



Omni30 Alarm Annunciator System

Model C1620/1/2/3 Modular Annunciator System.

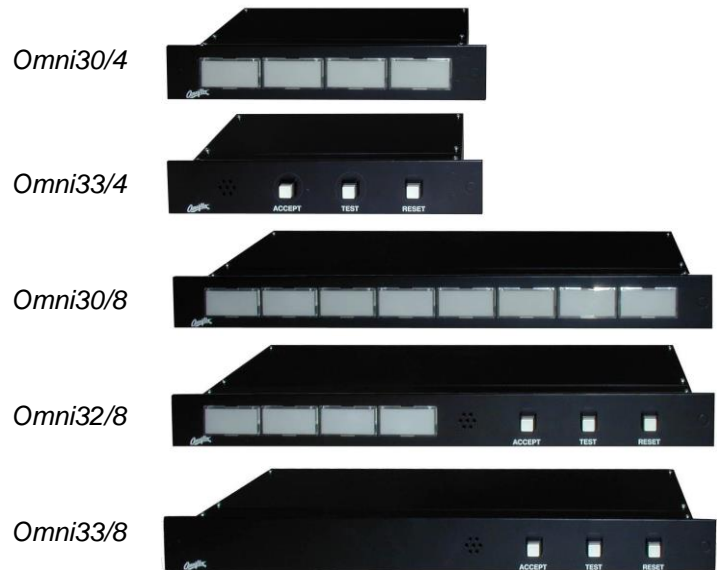
DATASHEET

Features

- Compatible with "UC30" Series products
- Panel mount or 19" Rack mount
- Expandable up to 128 points
- Plug-in Terminals for easy maintenance
- 27 Standard Alarm Sequences
- Choice of Backlit Lamp or LED Display
- User printed legends on inkjet/laser
- All "DIP" Switches externally accessible
- 24Vdc Powered
- Flash synchronisation between modules
- Optional Serial Port - Modbus compatible

The Omni30 annunciator series is designed as a replacement for the RIS UC30 series products. Based upon the field proven OMNIFLEX Omni16C technology, this product range provides state of the art annunciation to fit existing installations. Available in panel mount or 19-inch Rack mount configurations, the Omni30 series annunciator can be fitted with incandescent lamp or solid state LED displays. These standard modules can be wired together to form an annunciator system of up to 128 points.

Inputs accept potential free contacts and are individually configured for N.O. or N.C. operation by a combination of wiring and externally accessible "DIP" switch. All wiring terminals are plug-in for easy system



maintenance.

Any one of 27 alarm sequences can be selected for each alarm module on the externally accessible DIP switches.

Window legends can be created by the user using a standard Laser or Inkjet Printer using the software template provided.

When wired together as a system, all alarm modules will be flash synchronised, and can share a common set of pushbutton controls.

Test pushbutton acts as combined Lamp Test and Circuit Test.

SPECIFICATIONS

Power Supply

Supply Voltage	24Vdc +/-15%		
<u>Consumption:</u>	<u>Quiescent</u>	<u>Lamps On</u>	<u>LED's ON</u>
Omni30/8	150mA max	1A max	500mA max
Omni32/8	150mA max	500mA max	250mA max
Omni33/8	50mA max	-	-
Omni30/4	150mA max	500mA max	250mA max
Omni33/4	50mA max	-	-

Note: "Lamps On" = Unit fitted with incandescent Lamps all illuminated
 "LEDs On" = Unit fitted with LED's all illuminated

Alarm Inputs

Normally Closed Inputs:	Wired to Common positive supply
Normally Open Inputs:	Wired to Common negative supply
Quantity:	
Omni30/4	4 Inputs/Alarm Points
Omni30/8	8 Inputs/Alarm Points
Omni32/8	4 Inputs/Alarm Points
Max. Open cct Voltage	28Vdc
Max. Closed cct Current	4mA per input circuit
Max. Loop Resistance to detect closed contact	1 kohms
Min. Loop Resistance to detect open contact	200 kohms

Input Scan Rate	4 milliseconds
Wire size	1.5mm ² (17SWG/15.5SWG) max.
Connections	Via plug-in Terminals

Control Pushbuttons

Quantity	Three buttons mounted on front facia of Omni32/4, 32/8 and 33/8 units External control pushbuttons may be connected to Alarm Modules.
Functions	Acknowledge (Normally Open to +24Vdc) Reset (Normally Closed to +24Vdc) Test (Normally Open to 0V)

Alarm Window Display

Quantity	4 or 8 Alarm windows
Type	Backlit LED or Incandescent Lamp (Order Lamps or LED's separately)
Window Size	24mmx53mm
Legend Area	21mmx49mm
Legend Type	User printed on transparent film with laser/inkjet printer using software template provided.

