Features

- Small , compact, panel mounted and easy to use
- 8 Potential Free Contact Inputs
- Normally Open/Closed Selectable via DIP switch
- 24Vdc Powered
- 27 Standard Sequences
- Choice of Backlit LED/ Sidebar LED Display
- User printed legends on inkjet/laser printer
- Four function Group Alarm output contact
- Motor Alarm Sequence and Timer options
- Optional internal repeat relay outputs
- Fully “DIP” Switch Configurable
- Optional Serial Port - Modbus/PLC compatible

The Omni8C annunciator is the compact replacement to the Omni8A and B series annunciators with one product offering the option of Backlit LED or Sidebar LED indicator windows. Omniflex has completely redesigned the Omni8C with new technology to compliment PLC’s in applications where alarm annunciation is required using serial communications. Omni8C is a panel mounted annunciator occupying half the space of the previous model. Install the optional integral Test, Silence, Acknowledge, Reset Pushbuttons sacrificing one alarm window or use an externally wired pushbutton station.

The 8 inputs accept potential free or optional high voltage inputs and are individually DIP switch configured for N.O. or N.C. operation. Inputs are wired to plug-in terminals at the rear of the annunciator. The alarm sequence for the 8 inputs is also configured by DIP switch with a choice of 27 standard sequences. Four output relays can be configured as group alarm, horn output and watchdog with a change over contact at the terminals. The group alarm can be set to one of four functions, Follows input, follows alarm, Multiple reflash, Ringback horn.

Input 8 may be designated via DIP switch as an Inhibit input which disables all the inputs on the annunciator during maintenance activities.

SPECIFICATIONS

Power Supply		
Supply Voltage	24Vdc ± 15%	
Consumption C1490 C1491	 0.5 Amp max 0.5 Amp max	
Alarm Inputs - Potential Free Contact		
Input Board Option	**C149X-0**	**C149X–1**
Default Option	Default (+ve com.)	-ve Common
Input voltage Isolation	None	
Quantity and Type	8 Potential Free Contacts	
Max. Open cct Voltage	28Vdc	
Max. Closed cct Current	5mA per input circuit	
Max. Loop Resistance to detect closed contact	200 ohms	
Min. Loop Resistance to detect open contact	100 kohms	
Alarm Inputs - Individually Isolated		
Input Board Option	**C149X-2**	**C149X–3**
Input Voltage range	19 to 60Vdc	90-150Vdc/ac rms
Isolation Input to Logic	1500V ac rms	1500V ac rms
Isolation Input to Input	500V ac rms	500V ac rms
Quantity and Type	16 dc or ac inputs	
Compliance to standards		
Safety	IEC950	
EMC	EN50081-2; EN50082-2	
Compliance to CEGB EES 1988 and Eskom NWS1819 specifications		
Inputs General		
Input Scan Rate	4 milliseconds	
Wire size	1.5mm^2 (17SWG/15.5SWG) max.	
Connections	Via plug-in Terminals	
Integral Pushbuttons		
Quantity	Four buttons mounted on front facia	
Functions	Silence; Acknowledge; Reset; Circuit Test	
Alarm Window Display		
Quantity	8 Alarm windows	
Model	C1490	C1491
Type	Backlit LED	Sidebar LED
Window Size	24mmx64mm	21mmx51mm
Legend Area	21mmx60mm	20mmx40mm

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Legend Type	User printed on film with laser/inkjet using software provided.	Engraved plastic window

Relay Contact Outputs

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

Temperature Range

Operating Temperature Recommended Humidity	0°C – 60 °C (+32°F – 140°F) Up to 90% RH, non condensing
Storage Temperature Recommended Humidity	-10°C – 70 °C (+14°F – 158°F) Less than 40% RH

Weight

Unpacked	1.6kg approx.
Packed	1.8kg approx.

