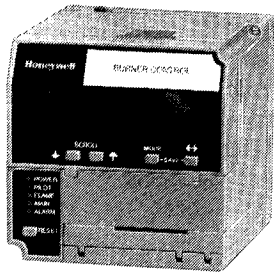
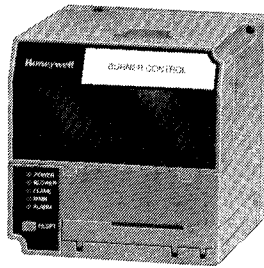


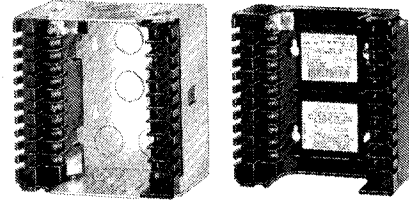
7800 SERIES Burner Control



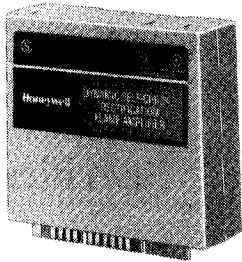
**Relay Module
RM7838,
RM7800**



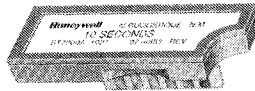
**Relay Module
RM7823, RM7840,
RM7885, RM7890,
RM7895**



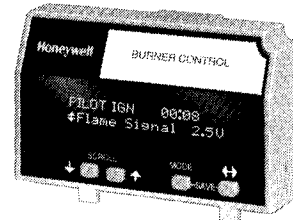
**Universal Wiring
Subbase
Q7800A (Panel mount)
Q7800B (Burner mount)**



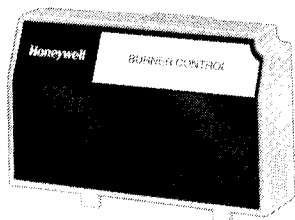
**Flame Amplifier
R7847, R7849,
R7848, R7886**



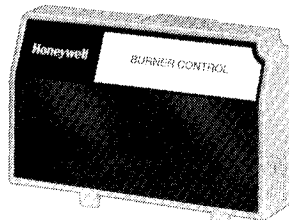
**Purge Timer
ST7800**



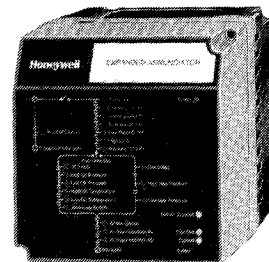
**Keyboard Display
Module
S7800**



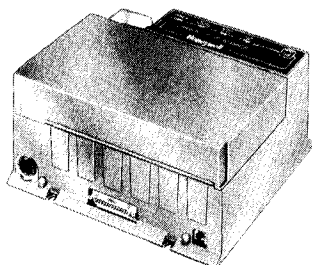
**DATA CONTROLBUS
MODULE™
S7810**



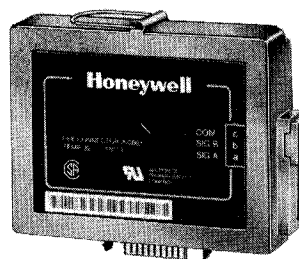
**Remote Reset
Module
S7820**



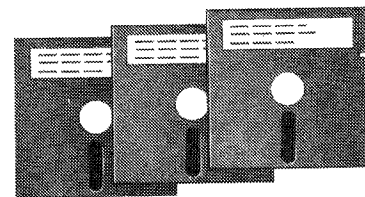
**Expanded
Annunciator
Module
S7830**



**Communication
Interface
Q7700**



**ControlBus
Module
Q57800**



**Combustion System
Manager Software
ZM7850
(PC software)**

Application

The 7800 SERIES Burner Control is a microprocessor based integrated control for gas, oil or combination fuel single burner application. The 7800 SERIES consists of a Relay Module, Subbase, Amplifier, Keyboard Display Module and Purge Card. Options include Personal Computer Communication Interface, ControlBus Module, Remote Display Mounting, First Out Expanded Annunciator, and ZM7850 Combustion System Manager.

