1083		Contact OEM	Contact OEM	4-wire LHL HF, LF PRV	Proven			X	X	X	X	Configurable <sup>4</sup>	X	4, 10		X	10, 15	15	120	50/60	Programmer control with Valve Proving Feature and Programmable Post Purge. Requires S7800A1142 Display Module to program. With Blinkum Fault Messaging. Cleaver Brook Proprietary (833-03518)
RM7840L1091	RM7840L1091		Selectable	Selectable	4-wire LHL HF, LF PRV	Proven			X	X	X	X	Configurable <sup>4</sup>	X	4 (fixed)		X	10, 15	15	120	50/60	Programmer control with Valve Proving Feature and Programmable Post Purge. Requires S7800A1142 Display Module to program. With Blinkum Fault Messaging.
RM7840M1009	RM7840M1017		Selectable	Selectable	2-wire On-Off, LF PRV	Proven	X		X		X		Configurable <sup>4</sup>	X	4, 10	X	X	10	15	120	50	
RM7840M1017	RM7840M1017		Selectable	Selectable	2-wire On-Off, LF PRV	Proven	X		X		X		Configurable <sup>4</sup>	X	4, 10	X	X	10	15	120	50/60	

See footnotes on page 34



Table 9. HONEYWELL 7800 SERIES PROGRAMMER CROSS REFERENCE. (Continued)

Device to be Replaced	Current Replacement	Enhanced Replacement option	Flame Amplifier 2	Purge			Interlocks								PFEP	INTM Pilot	INTR Pilot	MFEP	Postpurge	Voltage	Frequency	Comments
				Timing 1	Type		Start	Running	Lockout	Preignition	Hi-fire	Lo-fire	Dynamic Air-Flow SW Check	Run/Test Switch <sup>3</sup>								
					Damper Position	Air-flow																
RM7845A1001	RM7845A1001	RM7840L1075	Selectable	Selectable	4-wire LHL HF, LF PRV	Proven			X	X	X	X	Configurable <sup>4</sup>	X	4, 10		X	10	15	120	50/60	
RM7850A1001	RM7850A1001		Selectable	Selectable	4-wire LHL HF, LF PRV	Proven	X	X	X		X	Configurable <sup>4</sup>	X	3 or 5	X	X	3 or 5	2	120	50/60	With 5 second Pilot Stabilization Time. FFRT 1.0 or 2.0 seconds CE Listed	
RM7850A1019	RM7850A1019		Selectable	Selectable	4-wire LHL HF, LF PRV	Proven	X	X	X		X	Configurable <sup>4</sup>	X	3 or 5	X	X	3 or 5	5	120	50/60	With 5 second Pilot Stabilization Time. FFRT 1.0 or 2.0 seconds CE Listed	
RM7850A1027	RM7850A1027		Selectable	Selectable	4-wire LHL HF, LF PRV	Proven	X	X	X		X	Configurable <sup>4</sup>	X	3 or 5	X	X	3 or 5	30	120	50/60	With 5 second Pilot Stabilization Time. FFRT 1.0 or 2.0 seconds CE Listed	
RM7850A1035	RM7850A1035		Selectable	Selectable	4-wire LHL HF, LF PRV	Proven	X	X	X		X	Configurable <sup>4</sup>	X	3 or 5	X	X	3 or 5	2	120	50/60	With 5 second Pilot Stabilization Time. FFRT 1.0 or 2.0 seconds PFEP with Early Spark Termination (2 or 6 seconds based on Configuration Resistor. CE Listed	
RM7865A1009	RM7865C1007																		120	50/60	Fulton Proprietary Pulse Firing	
RM7865B1008	RM7865C1007																		120	50/60	Fulton Proprietary Pulse Firing	
RM7865C1007	RM7865C1007																		120	50/60	Fulton Proprietary Pulse Firing	
See footnotes on page 34																						

## Table 9 7800 PROGRAMMER SERIES FOOTNOTES:

### 1 Amplifier Options

	FFRT* (seconds)	Standard	Ampli-check
<b>Rectification</b>			
Flame Rods	0.8 or 1.0	R7847A1025	R7847B1023
C7012A, C	2.0 or 3.0	R7847A1033	R7847B1031
Rectifier pilot burners (Q179, C7005)		>50 feet leadwire run	>50 feet leadwire run
		R7847A1074	R7847B1064
		R7847A1082	R7847B1072
<b>UV</b>			
C7027, C7035, C7044	0.8 or 1.0	R7849A1015	R7849B1013
	2.0 or 3.0	R7849A1023	R7849B1021
<b>Shutter-Check UV Detector</b>			
C7012E, F	2.0 or 3.0	R7847C1005	
C7061A, M, F	0.8 or 1.0	R7861A1034	
	2.0 or 3.0	R7861A1026	
C7076A, D	2.0 or 3.0	R7886A1001	
C7961E, F	2.0 or 3.0	R7851C1008	
<b>Optical</b>			
C7927 (UV)	0.8 or 1.0		R7851B1018
C7962 (Visible)	2.0 or 3.0		R7851B1000
<b>Infrared</b>			
C7915	2.0 or 3.0	R7852A1001	R7852B1009

\*Flame Failure Response Time

### 2 Purge Timer Options

Timing	ST7800	Timing	ST7800
2 seconds	A1005	2.5 Minute	A1070
7 seconds	A1013	4 Minute	A1088
10 seconds	A1021	6 Minute	A1096
30 seconds	A1039	9 Minute	A1104
40 seconds	A1047	12 Minute	A1112
60 seconds	A1054	15 Minute	A1120
90 seconds	A1062	22 Minute	A1138
		30 Minute	A1146

<sup>3</sup> Flame-out timer used with Run/Test Switch. Allows pilot to be momentarily extinguished and caused LOCKOUT if total no flame time exceeds 15 seconds.

<sup>4</sup> Selected with Configuration Resistor, See instruction sheet.

Table 10. FIREYE® P SERIES TO HONEYWELL PROGRAMMER CROSS REFERENCE.

