INSTRUCTION MANUAL

IM670-U-M v0.2



COMPALARM C2C ALARM ANNUNCIATOR

DESCRIPTION

- Compact alarm system, with a basic module of 12 signals
- Multiple modules coupling possibility
- Easy printing of the alarm points description
- Optoisolated inputs for 24÷250V, NO or NC contacts, which can be set point by point
- Alarm sequences can be easily configured according to ISA specifications
- Easy and fast programming by dipswitches
- "First out" feature for recognizing the first tripped alarm
- Serial port communication RS485
- High safety and reliability

C2C is suitable for connection of 12 inputs from normally open or normally closed contacts. One basic set available each with up to operating sequences can be easily configured according to ISA specifications.

C2C is a compact device, all microprocessor based logic is embedded in the display unit. Alarm status are displayed by means of hi brightness, maintenance red led.

A printed paper sheet can hold alarm associated text, placed under the front panel polyester foil and retained by an easily removable frame.

WIRING

110V or 230V alternating current or 90÷260V alternating or direct current must be provided with correct connection for main power supply type 20÷60V alternating or direct current must be provided with correct connection for low voltage supply type. Inputs are optoisolated from power supply and available for different voltages, allowing both direct or alternating current supply. Relays outputs available like independent contacts.

The "R1" output is suitable for cumulative of alarms, this output will be activated at abnormal condition; after an alarm event this contact can be re-enabled only with specifications according to related ISA sequence.

The "R2" output is for acoustic (or visual) device, behavior of this output will reflect specifications according to ISA sequence.

OPERATION

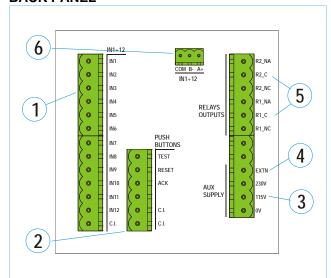
At power-on or return from power-fail, the alarm system will reach an idle condition i.e. no visual and acoustic signalling. When an input associated contact changes state the alarm system turn from steady to alarm condition, this means that visual devices and horn output follows the pre-set sequence operation.

By means of push buttons it's possible to acknowledge the alarm, silence the horn and reset to normal condition. A specific push button (TEST) perform the visual device test, without perturbation to normal operation.

Operating dip-switched are located under the polyester front foil, retained by removable click-in frame and must be selected before power-on.

Before to place the polyester layer is possible to insert a simple paper sheet with alarm text to be visible through the transparent windows. This paper could be written, engraved or printed. Templates are available for easy PC printing.

BACK PANEL



- 1 Inputs terminal
- 2 Ext. pushbuttons / common terminals
- 3 Power supply
- 4 Extension terminal
- 5 Outputs relays
- 6 Communication port RS485 (option)

CAUTION

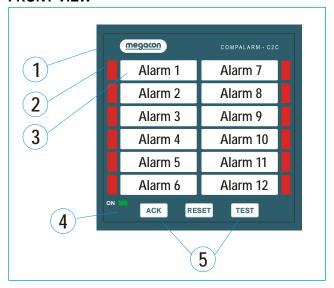
All safety limit switches should be approved as limit controls.

The use of electronic switches may cause erratic operation.

Installation and test must be accomplished by trained and qualified personnel.

Compalarm C2C instruction manual IM670-U-M v0.2 pag. 1 / 5

FRONT VIEW

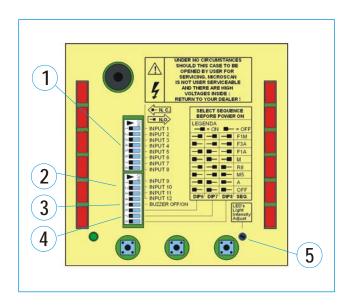


FRONT PANEL

- 1 Removable front frame
- 2- LED lamp
- 3 Transparent window for alarm text
- 4- Power ON LED
- 5 Push buttons

Removable front panel is composed by the following items:

- 1-Common paper sheet for alarm text
- 2-Polyester protection front layer
- 3-Removable front frame



BOTTOM FRONT PANEL

- 1 Normally open/close input 1÷8 mode selection
- 2 Normally open/close input 9÷12 mode selection
- 3- Internal buzzer off / on
- 4 Operating sequence selector
- 5 LED's light intensity adjust

To remove the front panel, insert the tip of a small screw-driver under a corner of the frame and slightly push off. This operation is possible also on devices already installed on the flush panel.

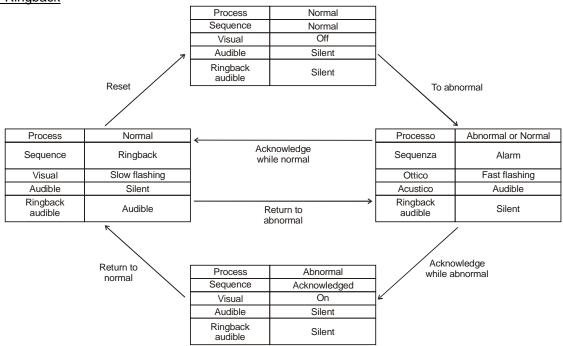
Excessive strong enclosure tightening can produce problem removing the frame.

RESET TO FACTORY DEFAULT

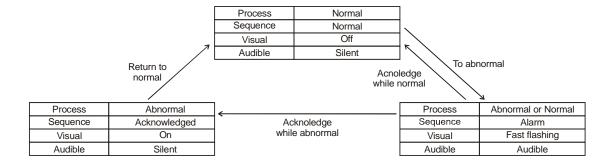
Press all the three push buttons on the first and, at the same time, switch ON the device and reset the default parameters of Modbus communication. (baudrate 19200, none parity, 1 bit stop, ID node 01).

