

# THE FIRING LINE

## Honeywell Flame Sensors (Scanners) Cross Reference

**CROSS REFERENCE**

HONEYWELL			FIREYE™			VIGITRON					
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C7010	Table 2	page 2	45AM1	Table 16	page 14	<b>BARBER COLEMAN</b>					
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C7014											
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C7015	Table 4	page 4	UV-6								
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C7915	Table 5	page 5	UV-7								
Ultraviolet			45UV2				<b>PYRONICS</b>				
C7012	Table 6	page 6	45UV3				4350	Table 19	page 17		
C7020	Table 7	page 9	45UV1	Table 18	page 16	<b>PROTECTION CONTROLS</b>					
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**Table 1. C7003 RECTIFYING PHOTOCELL AND MOUNT CROSS REFERENCE.**

Device to be Replaced	Current Replacement <sup>①</sup>	Functions of Device to be Replaced		Comments
		Pipe Mounting Size NPT (in.)	Used With	
C7003A1005	None <sup>①</sup>	2	All rectification type amplifiers and primaries. (Uses 38316 Photocell.)	Less finned casting and less removable glass window. International model.
C7003A1013	None <sup>①</sup>	2		
C7003A1021	None <sup>①</sup>	2		

<sup>①</sup> A possible solution would be to update to a 7800 Series replacement using the R7852B amplifier and the visible light detector C7962B.

**Table 2. C7010 RECTIFYING PHOTOCELL AND MOUNT CROSS-REFERENCE.**

Device to be Replaced	Current Replacement	Functions of Device to be Replaced		Comments
		Pipe Mounting Size NPT (in.)	Used With	
C7010A1006	None <sup>①</sup>	1-1/4	All rectification type amplifiers and primaries. (Uses 38316 Photocell.)	International model. Fungus-proof. <sup>②</sup>
C7010A1014	None <sup>①</sup>	1-1/4		
C7010A1022	None <sup>①</sup>	1-1/4		

<sup>①</sup> A possible solution would be to update to a 7800 Series replacement using the R7852B amplifier and the visible light detector C7962B

<sup>②</sup> Fungus-proofing is not a current option.

**Table 3. C7013 AND C7014 RECTIFYING PHOTOCELL AND MOUNT CROSS REFERENCE (ALSO INCLUDES INFORMATION ON Q174 AND Q231)**

Device to be Replaced	Current Replacement <sup>①</sup>	Specifications of Device to be Replaced			Comments
		With Housing	With Lens <sup>②</sup>	With Filter <sup>②</sup>	
C7013A1003	None <sup>①</sup>	Yes	No	No	—
C7013A1011	None <sup>①</sup>	Yes	No	Yes	—
C7013A1029	None <sup>①</sup>	Yes	Yes	No	—
C7014A1002	None <sup>①</sup>	No	No	No	—
C7014A1010	None <sup>①</sup>	No	No	No	6-32 NC screw instead of Rajah connector.
Q174A1002	None <sup>①</sup>	Yes	No	No	Old OS number of C7013.
Q174A1010	None <sup>①</sup>	No	No	No	Old OS number of C7013.
Q231A1000	None <sup>①</sup>	No	No	No	Old OS number of C7014.
Q231A1018	None <sup>①</sup>	No	No	No	Old OS number of C7014. No. 6-32 NC screw instead of Rajah connector.

<sup>①</sup> A possible solution would be to update to a 7800 Series replacement using the R7852B amplifier and the visible light detector C7962B.

<sup>②</sup> Photocell part no. 38316, filter and lens holder, part no. 38570, filter part no. 38576, or lens part no. 121610 are no longer available.

Table 4. C7015 INFRARED FLAME DETECTOR CROSS REFERENCE (ALSO INCLUDES INFORMATION ON Q283)

