Omni 10c

Model C1660A (wired) and C1661A (serial) 10 Point Integral Alarm Annunciator.

DATASHEET

Features

- 20-60Vdc Powered
- Compact, panel mounted and easy to use
- 10 Contact Inputs or serial port driven
- Normally Open/Closed Selectable via DIP switch
- 27 Standard Sequences
- Bright Solid State Backlit Red LED Display
- User printed legends on inkjet/laser
- Four function Group Alarm output contact
- Fully “DIP” Switch Configurable
- Optional Serial Port - Modbus/PLC compatible

The Omni-10c alarm annunciator is a compact panel mounted annunciator designed for the harsh industrial, substation and marine environments. This product inherits the field proven Omni16c design technologies into an ultra compact ruggedised package.

10 inputs are wired to the rear of the panel mount unit (Model C1660A only), and any abnormal condition on any of the inputs causes the corresponding window on the front of the Omni10c to flash according to the selected flash sequence.

The operator controls the Omni10c annunciator via up to four separate pushbuttons (not included).

A “Horn” relay output contact on the rear of the unit can be used to sound an audible warning (not included) when an alarm occurs.

A common “Group Alarm” relay output contact available on the rear of the unit will indicate when any alarm on the Omni10c occurs.

A number of input options are available including high voltage isolated inputs, and a serial port only interface for inputs originating in other instrumentation. The 10 wired inputs and are individually DIP switch configured for N.O. or N.C. operation.

The alarm flashing sequence for the 10 inputs is configured by switches on the rear of the unit with a choice of 27 standard sequences.

Multiple Omni10c alarm units can be wired together with common pushbuttons and audible for all units. Facility is also provided to synchronise flashing between multiple units, and extend first out alarm indication across multiple units.

An optional serial port provides the ability to connect the Omni10c via the popular Modbus communications protocol to other intelligent devices.

SPECIFICATIONS

Power Supply		
Voltage Option	20-60Vdc	
Max dc Ripple	10% pk. to pk.	
Consumption	300mA maximum at 24Vdc 150mA maximum at 48Vdc	
Alarm Inputs (Model C1660A only)		
Model	**C1660A-1**	**C1660A-2**
Input Voltage range	19 to 60Vdc	90-150Vdc/ac rms
Isolation Input to Logic	1500V ac rms	1500V ac rms
Isolation Input to Input	None. Inputs share a single common return	
Input present	> 12Vdc	>18Vdc/12Vac
Input not present	< 9Vdc	< 9Vdc/6Vac
Input Current	1mA at 24Vdc 2.6mA at 48Vdc	3mA at 110Vac/dc
Quantity and Type	10 inputs	

Inputs General	
Input Scan Rate	4 milliseconds
Wire size	1.5mm2 (17SWG/15.5SWG) max.
Connections	Via plug-in Terminals
Operator Pushbutton Controls	
Type	Four pushbutton inputs on the rear of the unit
Functions	Silence; Acknowledge; Reset; Test
Alarm Window Display	
Quantity	10 Alarm windows (2 Wide x 5 High)
Lamp Type	Bright Red Backlit Solid State (LED)
Window Size	16mmx45mm
Legend Type	User printed on film with laser/inkjet using software provided. 3 or 4 rows of text can be accommodated with the template provided

Omni 10c

Model C1660A (wired) and C1661A (serial) 10 Point Integral Alarm Annunciator.

Relay Contact Outputs

Contact Type	1 Potential free changeover (Form C) for GA. 1 Potential free normally Open (Form A) for Horn.
Contact Rating	2A 30Vdc or 0.5A 230Vac
Isolation	1000Vac from contact to other circuits

Temperature Range

Operating Temperature	0°C – 60 °C (+32°F – 140°F)
Storage Temperature	-10°C – 70 °C (+14°F – 158°F)

Weight

Unpacked	0.8kg approx.
Packed	1kg approx.