Compliance to Standards

Ingress Protection (I.P.)	IP42 (front only)
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

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
C1490-x	LED Backlit Alarm Annunciator; 24Vdc (Order LED boards separately)
C1491-x	Sidebar LED Annunciator; 24Vdc *(Not recommended for new designs)*

x=	0 (default)	1	2	3
	+ve Com	-ve Com	19-60Vdc iso	90-150Vac/dc iso

Accessories

To be ordered separately. Will be fitted before delivery.

Serial Communications Option (Modbus)	
C1423	Isolated RS232/485 Serial Port
Repeat Outputs	
C1425	8 way Repeat Relay Board
C1426	16 way Ribbon-Header Repeat Output Board (Input and Lamp Repeats)
C1169	16 Way Repeat Lamp Driver Terminals
Pushbutton Stations	
C1420	Integral Pushbutton Station – (in window 8)
C1415	Remote Pushbutton Station with Audible
Window and Lamp Board Options	
Backlit LED	
C1150	Red Backlit LED Lamp Board
C1151	Yellow Backlit LED Lamp Board
C1152	Green Backlit LED Lamp Board
C1153	Blue Backlit LED Lamp Board
C1154	Orange Backlit LED Lamp Board
C1155	White Backlit LED Lamp Board
Incandescent Lamps (as Spares only; Lamp version no longer available)	
C1160	Lamp and Holder 8 Window Pack
C1161	Incand. Lamp replacement 10 pack
C1162	Incand. Lamp replacements 100 pack
C1463	Assorted Colour Filter Kit
Sidebar LED	
C1448-1	Black engravable window
C1448-2	Red engravable window
C1448-3	Amber engravable window
C1448-4	Yellow engravable window
C1448-5	Green engravable window
C1448-6	Blue engravable window
C1448-7	White engravable window
C1446	Engraving for Sidebar LED Windows
Mounting Hardware	
C1431-01	Mounting Kit 2 High Stack
C1431-02	Mounting Kit 3 High Stack
C1431-03	Mounting Kit 4 High Stack
Interface Accessories	
C1168	Omniset Programming cable for Prog Port
C1416	Ribbon Header to terminals converter
C6308	Ribbon to 16 Relays Form C 5A

Spares

To be ordered separately. Will NOT be fitted before delivery.

Input Boards	
C1171	Omni8/16C Standard 8 Channel Common Positive
C1173	Omni8/16C Standard 8 Channel Common Negative
C1172	Omni 8/16C 8 Channel Isolated 19-60Vdc Inputs
C1170	Omni 8/16C 8 Channel Isolated 90-150Vac/dc Inputs