Device to be Replaced	Current Replacement <sup>① ⑦</sup>	Specifications of Device to be Replaced					
		Mounting Pipe Size NPT (in.)	Lead Length (in.)	Orifice	Collimating Lens	Cell Type	
C7015A1001	C7915A1010 <sup>③ ⑤</sup>	3/4	30	No	No	None	—
C7015A1019	C7915A1010 <sup>③ ⑤</sup>	3/4	30	No	Yes	None	—
C7015A1027	C7915A1028 <sup>③ ④ ⑤ ⑥</sup>	3/4	48	No	No	None	—
C7015A1035	C7915A1028 <sup>③ ④ ⑤ ⑥</sup>	3/4	48	No	Yes	None	—
C7015A1043	C7915A1036 <sup>③ ⑤</sup>	3/4	96	No	No	None	—
C7015A1050	C7915A1036 <sup>③ ⑤</sup>	3/4	96	No	Yes	None	—
C7015A1068	Not Released	3/4	96	No	No	None	—
C7015A1076	C7915A1010 <sup>③ ⑤</sup>	3/4	30	Yes	Yes	(B) type	—
C7015A1084	C7915A1010 <sup>③ ⑤</sup>	3/4	30	No	Yes	(D) type	With rubber gasket (part no. 114465).
C7015A1092	C7915A1036 <sup>③ ⑤</sup>	3/4	96	Yes	Yes	(C) type	—
C7015A1100	C7915A1010 <sup>③ ⑤</sup>	3/4	30	Yes	Yes	(B) type	With 3/4 in. x 1/2 in. bushing adapter. <sup>⑥</sup>
C7015A1118 <sup>②</sup>	C7915A1044 <sup>② ③</sup>	3/4	48	No	Yes	(D) type	Proprietary to Cleaver Brooks.
C7015A1126	C7915A1028 <sup>③ ④ ⑤ ⑥</sup>	3/4	48	Yes	Yes	(D) type	With heat block, rubber gasket (part no. 114465) <sup>④ ⑤ ⑥</sup>
C7015A1134	Not Released						
C7015A1142		3/4	48	No	No	(C) type	With heat block. <sup>④</sup>
C7015A1150	Not Released						
C7015A1167	C7915A1044 <sup>② ③</sup>	3/4	48	No	Yes	(B) type	Proprietary to Cleaver Brooks.
Q283A1001	C7915A1010 <sup>③ ⑤</sup>	3/4	30	No	No	None	Old OS number of C7015.
Q283A1019	C7915A1010 <sup>③ ⑤</sup>	3/4	30	No	Yes	None	Old OS number of C7015.
Q283A1027	C7915A1028 <sup>③ ④ ⑤ ⑥</sup>	3/4	48	No	No	None	Old OS number of C7015.
Q283A1035	C7915A1028 <sup>③ ④ ⑤ ⑥</sup>	3/4	48	No	Yes	None	Old OS number of C7015.
Q283A1043	C7915A1036 <sup>③ ⑤</sup>	3/4	96	No	No	None	Old OS number of C7015.
Q283A1050	C7915A1036 <sup>③ ⑤</sup>	3/4	96	No	Yes	None	Old OS number of C7015.

<sup>①</sup> Perform pilot turndown test.

<sup>②</sup> Available from proprietary OEM only.

<sup>③</sup> Replacements have 32007255-001 Lead Sulfide Infrared Cell.

<sup>④</sup> Replacement includes Heat Block part number 105061 and Reducer Bushing part number 390427.

<sup>⑤</sup> Replacement includes Orifice and Collimating Lens part number 50019469-001.

<sup>⑥</sup> Part no. 390427 for replacing Fireye™ Lead Sulfide Infrared Detectors.

<sup>⑦</sup> When using the replacement suggestion, the system MUST be updated to a 7800 Series replacement using the R7852B amplifier.

**Table 5. C7915 INFRARED FLAME DETECTOR CROSS REFERENCE.**

Device to be Replaced	Current Replacement <sup>①</sup>	Specifications of Device to be Replaced					
		Mounting Pipe Size NPT (in.)	Lead Length (in.)	Orifice	Collimating Lens <sup>④</sup>	Cell Type	
C7915A1002	Not Released	3/4			Yes	1	
C7915A1010	C7915A1010	3/4	30	Yes	Yes	1	Requires Flame amplifier R7852.
C7915A1028	C7915A1028	3/4	48	Yes	Yes	1	With Heat Block and reducer bushing. Requires Flame amplifier R7852. <sup>②</sup> <sup>③</sup>
C7915A1036	C7915A1036	3/4	96	Yes	Yes	1	Requires Flame amplifier R7852.
C7915A1044	C7915A1044	3/4	48	No	Yes	1	Proprietary to Cleaver Brooks. With Heat Block and reducer bushing. <sup>②</sup> <sup>③</sup>

<sup>①</sup> Includes Cell part number 32007255-001

<sup>②</sup> Heat Block (part number 105061)

<sup>③</sup> Part no. 390427 for replacing Fireye™ Lead Sulfide Infrared Detectors.

<sup>④</sup> Collimating lens part number 50019469-001

Table 6. C7012 ULTRAVIOLET FLAME DETECTOR CROSS REFERENCE.

