ME0456 4100U AS1668 Fan Control Module Installation Instructions

Overview

The ME0456 is a 4100U style Switch/LED display module designed specifically for fan control. It complies with the requirements of AS1668.1-1998. It has a rotary switch and 3 LEDs for each of 4 fans. In order to accommodate the rotary switches, the front plate is joggled forward so that it protrudes through the trim.

It is purchased under part number ME0456.

Kit Contents

This kit contains:
2 x FA2651, 8U and 15U Cabinet Spacer Brackets,
1 x LB0605, Set Of 6 Zone Label Cards,
1 x LT0386, These Installation Instructions,
1 x ME0456, Fan Control Module,
2 x NT0034, 6/32 UNC Nuts,
2 x SC0176, M4 x 10 Screws,
1 x SX0039, 26W FRC, 2" Long,
1 x SX0053, 26W FRC, 34" Long,
4 x SX0132, 6/32 UNC M/F Barrel Nuts,
2 x WA0011, M4 Shake Proof Washers.

Labelling

The Fan Control switch positions of ON, AUTO and OFF, are permanently marked on the faceplate label, as required by AS1668.1.

The labelling of the LEDs, ON, FLT, and OFF, is marked on the removable fan name label card, LB0605, supplied with the module. The name area accommodates 3 rows of 6 letters at 5mm height.

The card may be reversed and different LED labelling used, e.g, for damper controls.

A "soft" version of this label is available as LB0605. This template allows entry of the fan name on a PC for local printing. The LED names may also be revised.

Mounting & Connection

The Fan Control module mounts to the frame of the 4100U Expansion bay door from the front, in a similar fashion to display modules. Mounting nuts and washers are included.

The Fan Control module can also mount in a 4100ES 7U Display Door (4100-KT0549 or 4100-ME0499) as detailed in LT0570. The Display Door mounts directly to the rack cabinet, and doesn't require an equipment bay for support.

If mounting a Fan Control module in a 4100ES 7U Display Door , which is mounted in a 8U or 15U Panel, the module will need to be spaced off the 7U Display Door with 2 Spacer Brackets. These are supplied as part of a 4100-ME0456. Refer to Fig. 2 for 8U or 15U Panel mounting details.

Connection from "Out" of the adjacent Switch/LED module (or 64/64 Controller if it is the first module on that Controller) to "In" on the module is by the flat flexible cable provided (166-226).

Programming

The Module is programmed as a standard 8 Switch/16 LED module. Up to 4 can be driven by one 64/64 Switch/LED Controller.

Each fan control with one rotary switch uses two of the 8 "switches", and 3 of the 16 LEDs of an 8 Switch/16 LED module as per Table 1. The other 4 LEDs

are not fitted so must not be programmed.

Table 1. Switch/LED Format

Fan Control	Switches	LEDs		
		ON	FLT	OFF
1	SW1, SW2	LD1	LD2	LD3
2	SW3, SW4	LD5	LD6	LD7
3	SW5, SW6	LD9	LD10	LD11
4	SW7, SW8	LD13	LD14	LD15

The switch functions for Fan Control 1 are shown in Table 2. The state with both switches closed is not physically achievable.

Table 2. Switch Status

SW1	SW2	Control Status
Closed (up)	Open (centre)	On
Open (centre)	Closed (up)	Off
Open (centre)	Open (centre)	Auto

