

THE FIRING LINE

Honeywell Amplifier Cross Reference

HONEYWELL AMPLIFIER CROSS REFERENCE

Device To Be Replaced	Current Replacement	Functional 7800 SERIES Replacement ^⑨		Specifications of Device to be Replaced				Comments
		Standard	AMPLI-CHECK™ ^⑤	Flame Detector Type ^①	FFRT (secs)	Control Used With	Amplifier Color	
120801A ^④	None	R7847A1033	R7847B1031	visible	2-4	R4126/R4127 ^⑦ ^⑧	black	
121823A	None	R7847A1033	R7847B1031	rectification	2-4	R8169A ^②	green	
121823B	None	R7847A1025	R7847B1023	rectification	0.8	R8169A ^②	green	
122754A	None	R7847A1033	R7847B1031	rectification	2-4	Q518/Q519/W787	W787 ^⑦	Change base to current Q518/Q519; use R7257A1028.
123228A	None	R7848A1008	R7848B1006	infrared	2-4	R4126/R4127 ^⑦ ^⑧	red	
123228B	None	None	None	infrared	0.8	R8169A ^②	red	
123752A	None	R7847A1033	R7847B1031	C7020,UV ^③	2-4	R4126/R4127 ^⑦ ^⑧	violet	
123752B	None	None	None	C7020,UV ^③	0.8	R4126/R4127 ^⑦ ^⑧	violet	
124928A	R7257A1028	R7847A1033	R7847B1031	rectification	2-4	R4150 ^⑦ ^⑧	green	
124929A	R7258A1001	R7848A1008	R7848B1006	infrared	2-4	R4150 ^⑦ ^⑧	red	
R7191A1001	None	R7847A1033	R7847B1031	rectification	2-4	Q518/Q519/W787 ^⑦	W787 ^⑦	Change base to current Q518/Q519; use R7257A1028.
R7247A1005	R7247A1005	R7847A1033	R7847B1031	rectification	2-4	R4140	green	
R7247A1013	None	R7847A1025	R7847B1023	rectification	2 max	R4140	green	International model.
R7247A1021	R7247A1021	R7847A1025	R7847B1023	rectification	1 max.	R4140	green	
R7247B1003 ^⑤	R7247B1003 ^⑤	None	R7847B1031	rectification	2-4	R4140	green	
R7247B1011 ^⑤	R7247B1011 ^⑤	None	R7847B1023	rectification	2 max.	R4140	green	
R7247C1001 ^⑥	R7247C1001 ^⑥	None	R7847C1005 ^⑥	C7012E,F	2-4	R4140	green	
R7247C1019 ^⑥	R7247C1019 ^⑥	None	None	C7012E,F	2 max.	R4140	green	
R7248A1004	R7248A1004	R7848A1008	R7848B1006	infrared	2-4	R4140	red	
R7248A1012	None	None	None	infrared	2 max.	R4140	red	
R7248A1020	None	None	None					Never produced.
R7248A1038	None	None	None	infrared	2 max.	R4140	red	
R7248A1046 ^②	R7248A1046 ^②	None	None	infrared	2-4	R4140	red	Proprietary to Cleaver Brooks.
R7248B1002 ^⑤	None	None	None	infrared	2 max.	R4140	red	
R7248B1010 ^② ^⑤	R7248B1010 ^② ^⑤	None	None	infrared	2-4	R4140	red	Proprietary to Cleaver Brooks.
R7248B1028 ^⑤	R7248B1028 ^⑤	None	R7848B1006	infrared	2-4	R4140	red	
R7249A1003	R7249A1003	R7849A1023	R7849B1021	ultraviolet	2-4	R4140	violet	
R7249A1011	R7249A1011	R7849A1015	R7849B1013	ultraviolet	2 max.	R4140	violet	

See footnotes on page 4.

