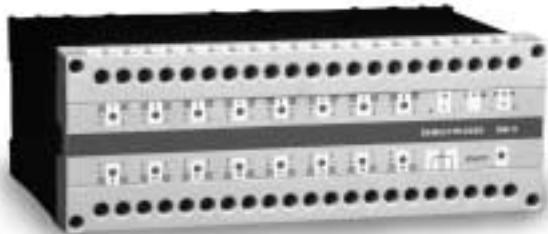




User's Guide



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DRA-DM-11
DEMULTIPLEXER UNIT FOR DRA-MDM-11 MUX/DEMUX SYSTEM



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1. GENERAL DESCRIPTION

The DRA-DM-11 is the de-multiplexer unit of DRA-MDM-11, Mux/deMux system. The DRA-DM-11 unit receives the DRA-M-11 multiplexed current loop output, and generates 16 current loop outputs having the same magnitude and order as input to the DRA-M-11 unit.

The DRA-DM-11 is equipped with an alarm feature which is displayed through a flashing LED and a dry contact for external activation. The alarm will be turned on whenever an interruption occurs in the communication leads.

Each current loop output is equipped with a LED indicator which lights only when the current loop is closed.

2. MOUNTING INSTRUCTIONS

The DRA-DM-11 is designed for standard DIN rail mounting.

Place the unit on the upper part of the mounting rail with the fastening tab facing down. Using a suitable flat screwdriver loosen the tab slightly and attach the unit to the rail. Once the tab is loosened, ensure that the unit is fastened securely in place.

3. REPLACING FUSES

To replace a blown fuse, disassemble the unit as follows:

3.1 Take off both terminal strips by removing the four screws at the edges.

Note : This action does not require disconnecting the cables connected to the strips.

3.2 Remove the front panel using a suitable flat screwdriver. Press down gently on the plastic springloaded tabs located in the slots on either side of the unit.

3.3 Disconnect the flat connectors which connect the front panel, printed circuit.

3.4 Replace the blown fuse.

WARNING: Never install a data input fuse rated more than 100mA, and a main fuse rated more than 800mA

4. ASSEMBLING THE UNIT

The DRA-DM-11 unit includes two printed circuit cards designated as P.N 7052 and P.N 7053.

The printed circuit cards should occupy the slots in the enclosure according to fig1.

Connect the flat cables between the printed circuit cards and the front panel.

The front panel must be inserted into the grooves on both sides of the case while pressing down until a distinct "click" is heard. Assembly is completed by laying the terminal strips in place.

Note: The terminal strips are polarized and must not be placed backwards.

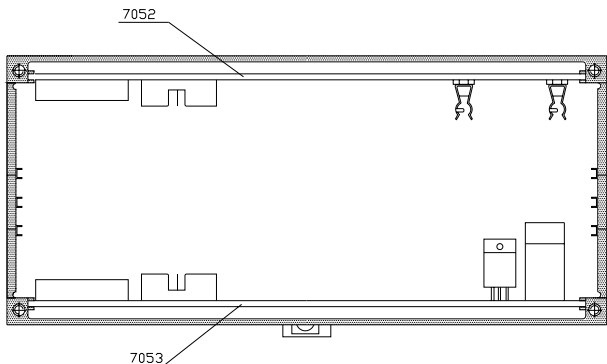


Figure 1

5. DISTANCE SETTING

The DRA-DM-11 scan rate depends on the distance between the multiplexer and the de-multiplexer. There are three jumper switches marked as 500,1Km,2Km on the printed circuit 7052; set the jumper to the proper distance selector.

6. ALARM

The DRA-DM-11 alerts by flashing the Alarm LED and by activating the Alarm relay, whenever there is any interruption in the communication.

The interrupt can occur due to disconnection or short-circuiting of the connection wires, or due to failure of the DRA-M-11 power supply.

When the failure is corrected, the Alarm flashing LED will turn off and the relay will release.

7. CONNECTING THE DRA-DM-11 TO DRA-M-11

The DRA-DM-11 is connected to the DRA-M-11 by a twisted pair of leads. In a hostile environment, a shielded cable is recommended.

To avoid ground-loop problems it is recommended to use a floating power supply and to ground, if necessary, the negative terminal of the DRA-DM-11 power supply.

Connection Diagram

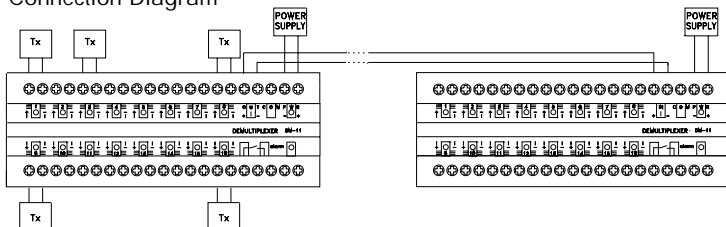


Figure 2

8. SPECIFICATIONS

INPUT

OUTPUTS

Accuracy (Refer to Current Input)

Scan rates:

500m:

1Km:

2Km:

ALARM

Contact rating

INDICATORS

SUPPLY

Supply Voltage

Supply Current Consumption

FUSES

Main Fuse

Analog Input Fuse

TEMPERATURE

Operating

Storage

HUMIDITY

HOUSING

Box

Terminals

WEIGHT

DIMENSIONS

Multiplexed current loop

16, 0/4-20mA current loops

$\pm 0.1\%$ typical, maximum $\pm 0.25\%$ of span

Aprox. 1000 ch/sec.

Aprox. 500 ch/sec.

Aprox. 250 ch/sec.

Dry contact (closed in an alarm)

1A at 230Vac max.

1 Yellow LED, Power-On indicator

16 Red LEDs, current output activity indicators

1 Red Alarm LED

$24 \pm 10\%$ Vdc (regulated)

500mA

630mA, Fast Blow (5x20mm)

63mA, Fast Blow (5x20mm)

0 to 70°C (32 to 158°F)

-25 to $+85^{\circ}\text{C}$ (-13 to 185°F)

5 to 95% Relative humidity, non condensed

Plastic Polycarbonate

According to IP50 DIN 40050

According to IP20 DIN 40050

0.6 Kg. (1.5 lb.)

73Hx200Wx121mmD (2.88"x7.88"4.76")

WARRANTY/DISCLAIMER

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FOR WARRANTY RETURNS, please have the following information available BEFORE contacting OMEGA:

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2. Model and serial number of the product under warranty, and
3. Repair instructions and/or specific problems relative to the product.

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3. Repair instructions and/or specific problems relative to the product.

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