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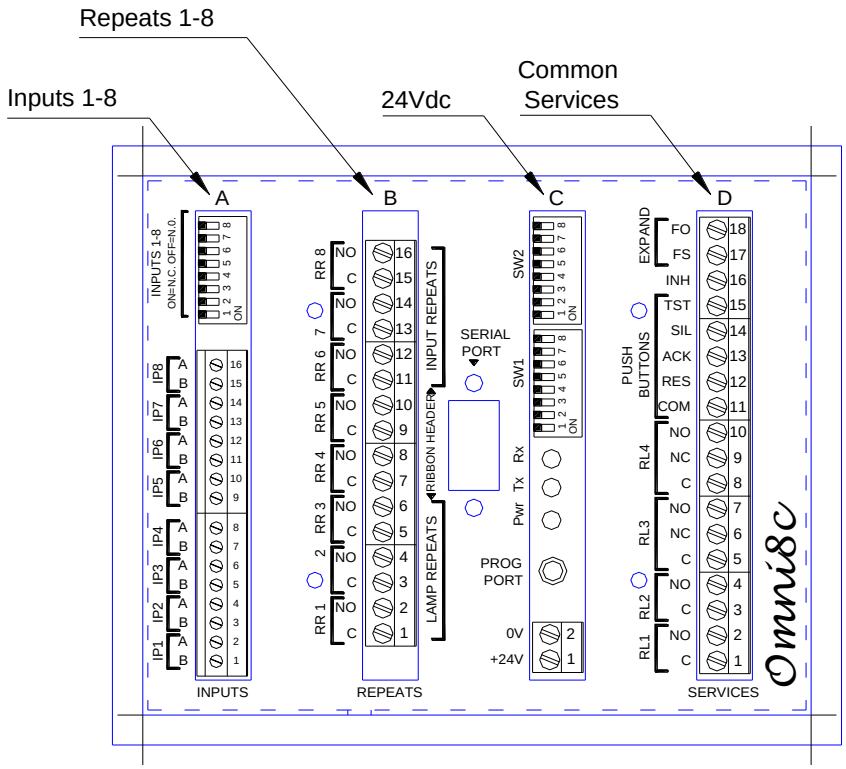
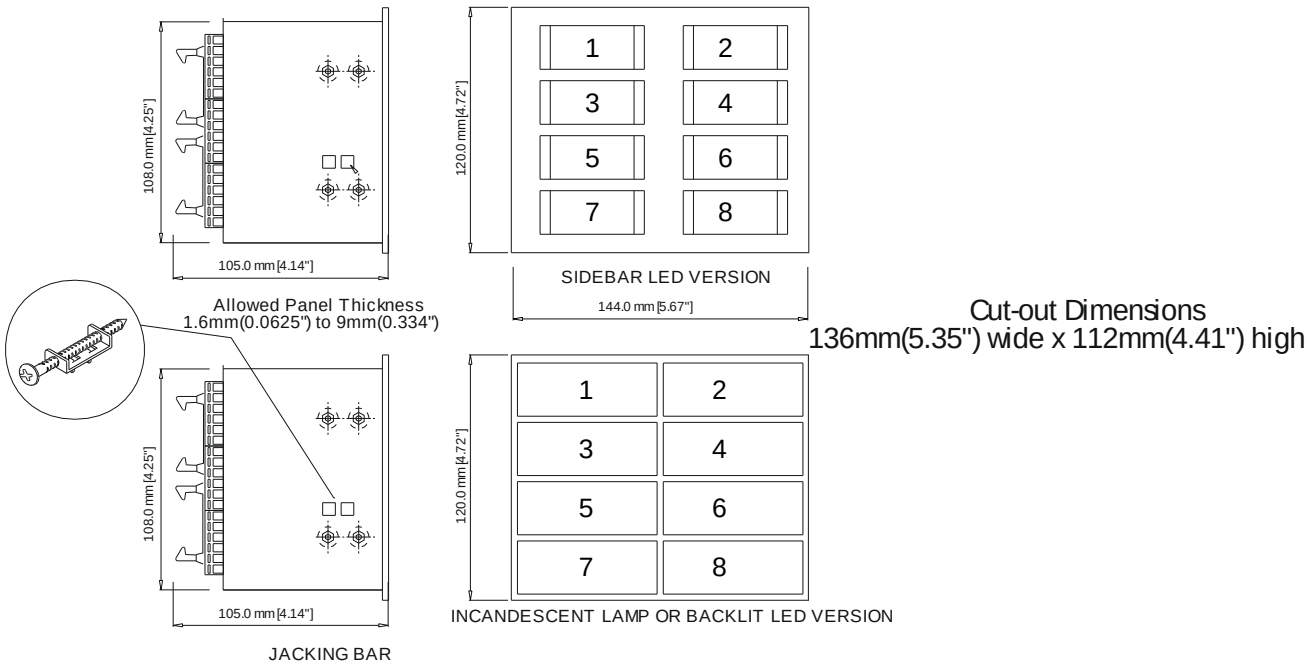
ELECTRICAL CONNECTION



MECHANICAL CONFIGURATION (INCLUDING WINDOW LAYOUT)



