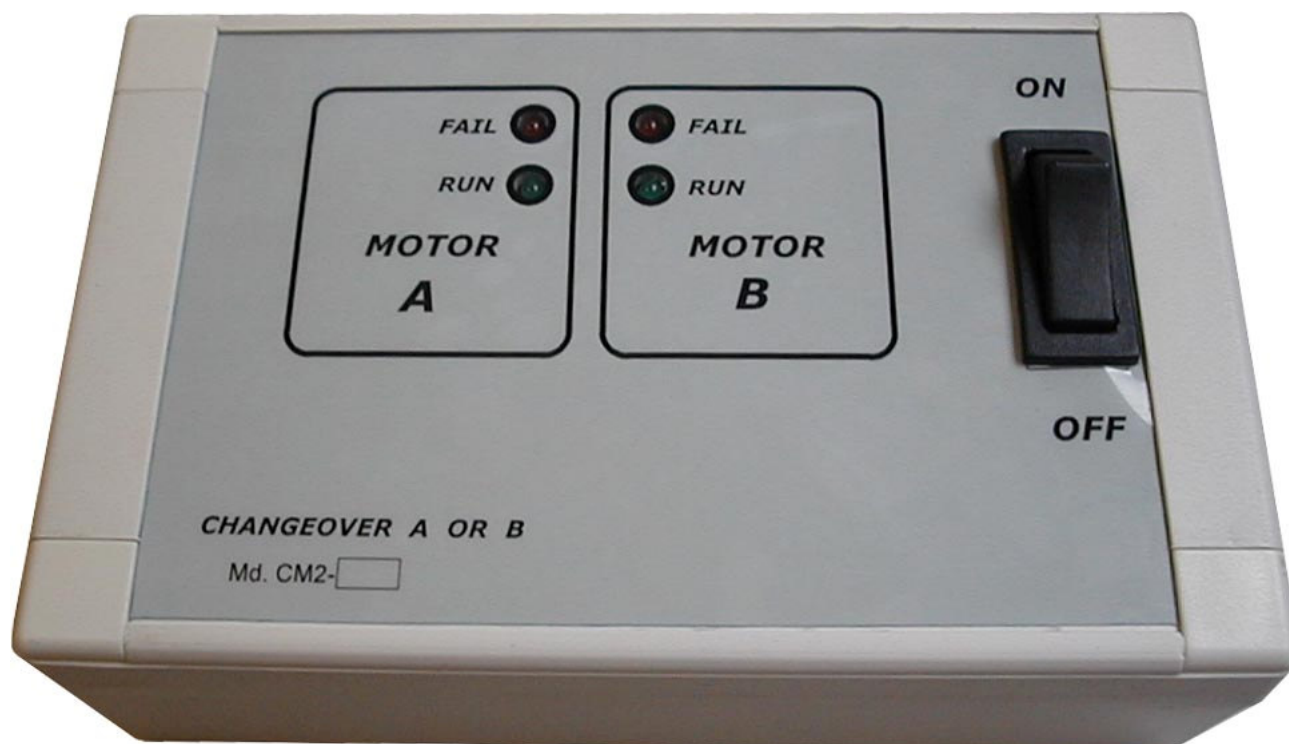


CHANGE-OVER CONTROLLER

Models: CM2-0 and CM2-1

SINGLE PHASE SWITCH FOR VENTILATION MOTORS IN HIGH AVAILABILITY SYSTEMS



DESCRIPTION

The CM-2 is a circuit designed for ventilation installations which, the lack of air can cause an important problem.

The system is based on the use of two fans; one of them is operating while the other one is on standby (A and B). It works detecting electric current or the air flow that the motor produces while working.

If one motor fails, a signal goes to the controller, to turn on the reserve motor.

With the aim of balancing the decline of power of both motors, the option exists for making them work in alternate mode on cycles of the same duration, from four minutes to 24 hours.

The option also exists of making them work with no cycle; if after checking the motor A for 30 seconds, and this one works correctly, it automatically changes to B and remains on this state permanently.

The system has status indicators on the control panel and it also has a failure output indicator (optional on the model CM2-1) to indicate the failure of one of the motors, both, or the lack of tension on that part, through insulated relay contacts.