Figure 1. Fan Control Module

6/32 UNC M/F HEX
BARREL NUT

LED / SWITCH
CONTROLLER

FAN
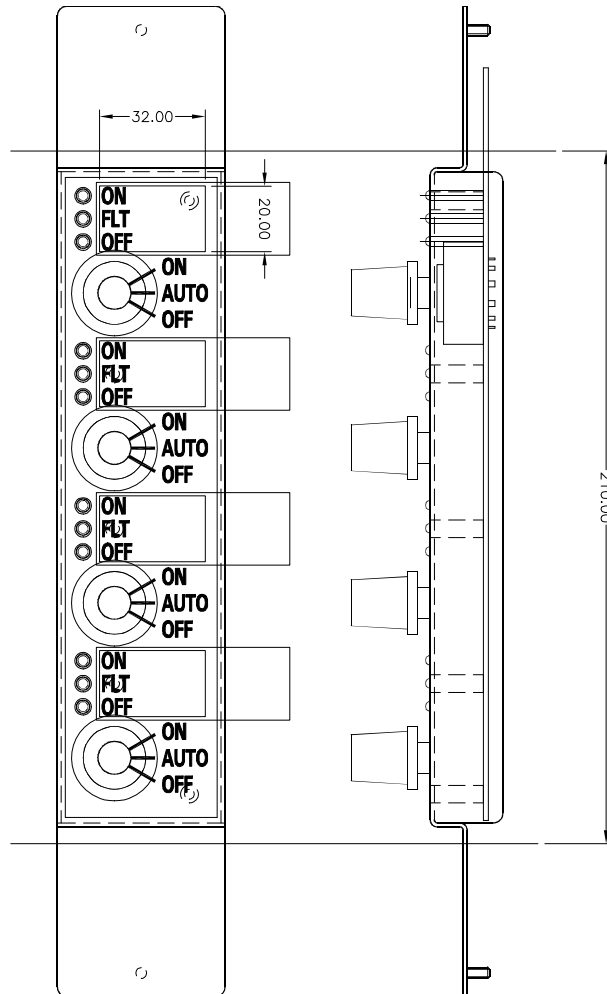CONTROL
MODULE

SPACER
BRACKET
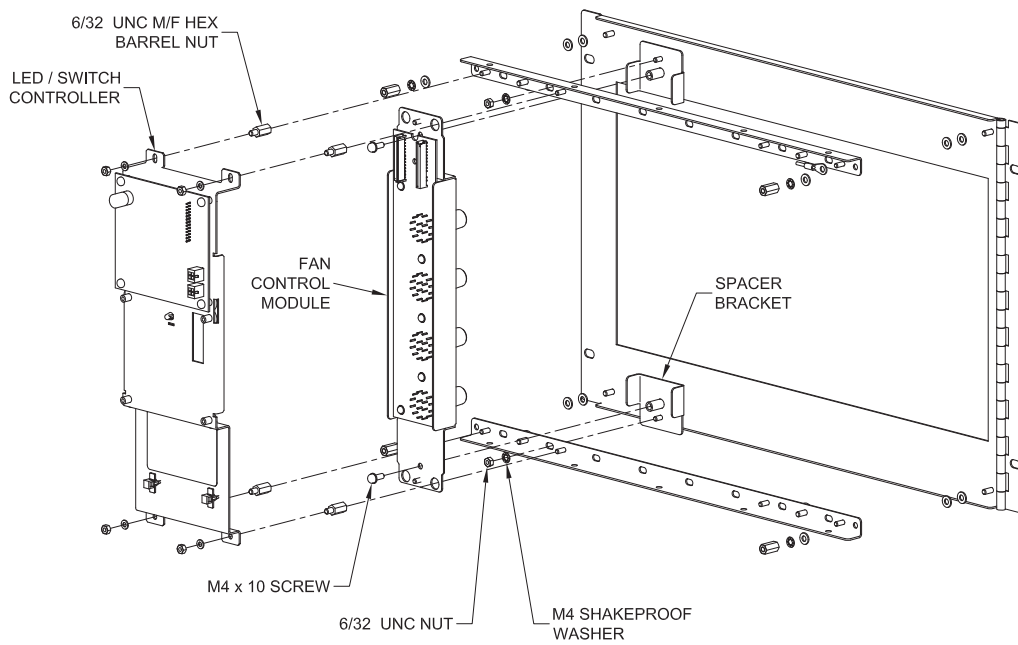
M4 x 10 SCREW

6/32 UNC NUT

M4 SHAKEPROOF
WASHER

Figure 2. Mounting a Fan Control Module and LED/Switch Controller on
4100-KT0549 7U display door in a 8U or 15U cabinet