Device to be Replaced	Replacement Control				Prepurge		Interlocks						PFEP	INTM Pilot	INTR Pilot	MFEP	Spark Term	Postpurge	Voltage	Frequency	Comments
	Current Replacement to meet UL 1 4 5 7 8 12 17	7800 Series Replacement to meet Insurance 1 4 5 7 9 11 12 13 17	Amplifier	Purge Timer	Timing	Type	Start	Running	Lockout	Preignition	Hi-fire	Lo-fire									
24PJ8 1000	2 6 10 14 RM7840G1014 or RM7840G1022	2 6 11 RM7840L1018 or RM7840L1075	R7847A1033	ST7800A1005	0	On-Off, LF Proving	X						15, 30	X		15		0	115 230	50/60	Rectification type flame sensor, low voltage controller, vacuum tube.
24RJ8 1000	None	None			60								7		X			80	120	50/60	1-4 sec FFRT, low voltage special for air heaters, vacuum tube electronics.
25RU8 4580	NONE	RM7840L1018 or RM7840L1075	<sup>18</sup> R7861A1026	ST7800A1054 (60 seconds)	47	On-Off, LF Proving			X	X	X	X	8		X	10, 15		20	120	50/60	4 sec FFRT, used with self-check UV flame detector
25RU8 6558	10 14 RM7840G1014 or RM7840G1022	10 RM7840L1018 or RM7840L1075	<sup>18</sup> R7849A1023	ST7800A1039 (30 seconds)	33	3-wire, LHL, LF Proving	X	X				X	7		X	10, 60	X	15	120	50/60	4 sec FFRT, UV type flame detector.
25RU8 6560	14 RM7840G1014 or RM7840G1022	RM7840L1018 or RM7840L1075	<sup>18</sup> R7849A1015 (0.8 FFRT) R7849A1023 (3.0 FFRT)	ST7800A1054	60	4-wire LHL, LF Proving		X				X	7		X	15, 40	X	10	120	50/60	1-4 sec FFRT, UV type flame detector.
24RU8 6566	14 RM7840G1014 or RM7840G1022	RM7840L1018 or RM7840L1075	<sup>18</sup> R7849A1023	ST7800A1039	30	2-wire On-Off, LF Proving		X				X	10		X	15, 25		10	120	50/60	4 sec FFRT, UV type flame detector.
25RU8 6570	NONE	RM7840L1018 or RM7840L1075	<sup>18</sup> R7849A1023	ST7800A1054 (60 seconds)	63	4-wire LHL, HF, LF Proving		X			X	X	7		X	15, 30	X	15	120	50/60	4 sec FFRT, UV type flame detector.
25RU8 6580	NONE	RM7840L1018 or RM7840L1075	<sup>18</sup> R7849A1015	ST7800A1054 (60 seconds)	45	4-wire LHL, HF & LF Proving			X	X	X	X	10		X	10, 15, 30	X	20	120	50/60	1-2 sec FFRT, UV type flame detector.
26RJ8 1000	2 6 14 RM7840G1014 or RM7840G1022	2 6 RM7840L1018 or RM7840L1075	<sup>18</sup> R7852A1001 (3.0 sec)	ST7800A1039	30	3-wire, LHL, LF Proving		X					10		X	15		30	115 230	50/60	4 sec FFRT, IR type flame detector, low voltage controller.
26RJ8 1001	2 6 14 RM7840G1014 or RM7840G1022	2 6 RM7840L1018 or RM7840L1075	<sup>18</sup> R7852A1001 (3.0 sec)	ST7800A1039	30	4-wire LHL, LF Proving		X					10		X	15		30	115 230	50/60	Orr and Sewbower special, IR type flame detector, low voltage controller.
26RJ8 1002	Cleaver Brook Proprietary				30	On-Off, LF Proving	X	X					10		X	15		30	115 230	50/60	Cleaver Brooks special, 4 sec FFRT, IR type flame detector, low voltage controller.

See footnotes on page 40

Table 10. FIREYE® P SERIES TO HONEYWELL PROGRAMMER CROSS REFERENCE. (Continued)

Device to be Replaced	Replacement Control				Prepurge		Interlocks						PFEP	INTM Pilot	INTR Pilot	MFEP	Spark Term	Postpurge	Voltage	Frequency	Comments
	Current Replacement to meet UL 1 4 5 7 8 12 17	7800 Series Replacement to meet Insurance 1 4 5 7 9 11 12 13 17	Amplifier	Purge Timer	Timing	Type	Start	Running	Lockout	Preignition	Hi-fire	Lo-fire									
26RJ8 1003	2 6 14 RM7840G1014 or RM7840G1022	2 6 RM7840L1018 or RM7840L1075	18 R7852A1001 (3.0 sec)	ST7800A1039	30	On-Off, LF Proving		X					10		X	10		60	115 230	50/60	North America special, 4 sec FFRT, IR type flame detector, low voltage controller.
26RJ8 1004	6 14 RM7840G1014 or RM7840G1022	6 RM7840L1018 or RM7840L1075	18 R7852A1001 (3.0 sec)	ST7800A1039	30	On-Off, LF Proving		X					10		X	60		15	115 230	50/60	4 sec FFRT, IR type flame detector, B&W FM boiler special, vacuum tube circuitry.
26RJ8 1005	6 RM7840M1017	6 RM7840L1018 or RM7840L1075	18 R7852A1001 (3.0 sec)	ST7800A1039	30	On-Off, LF Proving		X					10		X	10		60	115 230	50/60	4 sec FFRT, IR type flame detector, B&W FM boiler special, vacuum tube circuitry.
26RJ8 1006	2 6 10 14 RM7840G1014 or RM7840G1022	2 6 10 RM7840L1018 or RM7840L1075	18 R7852A1001 (3.0 sec)	ST7800A1039	30	On-Off, LF Proving	X	X					10		X	15		30	115 230	50/60	4 sec FFRT, IR type flame detector, low voltage controller, vacuum tube circuitry.
26RJ8 1008	2 6 14 RM7840G1014 or RM7840G1022	2 6 RM7840L1018 or RM7840L1075	18 R7852A1001 (3.0 sec)	ST7800A1039	30	On-Off, LF Proving		X					10		X	15, 60		15	115 230	50/60	4 sec FFRT, IR type flame detector, low voltage controller, vacuum tube circuitry.
26RJ8 1009	2 6 14 RM7840G1014 or RM7840G1022	2 6 RM7840L1018 or RM7840L1075	18 R7852A1001 (3.0 sec)	ST7800A1039	30	On-Off, LF Proving		X					10		X	10, 15		60	115 230	50/60	4 sec FFRT, IR type flame detector, low voltage controller, vacuum tube circuitry.
26RJ8 1011	2 6 10 14 RM7840G1014 or RM7840G1022	2 6 10 RM7840L1018 or RM7840L1075	18 R7852A1001 (3.0 sec)	ST7800A1005 (2 seconds)	0	On-Off, LF Proving	X	X					10		X	10, 55		30	115 230	50/60	North America special, IR type flame detector, low voltage controller, vacuum tube circuitry.
26RJ8 1012 26RJ8 1012T	2 3 6 14 RM7840G1014 or RM7840G1022	2 3 6 RM7840L1018 or RM7840L1075	3 18 R7852A1001 (3.0 sec)	ST7800A1047 (40 seconds)	35	4-wire LHL, LF Proving		X				X	10		X	15		25	115 230	50/60	North America special, dual IR type flame detectors, vacuum tube circuitry.
26RJ8 1016 26RJ8 1016T	2 3 6 14 RM7840G1014 or RM7840G1022	2 3 6 RM7840L1018 or RM7840L1075	3 18 R7852A1001 (3.0 sec)	ST7800A1062 (90 seconds)	65			X					10		X	15		10	115 230	50/60	1 sec FFRT, dual IR type flame detectors, vacuum tube circuitry.
26RJ8 1018	2 6 14 RM7840G1014 or RM7840G1022	2 6 RM7840L1018 or RM7840L1075	18 R7852A1001 (3.0 sec)	ST7800A1054 (60 seconds)	45	4-wire LHL, LF Proving		X			X		10		X	15, 30		15	115 230	50/60	2-4 sec FFRT, IR type flame detectors, low voltage controller, vacuum tube circuitry.
26RJ8 1114, 26RJ8 1115, 26RJ8 5914	NONE	NONE			45	4-wire LHL, LF Proving	X	X				X	10		X	15, 30		15	120 208 240	50/60	U.S. Navy special, no replacement available, voltage controller, vacuum tube

See footnotes on page 40

Table 10. FIREYE® P SERIES TO HONEYWELL PROGRAMMER CROSS REFERENCE. (Continued)

