



Installation Manual

AIS 240B-35



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Record of Revisions

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SECTION 1

GENERAL DESCRIPTION

1.1 Introduction

This Manual describes the installation of the AIS 240B-35 Switching Module. It is intended for use by FAA certified repair stations and original equipment manufacturers (OEM's) to install the units and includes both mechanical and electrical installation information. The installer should insure that the Switching Modules are operating according to their intended function.

1.2 Product Description

The AIS 240B-35 is a 24 pole signal level switching units. The contact switching rating is limited by the circuit board track current capacity to 1.0 Amps.

1.2.1 Product Variations

The Model AIS 240B-35, Sandia Part Number 306434-00 is a replacement for the AIS 240-35 and AIS 240A-35. It uses 12 relays in a series/parallel arrangement to provide the same 24 poles of switching. While the mechanical package and installation of the AIS 240B is identical to the AIS 240-35 and AIS 240A, there is a slight weight variation. See the physical Characteristics for the weight of each unit.

1.3 Technical Characteristics

1.3.1 Physical Characteristics

Length	5.13"
Width	3.46"
Height	1.20"
Weight	0.61 lb.

1.3.2 Electrical Characteristics

Operating Voltage	28 Vdc
Current	160mA (All Relays Engaged)
Max Operating Temp.	-20°C to +55°C
Max Operating Altitude	50,000 ft.
Contact Rating	1.0 A @30 Vdc

1.4 Certification

FAA-PMA Pending

SECTION 2

INSTALLATION CONSIDERATIONS

2.1 Introduction

The AIS 240B-35 has been designed to provide 24 poles of signal level switching.

2.2 Mounting

The AIS 240B-35 can be mounted in any axis either inside or outside the pressure vessel. It is mounted with 4 each number six or eight mounting screws (not provided).

2.3 Cooling

The AIS 240B-35 does not require external cooling.

2.4 Electrical

The AIS 240B-35 operates on 18 to 32.0 Vdc. The AIS 240B-35 is supplied with a 78 pin Sub-D connector, Sandia Part Number 204508-1 and 80 crimp contacts, Sandia Part Number 305070. Extra pins can be discarded upon completion of the installation. Power and ground wires should be #22 AWG or larger.

SECTION 3

INSTALLATION PROCEDURES

3.1 General

The AIS 240B-35 is supplied with a 78 pin Sub D mounting connector and 80 crimp style contacts. The AIS 240B-35 is hard mounted in any axis using four (4) number 6 or 8 screws.

3.2 Equipment Required

3.2.1 Supplied

Model AIS 240B-35, Sandia Part Number 306434-00

Electrical Installation Kit Sandia Part Number 305552-00. The installer may also use the manufacturer's part in lieu of the Sandia Part. The Manufacturer and their part number(s) are listed below along with the Sandia Part Numbers.

1 each 204508-1 Connector Housing (AMP/TYCO P/N 204508-1)

1 each 305055 Connector Clamp (AMP/TYCO 1-5207908-3)

80 each 305070 Crimp Contacts (AMP/TYCO P/N 204351-1)

3.2.2 Required But Not Supplied

Four (4) Number 6 or Number 8 or equivalent mounting screws.

3.3 Mounting

The AIS 240B-35 mount with four (4) Number 6, 8 or equivalent machine screws in the four holes in the unit's mounting flanges.