The 7800 SERIES is programmed to provide safety, functional capability and features beyond the capacity of conventional controls. The 7800 SERIES is Underwriters Laboratories Inc. listed, Canadian Standards Association listed, and Factory Mutual approved.

Functions provided by the 7800 SERIES include automatic or semi-automatic burner sequencing, flame supervision, system status indication, historical files (total cycles, total hours, last six lockouts), system or self-diagnostics and troubleshooting aid.

The 7800 SERIES Communication Interface option provides local and remote monitoring and diagnostics of the 7800 SERIES by using an IBM® equivalent personal computer and Microsoft Windows 3.0 software.

The First Out Expanded Annunciator provides system status indication for up to 21 points for system and self diagnostics beyond standard 7800 SERIES functions.

The 7800 Remote Keyboard Display Module mounting provides system status monitoring from multiple locations.

FEATURES

- Dynamic self-check logic.
- Dynamic safety relay test.
- Tamper resistant timing and logic.
- Dynamic input check.
- First out annunciation and system diagnostics are provided by a 40 character vacuum fluorescent display (VFD) located on the Keyboard Display Module.
- Five LEDs for system sequence status.
- Five function Run/Test switches.
- Nonvolatile memory, (7800 SERIES retains history files and sequencing status after loss of power).
- Interchangeable plug-in flame amplifiers.
- Dependable, long term operating microcomputer technology.
- Communication interface capability.
- Local or remote annunciation of 7800 SERIES shut-downs.
- First out expanded annunciation with 24 LEDs for limit or interlock status.
- Application flexibility.
- Burner Controller Data.
 - Sequence status.
 - Sequence time.
 - Hold status.
 - Lockout/alarm status.
 - Flame signal strength.
 - Expanded annunciator status.
 - Total hours of operation.
 - Total cycles of operation.

- Fault history, of the six most recent faults.
 - Fault message and code.
 - Sequence status at the time of fault.
 - Sequence time of the fault.
 - Expanded annunciator data at the time of fault.
 - Cycles of operation at the time of fault.
 - Hours of operation at the time of fault.
- Diagnostic information.
 - Relay module type.
 - Software revision and version.
 - On/off status of all digital inputs/outputs.
 - Status of configuration jumpers.
 - Selected prepurge time.
 - Flame failure response time.
 - Flame amplifier type.
 - Manufacturing date code.
- Off cycle flame signal check.
- Preignition interlock check.
- Airflow switch check.
- Configuration jumpers for sequence timings and tests.
- Field selectable flame failure response timings.
- Interchangeable purge timers.
- Remote rest.
- Modernization adapter subbases.
- Interchangeable mounting subbases.

Specifications

ELECTRICAL RATINGS:

Voltage and Frequency:

Relay Module:

120 Vac (+10/-15%).
50 or 60 Hz (+/-10%).

Display Module:

13 Vdc (+10/-15%).
50 or 60 Hz.

Expanded Annunciator:

120 Vac (+10/-15%).
50 or 60 Hz.

Power Dissipation:

Relay Module:

10 watts maximum.

Expanded Annunciator:

5 watts maximum.

Keyboard Display Module:

3 watts maximum.

Communication Interface:

5 watts maximum.

Maximum Total Connected Load:

2000VA.

Fusing:

7800 SERIES

15A maximum, type FRN or equivalent.

Total System:

20A maximum, type FRN or equivalent.