Device to be Replaced	Replacement Control				Prepurge		Interlocks					PFEP	INTM Pilot	INTR Pilot	MFEP	Spark Term	Postpurge	Voltage	Frequency	Comments
	Current Replacement to meet UL 1 4 5 7 8 12 17	7800 Series Replacement to meet Insurance 1 4 5 7 9 11 12 13 17	Amplifier	Purge Timer	Timing	Type	Start	Running	Lockout	Preignition	Hi-fire									
26RJ8 6008	2 6 14 RM7840G1014 or RM7840G1022	2 6 RM7840L1018 or RM7840L1075	18 R7852A1001 (3.0 sec)	ST7800A1047 (40 seconds)	35	3-wire, LHL, LF Proving	X				X	10		X	15, 55	15	120 208 240	60	1-4 sec FFRT, IR type flame detector, low voltage controller, vacuum tube circuitry.	
26RJ8 6009	2 6 14 15 RM7840M1017	2 6 RM7840L1018 or RM7840L1075	18 R7852A1001 (3.0 sec)	ST7800A1047 (40 seconds)	35	On-Off, LF Proving	X					10		X	15	55	120 208 240	50/60	B&W FM boiler special, 1-4 sec FFRT, IR type flame detector, low voltage controller, vacuum tube circuitry.	
26RJ8 6012	2 3 6 RM7840G1014 or RM7840G1022	2 3 6 RM7840L1018 or RM7840L1075	3 18 R7852A1001 (3.0 sec)	ST7800A1047 (40 seconds)	35	4-wire LHL, LF Proving	X					10		X	15	30	120 208 240	50/60	1-4 sec FFRT, dual IR type flame detectors, low voltage controller, vacuum tube circuitry.	
26RJ8 6016	2 3 6 RM7840G1014 or RM7840G1022	2 3 6 RM7840L1018 or RM7840L1075	3 18 R7852A1001 (3.0 sec)	ST7800A1062 (90 seconds)	65	4-wire LHL, LF Proving	X					10		X	15	15	120 208 240	50/60	1-4 sec FFRT, dual IR type flame detectors, low voltage controller, vacuum tube circuitry.	
26RJ8 6018	2 10 14 RM7840G1014 or RM7840G1022	2 10 RM7840L1018 or RM7840L1075	18 R7852A1001 (3.0 sec)	ST7800A1054 (60 seconds)	45	4-wire LHL, LF Proving	X	X			X	10		X	15, 30	15	120 208 240	50/60	1-4 sec FFRT, IR type flame detector, low voltage controller, vacuum tube circuitry.	
26RJ8 6026	NONE	NONE		ST7800A1054	60	On-Off, LF Proving		X			X	7	X		15	80	120	60	1-4 sec FFRT, IR type flame detector, low voltage controller, special for air heaters	
26RJ8 6058	10 14 RM7840G1014 or RM7840G1022	10 RM7840L1018 or RM7840L1075	18 R7852A1001 (3.0 sec)	ST7800A1047 (40 seconds)	35	3-wire, LHL, LF Proving	X	X			X	10		X	15, 55	15	120	60	1-4 sec FFRT, IR type flame detector, vacuum tube circuitry.	
26RJ8 6060	10 14 RM7840G1014 or RM7840G1022	10 RM7840L1018 or RM7840L1075	18 R7852A1001 (3.0 sec)	ST7800A1054	60	4-wire LHL, LF Proving	X	X			X	7		X	10, 30	20	120	50/60	1-4 sec FFRT, IR type flame detector, vacuum tube circuitry.	
26RJ8 6066	10 14 RM7840G1014 or RM7840G1022	10 RM7840L1018 or RM7840L1075	18 R7852A1001 (3.0 sec)	ST7800A1039	30	On-Off, LF Proving	X	X			X	10		X	15, 25	10	120	50/60	1-4 sec FFRT, IR type flame detector, vacuum tube circuitry.	
26RJ8 6068	10 14 RM7840G1014 or RM7840G1022	10 RM7840L1018 or RM7840L1075	18 R7852A1001 (3.0 sec)	ST7800A1054 (60 seconds)	45	4-wire LHL, LF Proving	X	X				10		X	15, 30	15	120	60	1-4 sec FFRT, IR type flame detector, vacuum tube circuitry, for Canada.	
26RJ8 6070	NONE	RM7840L1018 or RM7840L1075	18 R7852A1001 (3.0 sec)	ST7800A1062 (90 seconds)	65	4-wire LHL, HF & LF Proving		X			X	10		X	15, 30	15	120	60	1-4 sec FFRT, IR type flame detector, vacuum tube circuitry.	

See footnotes on page 40

Table 10. FIREYE® P SERIES TO HONEYWELL PROGRAMMER CROSS REFERENCE. (Continued)

Device to be Replaced	Replacement Control				Prepurge		Interlocks						PFEP	INTM Pilot	INTR Pilot	MFEP	Spark Term	Postpurge	Voltage	Frequency	Comments
	Current Replacement to meet UL 1 4 5 7 8 12 17	7800 Series Replacement to meet Insurance 1 4 5 7 9 11 12 13 17	Amplifier	Purge Timer	Timing	Type	Start	Running	Lockout	Preignition	Hi-fire	Lo-fire									
26RJ8 6080	14 RM7840G1014 or RM7840G1022	RM7840L1018 or RM7840L1075	18 R7852A1001 (3.0 sec)	ST7800A1054 (60 seconds)	45	4-wire LHL, HF & LF Proving			X	X	X	X	10		X	10, 15, 30	X	20	120	50/60	1-2 sec FFRT, IR type flame detector, vacuum tube circuitry.
26RJ8 6160	14 RM7840G1014 or RM7840G1022	RM7840L1018 or RM7840L1075	18 R7852A1001 (3.0 sec)	ST7800A1054	60	4-wire LHL, LF Proving		X		X		X	7		X	10, 30	X	20	120	50/60	1-4 sec FFRT, IR type flame detector, vacuum tube circuitry.
26RJ8 CB-1	Cleaver Brook Proprietary				45	4-wire LHL, LF Proving		X				X	10		X	15		15	120	50/60	Cleaver Brooks special, IR type flame detector, low voltage controller.
26RJ8 CB-3	Cleaver Brook Proprietary				45	4-wire LHL, HF & LF Proving			X	X	X	X	10		X	10, 15, 30		20	120	50/60	Cleaver Brooks special, IR type flame detector, low voltage controller.
29RF5 1000	2 6 10 14 RM7840G1014 or RM7840G1022	2 6 10 RM7840L1018 or RM7840L1075	18 R7852A1001 (3.0 sec)	ST7800A1039 (30 seconds)	15	On-Off, LF Proving	X	X					5		X	10		15	115 230	50/60	1-4 sec FFRT, IR type flame detector, low voltage controller, vacuum tube circuitry.
29RF5 1001	2 6 10 14 RM7840G1014 or RM7840G1022	2 6 10 RM7840L1018 or RM7840L1075	18 R7852A1001 (3.0 sec)	ST7800A1039 (30 seconds)	25	On-Off, LF Proving	X	X					7	X	X	13		15	115 230	50/60	1-4 sec FFRT, IR type flame detector, low voltage controller, vacuum tube circuitry.
29RF5 1002	2 6 10 14 RM7840G1014 or RM7840G1022	2 6 10 RM7840L1018 or RM7840L1075	18 R7852A1001 (3.0 sec)	ST7800A1039 (30 seconds)	15	On-Off, LF Proving	X	X					5		X	15		15	115 230	50/60	1-4 sec FFRT, IR type flame detector, low voltage controller, vacuum tube circuitry.
29RF5 1005	2 6 14 RM7840G1014 or RM7840G1022	2 6 RM7840L1018 or RM7840L1075	18 R7852A1001 (3.0 sec)	ST7800A1039 (30 seconds)	15	On-Off, LF Proving		X					5, 10		X	15		15	115 230	50/60	2-4 sec FFRT, IR type flame detector, low voltage controller, vacuum tube circuitry.
29RF5 1009	2 6 10 14 RM7840G1014 or RM7840G1022	2 6 10 RM7840L1018 or RM7840L1075	18 R7852A1001 (3.0 sec)	ST7800A1039 (30 seconds)	25	On-Off, LF Proving	X	X					7	X	X	13		15	114 230	50/60	1-4 sec FFRT, IR type flame detector, low voltage controller, vacuum tube circuitry.
29RF5 1015	2 6 14 RM7840G1014 or RM7840G1022	2 6 RM7840L1018 or RM7840L1075	18 R7852A1001 (3.0 sec)	ST7800A1039 (30 seconds)	15	On-Off, LF Proving		X					5, 10		X	15		15	115 230	50/60	2-4 sec FFRT, IR type flame detector, low voltage controller, vacuum tube circuitry.
29RF5 1103	NONE	NONE			15	On-Off, LF Proving		X					5		X	15		15	115 230	50/60	Military special, IR type flame detector, low voltage controller, vacuum tube circuitry.

