

# Flame Amplifiers

## 7800 SERIES and R7140 Flame Signal Amplifiers



**Solid state plug-in amplifiers that respond to flame detector inputs to indicate the presence of flame when used with 7800 SERIES relay modules.**

- Flame failure response time of 0.8 or 3.0 seconds (1.0 or 2.0 for CE approved devices).
- Flame signal strength ranges from 0.0 to 5.0 Vdc.
- Plug into 7800 relay module through printed circuit board edge connector keyed for proper orientation.
- Flame signal test jacks to measure amplifier flame signal voltage.
- Color-coded labels identify flame detection type.
- Dynamic Self-Check Amplifier test the detectors and all electronic components in the flame detection system.
- Ampli-check tests the amplifier and 7800 SERIES Relay.
- None (standard) is just tested at normal system startup.
- 7800 SERIES relay module locks out on safety shutdown with flame detection system failure.
- Compatible with existing Honeywell flame detectors (order separately).

**Approvals, Underwriters Laboratories Inc.:** Listed: File No. MP268, Guide No. MCCZ

**Approvals, CSA:** Certified: File No. LR95329-3

**Approvals, Swiss RE:** Acceptable

**Approvals, Factory Mutual:** Approved: Report No. 1V9A0.AF

Material Number	Type	Flame Failure Response Time (sec)	Self Checking	Use With Primary Safety Control	Use With Flame Sensor	Comments
R7824C1002/U	Ultraviolet	3.0 sec	Dynamic Self-Check	RM7824	C7024E, F Flame Detector	Color: Green
R7847A1025/U	Rectification	0.8 sec or 1.0 sec	None (standard)	7800 SERIES Relay Modules	Gas: Rectifying Flame Rods C7004, C7005, C7007, C7008, C7009, Q179	Color: Green
R7847A1033/U	Rectification	2.0 sec or 3.0 sec	None (standard)	7800 SERIES Relay Modules	Gas: Rectifying Flame Rods C7004, C7005, C7007, C7008, C7009, Q179; Gas, oil, coal: Ultraviolet Flame Sensor C7012A, C	Color: Green
R7847A1074/U	Rectification	0.8 sec or 1.0 sec	None (standard)	7800 SERIES Relay Modules	Gas: Rectifying Flame Rods C7004, 5, 7, 8, or 9, Q179 for impedance matching for leadwire runs > 50' or Ultraviolet Flame Sensor C7012A, C	Color: Green
R7847A1082/U	Rectification	2.0 sec or 3.0 sec	None (standard)	7800 SERIES Relay Modules	Gas: Rectifying Flame Rods C7004, 5, 7, 8, or 9, Q179 for impedance matching for leadwire runs > 50' or Ultraviolet Flame Sensor C7012A, C	Color: Green
R7847B1023/U	Rectification	0.8 sec or 1.0 sec	Ampli-Check	7800 SERIES Relay Modules	Gas: Rectifying Flame Rods C7004, C7005, C7007, C7008, C7009, Q179	Color: Green
R7847B1031/U	Rectification	2.0 sec or 3.0 sec	Ampli-Check	7800 SERIES Relay Modules	Gas: Rectifying Flame Rods C7004, C7005, C7007, C7008, C7009, Q179; Gas, oil, coal: Ultraviolet Flame Sensor C7012A, C	Color: Green
R7847B1064/U	Rectification	0.8 sec or 1.0 sec	Ampli-Check	7800 SERIES Relay Modules	Gas: Rectifying Flame Rods C7004, 5, 7, 8, or 9, Q179 for impedance matching for leadwire runs > 50' or Ultraviolet Flame Sensor C7012A, C	Color: Green
R7847B1072/U	Rectification	2.0 sec or 3.0 sec	Ampli-Check	7800 SERIES Relay Modules	Gas: Rectifying Flame Rods C7004, 5, 7, 8, or 9, Q179 for impedance matching for leadwire runs > 50' or Ultraviolet Flame Sensor C7012A, C	Color: Green
R7847C1005/U	Rectification	2.0 sec or 3.0 sec	Dynamic Self-Check	7800 SERIES Relay Modules	Gas, oil, coal: Ultraviolet Flame Sensor C7012E, F	Color: Green
R7848A1008/U	Infrared	2.0 sec or 3.0 sec	None (standard)	7800 SERIES Relay Modules	Gas, oil, coal: Infrared (lead sulfide) C7015	Color: Red
R7848B1006/U	Infrared	2.0 sec or 3.0 sec	Ampli-Check	7800 SERIES Relay Modules	Gas, oil, coal: Infrared (lead sulfide) C7015	Color: Red
R7849A1015/U	Ultraviolet	0.8 sec or 1.0 sec	None (standard)	7800 SERIES Relay Modules	Gas, Oil: Minipeeper C7027A, C7035A, C7044	Color: Purple
R7849A1023/U	Ultraviolet	2.0 sec or 3.0 sec	None (standard)	7800 SERIES Relay Modules	Gas, Oil: Minipeeper C7027A, C7035A, C7044	Color: Purple
R7849B1013/U	Ultraviolet	0.8 sec or 1.0 sec	Ampli-Check	7800 SERIES Relay Modules	Gas, Oil: Minipeeper C7027A, C7035A, C7044	Color: Purple
R7849B1021/U	Ultraviolet	2.0 sec or 3.0 sec	Ampli-Check	7800 SERIES Relay Modules	Gas, Oil: Minipeeper C7027A, C7035A, C7044	Color: Purple
R7851B1000/U	Optical	2.0 sec or 3.0 sec	Ampli-Check	7800 SERIES Relay Modules	Gas, Oil, Coal: Optical (UV, Visible Light) C7927, C7962	Color: White
R7851B1018/U	Optical	0.8 sec or 1.0 sec	Ampli-Check	7800 SERIES Relay Modules	Gas, Oil, Coal: Optical (UV, Visible Light) C7927, C7962	Color: White
R7851C1008/U	Optical	2.0 sec or 3.0 sec	Dynamic Self-Check	7800 SERIES Relay Modules	Gas, oil, coal: Optical (UV only) C7961E, F	Color: White
R7852A1001/U	Infrared	2.0 sec or 3.0 sec	None (standard)	7800 SERIES Relay Modules	Gas, oil, coal: Infrared (lead sulfide) C7915	Color: Red/White
R7852B1009/U	Infrared	2.0 sec or 3.0 sec	Ampli-Check	7800 SERIES Relay Modules	Gas, oil, coal: Infrared (lead sulfide) C7915	Color: Red/White
R7861A1026/U	Ultraviolet	2.0 sec or 3.0 sec	Dynamic Self-Check	7800 SERIES Relay Modules	Gas, oil, coal: Ultraviolet Flame Sensor C7061	Color: Purple
R7861A1034/U	Ultraviolet	0.8 sec or 1.0 sec	Dynamic Self-Check	7800 SERIES Relay Modules	Gas, oil, coal: Ultraviolet Flame Sensor C7061	Color: Purple
R7886A1001/U	Ultraviolet	2.0 sec or 3.0 sec	Dynamic Self-Check	7800 SERIES Relay Modules	Gas, oil, coal: Adjustable Sensitivity Ultraviolet Flame Sensor C7076	Color: Blue