DIMENSIONS:

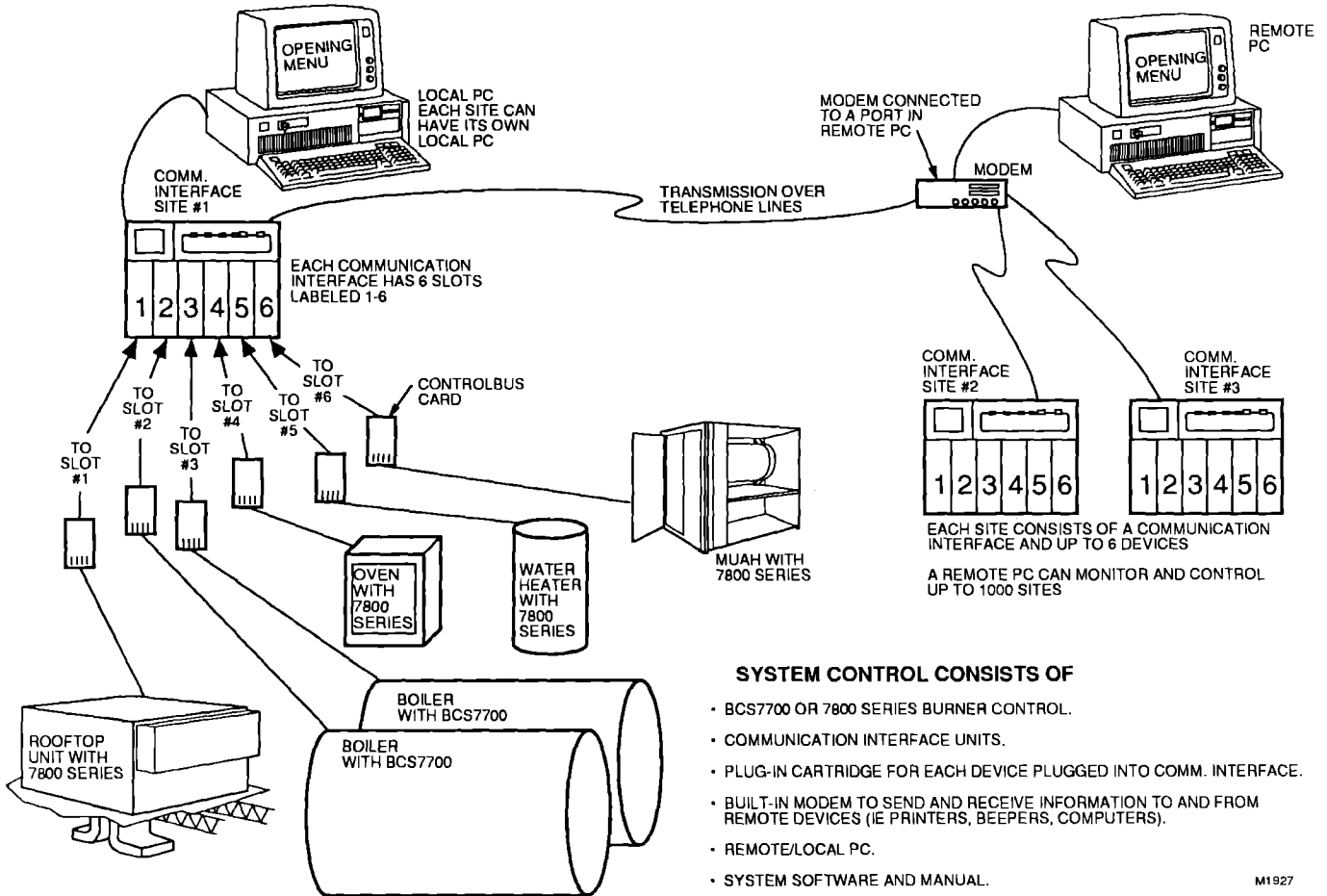
5" x 5" x 5-1/4" (Relay Module, Amplifier, Keyboard Display Module, Purge Timer and panel type mounting subbase).

ENVIRONMENTAL RATINGS:

Ambient Temperature:
 Operating -40° F to 140° F.
 Storage -40° F to 150° F.
 Humidity: 85% RH continuous, noncondensing.

APPROVAL BODIES:

Underwriters Laboratories Inc.
 Canadian Standards listed.
 Factory Mutual approved.
 Federal Communications Commission.
 Canadian Department of Communication.



M1927



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