See footnotes on page 40

Table 10. FIREYE® P SERIES TO HONEYWELL PROGRAMMER CROSS REFERENCE. (Continued)

Device to be Replaced	Replacement Control				Prepurge		Interlocks						PFEP	INTM Pilot	INTR Pilot	MFEP	Spark Term	Postpurge	Voltage	Frequency	Comments
	Current Replacement to meet UL 1 4 5 7 8 12 17	7800 Series Replacement to meet Insurance 1 4 5 7 9 11 12 13 17	Amplifier	Purge Timer	Timing	Type	Start	Running	Lockout	Preignition	Hi-fire	Lo-fire									
29RF5 1104	2 6 14 RM7840G1014 or RM7840G1022	2 6 RM7840L1018 or RM7840L1075	18 R7852A1001 (3.0 sec)	ST7800A1013 (7 seconds)	5	On-Off, LF Proving		X					5		X	15		15	115 230	50/60	A.E.C. Kilns special, IR type flame detector, low voltage controller, vacuum tube circuitry.
29RF5 6009	2 6 10 14 RM7840G1014 or RM7840G1022	2 6 10 RM7840L1018 or RM7840L1075	18 R7852A1001 (3.0 sec)	ST7800A1039 (30 seconds)	25	On-Off, LF Proving	X	X					7	X		13		15	120 208 240	60	1-4 sec FFRT, IR type flame detector, low voltage controller, vacuum tube circuitry.
29RF5 6015	2 6 10 14 RM7840G1014 or RM7840G1022	2 6 10 RM7840L1018 or RM7840L1075	18 R7852A1001 (3.0 sec)	ST7800A1039 (30 seconds)	18	On-Off, LF Proving	X	X					5, 10		X	15		12	120 208 240	60	1-4 sec FFRT, IR type flame detector, low voltage controller, vacuum tube circuitry.
29RF5 6103	NONE	NONE																			Military special, IR type flame detector, vacuum tube circuitry.

See footnotes on page 40

## Table 10 FIREYE FOOTNOTES:

- 1 Refer to Modernization Wiring Information for conversion wiring information.
- 2 Low Voltage controller will need to be upgraded to line voltage controller.
- 3 Replacement suggestion does not support dual IR detector feature, be sure to confirm application requirements.
- 4 Replacement control has 15 second postpurge.
- 5 Replacement control has 15 second postpurge, RM7840G1022 or RM7840L1075 have programmable postpurge option.
- 6 Replacement suggestion is 120 Vac, 50/60 Hz.
- 7 Requires Q7800A or Q7800B Wiring Subbase.
- 8 RM7840G,M meets current UL requirements.
- 9 RM7840L meets current insurance requirements.
- 10 Start interlocks become running interlocks using the replacment controls. (Required to start the equipment, and maintained throughout the call for heat).
- 11 Running Interlocks become lockout interlocks. (Opening interlock results in safety shutdown and control reset).
- 12 Replacement control has 10 second PFEP, 4 seconds available with JR1 clipped
- 13 Replacement has 10, 15 second MFEP.
- 14 Replacement has 10, 15, 30 second MFEP or intermittent pilot.
- 15 Replacement has 10 second MFEP or intermittent pilot.
- 16 5 second ignition early spark termination when ignition wired to terminal 10.
- 17 Display Module is available by ordering model shown in the table, or ordering seperately.

Suggestion Model	Display Model
RM7840M1017	RM7800M1011
RM7840G1014	RM7800G1018
RM7840G1022	Order S7800A1142 seperately
RM7840L1018	RM7800L1012
RM7840L1075	RM7800L1087
R7120D	Order S7800A1001 seperately

- 18 Select appropriate flame detector and amplifier from table

Flame Detection Type	FFRT		Comments
	0.8 sec	3.0 sec	
Rectification	R7847A1025	R7847A1033	Use existing Flame Rod
Ultraviolet	R7849A1015	R7849A1023	Order Honeywell flame detector C7027 or C7035
Infrared		R7852A1001	Order Honeywell flame detector C7915
Self Check UV	C7861A1034	R7861A1026	Order Honeywell flame detector C7061



Table 11. FIREYE® C SERIES TO HONEYWELL PROGRAMMER CROSS REFERENCE.

Device to be Replaced	Current Plug In Replacement 17	Replacement Control				Prepurge		Interlocks						Spark Term	Postpurge	Modulation	Voltage	Frequency	Comments				
		Current Replacement to meet UL 1 4 5 7 8 12 17	7800 Series Replacement to meet Insurance 1 4 5 7 9 11 12 13 17	Amplifier	Purge Timer	Timing	Type	Start	Running	Lockout	Preignition	Hi-fire	Lo-fire							PFEP	INTM Pilot	INTR Pilot	MFEP
24CJ5 1000		10 RM7840M1017	10 RM7840L1018 or RM7840L1075	R7847A1033	ST7800A1047 (40 seconds)	33	On-Off, LF Proving	X	X				7	X		10		8		120	50/ 60	4 sec FFRT, rectification type flame sensor, vacuum tube circuitry.	
24CJ5 3000		10 RM7840M1017	10 RM7840L1018 or RM7840L1075	R7847A1033	ST7800A1039	30	On-Off, LF Proving	X	X				7	X	X	10		X	15		120	60	2-4 sec FFRT, rectification type flame sensor.
24CJ5 3010		10 RM7840M1017	10 RM7840L1018 or RM7840L1075	R7847A1033	ST7800A1047 (40 seconds)	37	On-Off, LF Proving	X	X			X	7	X		10		X	15		120	60	2-4 sec FFRT, rectification type flame sensor.
24CJ5 3011		10 RM7840M1017	10 RM7840L1018 or RM7840L1075	R7847A1025 (0.8 FFRT) R7847A1033 (3.0 FFRT)	ST7800A1070 (2.5 minutes)	98	On-Off, LF Proving	X	X			X	7	X		10		X	25		120	60	1-4 sec FFRT, rectification type flame sensor.
24CJ5 3014		10,14 RM7840G1014 or RM7840G1022	10 RM7840L1018 or RM7840L1075	R7847A1025 (0.8 FFRT) R7847A1033 (3.0 FFRT)	ST7800A1054	60	3-wire, LHL, LF Proving	X	X			X	7	X		10			20	3-wire	120	60	1-4 sec FFRT, rectification type flame sensor.
24CJ5 5010	R7120D3007	10 RM7840M1017	10 RM7840L1018 or RM7840L1075	R7847A1025 (0.8 FFRT) R7847A1033 (3.0 FFRT)	ST7800A1047 (40 seconds)	37	On-Off, LF Proving	X	X			X	5	X		10		X	15		120	60	1-4 sec FFRT, rectification type flame sensor.
24CJ5 5011	R7120D3007	10 RM7840M1017	10 RM7840L1018 or RM7840L1075	R7847A1025 (0.8 FFRT) R7847A1033 (3.0 FFRT)	ST7800A1070 (2.5 minutes)	98	On-Off, LF Proving	X	X			X	5	X		10		X	25		120	60	1-4 sec FFRT, rectification type flame sensor.
24CJ5 5015	R7120D2000	14 RM7840G1014 or RM7840G1022	RM7840L1018 or RM7840L1075	R7847A1033	ST7800A1054	60	4-wire, LHL, LF Proving		X		X	X	7		X	10, 15		15	4-wire	120	50/ 60	4 sec FFRT, rectification type flame sensor.	
24RJ8 1000	R7120D2000	14 RM7840G1014 or RM7840G1022	RM7840L1018 or RM7840L1075	R7847A1033	ST7800A1054	60	4-wire, LHL, LF Proving		X		X	X	7		X	10, 15		15	4-wire	120	50/ 60	4 sec FFRT, rectification type flame sensor.	
25CU6 1050		10 RM7840M1017	10 RM7840L1018 or RM7840L1075	18 R7849A1023	ST7800A1039	30	On-Off, LF Proving	X	X				7	X		10		X	15		120	60	4 sec FFRT, UV type flame detector.

