

VFCI Volt-free contact interface

Overview

The VFCI has a 10A relay which is operated via an external volt-free contact.

This is useful for driving large loads from a low rated contact such as a Reed relay.

Applications include interfacing an Alphaglen Condensation detector to a large load



Specifications

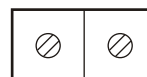
Operating characteristics	
Input signals	External volt-free contact
Output contact	10A (6A inductive) at 230VAC
Operating conditions	-10 to +40°C 0-90% RH (non-condensing)
Electrical specifications	
Supply voltage	24V AC or DC ±15%
Max operating current	30mA DC
Current to external contact	2mA typical
Terminal type	Rising cage connectors for 0.5-2.5mm ² cable
LED status	On when relay powered (option)
Installation category	IEC 664 Category II
Pollution degree	IEC 664 Degree 1
Mechanical details	
Dimensions	77 x 45 x 45mm
Mass	38g

Features

- 1 relay output
- input from volt-free contact
- Input sends current of ~ 2mA through external volt_free contact
- Relay is energised when external contact is closed
- 24V AC/DC powered
- LED status indication option
- DIN rail mounting

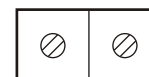
Connection diagrams

Power:



24V 0V
24V AC/DC Ground

VFC input

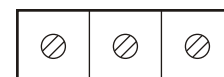


Both terminals to be connected to external contact

Note: VFC input terminals are not isolated from power inputs

Relay output:

NC NO C



Normally closed Normally open Common

Installation

- 1 The VFCI operates from a 24V AC/DC supply such as a 24V DC power supply or a 24V transformer
- 2 The relay output is Single Pole Changeover ie it can be wired as Normally Open or Normally Closed
- 3 Ensure that the PCB is not stressed when fitting to the DIN rail. If releasing from the DIN rail, use a flat bladed screwdriver to release the DIN clips

Safety

The VFCI must be installed only by a suitably qualified electrician and may not be safe if installed incorrectly. The VFCI must be used only in an installation which incorporates a switch or circuit breaker. Terminals must be disconnected from hazardous voltages before screwing or unscrewing. A 5A fuse on the 24V supply is recommended. When switching hazardous voltages, the VFCI must be mounted inside a cabinet and must not be accessible from the outside with a 100mm long probe

Cleaning

Under normal circumstances, relay modules should not require cleaning. However, they can be cleaned by disconnecting and wiping with isopropanol. They must be completely dry before reconnection

Alphaglen Laboratories Limited

Unit 13, Millbrook Business Park, Jarvis Brook, Crowborough, East Sussex TN6 3JZ, United Kingdom
Tel: 01892 664224 Email: info@alphaglen.co.uk Web: www.alphaglen.co.uk