Device to be Replaced	Current Replacement	Specifications of Device to be Replaced						Comments
		Voltage/ Frequency HZ	Mounting Pipe Size NPT (in.)	Lead Length (ft./in.)	Ambient Temp °F	Solid State	Shutter	
C7012A1004	C7012A1145	120/50,60	3/4	8/96	25 to 135	No	No	—
C7012A1012	C7012A1186	208/50,60	3/4	8/96	25 to 135	No	No	—
C7012A1020	C7012A1194	240/50,60	3/4	8/96	25 to 135	No	No	—
C7012A1038	C7012A1145	120/50,60	3/4	8/96	25 to 135	No	No	—
C7012A1046	C7012A1186	208/50,60	3/4	8/96	25 to 135	No	No	—
C7012A1053	C7012A1194	240/50,60	3/4	8/96	25 to 135	No	No	—
C7012A1061	C7012A1145	120/50,60	3/4	8/96	25 to 135	No	No	—
C7012A1079	C7012A1186	208/50,60	3/4	8/96	25 to 135	No	No	—
C7012A1087	C7012A1194	240/50,60	3/4	8/96	25 to 135	No	No	—
C7012A1095	C7012A1145 ③	120/50,60	3/4	8/96	25 to 135	No	No	With 60 psi window. International model.
C7012A1103	C7012A1145	120/50,60	3/4	8/96	25 to 135	No	No	International model.
C7012A1111	C7012A1186 ①	208/50,60	3/4	8/96	25 to 135	No	No	Fungus-proof
C7012A1129	C7012A1194 ①	240/50,60	3/4	8/96	25 to 135	No	No	Fungus-proof
C7012A1137	C7012A1152	120/50,60	1	8/96	25 to 135	No	No	—
C7012A1145	C7012A1145	120/50,60	3/4	8/96	25 to 175	Yes	No	—
C7012A1152	C7012A1152	120/50,60	1	8/96	25 to 175	Yes	No	—
C7012A1160	C7012A1160	120/50,60	1	8/96	-40 to 175	Yes	No	—
C7012A1178	C7012A1194 ①	240/50,60	3/4	8/96	25 to 135	No	No	Fungus-proof
C7012A1186	C7012A1186	208/50,60	3/4	8/96	25 to 175	Yes	No	—
C7012A1194	C7012A1194	240/50,60	3/4	8/96	25 to 175	Yes	No	—
C7012A1202	C7012A1202	100/50,60	3/4	8/96	25 to 175	Yes	No	International model.
C7012A1210	C7012A1210	120/50,60	3/4	8/96	25 to 175	Yes	No	With 113228J uv tube. Yamatake model
C7012B1002	C7012A1160 ②	120/50,60	1	8/96	-40 to 175	No	No	—
C7012C1000	C7012C1042 ④ ⑤	120/50,60	1	8/96	45 to 135	No	No	Explosion-proof housing.
C7012C1018	None	120/50,60	1	8/96	45 to 135	No	No	Explosion-proof housing. International model.
C7012C1026	None	208/50,60	1	8/96	45 to 135	No	No	Explosion-proof housing. International model.
C7012C1034	C7012C1042 ④	120/50,60	1	8/96	45 to 135	No	No	Explosion-proof housing.
C7012C1042	C7012C1042	120/50,60	1	8/96	25 to 175	Yes	No	Explosion-proof housing.

Device to be Replaced	Current Replacement	Specifications of Device to be Replaced						Comments
		Voltage/ Frequency HZ	Mounting Pipe Size NPT (in.)	Lead Length (ft./in.)	Ambient Temp °F	Solid State	Shutter	
C7012C1059	None	120/50,60	1	8/96	25 to 175	Yes	No	Explosion-proof housing. International model.
C7012C1067	None	208/50,60	1	8/96	25 to 175	Yes	No	Explosion-proof housing. International model.
C7012C1075	C7012C1075	100/50,60	3/4	8/96	25 to 175	Yes	No	JIS Explosion-proof approved. International model.
C7012D1008	None	C7012D1008 had microammeter mounted in back of sensor case. Not designed for use with relay or programmer.						
C7012E1005	C7012E1104	120/50,60	3/4	8/96	-20 to 125	No	Yes	—
C7012E1013	C7012E1104	120/50,60	3/4	8/96	-20 to 125	No	Yes	—
C7012E1021	C7012E1187	220/50	3/4	8/96	-20 to 125	No	Yes	International model.
C7012E1039	C7012E1146	208/50,60	3/4	8/96	-20 to 125	No	Yes	—
C7012E1047	C7012E1153	240/50,60	3/4	8/96	-20 to 125	No	Yes	—
C7012E1054	C7012E1104	120/50,60	3/4	8/96	-20 to 125	No	Yes	—
C7012E1062	C7012E1104 ④	120/50,60	3/4	8/96	-20 to 125	No	Yes	—
C7012E1070	C7012E1104 ⑤	120/50,60	3/4	8/96	-20 to 125	No	Yes	With collimating lens.
C7012E1088	C7012E1112	120/50,60	1	8/96	-20 to 125	No	Yes	—
C7012E1096	C7012E1161	120/50,60	1	⑥	-20 to 125	No	Yes	—
C7012E1104	C7012E1104	120/50,60	3/4	8/96	-20 to 125	Yes	Yes	—
C7012E1112	C7012E1112	120/50,60	1	8/96	-20 to 125	Yes	Yes	—
C7012E1120	C7012E1120	120/50,60	1	8/96	-40 to 175	Yes	Yes	—
C7012E1138	C7012E1187	220/50	3/4	8/96	-20 to 175	Yes	Yes	International model.
C7012E1146	C7012E1146	208/50,60	3/4	8/96	-20 to 175	Yes	Yes	—
C7012E1153	C7012E1153	240/50,60	3/4	8/96	-20 to 175	Yes	Yes	—
C7012E1161	C7012E1161	120/50,60	1	⑥	-20 to 175	Yes	Yes	—
C7012E1179	C7012E1161 ①	120/50,60	1	⑥	-20 to 175	Yes	Yes	Fungus-proof
C7012E1187	C7012E1187	220/50	3/4	8/96	-20 to 175	Yes	Yes	DIN approved. International model.
C7012E1195	C7012E1195	110/50	3/4	8/96	-20 to 175	Yes	Yes	MSI approved. International model.
C7012E1203	C7012E1203	240/50,60	3/4	8/96	-20 to 175	Yes	Yes	MSI approved. International model.
C7012E1211	C7012E1211	100/50,60	3/4	8/96	-20 to 175	Yes	Yes	With 113228J uv tube. Yamatake model
C7012E1229 ⑩	C7012E1229 ⑩	208/50,60	3/4	8/96	-20 to 175	Yes	Yes	—
C7012E1237	Not Released							—
C7012E1245	C7012E1245	120/50,60	3/4	8/96	-20 to 175	Yes	Yes	With 113228J uv tube. Yamatake model