Compliance to Standards

Safety	EN 60950:1995
Emissions	EN55011 & EN50081-2:1994 Grp I Class A
Immunity – ESD	IEC 61000-4-2:1995, level 3
Immunity – RF Fields	IEC 61000-4-3:1995, level 3
Immunity – Fast Transients	IEC 61000-4-4:1995 2 kV – DC power port 1 kV – input/output lines
Supply Variations	IEC 61000-4-7:1991, 24 V dc +15% -10%
Vibration	IEC60068-2-6: 1995 10-150Hz. 1g

Compliance	Complies with CEGB EES 1988 and Eskom NWS1819 sub-station specifications. Designed to meet IEC61508 SIL1.

Sequence Options

Seq. No.	Sequence Description
1	LAMP FOLLOWS INPUT
2	MOMENTARY (FLEETING) ALARM, MANUAL RESET
3	ALARM ONLY (NON-LATCHING INPUTS) AUTO RESET
4	MOMENTARY ALARM, MANUAL RESET WITH ALARM RINGBACK
5	FIRST OUT, MULTIPLE GROUPS, MANUAL RESET
6	FIRST OUT, MANUAL RESET, AUTO RESET ON SUBSEQUENT ALARMS
7	FIRST OUT, SINGLE GROUP, MANUAL RESET, FIRST OUT CONTINUOUS FLASH
8	FIRST OUT, MANUAL RESET, SUBSEQUENT ALARMS WITHOUT HORN
9	MOMENTARY ALARM, MANUAL RESET, AUTO SILENCE AFTER TIME DELAY.
10	MOMENTARY ALARM, MANUAL RESET, REALARM AFTER TIME IF STILL ABNORMAL.
11	MOMENTARY ALARM, MANUAL RESET, CONSTANT FLASH (FOR MOTOR ALARMS).
12	MOMENTARY ALARM, AUTO RESET, TIME DELAY ON RETURN TO NORMAL.
13	PULSE MONITORING ALARM; MANUAL RESET
18	MOMENTARY ALARM, AUTO RESET
21	FIRST OUT, MULTIPLE GROUPS, AUTO RESET
23	FIRST OUT, SINGLE GROUP, AUTO RESET, FIRST OUT CONTINUOUS FLASH
24	FIRST OUT, AUTO RESET, SUBSEQUENT ALARMS WITHOUT HORN
25	MOMENTARY ALARM, AUTO RESET, AUTO SILENCE AFTER TIME DELAY.
26	MOMENTARY ALARM, AUTO RESET, REALARM AFTER TIME IF STILL ABNORMAL.
27	MOMENTARY ALARM, AUTO RESET, CONSTANT FLASH (FOR MOTOR ALARMS)
28	PULSE MONITORING ALARM, AUTO RESET
30	SERIAL PORT READ ONLY MODE
31	SERIAL PORT READ/WRITEMODE

ORDERING INFORMATION

ORDER CODE	DESCRIPTION
C1660A-1	Omni10c Alarm Annunciator (19-60Vdc inputs) Terminal Strips A, B and C installed
C1660A-2	Omni10c Alarm Annunciator (90-150V inputs) Terminal Strips A, B and C installed
C1661A	Omni10c Alarm Annunciator (Serial Inputs) Terminal Strips B and C installed

Accessories

To be ordered separately Will be fitted before delivery where applicable.

Serial Communications Option (Modbus)

C1423-1	Isolated RS232/485 Serial Port NOTE: This module is fitted standard on the C1661A, but is optional on the C1660A, and should be ordered separately when ordering this model.