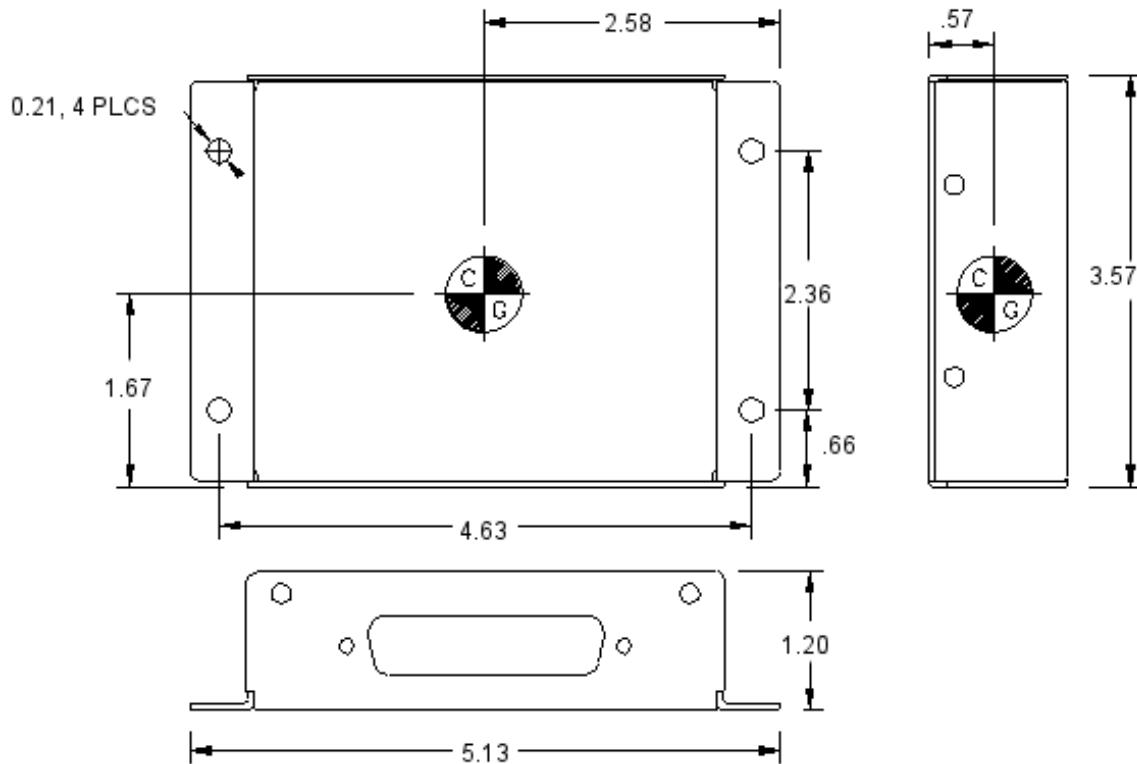


Figure 3-1
Mounting Dimensions

3.4 Electrical

The AIS 240B-35 uses 28 Vdc relays for the control HI input and a Control low for activation of the relays.

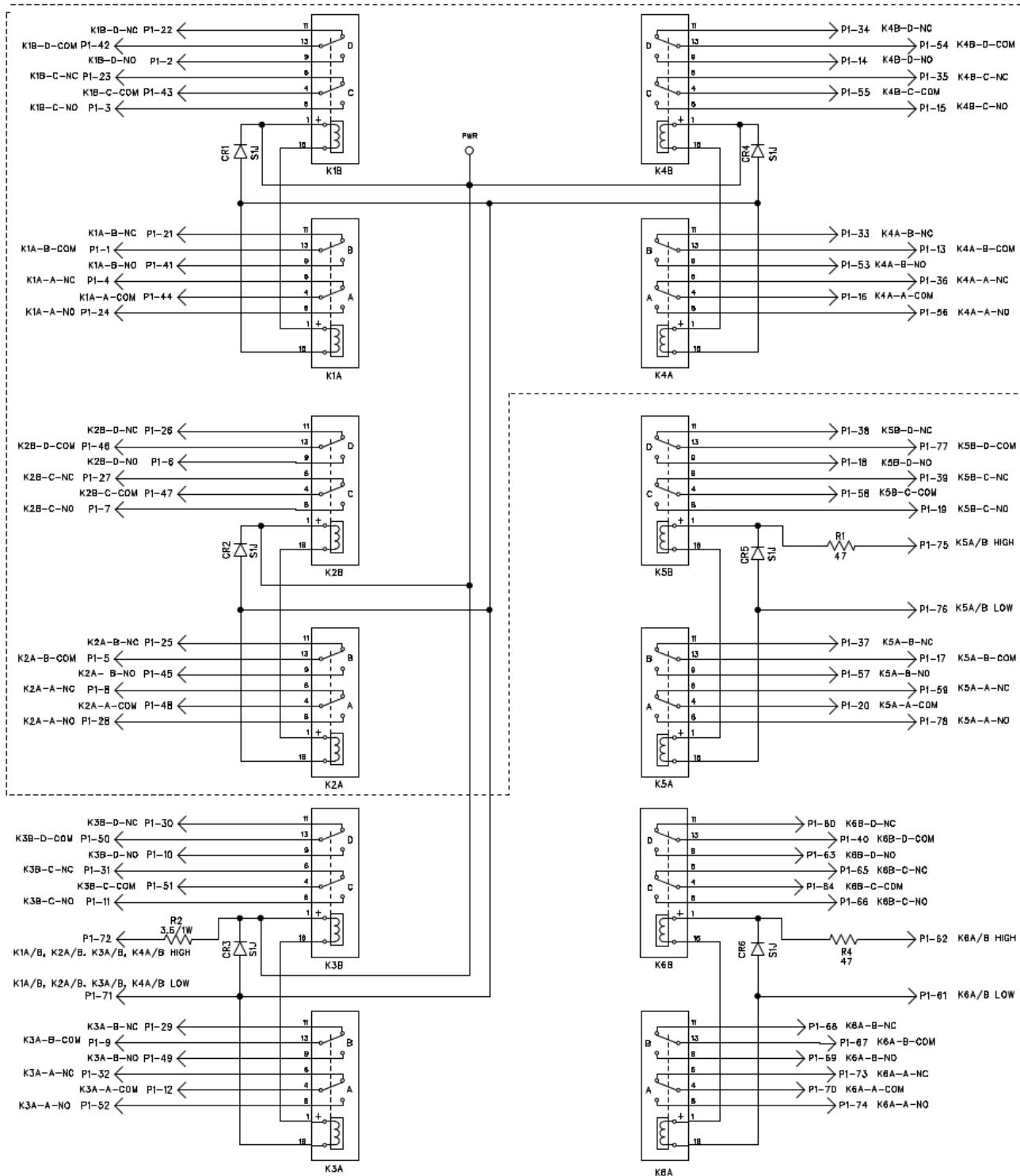


Figure 3-2
AIS 240B-35 Schematic and Pin Out

3.5 Operating Instructions and Limitations

Refer to the equipment being switched for operation and Limitations.

3.6 Calibration

No calibration is required

3.7 Continued Airworthiness

Maintenance of the AIS 240B-35 is on condition only. No scheduled maintenance is required.