See footnotes on page 44

Table 11. FIREYE® C SERIES TO HONEYWELL PROGRAMMER CROSS REFERENCE. (Continued)

Device to be Replaced	Current Plug In Replacement 17	Replacement Control				Purge		Interlocks						PFEP	INTM Pilot	INTR Pilot	Spark Term	Postpurge	Modulation	Voltage	Frequency	Comments
		Current Replacement to meet UL 1 4 5 7 8 12 17	7800 Series Replacement to meet Insurance 1 4 5 7 9 11 12 13 17	Amplifier	Purge Timer	Timing	Type	Start	Running	Lockout	Preignition	Hi-fire	Lo-fire									
25CU6 1062		10 RM7840M1017	10 RM7840L1018 or RM7840L1075	18 R7849A1015 (0.8 FFRT) R7849A1023 (3.0 FFRT)	ST7800A1047 (40 seconds)	37	On-Off, LF Proving	X	X			X	7	X		10	X	15		120	60	1-4 sec FFRT, UV type flame detector.
25CU6 1063		10 RM7840M1017	10 RM7840L1018 or RM7840L1075	18 R7849A1015 (0.8 FFRT) R7849A1023 (3.0 FFRT)	ST7800A1070 (2.5 minutes)	98	On-Off, LF Proving	X	X			X	7	X		10	X	25		120	60	1-4 sec FFRT, UV type flame detector.
25CU6 1065		10 RM7840G1014 or RM7840G1022	10 RM7840L1018 or RM7840L1075	18 R7849A1015 (0.8 FFRT) R7849A1023 (3.0 FFRT)	ST7800A1054	60	3-wire, LHL, LF Proving	X	X			X	7	X		10		20	3-wire	120	60	1-4 sec FFRT, UV type flame detector.
25CU6 5062	R7120D3007	10 RM7840M1017	10 RM7840L1018 or RM7840L1075	18 R7849A1015 (0.8 FFRT) R7849A1023 (3.0 FFRT)	ST7800A1047 (40 seconds)	37	On-Off, LF Proving	X	X			X	7	X		10	X			120	60	1-4 sec FFRT, UV type flame detector.
25CU6 5063	R7120D3007	10 RM7840M1017	10 RM7840L1018 or RM7840L1075	18 R7849A1015 (0.8 FFRT) R7849A1023 (3.0 FFRT)	ST7800A1070 (2.5 minutes)	98	On-Off, LF Proving	X	X			X	7	X		10	X	25		120	60	1-4 sec FFRT, UV type flame detector.
25CU6 5065 25CU6 5065A	R7120D1002	10 RM7840L1018 or RM7840L1075	10 RM7840L1018 or RM7840L1075	18 R7849A1023	ST7800A1054	60	4-wire LHL, HF & LF Proving			X	X	X	7		X	10, 15		20	4-wire	120	50/ 60	4 sec FFRT, UV type flame detector.
25CU6 5066 25CU6 5066A	R7120D1002	10 RM7840G1014 or RM7840G1022	10 RM7840L1018 or RM7840L1075	18 R7849A1023	ST7800A1054	60	3-wire, LHL, LF Proving		X		X	X	7		X	10, 30		15	4-wire	120	50/ 60	4 sec FFRT, UV type flame detector.
25CU6 RS-2 25CU6 RS-2D		10 RM7840M1017	10 RM7840L1018 or RM7840L1075	18 R7849A1023	ST7800A1039	30	On-Off, LF Proving	X	X				7	X	X	10	X	15		120	60	Ray Burner special, 4 sec FFRT, UV type flame detector.
25CU6 RS-2RE	R7120D3007	10 RM7840M1017	10 RM7840L1018 or RM7840L1075	18 R7849A1023	ST7800A1070 (2.5 minutes)	98	On-Off, LF Proving	X	X			X	5	X		10	X	25		120	60	Ray Burner special, 1-4 sec FFRT, UV type flame detector.
26CF6 1000		10 RM7840M1017	10 RM7840L1018 or RM7840L1075	18 R7852A1001 (3.0 sec)	ST7800A1039	30	On-Off, LF Proving	X	X			X	7	X		10		15		120	50/ 60	1-4 sec FFRT, IR type flame detector.

See footnotes on page 44

Table 11. FIREYE® C SERIES TO HONEYWELL PROGRAMMER CROSS REFERENCE. (Continued)

