**DESCRIPTION**

The ARC-1 Analog Releasing Controller is a microprocessor based dynamic control system specifically designed for fire protection systems release. The system is modular in design and consists of power supply modules, battery charger, general control board, set of contractor wiring terminals modules, emergency batteries and a door mounted local alphanumeric annunciator. All the equipment is included in a sturdy gauge 14 steel cabinet painted fire red, mounted in the top section of the ICAF cabinet.

The system's detection zones are intended to be used with either compatible conventional type smoke detectors or any listed dry contact type detection device.

The control panel is resistant to electromagnetic interference and has been designed and tested to meet stringent EMI shielding requirements. The panel architecture is designed for future expansion and is based on a standard 19" rack configuration with slide-in cards.

**Characteristics:**

- Slot Cards configuration on standard 19" rack (5U) installed in steel cabinet measuring 46" x 24" x 16" (116,8 x 61 x 40,6 cm).
- Standard input / output layout:
  - 2 Style B/D initiating device circuits
  - 2 Style B dry contacts supervisory circuits
  - 3 pressure transducer circuits
  - 3 Style Y/Z notification appliance circuits (signalling or releasing mode)
  - 4 User-definable auxiliary relays.
- Additional space for 5 plug-in I/O cards.
- Microprocessor based 'Plug & Play' distributed architecture.
- Watchdog supervised microprocessor.
- Power limited on all circuits.
- All output circuits protected against false activation.
- Dynamic over current protection on all notification appliance circuits.
- Alarm and trouble subsequent signal (resound).
- Local RS-232 Serial Communication Output for technician's PC interface.
- Remote RS-485 Serial Communication Output for remote PC interface.
- Dynamic integrated digital battery Volt./Amp. meter.
- Local alphanumeric annunciator with up to 16 lines of 40 characters.
- 24Vdc power regulated output, up to 7.5A
- Automatic battery test feature.
- Resettable and non-resettable regulated power outputs.
- Extensive transient protection on all circuits.
- Last events recall with up to 500 events in memory.
- 3 levels of password protected user menus.
- User-definable standard timers (4) and counters (4) for time-in, time-out, soak timer, etc.
- Slide-in identification labels for easy custom identification of user defined keys.

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**FM APPROVED**

**CE**
ARC-1 RELEASE CONTROLLER

Input Power:
Panel requires a supply of 2.8A - 120Vac at 60 Hz (1.4A - 220Vac at 50/60Hz) from an independent branch circuit breaker, lockable and identified for its purpose. Minimum wire size: 14 AWG with 600V insulation.

Batteries (lead acid only):
Maximum charging circuit: 4A
Maximum battery capacity: 104Ah
Standard batteries provided with the unit: 104Ah for a standby period of up to 90 hours meeting Factory Mutual requirements.

Panel layout:

![Panel layout diagram]

- Power Supply & Battery Charger Modules
- AC Power Supply Terminals
- Transducers Modules
- System Control Modules
- Input / Output Modules
- Optional Input / Output Modules
- Grounding Bar
- TBB Module (factory wired)
- Emergency Batteries
- Air Compressor Cut-Out Switch and Contactor Ass’y (when provided)