Device to be Replaced	Current Replacement	Specifications of Device to be Replaced						Comments
		Voltage/ Frequency HZ	Mounting Pipe Size NPT (in.)	Lead Length (ft./in.)	Ambient Temp °F	Solid State	Shutter	
C7012E1252	Not Released							—
C7012E1260	Not Released							—
C7012E1278	C7012E1278	120/50,60	1	None	-20 to 175	Yes	Yes	With Brad Harrison type connector
C7012F1003	C7012F1052 ④	120/50,60	1	8/96	-20 to 125	No	Yes	Explosion-proof housing.
C7012F1011	None	120/50,60	1	8/96	-20 to 125	No	Yes	Explosion-proof housing. International model.
C7012F1029	None	208/50,60	1	8/96	-20 to 125	No	Yes	Explosion-proof housing. International model.
C7012F1037	C7012F1052 ④	120/50,60	1	8/96	-20 to 125	No	Yes	Explosion-proof housing.
C7012F1045	None ①	120/50,60	1	8/96	-20 to 125	No	Yes	Explosion-proof housing. Fungus-proof.
C7012F1052	C7012F1052	120/50,60	1	8/96	-20 to 175	Yes	Yes	Explosion-proof housing.
C7012F1060	C7012F1060	120/50,60	1	8/96	-20 to 175	Yes	Yes	JIS Explosion-proof approved. International model.
C7012F1078	C7012F1078	208/50,60	1	8/96	-20 to 175	Yes	Yes	JIS Explosion-proof approved. International model.
C7012F1086	Not produced							—
C7012G1001	None	220/50	3/4	8/96	-20 to 125	No	No	International model.
C7012G1019	C7012G1019	220/50	3/4	8/96	⑧	Yes	No	DIN approved. International model.
C7012G1027	None	240/50,60	3/4	8/96	25 to 175	Yes	No	MSI approved. International model.
C7012G1035	None	110/50	3/4	8/96	25 to 175	Yes	No	MSI approved. International model.
C7012X1001	None	220/50	3/4	8/96	25 to 135	No	No	International model.
C7012X1019	None	240/50,60	3/4	8/96	⑧	No	No	Alco special
C7012X1027	C7012A1145	120/50,60	3/4	8/96	25 to 135	No	No	Armstrong Special
C7012X1035	None	220/50	3/4	8/96	25 to 135	No	No	International model.
C7012X1043	C7012A1194 ②	240/50,60	3/4	8/96	⑧	No	No	Alco special
C7012X1050	C7012A1194 ②	240/50,60	3/4	8/96	⑧	No	No	Cast case and cover.
C7012X1068	C7012A1145	120/50,60	3/4	8/96	⑧	No	No	Cast case and cover.
C7012X1076	C7012E1104	120/50,60	3/4	⑦	-20 to 125	No	Yes	Self-check



Device to be Replaced	Current Replacement	Specifications of Device to be Replaced						Comments
		Voltage/ Frequency HZ	Mounting Pipe Size NPT (in.)	Lead Length (ft./in.)	Ambient Temp °F	Solid State	Shutter	
C7012X1084	None	120/50,60	3/4	8/96	⑧	No	Yes	Self-check
C7012X1092	C7012E1203 ①	240/50,60	3/4	8/96	25 to 135	No	Yes	Fungus-proof
C7012X1100	None	120/50,60	1	5/60	⑧	No	Yes	Explosion-proof
C7012X1118	None	220/50	3/4	8/96	⑧	No	Yes	Self-check. International Model.