Device to be Replaced	Current Plug In Replacement 17	Replacement Control				Prepurge		Interlocks					PFEP	INTM Pilot	INTR Pilot	MFEP	Spark Term	Postpurge	Modulation	Voltage	Frequency	Comments
		Current Replacement to meet UL 1 4 5 7 8 12 17	7800 Series Replacement to meet Insurance 1 4 5 7 9 11 12 13 17	Amplifier	Purge Timer	Timing	Type	Start	Running	Lockout	Preignition	Hi-fire										
26CF6 1010		10 RM7840M1017	10 RM7840L1018 or RM7840L1075	18 R7852A1001 (3.0 sec)	ST7800A1047 (40 seconds)	37	On-Off, LF Proving	X	X			X	7	X	10	X	15		120	50/ 60	1-4 sec FFRT, IR type flame detector.	
26CF6 1011		10 RM7840M1017	10 RM7840L1018 or RM7840L1075	18 R7852A1001 (3.0 sec)	ST7800A1070 (2.5 minutes)	98	On-Off, LF Proving	X	X			X	7	X	10	X	25		120	50/ 60	1-4 sec FFRT, IR type flame detector.	
26CF6 1012		10 14 RM7840G1014 or RM7840G1022	10 RM7840L1018 or RM7840L1075	18 R7852A1001 (3.0 sec)	ST7800A1054	60	3-wire, LHL, LF Proving	X	X			X	7	X	10		20		120	50/ 60	1-4 sec FFRT, IR type flame detector.	
26CF6 5020	R7120D3007	10 RM7840M1017	10 RM7840L1018 or RM7840L1075	18 R7852A1001 (3.0 sec)	ST7800A1047 (40 seconds)	37	On-Off, LF Proving	X	X			X		X	10	X			120	50/ 60	1-4 sec FFRT, IR type flame detector.	
26CF6 5021	R7120D3007	10 RM7840M1017	10 RM7840L1018 or RM7840L1075	18 R7852A1001 (3.0 sec)	ST7800A1070 (2.5 minutes)	98	On-Off, LF Proving	X	X			X		X	10	X	25		120	50/ 60	1-4 sec FFRT, IR type flame detector.	
26CF6 5022 26CF6 5022A	R7120D1002	NONE	RM7840L1018 or RM7840L1075	18 R7852B1009 (3.0 sec)	ST7800A1054	60	4-wire LHL, HF & LF Proving			X	X	X	7	X	10, 15		20		120	50/ 60	With AUTOCHECK feature, same as Honeywell R7852B AMPLI- CHECK™.	
26CF6 5023 26CF6 5023A	R7120D2000	14 RM7840G1014 or RM7840G1022	RM7840L1018 or RM7840L1075	18 R7852A1001 (3.0 sec)	ST7800A1054	60	4-wire LHL, LF Proving		X		X	X	7		X	10, 30	15		120	50/ 60	4 sec FFRT, IR type flame detector.	
26CF6 RC-3A		14 RM7840G1014 or RM7840G1022	RM7840L1018 or RM7840L1075	18 R7852A1001 (3.0 sec)	ST7800A1054	60	4-wire LHL, LF Proving		X		X	X	7		X	10, 30	15		120	50/ 60	Ray Burner special, 2 sec FFRT.	

See footnotes on page 44

**Table 11 FIREYE FOOTNOTES:**

- 1 Refer to Modernization Wiring Information for conversion wiring information.
- 2 Low Voltage controller will need to be upgraded to line voltage controller.
- 3 Replacement suggestion does not support dual IR detector feature, be sure to confirm application requirements.
- 4 Replacement control has 15 second postpurge.
- 5 Replacement control has 15 second postpurge, RM7840G1022 or RM7840L1075 have programmable postpurge option.
- 6 Replacement suggestion is 120 Vac, 50/60 Hz.
- 7 Requires Q7800A or Q7800B Wiring Subbase.
- 8 RM7840G,M meets current UL requirements.
- 9 RM7840L meets current insurance requirements.
- 10 Start interlocks become running interlocks using the replacment controls. (Required to start the equipment, and maintained throughout the call for heat).
- 11 Running Interlocks become lockout interlocks. (Opening interlock results in safety shutdown and control reset).
- 12 Replacement control has 10 second PFEP, 4 seconds available with JR1 clipped
- 13 Replacement has 10, 15 second MFEP.
- 14 Replacement has 10, 15, 30 second MFEP or intermittent pilot.
- 15 Replacement has 10 second MFEP or intermittent pilot.
- 16 5 second ignition early spark termination when ignition wired to terminal 10.
- 17 Display Module is available by ordering model shown in the table, or ordering seperately.

Suggestion Model	Display Model
RM7840M1017	RM7800M1011
RM7840G1014	RM7800G1018
RM7840G1022	Order S7800A1142 seperately
RM7840L1018	RM7800L1012
RM7840L1075	RM7800L1087
R7120D	Order S7800A1001 seperately

- 18 Select appropriate flame detector and amplifier from table.

Flame Detection Type	FFRT		Comments
	0.8 sec	3.0 sec	
R.ectification	R7847A1025	R7847A1033	Use existing Flame Rod
Ultraviolet	R7849A1015	R7849A1023	Order Honeywell flame detector C7027 or C7035
Infrared		R7852A1001	Order Honeywell flame detector C7915
Self Check UV	C7861A1034	R7861A1026	Order Honeywell flame detector C7061

Table 12. FIREYE® D SERIES PROGRAMMER TO HONEYWELL CROSS REFERENCE.

Device to be Replaced	Functional Replacement					Purge		Interlocks						PFEP	INTM Pilot	INTR Pilot	MFEP	Early Spark Term	Postpurge	Voltage	Frequency	Comments
	Current Plug In Replacement 17	7800 Series Functional Replacement 1 7 8 16 17	7800 Series Functional Replacement to Meet Insurance Needs 1 7 9 16 17	Amplifier	Purge Timer	Timing	Type	Start	Running	Lockout	Preignition	Hi-fire	Lo-fire									
D10-5016	R7120D1002		RM7840L1018 or RM7840L1075	R7847A1033	ST7800A1054	60	4-wire LHL, HF & LF Proving			X	X	X	X	10		X	10, 15	X	15	120	50/60	4 sec FFRT, rectification type flame detector, solid state circuitry.
D10-5022	R7120D1002		RM7840L1018 or RM7840L1075	<sup>18</sup> R7852B1009	ST7800A1054	60	4-wire LHL, HF & LF Proving			X	X	X	X	10		X	10, 15	X	15	120	50/60	4 sec FFRT, IR type flame detector, auto check amplifier, solid state circuitry.
D10-5065	R7120D1002		RM7840L1018 or RM7840L1075	<sup>18</sup> R7849A1023	ST7800A1054	60	4-wire LHL, HF & LF Proving			X	X	X	X	10		X	10, 15	X	15	120	50/60	4 sec FFRT, UV type flame detector, solid state circuitry.
D20-5015	<sup>14</sup> R7120D2000	<sup>14</sup> RM7840G1014 or RM7840G1022	RM7840L1018 or RM7840L1075	R7847A1033	ST7800A1054	60	4-wire LHL, LF Proving				X	X	X	10		X	10, 15	X	15	120	50/60	4 sec FFRT, rectification type flame detector, solid state circuitry.
D20-5023	<sup>14</sup> R7120D2000	<sup>14</sup> RM7840G1014 or RM7840G1022	RM7840L1018 or RM7840L1075	<sup>18</sup> R7852A1001	ST7800A1054	60	4-wire LHL, LF Proving		X		X		X			X	10, 15	X	15	120	50/60	4 sec FFRT, IR type flame detector, solid state circuitry.
D20-5066	<sup>14</sup> R7120D2000	<sup>14</sup> RM7840G1014 or RM7840G1022	RM7840L1018 or RM7840L1075	<sup>18</sup> R7849A1023	ST7800A1054	60	4-wire LHL, LF Proving		X		X		X			X	10, 15	X	15	120	50/60	4 sec FFRT, UV type flame detector, solid state circuitry.
D30-5010	R7120D3007	RM7840M1017	<sup>13</sup> RM7840L1018 or RM7840L1075	R7847A1033	ST7800A1039	30	On-Off, LF Proving		X		X		X		X	X	10	X	15	120	50/60	4 sec FFRT, rectification type flame detector, solid state circuitry.
D30-5011	R7120D3007	RM7840M1017	<sup>13</sup> RM7840L1018 or RM7840L1075	R7847A1033	ST7800A1062	90	On-Off, LF Proving		X		X		X		X	X	10	X	15	120	50/60	4 sec FFRT, rectification type flame detector, solid state circuitry.