FUNCTIONS

- Detection of failure to the power supply
- Detection of failure to the air flow switch
- Eight preset of times for changing between fans A-B, B-A, adjustable (with bridges JP1)
- Two ways of operating,, with changing cycle, or without changing cycle , (to configure through bridge JP2)
- Able to be used with speed regulator
- Main switch to 16 Amp. Uni-polar to cut off the Live supply to the motors
- Protection Fuse against short circuit
- Status indicators through four LEDS
- A or B output signal failures through insulated relay contacts of 10 Amp
- Protection of the input of the air flow switch, against excess of current (bypassed to ground of the switch)
- Protector of the current detector, (through short circuits of the motors)
- Protection of excess of voltage in line with (voltage 250V. 20 Amp.)
- Diagnosis to start the motors A and B.

ATTENTION:

This device, connected to the main power supply can endanger the life of people by electrocution, so please any alterations to be carried out by qualified personnel.



DO NOT HANDLE THE EQUIPMENT WITH THE TENSION CONNECTED

INSTALLATION

The installation will be done according to the current regulations and to the low tension electro technical rules, with the cable sections and appropriated insulation.

Warning: The circuit and all its components are connected to the current voltage, directly to the terminal 6 of the terminal plate that correspond to the neutral, it is important that this connection correspond to the real Neutral of the main., to avoid possible electrical discharges and a bad functioning of the equipment.

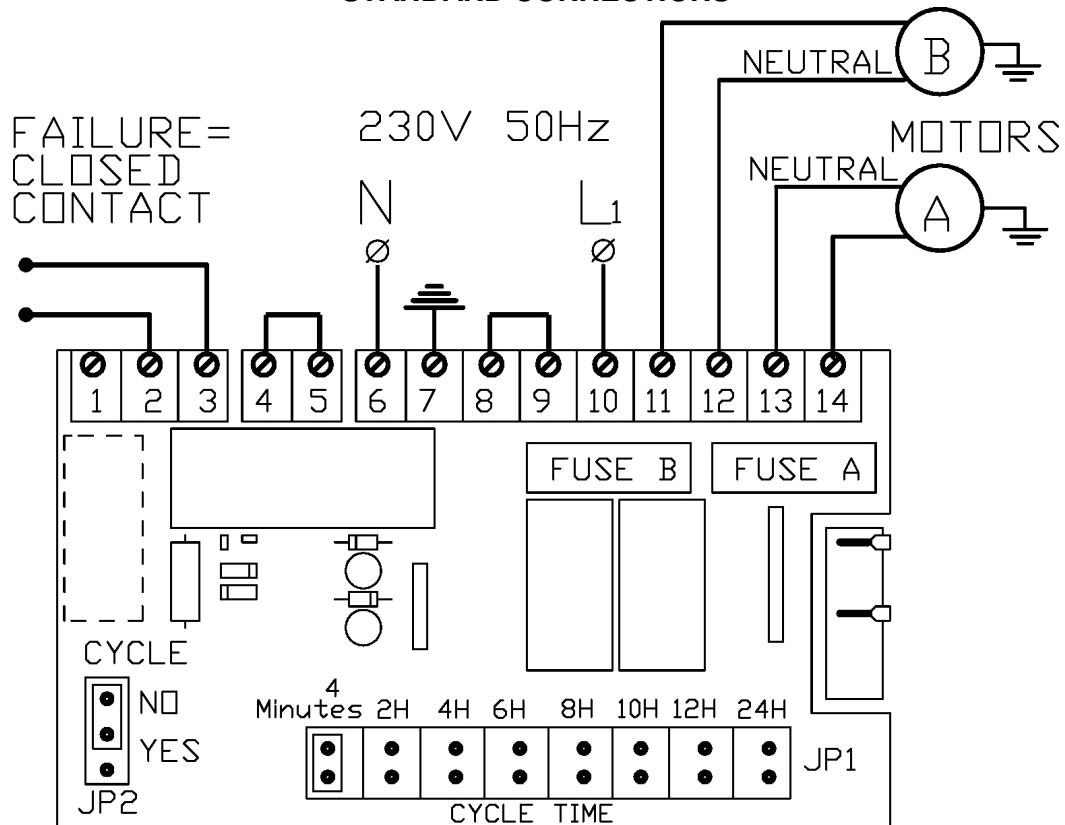
The ON switch is uni-polar and it only cuts the line live supply.

