

TECHNICAL SPECIFICATION

System Compatibility:	Use only with FC Fire Alarm Controllers
Environment:	Indoor Application only
Operating Temperature:	-25° to +70°C
Storage Temperature:	-40° to +80°C
Operating Humidity:	Up to 95% non-condensing
Dimensions (HWD):	
Module:	26.5 x 42 x 74 mm
Electrical Characteristics:	
Input Voltages:	24V dc, 24V ac, 120V ac, 240V ac
Contact Rating:	8A @ 28V dc 10A @ 28V ac and 120V ac 5A @ 240V ac (resistive)

Electromagnetic Compatibility

The HVR800 complies with the following:
Product family standard EN50130-4 in respect of Conducted Disturbances, Radiated Immunity, Electrostatic Discharge, Fast Transients and Slow High Energy
EN61000-6-3 for emissions

INTRODUCTION

This document refers to HVR800s with a manufacturing date code of 43-03 or later. When used with a FC410RIM, FC410RIM PCB must be Issue 9 or later.

The HVR800 High Voltage Relay Interface is a non-addressable multi-voltage relay module (operating from 24V dc, 24V ac, 120V ac and 240V ac). The encapsulated HVR800 provides a 10 amp volt-free contact that can be used to extend the contact ratings of FC410RIM Addressable Relay Module applications.

A maximum of four HVR800s can be individually driven and controlled by an FC410MIO Small Addressable Multi-Input/Output module if all HVR800s are powered by 120V ac or 240V ac.

For ac operation, no external dc power supply unit is required to operate the relay.

When used to switch 24V dc, the HVR800 must be provided with an external 24V dc supply which should be switched through the clean relay contacts of an FC410MIO or FC410RIM

FEATURES

The HVR800 is contained on a single-sided printed circuit board, which is fitted to a plastic tray and then potted (as Fig. 1).

MOUNTING

The HVR800 may be mounted in any suitable electrical box. Terminal blocks complying with the EC Low Voltage Directive must be used when 120V ac and 240V ac voltages are used. A warning label must be fitted to the electrical box and FC410RIM when mains voltages are used.

In all 24V dc and 24V ac applications, all unused HVR800 wires must be individually isolated and insulated to prevent the risk of electrical shorting.

⚠ WARNING:

IN 120V AC AND 240V AC APPLICATIONS, MAINS VOLTAGES (120V AC OR 240V AC) WILL BE PRESENT ON SOME OF THE UNUSED WIRES. IN ALL THESE APPLICATIONS ALL UNUSED HVR800 WIRES MUST BE INDIVIDUALLY ISOLATED AND INSULATED TO PREVENT RISK OF ELECTRICAL SHORTING AND ELECTRIC SHOCK.

CABLING

An approved low voltage terminal block must be used. Unused wires must be terminated in an approved manner.

WIRING NOTES

- 1) There are no user-required settings (such as switches or headers) on the HVR800.
- 2) All wiring must conform to the applicable standards.
- 3) All conductors to be free of earths.
- 4) For typical wiring configuration, see Figures 2 to 6.
- 5) The GRY and PNK driver 'O' wires on the HVR800 must not be used in 24V dc and 24V ac applications.
- 6) The HVR800 must be mounted adjacent the FC410MIO or FC410RIM. The maximum cable length can not be greater than 1 metre between the HVR800 and the FC410RIM/FC410MIO.

ORDERING INFORMATION

HVR800:	High Voltage Relay Interface
FC410RIM:	Relay Interface Module
FC410MIO:	Small Addressable Multi-Input/Output module

RECYCLING INFORMATION

Customers are recommended to dispose of their used equipments (panels, detectors, sirens, and other devices) in an environmentally sound manner. Potential methods include reuse of parts or whole products and recycling of products, components, and/or materials.

WASTE ELECTRICAL AND ELECTRONIC EQUIPMENT (WEEE)

DIRECTIVE

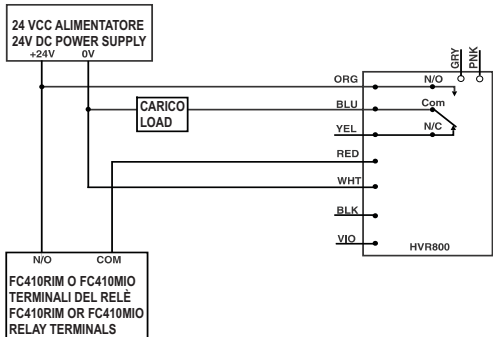


In the European Union, this label indicates that this product should NOT be disposed of with household waste. It should be deposited at an appropriate facility to enable recovery and recycling.

The manufacturer reserves the right to change the technical specifications of this product without prior notice.