Group Output

Products equipped	Omni32/8; Omni33/8; Omni33/4
Type	Open Collector Transistor switch to 0V





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Rating	30Vdc max 80mA max
Repeat Lamp Outputs (Alarm Modules only)	
Type	Open Collector Transistor switch to 0V
Rating	30Vdc max 80mA max
Temperature Range	
Operating Temperature	0°C – 60 °C (+32°F – 140°F)
Storage Temperature	-10°C – 70 °C (+14°F – 158°F)
Weight	
Unpacked	1.4kg (10.5Inch); 2.6kg (19Inch).
Packed	1.8kg (10.5Inch); 3.0kg (19Inch)
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%

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/WRITE MODE

ORDERING INFORMATION

ORDER CODE	DESCRIPTION
C1620	Omni30/8 - 8 Way Alarm Module Panel Mount (483mmW x 44.5mmH)
C1620-1	Omni30/8-SL - 8 Way Alarm Module 19 inch Rack mount (483mmW x 44.5H)
C1621	Omni32/8 -4 Way Alarm + Control Module Panel Mount (483mmW x 44.5mmH)
C1621-1	Omni32/8 -4 Way Alarm + Control Module 19 inch Rack Mount (483mmW x 44.5H)
C1622	Omni33/8 - Control Module Panel Mount (483mmW x 44.5mmH)
C1622-1	Omni33/8 - Control Module 19 inch Rack Mount (483mmW x 44.5H)
C1623	Omni30/4 - 4 Way Alarm Module Panel Mount (267mmW x 44.5mmH)
C1624	Omni33/4 – Control Module Panel Mount (267mmW x 44.5mmH)

ACCESSORIES	<i>To be ordered separately Will be fitted before delivery.</i>
Window and Lamp Board Options	
Backlit Solid State Light Emitting Diode (LED) Lamp Modules	
C1650	Red Backlit LED Lamp Module
C1651	Yellow Backlit LED Lamp Module
C1652	Green Backlit LED Lamp Module
C1653	Blue Backlit LED Lamp Module
C1654	Orange Backlit LED Lamp Module
C1655	White Backlit LED Lamp Module
Incandescent Lamps (two lamps per Window)	
C1160	Lamp and Holder 8 Window Pack
C1161	Incand. Lamp replacement 10 pack
C1162	Incand. Lamp replacements 100 pack
C1663	Assorted Colour Filter Kit (1 supplied with each annunciator)
Serial Communications Option (Modbus)	
C1423	Isolated RS232/485 Serial Port
Interface Accessories	
C1168	OmniSet Programming cable for Prog Port