HONEYWELL AMPLIFIER CROSS REFERENCE (continued)

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		Standard	AMPLI-CHECK™ ^⑤	Flame Detector Type ^①	FFRT (secs)	Control Used With	Amplifier Color	
R7249A1029	None	R7849A1015	R7849B1013	ultraviolet	1 max.	R4140	violet	
R7249A1037 ^②	R7249A1037 ^②	None	None	ultraviolet	2-4	R4140	violet	Proprietary to Cleaver Brooks.
R7253A1006	None	R7847A1025	R7847B1023	rectification	0.8	R4126/R4127 ^⑦ ^⑧	green	
R7253A1014	None	R7847A1033	R7847B1031	rectification	2-4	R4126/R4127 ^⑦ ^⑧	green	
R7253A1022	None	R7847A1033	R7847B1031	rectification	2-4	R4126/R412 ^⑦ ^⑧	green	
R7253A1030	None	R7847A1025	R7847B1023	rectification	2 max.	R4126/R4127 ^⑦ ^⑧	green	
R7253B1004 ^⑤	None	None	R7847B1023	rectification	2 max.	R4126/R412 ^⑦ ^⑧	green	
R7253B1012 ^⑤	None	None	R7847B1023	rectification	2 max.	R4126/R4127 ^⑦ ^⑧	green	
R7253B1020 ^⑤	None	None	R7847B1031	rectification	2-4	R4126/R4127 ^⑦ ^⑧	green	
R7254A1005	None	R7848A1008	R7848B1006	infrared	2-4	R4126/R4127 ^⑦ ^⑧	red	
R7254A1013 ^②	None	R7848A1008	R7848B1006	infrared	2-4	R4126/R4127 ^⑦ ^⑧	red	Proprietary to Ray Burner.
R7254A1021	None	R7848A1008	R7848B1006	infrared	2-4	R4126/R4127 ^⑦ ^⑧	red	
R7254A1039 ^②	None	R7848A1008	R7848B1006	infrared	2-4	R4126/R4127 ^⑦ ^⑧	red	Proprietary to Ray Burner.
R7254A1047	None	None	None	infrared	2 max.	R4126/R4127 ^⑦ ^⑧	red	
R7255A1004	None	None	None	C7020, UV ^③	0.8	R4126/R4127 ^⑦ ^⑧	violet	
R7255A1012 ^②	None	R7847A1033	R7847B1031	C7020, UV ^③	2-4	R4126/R4127 ^⑦ ^⑧	violet	Proprietary to Ray Burner.
R7255A1020	None	R7847A1033	R7847B1031	C7020, UV ^③	2-4	R4126/R4127 ^⑦ ^⑧	violet	
R7255A1038	None	R7847A1033 ^⑩	R7847B1031 ^⑩	C7020, UV ^③	2-4	R4126/R4127 ^⑦ ^⑧	violet	Fungus-proofed R7255A1012.
R7255A1046	None	R7847A1033	R7847B1031	C7020, UV ^③	2-4	R4126/R4127 ^⑦ ^⑧	violet	
R7255B1002 ^⑤	None	None	R7849B1013	ultraviolet	0.8	R4126/R4127 ^⑦ ^⑧	violet	
R7255B1010 ^⑤	None	None	R7849B1021	ultraviolet	2-4	R4126/R4127 ^⑦ ^⑧	violet	
R7255B1028 ^② ^⑤	None	None	R7849B1021	ultraviolet	2-4	R4126/R4127 ^⑦ ^⑧	violet	Proprietary to Ray Burner.
R7255B1036 ^⑤	None	None	R7849B1013	ultraviolet	2 max.	R4126/R4127 ^⑦ ^⑧	violet	
R7256A1003	None	R7847A1025 ^④	R7847B1023 ^④	visible	0.8	R4126/R4127 ^⑦ ^⑧	black	
R7257A1002	R7257A1028	R7847A1033	R7847B1031	rectification	2-4	R4150/Q518 ^⑦ ^⑧	green	
R7257A1010	R7257A1028	R7847A1033	R7847B1031	rectification	2-4	Q519/W787 ^⑦	green	International model.
R7257A1028	R7257A1028	R7847A1033	R7847B1031	rectification	2-4	R4150 ^⑦ ^⑧	green	
R7257A1036	None	R7847A1025	R7847B1023	rectification	0.8	R4150 ^⑦ ^⑧	green	
R7257A1044	None	R7847A1025	R7847B1023	rectification	0.8	R4150 ^⑦ ^⑧	green	International model.

See footnotes on page 4.