- ① Fungus-proofing no longer is an option from Honeywell.
- ② Replacement device has 1 inch NPT mounting.
- ③ Replacement device does not have 60 psi window
- ④ Replacement device has 8 foot leads only.
- ⑤ Replacement C7012E1104 does not have collimating lens;order collimating lens (part no. 124204) separately or use existing lens.
- ⑥ Special 10 foot, 5-wire cable with 5-pin male amphenol connector.
- ⑦ With special AN type connector; use existing connector and rewire to solid state C7012E1104.
- ⑧ Special high temperature model. For Intermittent use up to 250° F.
- ⑨ Replacement rated 25° F to 175° F.
- ⑩ Has 100V/50,60 shutter mechanism.

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**Table 7. C7020 ULTRAVIOLET FLAME DETECTOR CROSS REFERENCE.**

Device to be Replaced	Current Replacement ⑤ ⑥	Specifications of Device to be Replaced						Comments
		Voltage/ Frequency HZ	Mounting Pipe Size NPT (in.)	Lead Length (ft./in.)	Ambient Temp °F	Solid State	Shutter	
C7020A1004 ① ②	C7012A1160	120/60	1	8/96	-20 to 200	No	No	
C7020A1012 ① ② ③	None	120/60	1	8/96	-20 to 200	No	No	International model. BSP threads. 124803 Mounting Plate
C7020A1020 ① ② ③	None	120/60	1	8/96	-20 to 200	No	No	International model. BSP threads. 124804 Mounting Plate
C7020A1038 ① ②	C7012A1160 ④	120/60	1	8/96	-20 to 200	No	No	Fungus-proof. ④

- ① C7020A models used with R7255A Amplifier only. ③
- ② Used with R4126, R4127 Programmers. ③
- ③ Device no longer available.
- ④ Fungus-proofing is no longer available
- ⑤ Update system. Select proper 7800 Series Device and R7847 amplifier
- ⑥ Replacement has ambient temperature range of -40° F to 175° F.

Table 8. C7024 ULTRAVIOLET FLAME DETECTOR CROSS REFERENCE.

Device to be Replaced	Current Replacement	Specifications of Device to be Replaced						Comments
		Voltage (Vdc)	Mounting Pipe Size NPT (in.)	Lead Length (ft./in.)	Ambient Temp °F	Solid State	Shutter	
C7024E1001	C7024E1001	24	3/4	8/96	-40 to 175	Yes	Yes	
C7024F1009	C7024E1001	24	1	8/96	-20 to 175	Yes	Yes	Explosion-proof housing.

Table 9. C7027 AND C7044 ULTRAVIOLET FLAME DETECTOR CROSS REFERENCE.

Device to be Replaced	Current Replacement	Specifications of Device to be Replaced			Comments
		Mounting Pipe Size NPT (in.)	Lead Length (ft./in.)	Ambient Temp °F	
C7027A1007	C7027A1080	1/2	6/72	0 to 215	
C7027A1015	C7027A1031	1/2	6/72	-40 to 215	
C7027A1023	C7027A1023	1/2	8/96	0 to 215	
C7027A1031	C7027A1031	1/2	8/96	-40 to 215	
C7027A1049	C7027A1049	1/2	8/96	0 to 215	With 1/2 in. NPT connector.
C7027A1056	C7027A1056	1/2	8/96	0 to 215	DIN approved. International model.
C7027A1064	C7027A1064	1/2	24/288	-40 to 215	With 1/2 in. NPT connector.
C7027A1072	C7027A1072	1/2	8/96	-40 to 215	With 1/2 in. NPT connector.
C7027A1080	C7027A1080	1/2	8/96	0 to 215	C7027A1023 With heat block, part no. 136733 and 1/2 x 3/8 NPT bushing, part no. 390427B.
C7027A1098 <sup>①</sup>	C7027A1098 <sup>①</sup>	1/2	8/96	0 to 215	Proprietary to Cleaver Brooks. <sup>①</sup>
C7027A1106	C7027A1049	1/2	8/96	0 to 215	With 1/2 in. NPT connector.
C7027A1114	C7027A1114	1/2	4.6/44	0 to 215	With 22 in. Flexible Conduit installed
C7044A1006	C7044A1006	Special Mounting	6/72	0 to 215	Side Viewing. International model.

<sup>①</sup> Available from proprietary OEM only.