The flow switch entrances are at mains potential.

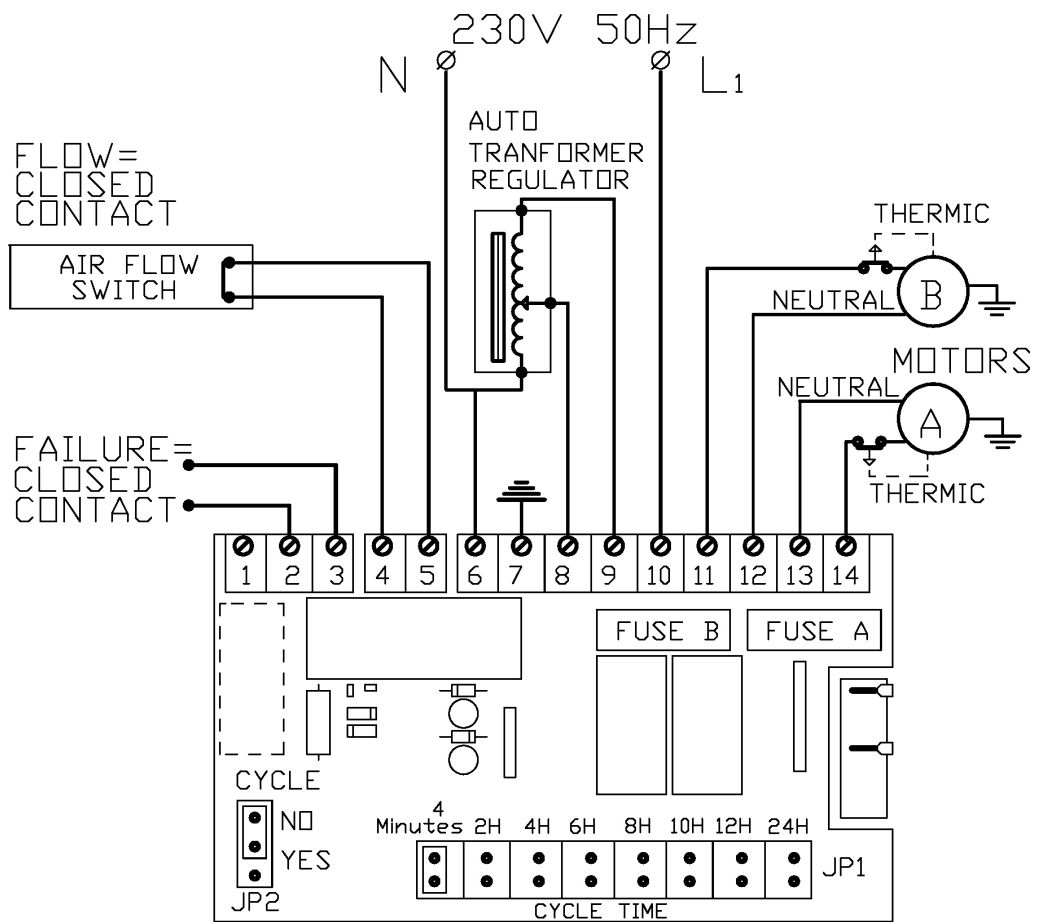
Do not make any adjustments with the tension connected, to avoid discharges or damages to the equipment.

CONNECTIONS

STANDARD CONNECTIONS



CONNECTIONS WITH SPEED REGULATION, THERMAL AND FLOW SWITCH



ELECTRICAL CHARACTERISTICS

Input voltage180V-250V.50Hz.
Max. Charge Intensity..... 8Amp
Min. Charge Intensity.....0.1Amp
Working Temperature.....-10°C to + 50°C
Protection degreeIP 40
Weight.....280gm
Dimensions.....145x90x45mm

CONFORMITY CERTIFICATE

RoHS.

We certificate that the CM2-0 and CM2-1 fulfils the European Standard with respect to its construction in dangerous substances.

EMC.

ELECTROMAGNETIC COMPATIBILITY

We certificate that the CM2-0 and the CM2-1 fulfils the Standard EMC current regulation.

EN61000-3-2
EN61000-3-3
EN50082-1
EN50081-1