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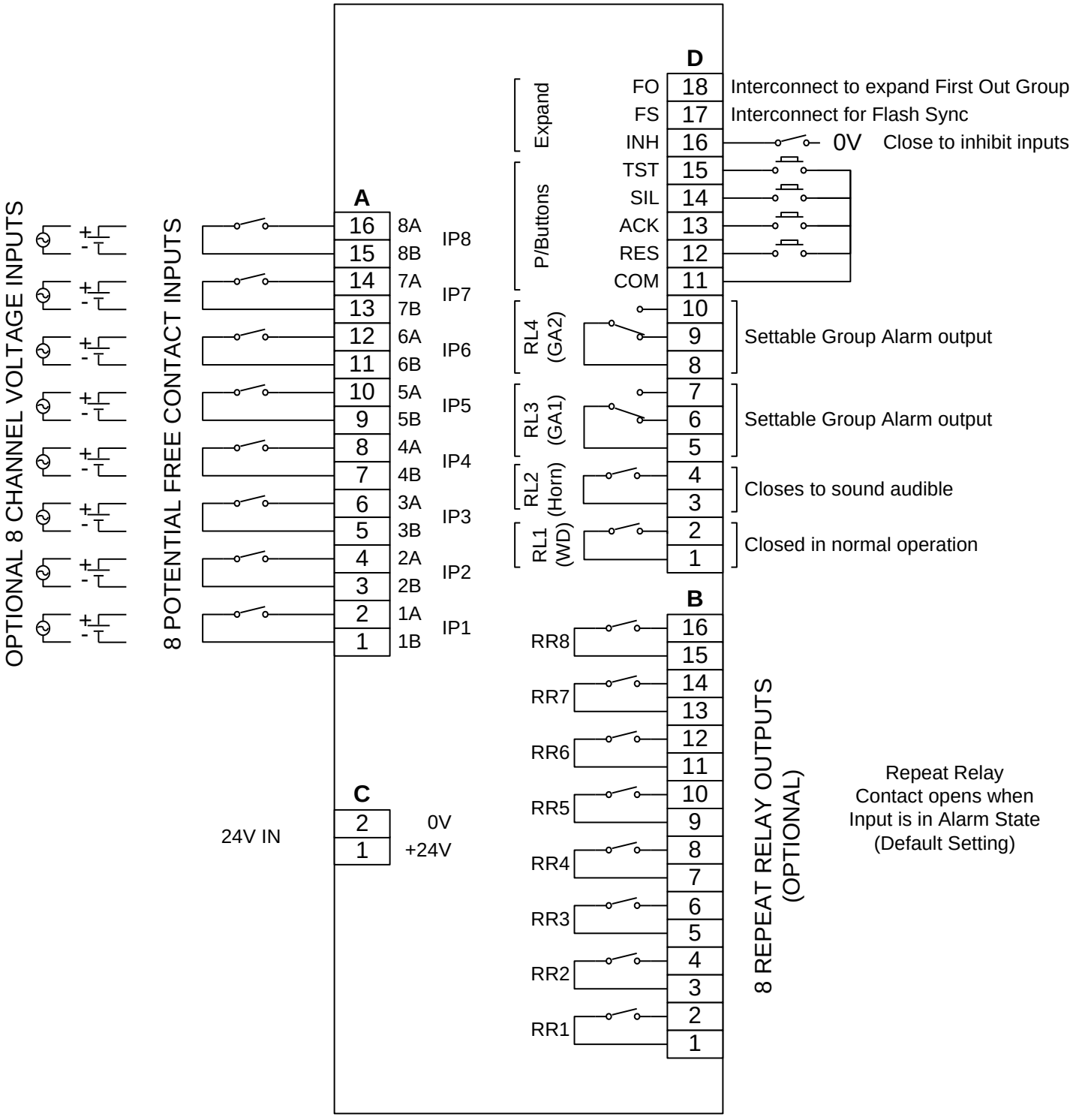
ELECTRICAL CONNECTION DIAGRAM