**Table 10. C7035 ULTRAVIOLET FLAME DETECTOR CROSS REFERENCE.**

Device to be Replaced	Current Replacement <sup>②</sup>	Specifications of Device to be Replaced				Comments
		UV Tube Included <sup>①</sup>	Mounting Pipe Size NPT (in.)	Lead Length (ft./in.)	Ambient Temp °F	
C7035A1007	C7035A1023	129464M	1	6/72	0 to 250	
C7035A1015	C7035A1031	129464N	1	6/72	-40 to 250	
C7035A1023	C7035A1023	129464M	1	6/72	0 to 250	
C7035A1031	C7035A1031	129464N	1	6/72	-40 to 250	
C7035A1049	C7035A1049	129464M	1	6/72	0 to 250	International model. DIN approved.
C7035A1056	C7035A1056	129464N	1	12/144	-40 to 250	
C7035A1064	C7035A1064	129464M	1	6/72	-40 to 250	International model. BSP PL thread. 4-pin base. DIN approved.
C7035A1072	Not Released					
C7035A1080	C7035A1080	129464M	1	6/72	0 to 250	600° F rated leads.

<sup>①</sup> Ultraviolet radiation sensor tube is field replaceable.

<sup>②</sup> Replacement meets Underwriters Laboratories Inc. raintight requirements. NEMA 3 and 4 enclosures.

**Table 11. C7927 ULTRAVIOLET FLAME DETECTOR CROSS REFERENCE.**

Device to be Replaced	Current Replacement	Specifications of Device to be Replaced			Comments
		Mounting Pipe Size NPT (in.)	Lead Length (in.)	Ambient Temp °F	
C7927A1008	None	1/2	77	-4 to 140	Cable with connectors
C7927A1016	C7927A1016	1/2	96	-40 to 200	Used with Amplifier R7851B

Table 12. C7061 ULTRAVIOLET FLAME DETECTOR CROSS REFERENCE.

Device to be Replaced	Current Replacement	Specifications of Device to be Replaced					Comments
		Voltage/ Frequency Hz	Mounting Pipe Size NPT (in.)	Lead Length (ft./in.)	Ambient Temp °F	Shutter	
C7061A1004	C7061A1004	120/50, 60	3/4	8/96	-40 to 175	Yes	—
C7061A1012	C7061A1012	120/50, 60	3/4	8/96	-40 to 175	Yes	—
C7061A1020	C7061A1020	120, 230/50, 60	3/4		-40 to 175	Yes	International Approved Model
C7061A1038	C7061A1038	120/50, 60	3/4		-40 to 175	Yes	Brad Harrison type connector
C7061A1046	C7061A1046	120/50, 60	1		-40 to 175	Yes	Brad Harrison type connector
C7061A1053	C7061A1053	120/50, 60	1	8/96	-40 to 175	Yes	—
C7061A1079	C7961A1079	120, 230/50, 60	3/4		-40 to 175	Yes	International Approved Model. With Collimating Lens part no.124204 installed
C7061F2001	C7061F2001	120/50, 60	1	8/96	-40 to 175	Yes	Explosion Proof

Table 13. C7961 ULTRAVIOLET FLAME DETECTOR CROSS REFERENCE.

Device to be Replaced	Current Replacement	Specifications of Device to be Replaced					Comments
		Voltage/ Frequency Hz	Mounting Pipe Size NPT (in.)	Lead Length (ft./in.)	Ambient Temp °F	Shutter	
C7961E1006	C7961E1006	120/50, 60	3/4	8/96	-40 to 175	Yes	Use with amplifier R7851C.
C7961E1014	C7961E1014	120/50, 60	1	8/96	-40 to 175	Yes	Use with amplifier R7851C.
C7961E1022	C7961E1022	120/50, 60	1	None	-40 to 175	Yes	Brad Harrison type connector. Use with amplifier R7851C.
C7961E1030	C7961E1030	120/50, 60	3/4	None	-40 to 175	Yes	Brad Harrison type connector. Use with amplifier R7851C.
C7961F1004	C7961F1004	120/50, 60	1	8/96	-40 to 175	Yes	Explosion Proof. Use with amplifier R7851C.

Table 14. C7076 ULTRAVIOLET FLAME DETECTOR CROSS REFERENCE.

