

A800

8 channel alarm/annunciator

ms6348
revision A, 19th January 2006
catalogue section 25



- **8 fault channels (2 banks of 4 inputs)**
- **configurable alarm and override options**
- **flexible facia labelling**

Description

The A800 is a versatile 8 channel alarm/annunciator module that can be OEM-configured for use in a wide range of panel applications – first out and latching alarm systems, self-resetting status displays, or a combination of both. The A800 may be used as a stand-alone module, or to provide extra fault inputs for the range of Murphy engine and generator controls.

Operation

The A800's 8 inputs are arranged in 2 banks of 4 inputs, designated banks A and B. Each bank uses tamperproof circuit board switches (accessed by removing the rear facia) for configuration of:-

- operation: self-resetting, or first out and latching
- input activation: open or closed, to positive or negative DC
- override timer: enabled or disabled

'Enable' terminals A and B are used for independent activation of each bank; alarm outputs A and B provide remote signalling of fault conditions; and a master 'reset' input allows a fault state to be cleared. The combination of enable/reset inputs and alarm outputs gives a wide degree of external control over when and how the input channels operate, including seam-free operation with other controls such as the Murphy Autostart series (AS710 shown overleaf). A lamp-test input is also provided.

Front facia and labelling

Active inputs are indicated by red LEDs on the front facia (amber and green are available for volume orders). A clear window next to each LED allows insertion of custom fault or status messages under the wipe-clean front label - a message label template is supplied with each module.

The A800 is housed in a front-of-panel mounted, 96 x 96mm DIN standard case. Electrical connection is at the rear through a 16 way, two-part type connector (terminal listing overleaf).

Product specification

power supply:	
operating voltage range:	
12 V setting	9 – 18 V DC
24 V setting	18 – 35 V DC
current consumption	< 100 mA
inputs:	
positive input defined as:	80% to 100% of positive DC supply
negative input defined as:	-1V to +2V of negative DC supply
inputs 1 – 8	selectable: open or closed, +ve or -ve
enable inputs A and B	close to positive DC to activate
reset and lamp test inputs	close to negative DC to activate
outputs:	
alarm outputs A and B	semiconductor (open collector transistor), negative DC when active, 300 mA max. @ 35 V DC
alarm override timer:	
adjustment range	< 3 to > 60 secs.
general:	
overall dimensions (w x h x d)	96 x 96 x 125 mm
panel cut-out dimensions	92 x 92 mm
weight	approx. 335 g
operating ambient temperature	-10 to +55 °C / 14 to 131 F
vibration	1G, 50 Hz to 5 kHz
chemical/fire	case: glass filled Noryl, self extinguishing, non-dripping. facia: polycarbonate

Warranty

A two year limited warranty on materials and workmanship is given with this Murphy product. Details are available on request and are packed with each unit.



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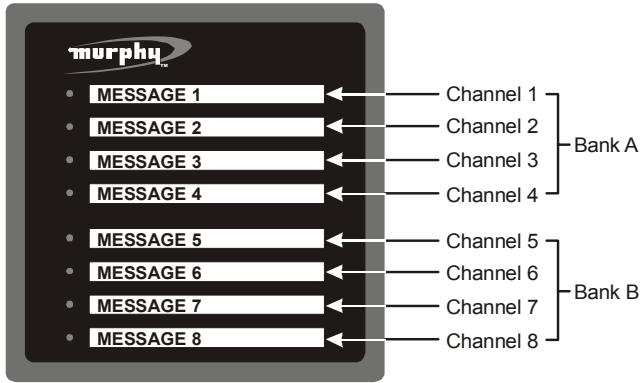
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USA - ISO9001:2000 FM 28221
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Front facia



Configuration

Switch No & function	Setting	Notes (see below)
10 Supply volts	12 V DC (ON) / 24 V DC (OFF)	a
Bank A inputs	closed -ve / closed +ve / open -ve / open +ve	b
Bank B inputs	closed -ve / closed +ve / open -ve / open +ve	b
A Override timer	on / off	c
A Fault type	alarm (latching) / alert (non-latching)	d
B Not used		

Notes:

- a) Sets the A800 for use with 12V or 24V DC systems.
- b) Set these switches to match the active input state for each bank, i.e. remote contacts closed or open when active (e.g. during fault), switching to/from positive or negative DC.
- c) These switches determine whether the override timer (details below) is assigned (or not) to each bank of inputs, further holding off the operation of their respective LEDs and alarm outputs.
- d) These switches set the operation type of each bank of inputs:-
 'Alarm' sets each bank to act as a 4 channel, first out and latching alarm system. The first fault received is displayed and latched on (even if that bank's enable terminal is subsequently made open circuit). The A800 ignores any input on that bank which subsequently becomes active.

If set to 'alert', the 4 LEDs mimic the state of the inputs. One or more LEDs may light at any one time and will self-reset when the respective input becomes inactive.

Located next to the 10 DIL switches, potentiometer VR1 sets the alarm 'override' time between 3 and 60 seconds. The timer is triggered when positive DC is applied to pin 12, but may be used to further hold off the operation of either bank A or bank B inputs, as detailed in c) above.

How to order

Stock no. Model, description

76.70.0087 A800/000 standard model, red LEDs

Special variations on LED colours, labelling and configuration are available for volume orders.



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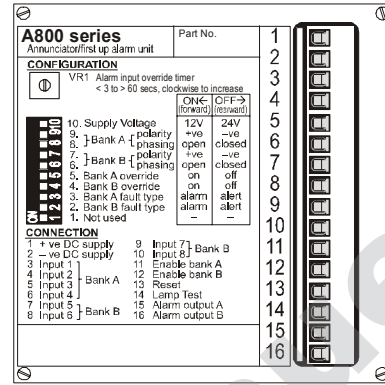
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In order to consistently bring you the highest quality, full featured products, we reserve the right to change our specifications and designs at any time.

Rear facia and electrical connection



Pin Function

- 1 Positive DC power supply
- 2 Negative DC power supply
- 3 - 6 Input channels 1 - 4 (Bank A)
- 7 - 10 Input channels 5 - 8 (Bank B)

Connect these inputs to the remote status or fault contacts. Set internal switches 6 - 9 (as shown left) to match the active contact state (open or closed, to/from positive or negative DC).

- 11 Enable Bank A
- 12 Enable Bank B & Override Timer

Connection to positive DC enables the operation of each bank of inputs. Applying positive DC to pin 12 also initiates the alarm override timer, which can be used to further hold off the operation of either bank (note c left).

- 13 Reset

Connect this pin to negative DC to reset the alarm inputs (e.g. after a latching fault)

- 14 Lamp Test

Connect this pin to negative DC to test all LEDs.

- 15 Alarm Output A

- 16 Alarm Output B

These are negative DC (open collector transistor) outputs, each of which activates when the A800 detects that one or more of the respective bank's inputs is active. The outputs may be commoned together or used separately to drive a relay coil or other alarm circuit.

Typical connection (with Murphy AS705/710)

