

INSTALLATION INSTRUCTIONS FOR THE

FDVMD100 INPUT DIN RAIL MODULE, FDVMDC100, FDVMD120 OUTPUT DIN RAIL MODULES, FDVMDIC100 AND FDVMDIC120 INPUT / OUTPUT DIN RAIL MODULES



This manual is intended as a quick reference installation guide. Please refer to the manufacturer's control panel installation manual for detailed system information.

GENERAL DESCRIPTION

The DIN rail module series is a family of microprocessor controlled interface devices permitting the monitoring and/or control of auxiliary devices. The digital communication protocol utilised by the monitoring control panel provides for high rates of information exchange in combination with particular features that ensure fast and secure responses. LED indicators (red, green, yellow) are activated by the control panel. The DIN rail modules are powered by the loop.

SHORT CIRCUIT ISOLATORS

All series DIN rail modules are provided with short-circuit monitoring isolators installed on the intelligent loop circuitry and can be activated by the control panel.

INSTALLATION

The DIN rail modules must be used in combination with compatible control panels employing the communication protocol for monitoring and control. The location of DIN rail modules should follow recognised national or international installation codes of practice. Connections to the terminals are polarity sensitive thus, please, check them by referring to the wiring diagrams and tables for each model. DIN rail Modules are provided with female terminal blocks, a 27 Kohm end of line resistor and a 10 Kohm alarm resistor, depending on the model.

COMMON TECHNICAL SPECIFICATIONS

Loop's voltage range	From 15 V (min) to 40 V (max)
Average current consumption	120 uA (@ 24 V)
LED's current consumption	6 mA (@ 24 V)
Operating temperature range	From -30 °C (min) to +70 °C (max)
Humidity	95% RH (no condensation)
Dimensions	79 x 90,5 x 25 mm
Weight	80 grams
Maximum wire gauge	2.5 mm ²

CAUTION

Disconnect loop power before installing the DIN rail modules.



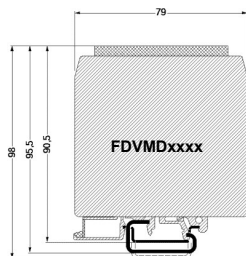
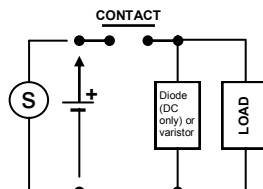
CAUTION

Electrostatic Sensitive Device.

Observe precautions when handling and making connections.

WARNING

When switching an inductive load, in order to protect the DIN rail module from surges caused by counter-EMF, it is important to protect the relay contacts. A diode with a reverse breakdown voltage of at least ten times the circuit voltage (DC applications only) or a varistor (AC or DC applications) should be connected in parallel to the load.



SETTING THE ADDRESS

DIN rail modules can be addressed by using a special hand-held programming unit (FDP100). Addresses may be selected over the range from 1 to 240, although, of course, each device on the loop must have a unique address.

- Connect the programmer to the module using the proper cable (refer to the FDP100 instruction manual).
- After installing all DIN rail modules and other loop devices, apply power to the loop in accordance with the panel's installation instructions.

The input / output DIN rail module holds two addresses. The address assigned by the FDP100 always relates to the input channel; the output channel is automatically assigned the consecutive address.

DEVICE'S MOUNTING

According to local electrical regulations, mount firmly the device onto the destination supporting DIN rail.

MAINTENANCE

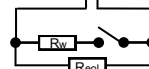
Test the DIN rail modules periodically according to local codes of practice. Those devices contain no serviceable part, so, should a fault develop, return them to your system supplier for exchange or disposal, according to warranty conditions.

INPUT module



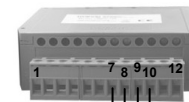
The FDVMD100 single channel supervised input DIN rail module provides monitoring of normally open contact fire alarm and supervisory devices.

End of line resistor (R_{eol}): 27 Kohm.
Alarm resistor (R_w): 10 Kohm.



Terminal	Description
1	Loop line IN (+)
2	Loop line OUT (+)
3	Loop line IN (-)
4	Loop line OUT (-)
5	Input (+)
6	Input (-)
7	Not used
8	Not used
9	Not used
10	Not used
11	Not used
12	Not used

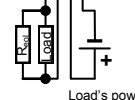
OUTPUT supervised module



The FDVMDC100 single channel supervised output DIN rail module provides control, by closing contacts, of auxiliary devices such as fire shutters.

End of line resistor (R_{eol}): 27 Kohm.

Relay contact ratings are:
30 V_{ac}, 2 A or 30 V_{ac}, 2 A (resistive load).



Load's power

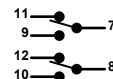
Terminal	Description
1	Loop line IN (+)
2	Loop line OUT (+)
3	Loop line IN (-)
4	Loop line OUT (-)
5	Not used
6	Not used
7	Load (+)
8	Load (-)
9	Load power (+)
10	Load power (-)
11	Not used
12	Not used

OUTPUT free contacts module



The FDVMDIC120 single channel relay output DIN rail module provides pole changeover contacts for the control of auxiliary devices such as fire shutters.

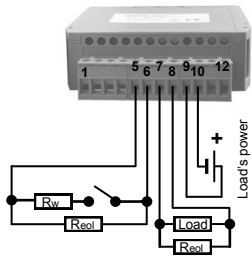
Relay contact ratings are:
30 V_{ac}, 2 A or 30 V_{ac}, 2 A (resistive load).



Terminal	Description
1	Loop line IN (+)
2	Loop line OUT (+)
3	Loop line IN (-)
4	Loop line OUT (-)
5	Not used
6	Not used
7	Common 1
8	Common 2
9	Normally open 1
10	Normally open 2
11	Normally closed 1
12	Normally closed 2

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INPUT / OUTPUT supervised module



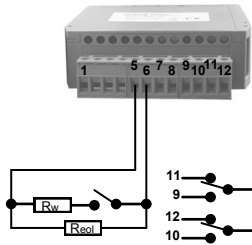
The **FDVMDIC100** input and output supervised DIN rail module combine in a single device supervised input and output characteristics.

End of line resistor (R_{eol}):27 Kohm.
Alarm resistor (R_w):10 Kohm.

Relay contact ratings are:
30 V_{dc}, 2 A or 30 V_{ac}, 2 A
(resistive load).

Terminal	Description
1	Loop line IN (+)
2	Loop line OUT (+)
3	Loop line IN (-)
4	Loop line OUT (-)
5	Input (+)
6	Input (-)
7	Load (+)
8	Load (-)
9	Load power (+)
10	Load power (-)
11	Not used
12	Not used

INPUT / OUTPUT free contacts module



The **FDVMDIC120** input and output free contacts DIN rail module combine in a single device supervised input and relay output characteristics.

End of line resistor (R_{eol}):27 Kohm.
Alarm resistor (R_w):10 Kohm.

Relay contact ratings are:
30 V_{dc}, 2 A or 30 V_{ac}, 2 A
(resistive load).

Terminal	Description
1	Loop line IN (+)
2	Loop line OUT (+)
3	Loop line IN (-)
4	Loop line OUT (-)
5	Input (+)
6	Input (-)
7	Common 1
8	Common 2
9	Normally open 1
10	Normally open 2
11	Normally closed 1
12	Normally closed 2



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BS EN 54-17, BS EN 54-18

Supervised input DIN rail module - FDVMDI100

Supervised output DIN rail module - FDVMDIC100

Form C contacts output DIN rail module - FDVMDIC120

Supervised I/O DIN rail module - FDVMDIC100

Form C contacts I/O DIN rail module - FDVMDIC120