



# Series 100 Annunciator

FOR POWER GENERATION, TRANSMISSION AND DISTRIBUTION, PETROLEUM, PETROCHEMICAL, AND OTHER PROCESS INDUSTRIES



## ALARM MONITORING SYSTEM

AMETEK's Series 100 Annunciator has all the features you need for an alarm monitoring system. Simple to install, configure and operate, and flexible to change, expand and grow to meet future requirements. The Series 100 has all these qualities along with reliable operation for your most critical needs. The Series 100 is maintenance free; once installed, you will never have to worry about it.



### COMPACT DESIGN

With a depth less than 4-1/2", it can be easily installed into control panels, system cabinets and consoles. It is an ideal fit for replacing older systems or for new installations. The high density design provides up to 44 alarms in just 80 square inch of panel space

### FLEXIBLE CONFIGURATION

Create any system size up to 10 rows by 20 columns of windows. Four window sizes are available in several colors. The large windows can easily be converted into smaller ones, providing instant expansion for the future.

### HIGH RELIABILITY

Each Series 100 annunciator is equipped with low power, long life white LEDs. Each alarm point uses a pair of LEDs providing ample illumination in all light conditions. You never have to worry about changing a lamp or having it fail when you need it the most.

### MULTI-FUNCTION

All features and options are provided in a single model, making it easy to order or to change in the future. Our innovative software configuration tool is used to change any system parameter, such as: ISA alarm sequence, alarm grouping, input delays, or relay operation.

### SERIAL COMMUNICATION

Alarm information is easily transmitted or received with the bi-directional serial Modbus communications. The RS-232/485 serial communications can act as a slave or master providing control or monitoring of the alarm information.

### FIELD CHANGEABLE

The window legends are printed on standard transparency film, making it easy to change legends at any time. Even options like serial Modbus can be added in the future through a factory supplied password.

## FEATURES AND BENEFITS

- Compact design
- Minimal depth behind panel
- Bi-directional serial communications
- LED illumination
- Multi-function
- Software configured
- Laser printed legends
- Removable terminal blocks

**AMETEK**<sup>®</sup>

**POWER  
INSTRUMENTS**

*Experience the Power™*

## SPECIFICATIONS

### INPUT

#### Field Contacts

- Normally Open (N.O.) or Normally Closed (N.C.) input selection through DIP Switch
- Wet (voltage supplied) or dry (voltage free) contacts

#### Field Contact Voltage

- 5, 24, 48, 125 VDC, 120 VAC/DC
- 24 VDC open collector
- 24 VDC provided by annunciator power supply. Other voltage customer supplied.

#### Input Isolation

- Each input is optically isolated
- Inputs share common return\*

\*120 VAC/125 VDC input option provides isolation input to input

#### Input Response

- 50 milliseconds (nominal)
- Adjustable to 2 seconds

### DISPLAY

#### LED

- Dual white LED, 18mA @ 24VDC

#### Window Sizes

- Small: 0.98 x 1.14 in. (25 x 30 mm)
- Medium: 0.98 x 2.40 in. (25 x 60 mm)
- Large: 2.13 x 2.40 in. (55 x 60 mm)
- Extra Large: 2.13 x 4.96 in. (55 x 125 mm)

#### Window Color

- White, red, yellow, amber, green, blue

#### Legends

- Laser printed on transparency film

### ALARM SEQUENCE

#### Sequence Selections

- ISA-A, A4, A456, M, R12, F1A, F2M, FFAM2, F3A, R12C, F3C
- Dual color sequences
- Customized flash rates
- Up to 4 first out groups

### CONTROLS

Integral Test, Acknowledge, Silence and Reset

External Pushbutton Inputs

### OUTPUTS

#### Auxiliary Relay Option

- Individual relay per point
- Follows field contact or alarm sequence
- Energized or de-energized
- Form A or Form B (N.O. or N.C.)

#### Common Relays

- Four relays selectable for:
  - Critical and non-critical: horn, reflash, common alarm
  - Ringback audible, watchdog
- Energized or de-energized
- Form A or Form B (N.O. or N.C.)

#### Relay Ratings

- 30 VDC @ 2.0 amps
- 110 VDC @ 0.3 amps
- 120 VAC @ 0.5 amps

#### Audible

- Internal 80db audible device

### SERIAL MODBUS OPTION

- RS-232 or RS-485
- Modbus RTU or ASCII
- Master or slave mode
- Monitor mode (alarm information transmitted externally)
- Actuate mode (alarm information received externally)
- Pushbutton controls

### CONNECTIONS

#### Input/Output Terminals

- Two-part removable screw type
- Maximum wire size: 12 AWG (2.5 mm)

#### Communication Port

- 9 pin female D connector

### POWER REQUIREMENTS

#### Operating Range:

- 24 VDC  $\pm 15\%$
- Burden: 7.5 VA per 8 inputs

#### External Power Supply Options:

- 88-264 VAC 50/60 Hz
- 72-144 VDC
- 36-72 VDC

### MECHANICAL

#### Display Module (cell)

- 2.83" H x 5.67" W (72 x 144 mm)
- 1, 2, 4, 8 windows per cell

#### Weight

- 0.85 lb. per cell (0.4 kg per cell)

### ENVIRONMENT

#### Operating Temperature Range:

- -4 to 122°F (-20 TO 50°C)

#### Humidity:

- 20-95% RH

#### Surge Withstand:

- ANSI C37.90.1

#### Isolation:

- 1950 VDC or 1400 VAC input to output/ case/common, output to case/common

### CERTIFICATIONS

CE, UL, ULC

Annunciator Mounting Details in. (mm)

|                | Number of Cells Wide |                |                |                |                |
|----------------|----------------------|----------------|----------------|----------------|----------------|
|                | 1                    | 2              | 3              | 4              | 5              |
| Bezel Width    | 5.83<br>(148)        | 10.98<br>(279) | 16.13<br>(410) | 21.28<br>(541) | 26.43<br>(671) |
| Cut-out Width  | 5.50<br>(140)        | 10.65<br>(270) | 15.80<br>(401) | 20.95<br>(532) | 26.10<br>(663) |
|                | Number of Cells High |                |                |                |                |
|                | 1                    | 2              | 3              | 4              | 5              |
| Bezel Height   | 2.99<br>(76)         | 5.29<br>(134)  | 7.59<br>(193)  | 9.89<br>(251)  | 12.19<br>(310) |
| Cut-out Height | 2.66<br>(68)         | 4.96<br>(126)  | 7.26<br>(184)  | 9.56<br>(243)  | 11.86<br>(301) |

Allow 4.5" depth behind panel



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