See footnotes on page 47

Table 12. FIREYE® D SERIES PROGRAMMER TO HONEYWELL CROSS REFERENCE. (Continued)

Device to be Replaced	Functional Replacement				Purge		Interlocks						PFEP	INTM Pilot	INTR Pilot	MFEP	Early Spark Term	Postpurge	Voltage	Frequency	Comments
	Current Plug In Replacement 17	7800 Series Functional Replacement 1 7 8 16 17	7800 Series Functional Replacement to Meet Insurance Needs 1 7 9 16 17	Amplifier	Purge Timer	Timing	Type	Start	Running	Lockout	Preignition	Hi-fire									
D30-5020	R7120D3007	RM7840M1017	<sup>13</sup> RM7840L1018 or RM7840L1075	<sup>18</sup> R7852A1001	ST7800A1039	30	On-Off, LF Proving	X		X		X		X	X	10	X	15	120	50/ 60	4 sec FFRT, IR type flame detector, solid state circuitry.
D30-5021	R7120D3007	RM7840M1017	<sup>13</sup> RM7840L1018 or RM7840L1075	<sup>18</sup> R7852A1001	ST7800A1062	90	On-Off, LF Proving	X		X		X		X	X	10	X	15	120	50/ 60	4 sec FFRT, IR type flame detector, solid state circuitry.
D30-5062	R7120D3007	RM7840M1017	<sup>13</sup> RM7840L1018 or RM7840L1075	<sup>18</sup> R7852A1001	ST7800A1039	30	On-Off, LF Proving	X		X		X		X	X	10	X	15	120	50/ 60	4 sec FFRT, IR type flame detector, solid state circuitry.
D30-5063		RM7840M1017	RM7840L1018 or RM7840L1075										7	X	X	10	X	15	120	50/ 60	4 sec FFRT, IR type flame detector, solid state circuitry.
See footnotes on page 47																					

## Table 12 FIREYE FOOTNOTES:

- <sup>1</sup> Refer to Modernization Wiring Information for conversion wiring information.
- <sup>2</sup> Low Voltage controller will need to be upgraded to line voltage controller.
- <sup>3</sup> Replacement suggestion does not support dual IR detector feature, be sure to confirm application requirements.
- <sup>4</sup> Replacement control has 15 second postpurge.
- <sup>5</sup> Replacement control has 15 second postpurge, RM7840G1022 or RM7840L1075 have programmable postpurge option.
- <sup>6</sup> Replacement suggestion is 120 Vac, 50/60 Hz.
- <sup>7</sup> Requires Q7800A or Q7800B Wiring Subbase.
- <sup>8</sup> RM7840G,M meets current UL requirements.
- <sup>9</sup> RM7840L meets current insurance requirements.
- <sup>10</sup> Start interlocks become running interlocks using the replacment controls. (Required to start the equipment, and maintained throughout the call for heat).
- <sup>11</sup> Running Interlocks become lockout interlocks. (Opening interlock results in safety shutdown and control reset).
- <sup>12</sup> Replacement control has 10 second PFEP, 4 seconds available with JR1 clipped
- <sup>13</sup> Replacement has 10, 15 second MFEP.
- <sup>14</sup> Replacement has 10, 15, 30 second MFEP or intermittent pilot.
- <sup>15</sup> Replacement has 10 second MFEP or intermittent pilot.
- <sup>16</sup> 5 second ignition early spark termination when ignition wired to terminal 10.
- <sup>17</sup> Display Module is available by ordering model shown in the table, or ordering seperately.

Suggestion Model	Display Model
RM7840M1017	RM7800M1011
RM7840G1014	RM7800G1018
RM7840G1022	Order S7800A1142 seperately
RM7840L1018	RM7800L1012
RM7840L1075	RM7800L1087
R7120D	Order S7800A1001 seperately

- <sup>18</sup> Select appropriate flame detector and amplifier from table

Flame Detection Type	FFRT		Comments
	0.8 sec	3.0 sec	
Rectification	R7847A1025	R7847A1033	Use existing Flame Rod
Ultraviolet	R7849A1015	R7849A1023	Order Honeywell flame detector C7027 or C7035
Infrared		R7852A1001	Order Honeywell flame detector C7915
Self Check UV	C7861A1034	R7861A1026	Order Honeywell flame detector C7061

Table 13. FIREYE® E SERIES TO HONEYWELL PROGRAMMER CROSS REFERENCE.

Device to be Replaced <sup>b</sup>	Functional Replacement			Prepurge		Interlocks					PFEP	INTM Pilot	INTR Pilot	MFEP	Early Spark Term	Postpurge	Voltage	Frequency	Comments		
	Current Plug In Replacement 12	7800 Series Functional Replacement 1 3 4 11 12	7800 Series Functional Replacement to Meet Insurance 1 3 5 11 12	Amplifier 13	Purge Timer <sup>b</sup>	Timing b	Type	Start	Running	Lockout										Preignition	Hi-fire
<sup>d</sup> EP160 EPD160	R7120D1002	RM7840L1018 or RM7840L1075	RM7840L1018 or RM7840L1075		ST7800A1039	30	4-wire LHL, HF & LF Proving		X	X	X	X	10	X	10, 15	15	120	50/60	4 sec FFRT		
<sup>d</sup> EP161 EPD161	R7120D1002	RM7840L1018 or RM7840L1075	RM7840L1018 or RM7840L1075		ST7800A1039	30	4-wire LHL, HF & LF Proving		X	X	X		10	X	10, 30	15	120	50/60	4 sec FFRT		
<sup>k</sup> EP163	R7120D1002	RM7840L1018 or RM7840L1075	RM7840L1018 or RM7840L1075		k	k	4-wire LHL, HF & LF Proving		X	X	X	X	k		k	15	120	50/60	4 sec FFRT, Purge and Ignition timings are programmable using the ED Display Module.		
<sup>d h i</sup> EP165 EPD165	R7120D1002	RM7840L1018 or RM7840L1075	RM7840L1018 or RM7840L1075		ST7800A1039	30	4-wire LHL, HF & LF Proving			X	X	X	10	X	10	15	120	50/60	2 sec FFRT		
<sup>d</sup> EP166 EPD166	R7120D1002	RM7840L1018 or RM7840L1075	RM7840L1018 or RM7840L1075		ST7800A1039	30	4-wire LHL, HF & LF Proving		X	X	X	X	10	X	15	15	120	50/60	2 sec FFRT, locks out on power interruption		
<sup>d j</sup> EPD167	R7120D1002	RM7840L1018 or RM7840L1075	RM7840L1018 or RM7840L1075		ST7800A1039	30	4-wire LHL, HF & LF Proving		X	X	X	X	10	X	10, 15	15	120	50/60	4 sec FFRT		
<sup>d</sup> EP170 EPD170	R7120D1002	RM7840L1018 or RM7840L1075	RM7840L1018 or RM7840L1075		ST7800A1039	30	4-wire LHL, HF & LF Proving		X	X	X		5, 10	X	10	X	15	120	50/60	4 sec FFRT, Waits indefinitely for Low Fire Switch to close.,	
<sup>d</sup> EP260 EPD260	<sup>9</sup> R7120D2000	<sup>9</sup> RM7840G1014 or RM7840G1022	RM7840L1018 or RM7840L1075		ST7800A1039	30	4-wire LHL, LF Proving	X		X		X	10	X	10, 15	15	120	50/60	4 sec FFRT		
<sup>d</sup> EP261 EPD261	<sup>9</sup> R7120D2000	<sup>9</sup> RM7840G1014 or RM7840G1022	<sup>8</sup> RM7840L1018 or RM7840L1075		ST7800A1039	30	4-wire LHL, LF Proving	X		X		X	10	X	10, 30	15	120	50/60	4 sec FFRT		
<sup>d, h</sup> EP265 EPD265	<sup>9</sup> R7120D2000	<sup>9</sup> RM7840G1014 or RM7840G1022	<sup>8</sup> RM7840L1018 or RM7840L1075		ST7800A1039	30	4-wire LHL, LF Proving	X		X		X	10	X	10	15	120	50/60	2 sec FFRT		
<sup>d</sup> EP270 EPD270	<sup>9</sup> R7120D2000	<sup>9</sup> RM7840G1014 or RM7840G1022	RM7840L1018 or RM7840L1075		ST7800A1039	30	4-wire LHL, LF Proving	X		X		X	5, 10	X	10	X	15	120	50/60	4 sec FFRT	
<sup>e f g</sup> EP380 EPD380	R7120D3007	RM7840M1017	<sup>8</sup> RM7840L1018 or RM7840L1075		ST7800A1039	30	On-Off, LF Proving		<sup>h</sup> X		X		X	10	<sup>f</sup> X	10	<sup>f</sup> X	15	120	50/60	4 sec FFRT