HONEYWELL AMPLIFIER CROSS REFERENCE (continued)

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		Standard	AMPLI-CHECK™ ^⑤	Flame Detector Type ^①	FFRT (secs)	Control Used With	Amplifier Color	
R7257A1051	None	R7847A1025	R7847B1023	rectification	2 max.	R4150 ^⑦ ^⑧	green	
R7258A1001	R7258A1001	R7848A1008	R7848B1006	infrared	2-4	R4150 ^⑦ ^⑧	red	
R7258A1019	None	R7848A1008	R7848B1006	infrared	2-4	R4150 ^⑦ ^⑧	red	Reduced refractory response.
R7258A1027	None	None	None	infrared	2 max.	R4150 ^⑦ ^⑧	red	
R7259A1000	R7259A1000	R7849A1023	R7849B1021	ultraviolet	2-4	R4150 ^⑦ ^⑧	violet	
R7259A1018	None	R7849A1015	R7849B1013	ultraviolet	0.8	R4150 ^⑦ ^⑧	violet	International model.
R7259A1026	None	R7849A1015	R7849B1013	ultraviolet	2 max.	R4150 ^⑦ ^⑧	violet	
R7289A1004	R7289A1004	R7847A1033	R7847B1031	rectification	2-4	R4795	green	
R7289A1012	R7289A1012	R7847A1025	R7847B1023	rectification	0.8	R4795	green	
R7289A1020	R7289A1020	R7847A1033	R7847B1031	rectification	2-4	R4795	green	-40° F rated.
R7290A1001	R7290A1001	R7849A1023	R7849B1021	ultraviolet	2-4	R4795	violet	
R7290A1019	R7290A1019	R7849A1015	R7849B1013	ultraviolet	0.8	R4795	violet	
R7290A1027	R7290A1027	R7849A1023	R7849B1021	ultraviolet	2-4	R4795	violet	-40° F rated.
R7322B1027 ^④	None	R7847A1033	R7847B1031	visible ^④	2-4	R4140	black	
R7476A1007 ^⑪	R7476A1007 ^⑪	None	R7886A1001 ^⑪	ultraviolet	2-4	R4075C,D,E R4138C,D, R4140, BC7000	blue	Burner management systems. Use with C7076A,D Detectors.
R7476A1015 ^⑪	R7476A1015 ^⑪	None	None	ultraviolet	2 max.	R4075C,D,E R4138C,D, R4140, BC7000	blue	Burner management systems. Use with C7076A,D Detectors.
R7747C1006 ^② ^⑥	R7747C1006 ^② ^⑥	None	None	rectification UV, C7012E,F	2-4	BC7700A1007 ^②	green	Proprietary to Cleaver Brooks.
R7747C1014 ^⑥	R7747C1014 ^⑥	None	None	rectification UV, C7012E,F	2-4	BC7700A1015	green	
R7748B1007 ^② ^⑤	R7748B1007 ^② ^⑤	None	None	infrared	2-4	BC7700A1007 ^②	red	Proprietary to Cleaver Brooks.
R7748B1015 ^⑤	R7748B1015 ^⑤	None	None	infrared	2-4	BC7700A1015	red	
R7749B1006 ^② ^⑤	R7749B1006 ^② ^⑤	None	None	ultraviolet	2-4	BC7700A1007 ^②	violet	Proprietary to Cleaver Brooks.
R7749B1014 ^⑤	R7749B1014 ^⑤	None	None	ultraviolet	2-4	BC7700A1015	violet	
R7847A1009	None	None	None					Never produced.
R7847A1017	None	None	None					Never produced.
R7847A1025	R7847A1025	R7847A1025	R7847B1023	rectification	0.8	7800 SERIES	green	Select proper 7800 SERIES Control.