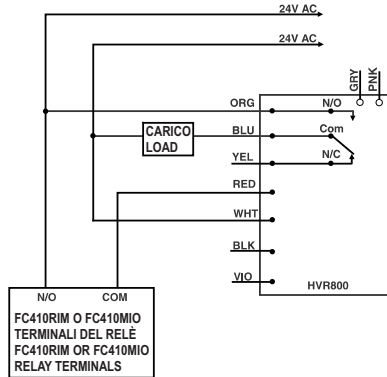
FIG. 1 HVR800 High Voltage Relay



NOTE:
1) TUTTI I COLLEGAMENTI NON UTILIZZATI DEL HVR800 DEVONO ESSERE ISOLATI INDIVIDUALMENTE PER EVITARE IL RISCHIO DI CORTOCIRCUITI ELETTRICI
2) COLLEGARE IL CARICO AL GIALLO PER NORMALMENTE 'ON'
3) IL GRIGIO E IL ROSA NON DEVONO ESSERE UTILIZZATI IN QUESTA APPLICAZIONE

NOTES:
1) ALL UNUSED HVR800 WIRES MUST BE INDIVIDUALLY ISOLATED AND INSULATED TO PREVENT THE RISK OF ELECTRICAL SHORTING
2) CONNECT LOAD WIRE TO YEL FOR A NORMALLY 'ON' LOAD
3) GRY AND PNK WIRES MUST NOT BE USED IN THIS APPLICATION

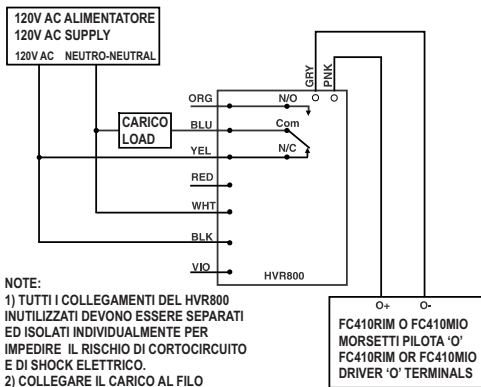
FIG. 2 HVR800 Applicazione 24 Vcc
HVR800 in 24V dc Application



NOTE:
1) TUTTI I COLLEGAMENTI NON UTILIZZATI DEL HVR800 DEVONO ESSERE ISOLATI INDIVIDUALMENTE PER EVITARE IL RISCHIO DI CORTOCIRCUITI ELETTRICI
2) COLLEGARE IL CARICO AL GIALLO PER NORMALMENTE 'ON'
3) IL GRIGIO E IL ROSA NON DEVONO ESSERE UTILIZZATI IN QUESTA APPLICAZIONE

NOTES:
1) ALL UNUSED HVR800 WIRES MUST BE INDIVIDUALLY ISOLATED AND INSULATED TO PREVENT THE RISK OF ELECTRICAL SHORTING
2) CONNECT LOAD WIRE TO YEL FOR A NORMALLY 'ON' LOAD
3) GRY AND PNK WIRES MUST NOT BE USED IN THIS APPLICATION

FIG. 3 HVR800 Applicazione 24 Vac
HVR800 in 24V ac Application



NOTE:
1) TUTTI I COLLEGAMENTI DEL HVR800 INUTILIZZATI DEVONO ESSERE SEPARATI ED ISOLATI INDIVIDUALMENTE PER IMPEDIRE IL RISCHIO DI CORTOCIRCUITO E DI SHOCK ELETTRICO.
2) COLLEGARE IL CARICO AL FILO ARANCIONE PER NORMALMENTE 'ON'

ATTENZIONE!

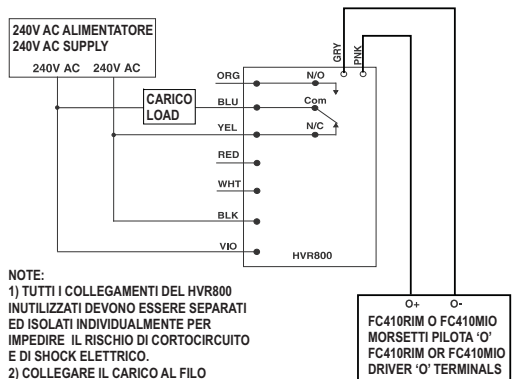
IN QUESTA APPLICAZIONE, 120V AC È PRESENTE SU ALCUNI DEI COLLEGAMENTI INUTILIZZATI DEL HVR800

NOTES:
1) ALL UNUSED HVR800 WIRES MUST BE INDIVIDUALLY ISOLATED AND INSULATED TO PREVENT THE RISK OF ELECTRICAL SHORTING AND ELECTRIC SHOCK.
2) CONNECT LOAD WIRE TO ORG FOR A NORMALLY 'ON' LOAD.

WARNING!

IN THIS APPLICATION, 120V AC WILL BE PRESENT ON SOME OF THE UNUSED WIRES ON THE HVR800

FIG. 4 HVR800 Applicazione 120 Vac
HVR800 in 120V ac Application



NOTE:
1) TUTTI I COLLEGAMENTI DEL HVR800 INUTILIZZATI DEVONO ESSERE SEPARATI ED ISOLATI INDIVIDUALMENTE PER IMPEDIRE IL RISCHIO DI CORTOCIRCUITO E DI SHOCK ELETTRICO.
2) COLLEGARE IL CARICO AL FILO ARANCIONE PER NORMALMENTE 'ON'

ATTENZIONE!

IN QUESTA APPLICAZIONE, 240V AC È PRESENTE SU ALCUNI DEI COLLEGAMENTI INUTILIZZATI DEL HVR800

NOTES:
1) ALL UNUSED HVR800 WIRES MUST BE INDIVIDUALLY ISOLATED AND INSULATED TO PREVENT THE RISK OF ELECTRICAL SHORTING AND ELECTRIC SHOCK.
2) CONNECT LOAD WIRE TO ORG FOR A NORMALLY 'ON' LOAD.

WARNING!

IN THIS APPLICATION, 240V AC WILL BE PRESENT ON SOME OF THE UNUSED WIRES ON THE HVR800

FIG. 5 HVR800 Applicazione 240 Vac
HVR800 in 240V ac Application