See footnotes on page 49



Table 13. FIREYE® E SERIES TO HONEYWELL PROGRAMMER CROSS REFERENCE. (Continued)

Device to be Replaced <sup>b</sup>	Functional Replacement				Prepurge		Interlocks					PFEP	INTM Pilot	INTR Pilot	MFEP	Early Spark Term	Postpurge	Voltage	Frequency	Comments	
	Current Plug In Replacement <sup>12</sup>	7800 Series Functional Replacement <sup>1 3 4 11 12</sup>	7800 Series Functional Replacement to Meet Insurance <sup>1 3 5 11 12</sup>	Amplifier <sup>13</sup>	Purge Timer <sup>b</sup>	Timing <sup>b</sup>	Type	Start	Running	Lockout	Preignition										Hi-fire
<sup>e f g</sup> EP381 EPD381	R7120D3007	RM7840M1017	<sup>8</sup> RM7840L1018 or RM7840L1075		ST7800A1039 (30 seconds)	15	On-Off, LF Proving	<sup>h</sup> X		X		X	5, 10	<sup>f</sup> X		10	<sup>f</sup> X	15	120	50/60	4 sec FFRT
<sup>e f g</sup> EP382 EPD382	R7120D3007	RM7840M1017	<sup>8</sup> RM7840L1018 or RM7840L1075		ST7800A1005 (2 seconds)	0	On-Off, LF Proving	<sup>h</sup> X		X		X		<sup>e</sup> X			<sup>f</sup> X	15	120	50/60	
<sup>g</sup> EP383	R7120D3007	RM7840M1017	<sup>8</sup> RM7840L1018 or RM7840L1075		I	I	On-Off, LF Proving			X		X	m	m	m		<sup>f</sup> X	m	120	50/60	m
<sup>f g h</sup> EP390 EPD390	R7120D3007	RM7840M1017	<sup>13</sup> RM7840L1018 or RM7840L1075		ST7800A1062	90	On-Off, LF Proving	<sup>h</sup> X		X		X	5, 10	<sup>f</sup> X		10	<sup>f</sup> X	15	120	50/60	4 sec FFRT

See footnotes on page 49

49

**Table 13 FIREYE FOOTNOTES:**

	Fireye Notes	Honeywell Solution Suggestion
a	All programmers have selectable 3 to P "prove open on Start" feature using a dipswitch	Clip JR3 if dipswitch feature is enabled.
b	Purge timings can be extended using the dipswitches located on the programmer module.	Check dipswitches and select appropriate ST7800 Purge Timer
c	EPD programmers include a built in LED display.	See display models suggestion in table I.
d	Programmer adds 30 second after pre-purge to allow damper motor to drive to low fire position.	Honeywell Model adds 30 seconds for jumpered or closed interlock
e	EP380, EM381, EP382 and EP390 have selectable intermittent or interrupted (15 sec PTFI) operation of terminal 6 using dipswitch.	Honeywell suggestion dependant on terminals wired
f	These programmers can use terminal X for spark termination. Requires terminals 10 and 5 to be jumpered.	Available when Ignition is wired to terminal 10.
g	EP380, EM381, EP382 and EP390 have selectable recycle or non recycle operation using a dipswitch.	Honeywell suggestion DOES NOT offer non recycle, if required select an "L model.
h	During MTFI, terminal 6 is energized for 5 seconds before 10 second MTFI for EP165 and EP265; 15 second MTFI for EP166 only.	Honeywell suggestion does not offer the energize the spark early.
i	EP165 locks out on power interruption	Honeywell suggestion DOES NOT offer this feature.

70-8313-02

PROGRAMMER CONTROL CROSS REFERENCE

	Fireye Notes	Honeywell Solution Suggestion
j	The EPD167 waits indefinitely for the Low Fire Start Switch (M-D) to close.	Honeywell suggestion DOES NOT offer this feature.
k	The EP163 Purge and Ignition timings are programmable using the ED Display Module.	Honeywell suggestion DOES NOT offer feature to program Purge and Ignition
l	The EP383 Purge, Ignition, FFRT and Post Purge time are programmable using the ED Display Module.	Honeywell suggestion DOES NOT offer feature to program Purge, Ignition, FFRT and Post Purge Time.
m	Intermittent or Interrupted Pilot operation may be selected using a dipswitch (or using the ED Display Module with EP383)	Honeywell suggestion offers feature based on the terminal the pilot valve is wired.

## Other Footnotes

- <sup>1</sup> Replacement control has 15 second postpurge.
- <sup>2</sup> Replacement control has 15 second postpurge, RM7840G1022 or RM7840L1075 have programmable postpurge option.
- <sup>3</sup> Requires Q7800A or Q7800B Wiring Subbase.
- <sup>4</sup> RM7840G,M meets current UL requirements.
- <sup>5</sup> RM7840L meets current insurance requirements.
- <sup>6</sup> Start interlocks become running interlocks using the replacement controls. (Required to start the equipment, and maintained throughout the call for heat).
- <sup>7</sup> Replacement control has 10 second PFEP, 4 seconds available with JR1 clipped
- <sup>8</sup> Replacement has 10, 15 second MFEP.
- <sup>9</sup> Replacement has 10, 15, 30 second MFEP or intermittent pilot.
- <sup>10</sup> Replacement has 10 second MFEP or intermittent pilot.
- <sup>11</sup> 5 second ignition early spark termination when ignition wired to terminal 10.
- <sup>12</sup> Display Module is available by ordering model shown in the table, or ordering separately.

Display Model Suggestions	
Suggestion Model	Display Model
RM7840M1017	RM7800M1011
RM7840G1014	RM7800G1018
RM7840G1022	Order S7800A1142 separately
RM7840L1018	RM7800L1012
RM7840L1075	RM7800L1087

- <sup>13</sup>Select appropriate flame detector and amplifier from table

Amplifier Selection	Type	FFRT (seconds)	Replacement	Comments
72D1R1	IR	2-4	R7852A1001	Select C7915 flame detector
72D1R1T	IR	1	none available	
72D1R3	IR	2-4 (For solid fuel)		
72D1R3T	IR	1 (For solid fuel)		
72DRT1	Flame Rod	2-4	R7847A1033	
72DRT1T	Flame Rod	1	R7847A1025	
72DUV1	UV	2-4	R7849A1023	Select C7027A1080 flame detector
72DUVS4	UV Self Check	2-4	R7861A1026	Select C7061 flame detector
72DUVS1T	UV Self Check	1	R7861A1034	Select C7061 flame detector



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