

An ISO 9001-2015 Certified Company

ALARM ANNUNCIATOR

Providing excellence with
Latest technology | Customized solution | Timely delivery



PROTON POWER CONTROL PVT.LTD.

Since 1988

www.protonelectronic.com



PRO4-1D



Window Dimension : 30 mm (W) x 65 mm (H)
Cutout Dimension : 68 mm (W) x 138 mm (H)
Overall Dimension : 72 mm (W) x 144 mm (H) x 195 mm (D)

PRO4-1D-H



Window Dimension : 30 mm (W) x 30 mm (H)
Cutout Dimension : 68 mm (W) x 138 mm (H)
Overall Dimension : 72 mm (W) x 144 mm (H) x 195 mm (D)

PRO6-1D



Window Dimension : 30 mm (W) x 30 mm (H)
Cutout Dimension : 68 mm (W) x 138 mm (H)
Overall Dimension : 72 mm (W) x 144 mm (H) x 195 mm (D)

PRO8-1D



Window Dimension : 30 mm (W) x 30 mm (H)
Cutout Dimension : 68 mm (W) x 138 mm (H)
Overall Dimension : 72 mm (W) x 144 mm (H) x 195 mm (D)

PRO8-2D

Window Dimension : 30 mm (W) x 65 mm (H)
 Cutout Dimension : 138 mm (W) x 138 mm (H)
 Overall Dimension : 144 mm (W) x 144 mm (H) x 195 mm (D)

PRO10-2D

Window Dimension : 30 mm (W) x 30 mm (H) and
 30 mm (W) x 65 mm (H)
 Cutout Dimension : 138 mm (W) x 138 mm (H)
 Overall Dimension : 144 mm (W) x 144 mm (H) x 195 mm (D)

PRO8-2D-H

Window Dimension : 30 mm (W) x 65 mm (H) and
 : 30 mm (W) x 30 mm (H)
 Cutout Dimension : 138 mm (W) x 138 mm (H)
 Overall Dimension : 144 mm (W) x 144 mm (H) x 195 mm (D)

4W92P

Window Dimension : 40 mm (W) x 40 mm (H)
 Cutout Dimension : 92 mm (W) x 92 mm (H)
 Overall Dimension : 96 mm (W) x 96 mm (H) x 100 mm (D)

PRO12-2D

Window Dimension : 30 mm (W) x 30 mm (H) and
 30 mm (W) x 65 mm (H)
 Cutout Dimension : 138 mm (W) x 138 mm (H)
 Overall Dimension : 144 mm (W) x 144 mm (H) x 195 mm (D)

PRO12-2D-H

Window Dimension : 30 mm (W) x 30 mm (H)
 Cutout Dimension : 138 mm (W) x 138 mm (H)
 Overall Dimension : 144 mm (W) x 144 mm (H) x 195 mm (D)

PRO16-2D



Window Dimension : 30 mm (W) x 30 mm (H)
Cutout Dimension : 138 mm (W) x 138 mm (H)
Overall Dimension : 144 mm (W) x 144 mm (H) x 195 mm (D)

PRO16-2D Export



Window Dimension : 30 mm (W) x 30 mm (H)
Cutout Dimension : 138 mm (W) x 138 mm (H)
Overall Dimension : 144 mm (W) x 144 mm (H) x 195 mm (D)

PRO12-3D



Window Dimension : 30 mm (W) x 65 mm (H)
Cutout Dimension : 210 mm (W) x 138 mm (H)
Overall Dimension : 216 mm (W) x 144 mm (H) x 195 mm (D)

PRO16-96

New



Parameter Specification	Details
Input Supply	: 90-270V AC, 50/60 HZ
Window 16	: Fixed
Display Device	: 3mm LED 1 No. each
Legend Window Dimensions	: 6 mm x 25 mm(H x L)
Power Consumptions	: 0.5 watts per window
Flash Rate	: 60 flash per minute
Operating Sequence	: Manual Reset or Auto Reset (Fixed)
Input Signal (For Faults)	: 230V AC (Neutral Common)
LED colour in window	: Red Only
Output Contacts	: 1 NO for Hooter and 1 NO for Group faults
Output Contact Rating	: 5Amp 240V AC
Inbuilt Push Buttons	: Test, Mute, Accept and Reset
Enclosure	: 96 X 96 X 90 mm
Panel cut out	: 92 X 92 mm