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ELECTRICAL CONNECTIONS

Omni30/4

+24V	0V	+24V	0V	HORN	0V	TEST	ACC	+24V	RES	P	DP
1	2	3	4	5	6	7	8	9	10	11	12

NC+	NO-	IP 4	IP 3	IP 2	IP 1	LMP 4	LMP 3	LMP 2	LMP 1	GP	+24V
1	2	3	4	5	6	7	8	9	10	11	12

Omni30/4 Rear View showing Terminal Layout

Omni33/4

+24V	0V	+24V	0V	HORN	0V	TEST	ACC	+24V	RES	P	DP
1	2	3	4	5	6	7	8	9	10	11	12

P	DP	+24V	L		NC	NO	COM			GP	+24V
1	2	3	4	5	6	7	8	9	10	11	12

Omni33/4 Rear View showing Terminal Layout

Omni30/8

+24V	0V	+24V	0V	HORN	0V	TEST	ACC	+24V	RES	P	DP
1	2	3	4	5	6	7	8	9	10	11	12

NC+	NO-	IP 4	IP 3	IP 2	IP 1	LMP 4	LMP 3	LMP 2	LMP 1	GP	+24V
1	2	3	4	5	6	7	8	9	10	11	12

NC+	NO-	IP 4	IP 3	IP 2	IP 1	LMP 4	LMP 3	LMP 2	LMP 1	GP	+24V
1	2	3	4	5	6	7	8	9	10	11	12

Omni30/8 Rear View showing Terminal Layout

Omni32/8

+24V	0V	+24V	0V	HORN	0V	TEST	ACC	+24V	RES	P	DP
1	2	3	4	5	6	7	8	9	10	11	12

P	DP	+24V	L		NC	NO	COM			GP	+24V
1	2	3	4	5	6	7	8	9	10	11	12

NC+	NO-	IP 4	IP 3	IP 2	IP 1	LMP 4	LMP 3	LMP 2	LMP 1	GP	+24V
1	2	3	4	5	6	7	8	9	10	11	12

Omni32/8 Rear View showing Terminal Layout

Omni33/8

+24V	0V	+24V	0V	HORN	0V	TEST	ACC	+24V	RES	P	DP
1	2	3	4	5	6	7	8	9	10	11	12

P	DP	+24V	L		NC	NO	COM			GP	+24V
1	2	3	4	5	6	7	8	9	10	11	12

Omni33/8 Rear View showing Terminal Layout

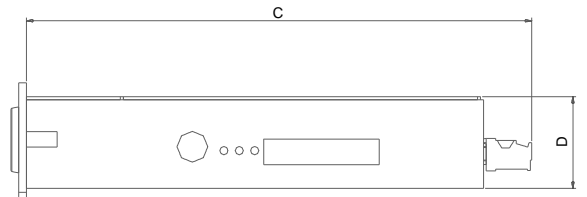
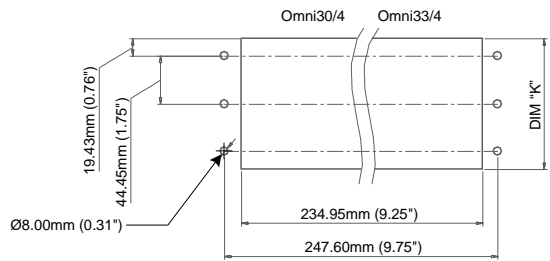
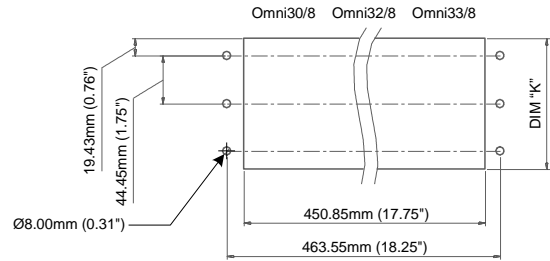
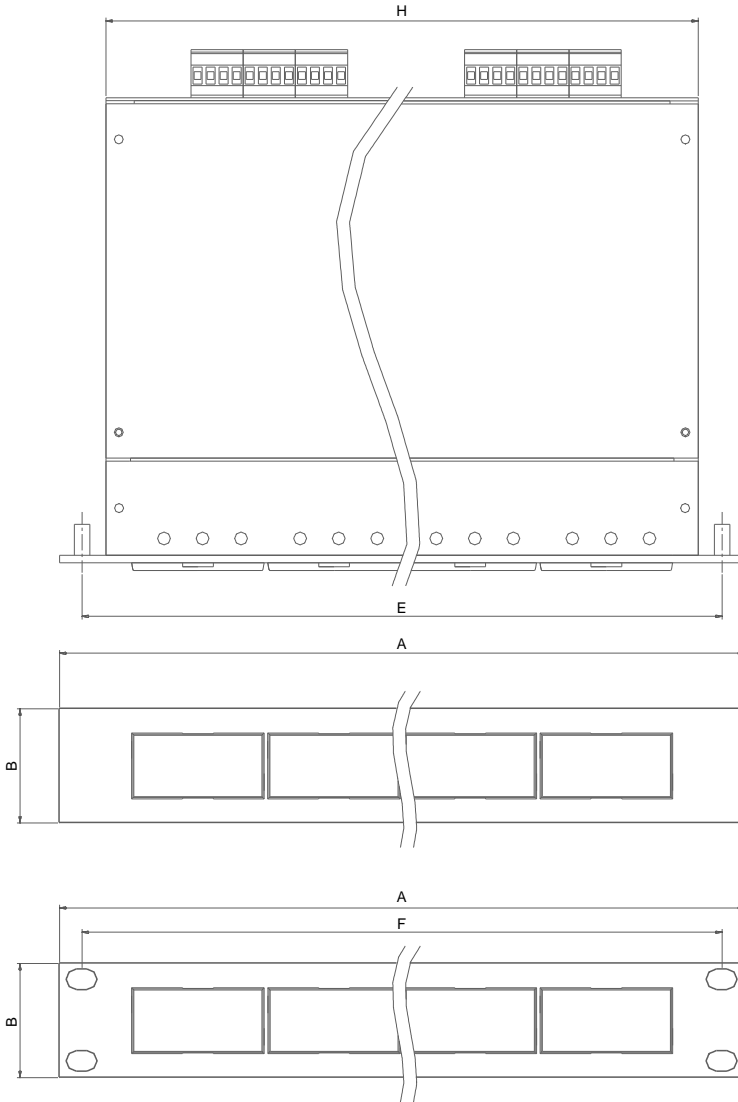




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MECHANICAL CONFIGURATION



	Omni30/4 Omni33/4	Omni30/8 Omni32/8 Omni33/8	Omni30/8-SIL Omni32/8-SIL Omni33/8-SIL
A	266.7mm (10.50")	482.6mm (19.00")	482.6mm (19.00")
B	44.45mm (1.75")	44.45mm (1.75")	44.45mm (1.75")
C	196 mm (7.72")	196 mm (7.72")	196 mm (7.72")
D	35.7mm (1.40")	35.7mm (1.40")	35.7mm (1.40")
E	247.60mm (9.75")	473.1mm (18.63")	463.5mm (18.25")
F	N/A	N/A	465.06mm (18.30")
G	N/A	N/A	31.75mm (1.25")
H	230.60mm (9.08")	230.60mm (9.08")	230.60mm (9.08")

No. of units to be mounted	Dimension "K"
	±0.25mm (0.01")
1	38.86mm (1.53")
2	83.31mm (3.28")
3	127.76mm (5.03")
4	172.2mm (6.787")
5	216.66mm (8.53")
6	261.1mm (10.28")