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Device To Be Replaced	Current Replacement	Functional 7800 SERIES Replacement ^⑨		Specifications of Device to be Replaced				Comments
		Standard	AMPLI-CHECK™ ^⑤	Flame Detector Type ^①	FFRT (secs)	Control Used With	Amplifier Color	
R7847A1033	R7847A1033	B7847A1033	R7847B1031	rectification UV, C7012A,C	2-4	7800 SERIES	green	Select proper 7800 SERIES Control.
R7847B1007	None	None	None					Never produced.
R7847B1015	None	None	None					Never produced
R7847B1023 ^⑤	R7847B1023 ^⑤	None	R7847B1023	rectification	0.8	7800 SERIES	green	Select proper 7800 SERIES Control.
R7847B1031 ^⑤	R7847B1031 ^⑤	None	R7847B1031	rectification UV, C7012A,C	2-4	7800 SERIES	green	Select proper 7800 SERIES Control.
R7847C1005 ^⑥	R7847C1005 ^⑥	None	R7847C1005	rectification UV, C7012E,F	2-4	7800 SERIES	green	Select proper 7800 SERIES Control.
R7848A1008	R7848A1008	R7848A1008	R7848B1006	infrared	2-4	7800 SERIES	red	Select proper 7800 SERIES Control.
R7848B1006 ^⑤	R7848B1006 ^⑤	None	R7848B1006	infrared	2-4	7800 SERIES	red	Select proper 7800 SERIES Control.
R7849A1007	None	None	None					Never produced.
R7849A1015	R7849A1015	R7849A1015	R7849B1013	ultraviolet	0.8	7800 SERIES	violet	Select proper 7800 SERIES Control.
R7849A1023	R7849A1023	R7849A1023	R7849B1021	ultraviolet	2-4	7800 SERIES	violet	Select proper 7800 SERIES Control.
R7849B1005	None	None	None					Never produced.
R7849B1013 ^⑤	R7849B1013 ^⑤	None	R7849B1013	ultraviolet	0.8	7800 SERIES	violet	Select proper 7800 SERIES Control.
R7849B1021 ^⑤	R7849B1021 ^⑤	None	R7849B1021	ultraviolet	2-4	7800 SERIES	violet	Select proper 7800 SERIES Control.
R7886A1001 ^⑪	R7886A1001 ^⑪	None	R7886A1001 ^⑪	ultraviolet C7076A,D	2-4	7800 SERIES	violet	Select proper 7800 SERIES Control.

FOOTNOTES:

- ^① See Table 1 for a listing of Honeywell Flame Detector models associated with specific amplifier types.
- ^② Available from Proprietary OEM only.
- ^③ C7020 cannot be used with 7800 SERIES Controls. Change flame detector to C7012A,C or C7012E,F.
- ^④ Used with C554A (cadmium sulfide) Visible Radiation Sensor. C554A cannot be used with 7800 SERIES Controls. Change flame detector to C7010A, C7013A, or C7014A Visible Radiation Flame Detector.
- ^⑤ AMPLI-CHECK™ Amplifier. Amplifier electronics self-checked.
- ^⑥ Dynamic Self-Check Amplifier. Amplifier electronics and ultraviolet radiation sensor self-checked. Used with C7012E, F Ultraviolet Flame Detectors.
- ^⑧ Device no longer available.
- ^⑨ Refer to programmer, primary cross-references for 7800 SERIES Control replacements for controls that are no longer available.
- ^⑩ 7800 SERIES Amplifiers cannot be used with controls other than 7800 SERIES.
- ^⑪ Contact your Honeywell Sales Representative for information regarding fungus-proofing.
Dynamic Self-Check. Use with C7076A,D Ultraviolet Flame Detectors.

TABLE 1—LISTING OF HONEYWELL FLAME DETECTOR MODELS BY ASSOCIATED AMPLIFIER TYPES

Sensor Model No.	Rectification	Rectification (UV)	Rectification (Self-Check)	Rectification (UV Self-Check) ^③	Ultraviolet	Ultraviolet Self-Check ^③	Ultraviolet Dynamic Self-Check ^④	Infrared	Infrared (Self-Check)	Cadmium Sulfide
C554										X
C7004B	X		X							
C7005A,B	X		X							
C7007A	X		X							
C7008A	X		X							
C7009A	X		X							
C7010A	X		X							
C7012A,C		X		X						
C7012E,F							X			
C7013A	X		X							
C7014A	X		X							
C7015A								X	X	
C7027A					X	X				
C7035A					X	X				
C7044A ^②					X	X				
C7076A,D							X			
Q179A,B,C,D ^④	X		X							
Q283								X	X	

FOOTNOTES:

② The Q283 Infrared Sensor (lead sulfide) was occasionally used with a C7008. The C7008 used the lead sulfide signal input and provided a rectification output. Thus the Q283 Infrared Detector and C7008 were used with a rectification control (RA890E, RA890F, etc.).

③ The C7076A,D are Ultraviolet Dynamic Self-Check Flame Detectors with sensitivity adjustment designed for industrial burner management systems.

④ AMPLI-CHECK™ Amplifiers. Amplifier electronics is self-checked.
Dynamic Self-Check Amplifiers. Ultraviolet radiation sensor and amplifier electronics are self-checked.

Honeywell

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