Device to be Replaced	Current Replacement ①	Specifications of Device to be Replaced					Comments
		Voltage/ Frequency Hz	Mounting Pipe Size NPT (in.)	Lead Length (ft./in.)	Ambient Temp °F	Shutter	
C7076A1007	C7076A1007	120/60	1	None	-40 to 160	Yes	—
C7076A1015	C7076A1015	100/50, 60	1	None	-40 to 160	Yes	—
C7076A1023	C7076A1023	200/50, 60	1	None	-40 to 160	Yes	—
C7076A1031	C7076A1031	220, 240/50	1	None	-40 to 160	Yes	—
C7076A1049	None	117/50	1	None	-40 to 160	Yes	—
C7076A1056	None	120/60	1	None	-40 to 160	Yes	Aspirator hinged on opposite side of housing
C7076A1064	None	220/50	1	None	-40 to 160	Yes	Meets TUV Requirements. International Model
C7076A1072	None	240/50	1	None	-40 to 160	Yes	Meets Euro Standards. International Model
<b>C7076D Series</b>							
C7076D1001	None	100/50, 60	1	None	-40 to 160	Yes	Explosion Proof. With JIS conduit box, Yamatake
C7076D1019	None	200/50, 60	1	None	-40 to 160	Yes	Explosion Proof. With JIS conduit box, Yamatake
C7076D1027	C7076D1027	120/60	1	None	-40 to 160	Yes	Explosion-proof model.
C7076D1035	None	120/50, 60	1	None	-40 to 160	Yes	Explosion Proof. With JIS conduit box, Yamatake
C7076D1043	None	220, 240/50	1	None	-40 to 160	Yes	Explosion-proof model. No Approvals
C7076D1050	None	220/50, 60	1	None	-40 to 160	Yes	Explosion Proof. CENELEC standard, Yamatake
C7076D1068	None	220, 240/50, 60	1	None	-40 to 160	Yes	Explosion Proof. With JIS conduit box, Yamatake
<b>C7076F Series</b>							
C7076F1006	C7076F1006	220, 240/50, 60	1	None	-40 to 160	Yes	Explosion-proof model. International Model.
C7076F1014	C7076F1014	110/50, 60	1	None	-40 to 160	Yes	Explosion-proof model. International Model.
C7076F1022	C7076F1022	100/50, 60	1	None	-40 to 160	Yes	Explosion-proof model. International Model for Japanese Market
C7076F1030	C7076F1030	220, 240/50, 60	1	None	-40 to 160	Yes	Explosion-proof model. International Model Tropicalized and Sand Storm Proof.

① C7076 is a UV detector with adjustable sensitivity and must be used with the R7476A1007 Plug-in Amplifier. Use R7886A1001 Amplifier with Honeywell 7800 Series Controls.

Table 15. FIREYE™ INFRARED FLAME DETECTOR CROSS REFERENCE

Device to be Replaced	Current Replacement <sup>① ②</sup>	Specifications of Device to be Replaced					Comments
		Mounting Pipe Size NPT (in.)	Lead Length (in.)	Orifice	Collimating Lens	With Cell	
<b>FIREYE™</b>							
48PT11000	C7915A1028	1/2	24	No	No	Yes	With heat block, straight body.
48PT11003	C7915A1028 <sup>③</sup>	1/2	96	No	No	Yes	With heat block, straight body.
48PT11007	C7915A1028	1/2	48	No	No	Yes	With heat block, straight body.
48PT19000	C7915A1028 <sup>④</sup>	1/2	24	No	No	Yes	With heat block, angle body.
48PT19003	C7915A1028 <sup>③ ④</sup>	1/2	96	No	No	Yes	With heat block, angle body.
48PT19007	C7915A1028 <sup>④</sup>	1/2	48	No	No	Yes	With heat block, angle body.
<b>FIREYE™</b>							
48PT21000	C7915A1028	1/2	24	No	No	Yes	With heat block, straight body.
48PT21003	C7915A1028 <sup>③</sup>	1/2	96	No	No	Yes	With heat block, straight body.
48PT21007	C7915A1028	1/2	48	No	No	Yes	With heat block, straight body.
48PT29000	C7915A1028 <sup>④</sup>	1/2	24	No	No	Yes	With heat block, angle body.
48PT29003	C7915A1028 <sup>③ ④</sup>	1/2	96	No	No	Yes	With heat block, angle body.
48PT29007	C7915A1028 <sup>④</sup>	1/2	48	No	No	Yes	With heat block, angle body.

<sup>①</sup> Perform pilot turndown test after replacing sensor and programmer.

<sup>②</sup> Replace Fireye™ Combustion Control with appropriate Honeywell control. Refer to FIRING LINE Primary and Programmer Cross-References and Modernization section.

<sup>③</sup> If 96-inch leadwires are required, order C7915A1036. Heat Block (part no. 105061), Gasket (part no. 114465), and Bushing Adapter (part no. 390427 for replacing Fireye™ Infrared Detectors) must be ordered separately, if needed.

<sup>④</sup> Replacement suggestion is a straight body.

Table 16. FIREYE™ VISIBLE LIGHT FLAME DETECTOR CROSS REFERENCE.

Device to be Replaced	Current Replacement <sup>①</sup>	Specifications of Device to be Replaced			Comments
		With Housing	With Lens	With Filter	
<b>FIREYE™</b>					
45AM11000	①	Yes	No	No	—
45CM11000	①	Yes	No	Yes	—
45CM11000Y	①	No	No	No	—

<sup>①</sup> A possible solution would be to update to a 7800 Series replacement using the R7852B amplifier and the visible light detector C7962B.

Table 17. FIREYE™ ULTRAVIOLET FLAME DETECTOR CROSS REFERENCE.