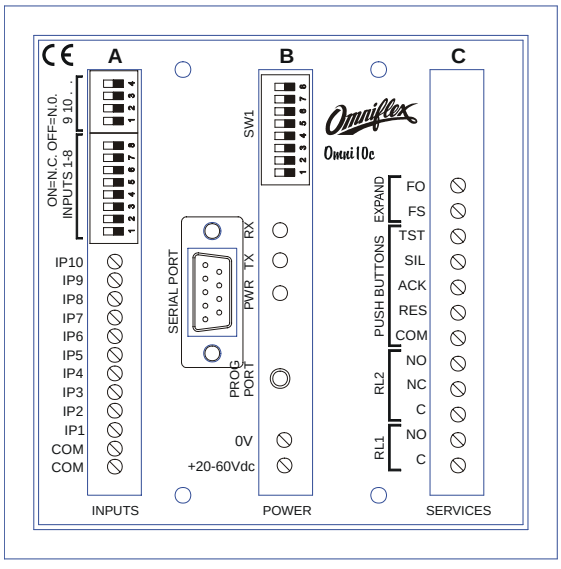
Pushbutton Station

C1415	Remote Pushbutton Station with Audible

Programming Cable

C1168	OmniSet Programming cable for Prog Port

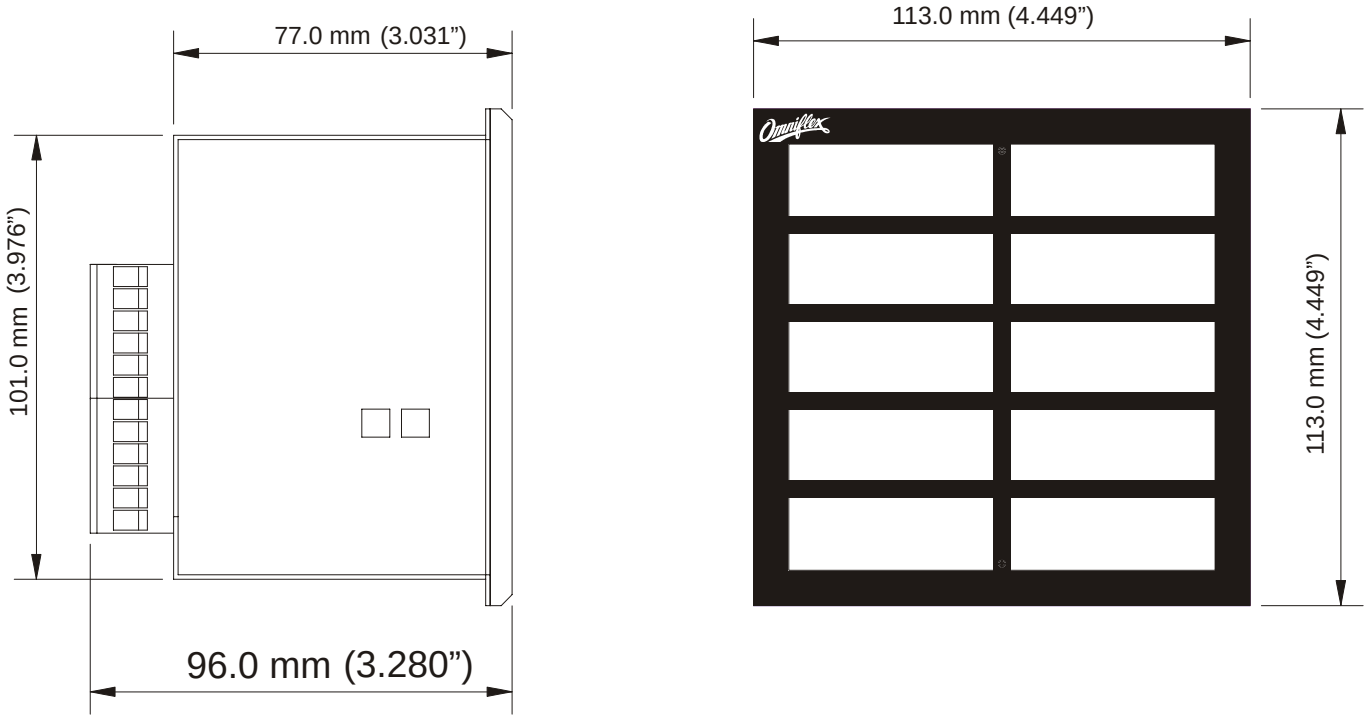
REAR VIEW SHOWING ELECTRICAL TERMINATIONS



http://www.omniflex.com

Omniflex®

MECHANICAL DETAILS



Cut-out Size required = 102 x 102mm

ELECTRICAL CONNECTION DIAGRAM