



MART1, MART3, MART1T, MAUV1, MAUV3 and MAUV1T

AMPLIFIER MODULES
FOR USE WITH THE FIREYE MODULAR
M-SERIES II CONTROL



DESCRIPTION

The Fireye MART1, MART3, MART1T, MAUV1, MAUV3 and MAUV1T are Amplifier Modules used with the Fireye Modular M-SERIES II control. These amplifier modules provide flame scanning capabilities using any of the Fireye standard ultraviolet scanners (self-check scanners not applicable) and flame rods. The Flame Failure Response Time (F.F.R.T.) of the control is determined by the selection of the amplifier module (see Ordering Information). Test jacks are provided on the amplifier modules to permit flame signal measurement during operation.

After scanner selection, the proper amplifier module **must** be used in the Modular M-SERIES II chassis (see Ordering Information). The amplifier module incorporates a plug-in design for ease of installation.

The programmer module determines the operational characteristics of the control (e.g. relight, purge timing, etc.).

For proper and safe application of this product, you must refer to bulletins C-4000 or C-4000E for a detailed description of the operation of the Modular M-SERIES II control, including installation instructions, operating sequences for the programmer modules, etc. Also follow the scanner installation and wiring instructions found in bulletins C-4000 or C-4000E for proper flame scanning operation.



WARNING: Selection of this control for a particular application should be made by a competent professional, licensed by a state or other government agency. Inappropriate application of this product could result in an unsafe condition hazardous to life and property. Installation should not be considered complete until pilot turndown and other appropriate performance tests have been successfully completed.

ORDERING INFORMATION

Flame Amplifier Selection:

| P/N | DESCRIPTION | USE WITH SCANNER |
|--------|---|-----------------------------|
| MAUV1 | UV amplifier, 2-4 second F.F.R.T. | UV1A, UV2, UV8A, 45UV3-1050 |
| MAUV3 | UV amplifier, 3 second F.F.R.T. | UV1A, UV2, UV8A, 45UV3-1050 |
| MAUV1T | UV amplifier, .8 second F.F.R.T. | UV1A, UV2, UV8A, 45UV3-1050 |
| MART1 | Flame rectification amplifier 2-4 second F.F.R.T. | 69ND1 |
| MART3 | Flame rectification amplifier, 3 second F.F.R.T. | 69ND1 |
| MART1T | Flame rectification amplifier .8 second F.F.R.T. | 69ND1 |

FLAME SCANNER SELECTION



| UV SCANNERS: | |
|--------------|---|
| UV1A3 | 1/2" NPT connector, 3 ft. (914 mm) flex. cable |
| UV1A6 | 1/2" NPT connector, 6 ft. (1828 mm) flex. cable |
| UV2 | 3/8" NPT connector, 3 ft. (914 mm) flex. cable |
| UV8A | 1/2" NPT 90 degree angle head, 6 ft. (1828 mm) unshielded leads |
| UV90-3, 6, 9 | 90 degree lateral view, 3 ft. (914 mm), 6 ft. (1828 mm), 9 ft. (2742 mm) flex conduit |
| 45UV3-1050 | 3/4" sleeve/set screw mount |

| FLAME DETECTORS: | |
|------------------|---------------------------------------|
| 69ND1-1000K4 | 12 inch flame rod, 1/2" NPT connector |
| 69ND1-1000K6 | 18 inch flame rod, 1/2" NPT connector |
| 69ND1-1000K8 | 24 Inch flame rod, 1/2" NPT connector |

APPROVALS

| AGENCY APPROVALS | | | | | | |
|------------------|----|-----|----|-----|-------|-------|
| | UL | CSA | FM | AGA | EC230 | EC298 |
| MAUV1 | ✓ | ✓ | ✓ | ✓ | | |
| MAUV3 | | | | | ✓ | ✓ |
| MAUV1T | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| MART1 | ✓ | ✓ | ✓ | ✓ | | |
| MART3 | | | | | ✓ | ✓ |
| MART1T | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |

Underwriters Laboratories Inc.: Listed Guide MCCZ — File MP 1537

Underwriters Laboratories Inc.: Recognized Components Guide MCCZ2 File MP1537

Canadian Standards Association: Guide 300-1-0.2 Class 2642 Oil File LR7989
Guide 140-A-2 Class 2632 Gas File LR 7989

American Gas Association

EN230

EN298

Factory Mutual

ANS Z21.20 Automatic Ignition Systems.



Remove power from the control and remove the control from its wiring base before proceeding.

INSTALLATION

The amplifier modules are used with the Fireye Modular M-SERIES II Base Chassis (P/N MC120, MC120E, MC120P, MC120R, MC120RE for 120VAC, P/N MC230, MC230R for 240VAC). They are installed in the chassis by grabbing hold of the amplifier module by the edges of its printed circuit board, aligning the module with the guide slots on the opening in the middle of the chassis, and inserting the module into the pin connectors.

The amplifier modules are designed to fit in the proper slot only. **DO NOT FORCE THEM.**





NOTICE

When Fireeye products are combined with equipment manufactured by others and/or integrated into systems designed or manufactured by others, the Fireeye warranty, as stated in its General Terms and Conditions of Sale, pertains only to the Fireeye products and not to any other equipment or to the combined system or its overall performance.

WARRANTIES

FIREEYE guarantees for *one year from the date of installation or 18 months from date of manufacture* of its products to replace, or, at its option, to repair any product or part thereof (except lamps, electronic tubes and photocells) which is found defective in material or workmanship or which otherwise fails to conform to the description of the product on the face of its sales order. **THE FOREGOING IS IN LIEU OF ALL OTHER WARRANTIES AND FIREEYE MAKES NO WARRANTY OF MERCHANTABILITY OR ANY OTHER WARRANTY, EXPRESS OR IMPLIED.** Except as specifically stated in these general terms and conditions of sale, remedies with respect to any product or part number manufactured or sold by Fireeye shall be limited exclusively to the right to replacement or repair as above provided. In no event shall Fireeye be liable for consequential or special damages of any nature that may arise in connection with such product or part.



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C-4002
NOVEMBER 1, 2005
Supersedes Dec.1999