Device to be Replaced	Current Replacement ①	Specifications of Device to be Replaced			Comments
		Mounting Pipe Size NPT (in.)	Lead Length (ft./in.)	Ambient Temp °F	
<b>FIREYE™</b>					
UV-1	C7027A1080 ②④	1/2	6/72	-40 to 212	Angle body.
UV-1A3	C7027A1080 ②	1/2	3/36	-40 to 212	Straight body.
UV-1A6	C7027A1080 ②	1/2	6/72	-40 to 212	Straight body.
UV-2	C7027A1080 ②	3/8	3/36	-40 to 212	Straight body.
UV-6	C7027A1080 ②④	1/2	6/72	-40 to 212	Angle body.
UV-7	C7027A1080 ②	3/8	6/72	-40 to 212	Angle body.
45UV21010	C7027A1080 ②③④	3/4	None	-40 to 200	Angle body.
45UV21112	C7027A1080 ②③④	3/4	None	-40 to 200	Angle body.
45UV21113	C7027A1080 ②③④	3/4	None	-40 to 200	Angle body.
45UV31050	C7027A1080 ②③④	3/4	None	212 max.	Angle body.

- ① The output of this sensor is not compatible with competitive amplifiers/primary relays. Programmer and amplifier or relay must also be replaced with appropriate Honeywell control. Refer to FIRING LINE Primary and Programmer Cross References and Modernization section.
- ② Current replacement has ambient temperature rating of 0° to 215° F. If -40° F rating is required, order C7027A1031. Heat Block (part no. 136733) and 1/2 x 3/8 Bushing (part no. 390427B) must be ordered separately, if needed.
- ③ Current replacement has 1/2 NPT mounting. Use standard 3/4 x 1/2 reducer coupling.
- ④ Replacement suggestion is a straight body.

Table 18. C7012 ULTRAVIOLET FLAME DETECTOR CROSS REFERENCE.

Device to be Replaced	Current Replacement	Specifications of Device to be Replaced						Comments
		Voltage/ Frequency HZ	Mounting Pipe Size NPT (in.)	Lead Length (ft./in.)	Ambient Temp °F	Solid State	Shutter	
<b>FIREYE™</b>								
45UV11020	C7012A1152 ② ⑤	120/50,60	1	None	200 max.	N/A		
45UV11021	C7012A1152 ② ⑤	120/50,60	1	None	220 max.	N/A		
45UV51000	C7012E1112 ② ⑤	120/50,60	1	None	200 max.	Yes		
45UV51005	C7012E1112 ②	120/50,60	1	8/96	200 max.	Yes		
45RM11000	C7076A1007 ③ ⑤	120/50,60	1	None	32 to 131	Yes	Yes	Adjustable sensitivity
<b>Vigitron</b>								
9501	C7012E1112 ④	120/50,60	1	8/96	-4 to 194	Yes	Yes	
<b>Barber Coleman</b>								
1291	C7012A1145	120/60	3/4	8/96	Unknown	No	No	

① The output of these sensors is not compatible with competitive amplifiers/primary relays. Programmer or Primary and amplifier must also be replaced with appropriate Honeywell control. Refer to FIRING LINE Primary and Programmer Cross References and Modernization section.

② Replacement has 175° F maximum temperature rating.

③ Replacement has -40° F to 160° F [-40 to 71° C] temperature rating.

④ Replacement has -20° to 175° F temperature rating.

⑤ Replacement has 8/96" leadwires.



**Table 19. FIREYE ULTRAVIOLET FLAME DETECTOR CROSS REFERENCE.**

Device to be Replaced	Current Replacement ①	Specifications of Device to be Replaced			Comments
		Mounting Pipe Size NPT (in.)	Lead Length (ft./in.)	Ambient Temp °F	
<b>Barber Coleman</b>					
1292	C7027A1080 ②③	3/4	7	212 max.	Straight body.
<b>Pyronics</b>					
4350	C7027A1031 ②③	1 (NPS union)	1 1/2	-40 to 212	Angle body.
<b>Protection Control</b>					
P-CI	C7027A1080 ②③	Unknown	6	212	Angle body.
P-CII	C7027A1080 ②③	3/4 NPS	6	212	Straight body.

① The output of these sensors is not compatible with competitive amplifiers/primary relays. Programmer or Primary and amplifier must also be replaced with appropriate Honeywell control. Refer to FIRING LINE Primary and Programmer Cross References and Modernization section.

② Current replacement has 1/2 NPT mounting. Use standard reducer coupling.

③ Replacement has 8/96" leadwires.

*THE FIRING LINE HONEYWELL FLAME SENSORS (SCANNERS) CROSS REFERENCE*

*THE FIRING LINE HONEYWELL FLAME SENSORS (SCANNERS) CROSS REFERENCE*

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