PRO20-3D

Window Dimension : 30 mm (W) x 30 mm (H) and
30 mm (W) x 65 mm (H)
Cutout Dimension : 210 mm (W) x 138 mm (H)
Overall Dimension : 216 mm (W) x 144 mm (H) x 195 mm (D)

PRO20-3D-H

Window Dimension : 30 mm (W) x 30 mm (H)
Cutout Dimension : 210 mm (W) x 138 mm (H)
Overall Dimension : 216 mm (W) x 144 mm (H) x 195 mm (D)

PRO24-3D

Window Dimension : 30 mm (W) x 30 mm (H)
Cutout Dimension : 210 mm (W) x 138 mm (H)
Overall Dimension : 216 mm (W) x 144 mm (H) x 195 mm (D)

PRO16-4D

Window Dimension : 30 mm (W) x 65 mm (H)
Cutout Dimension : 282 mm (W) x 138 mm (H)
Overall Dimension : 288 mm (W) x 144 mm (H) x 195 mm (D)

PRO28-4D



Window Dimension : 30 mm (W) x 30 mm (H)
 30 mm (W) x 65 mm (H)
 Cutout Dimension : 282 mm (W) x 138 mm (H)
 Overall Dimension : 288 mm (W) x 144 mm (H) x 195 mm (D)

PRO28-4D-H



Window Dimension : 30 mm (W) x 30 mm (H)
 Cutout Dimension : 282 mm (W) x 138 mm (H)
 Overall Dimension : 288 mm (W) x 144 mm (H) x 195 mm (D)

PRO32-4D



Window Dimension : 30 mm (W) x 30 mm (H)
 Cutout Dimension : 282 mm (W) x 138 mm (H)
 Overall Dimension : 288 mm (W) x 144 mm (H) x 195 mm (D)

PRO36-5D



Window Dimension : 30 mm (W) x 30 mm (H) and
 30 mm (W) x 65 mm (H)
 Cutout Dimension : 355 mm (W) x 138 mm (H)
 Overall Dimension : 365 mm (W) x 144 mm (H) x 195 mm (D)

PRO36-5D-H

Window Dimension : 30 mm (W) x 30 mm (H)
 Cutout Dimension : 355 mm (W) x 138 mm (H)
 Overall Dimension : 365 mm (W) x 144 mm (H) x 195 mm (D)

PRO40-5D

Window Dimension : 30 mm (W) x 30 mm (H)
 Cutout Dimension : 355 mm (W) x 138 mm (H)
 Overall Dimension : 365 mm (W) x 144 mm (H) x 195 mm (D)

PRO24-6D

Window Dimension : 30 mm (W) x 65 mm (H)
 Cutout Dimension : 428 mm (W) x 138 mm (H)
 Overall Dimension : 435 mm (W) x 144 mm (H) x 195 mm (D)

PRO48-6D

Window Dimension : 30 mm (W) x 30 mm (H)
 Cutout Dimension : 428 mm (W) x 138 mm (H)
 Overall Dimension : 435 mm (W) x 144 mm (H) x 195 mm (D)

PRO32-8D

Window Dimension : 30 mm (W) x 65 mm (H)
 Cutout Dimension : 565 mm (W) x 138 mm (H)
 Overall Dimension : 575 mm (W) x 144 mm (H) x 195 mm (D)

PRO64-8D

Window Dimension : 30 mm (W) x 30 mm (H)
 Cutout Dimension : 565 mm (W) x 138 mm (H)
 Overall Dimension : 575 mm (W) x 144 mm (H) x 195 mm (D)