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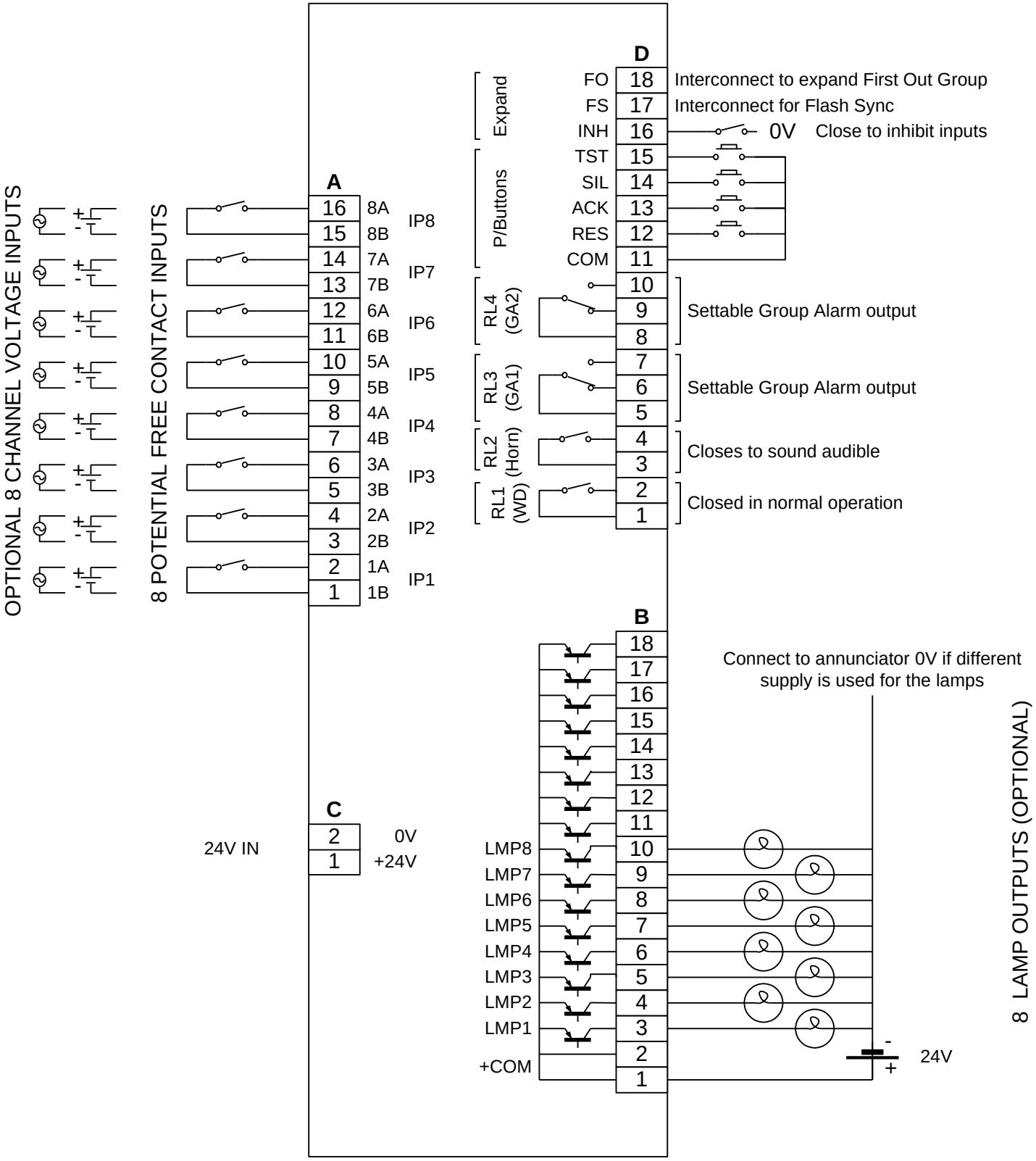
ELECTRICAL CONNECTION DIAGRAM (LAMP DRIVER C1169)