ALARM SEQUENCES

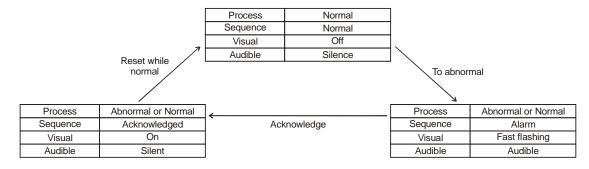




Compalarm C2C instruction manual IM670-U-M v0.2 pag. 2 / 5

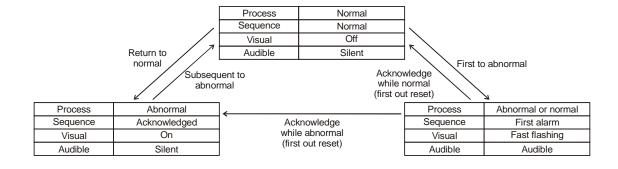


Sequence M



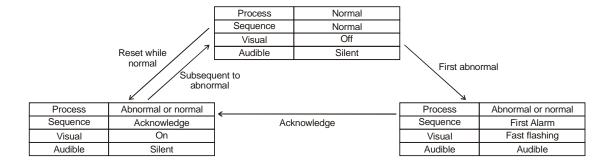
Sequence M5 (Manual Reset with No flashing)

Sequence F1A, Automatic Reset First Out with No Subsequent Alarm State

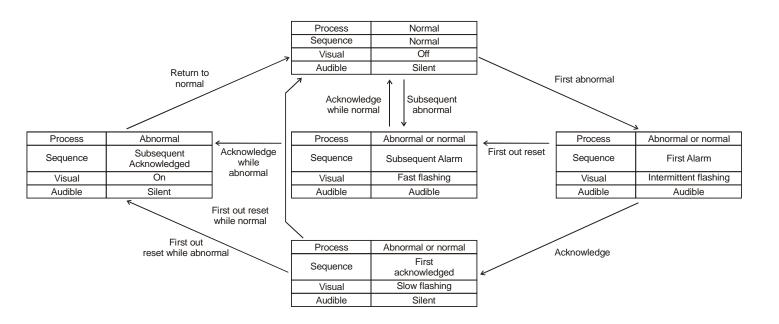


Compalarm C2C instruction manual IM670-U-M v0.2 pag. 3 / 5

Sequence F1M, Manual Reset First Out with No Subsequent Alarm State

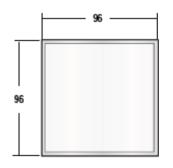


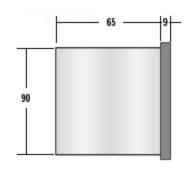
Sequence F3A, Automatic Reset First Out with First Out Flashing and Reset Pushbutton

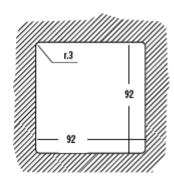


Compalarm C2C instruction manual IM670-U-M v0.2 pag. 4 / 5

DIMENSIONS







TECHNICAL DATA

TECHNICAL DATA	
Supply voltage	20÷60 Vac/dc - 115 or 230 Vac - 90÷260 Vac/dc
Frequency	50÷60 Hz
Power consumption	4.5 VA MAX
Line fuse (external)	500 mA
Terminals	Screw and plug terminal block
Operating temperature	0 ÷ 60 °C
Storage temperature	-20 ÷ 80 °C
Relative humidity	30 ÷ 90 % (non condensing)
Vibration allowed	0.5 G
Overall dimensions	96 x 96 x 65 mm
Cut-out dimensions	92 x 92 mm
Protection class	IP40
Material	Noryl UL V-0
Mounting position	Any
Weight	500 g MAX
Text window dimensions	34 x 9 mm
Output channels	2 SPDT contacts
Max switching current	5A @ 250V cosj=1
Max switching power	750 VA / 100 W
Input channels	12 optocoupled
Input pushbuttons	4 optocoupled
Inputs Voltage	24 / 48 / 115 / 230 Vac/dc ± 20%
Inputs current	5 mA MAX
Extension line	1000 m MAX
Galvanic separation	Inputs Outputs Supply
SERIAL INTERFACE (OPTION)	
Standard	RS485 Half-duplex (ModBus protocol)
Connector	5.0mm pitch extractible screw terminals
Isolation	4KVpeak o 2.5KVRMS – transceiver stage self powered
BaudRate	4800 – 9600 – 19200 – 38400
Node-ID	1 ÷ 247
Parity	Even – Odd - None
Stop bit	1 or 2
Emergency recovery configuration	Node 1 – Baud Rate 38400 – no-parity – 1 stop bit
EMC Compliance Directive	EMC 89/336/EEC
Emission	EN 50082-1
Immunity	EN 50082-2

Contact the technical assistance or refer at specific document for application don't described in this manual.

NOTE At reason of the evolution of standards and products, the company reserves to modify in every time the features of the product described in this document, that it's necessary to verify preventively. The liability of the producer for damage caused by defect of the product "can be reduced or deleted (...) when the damage is caused joint by a defect of product or for blame of the damaged or a person of which the damaged is responsible" (Article 8, 85/374/CEE).



Compalarm C2C instruction manual IM670-U-M v0.2 pag. 5 / 5