Window Hooter - HTR_W_O

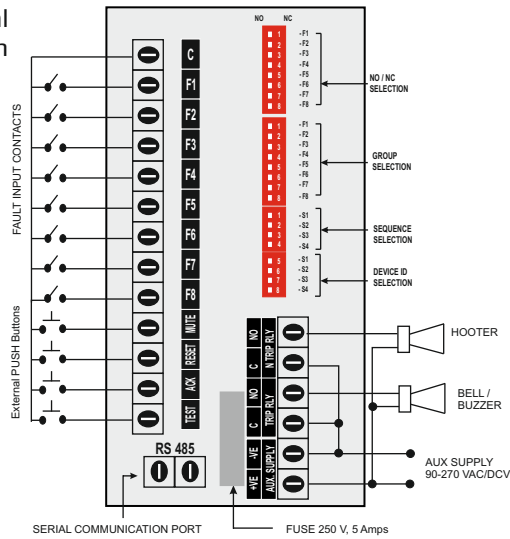
Parameter Specification	Details
Aux. Supply	: 12 VDC, 24 - 30 VAC/DC, 48VAC/ DC 90-270 VAC/DC
Frequency	: 50 / 60 Hz
Power Consumption	: 20 VA max
Standard Sound Output	: 90 db at 1 Meter.
Tone	: Two Different Selectable tones
Volume level adjustment	: Continuous Adjustable by Knob
LED Window	: Flashing
After power ON	: Window will flash and alarm - ON
ACK Push Button	: Window steady and Alarm Off
Mounting Type	: Panel Mounting
Operating Temperature	: 0 to + 60
Humidity	: Up to 95% RH
Enclosure	: ABS FRP with high strength
Cutout Size (W x H)	: 92mm X 92mm
Cutout Size (W x H x D)	: 96mm X 96mm X 65mm
Unit Weight (gms.)Appx.	: 400 gms.

**Electronic Hooter / Bell / Buzzer :
HTR_UN**

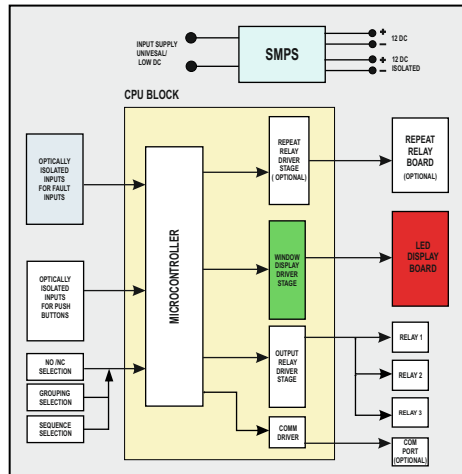
Parameter Specification	Details
Aux. Supply	: 12 VDC, 24 - 30 VAC/DC, 48VAC/ DC 90-270 VAC/DC
Frequency	: 50 / 60 Hz
Power Consumption	: 20 VA max
Standard Sound Output	: 90 db at 1 Meter.
Tone	: Three Different Selectable tones
Volume level adjustment	: Continuous Adjustable by Knob (Optional)
Mounting Type	: Panel Mounting
Operating Temperature	: 0 to + 60
Humidity	: Up to 95% RH
Enclosure	: ABS FRP with high strength
Cutout Size (W x H)	: 92mm X 92mm
Cutout Size (W x H x D)	: 96mm X 96mm X 65mm
Unit Weight (gms.)Appx.	: 400 gms.

Diagram

Terminal diagram



Block diagram



Tests

Electrical Test

- ◆ High voltage surge susceptibility test
- ◆ Impulse voltage withstand test
- ◆ Mains supply variation
- ◆ High voltage, high frequency disturbance (Noise) test

Description

- ◆ 2 KV AC (RMS) for 1 min. or 2.3 KV for 1 sec.
- ◆ 5 KV impulse at all i/p and o/p points
- ◆ +10% - 15%
- ◆ Longitudinal (2kV) Transverse (1kV)

Reference

- ◆ IEC - 255 - 4, IEEE 472 - 1974 IS 3231
- ◆ IEC60255-51 IEEE - 472 BS - 923
- ◆ Mfrs. Test
- ◆ IEC - 61000-4-12

Environmental Test

- ◆ Dry heat test
- ◆ Cold test
- ◆ IP 51 Test (As per IS/IEC 60529:2001)
- ◆ Burn in test in energized condition
- ◆ Damp heat test
- ◆ Dump test

Warranty

The Product Annunciator is backed up by Proton Power Control Pvt. Ltd's warranty against all manufacturing defects at our work for 18 months from the date of supply or 12 months from the date of installation, whichever is earlier.

Operating Sequence chart

FAULT CONDITION	MANUAL ACTION	MANUAL RESET		MANUAL RESET WITH TRIP CKT			AUTO RESET		FIRST UP		RING BACK ALARM	
	DIP SWITCH POSITION	ON OFF		ON OFF			ON OFF		ON OFF		ON OFF	
		AUDIO	VISUAL	AUDIO	TRIP RELAY	VISUAL	AUDIO	VISUAL	AUDIO	VISUAL	AUDIO	VISUAL
NORMAL		OFF	OFF	OFF	ON	OFF	OFF	OFF	OFF	OFF	OFF	OFF
NORMAL	TEST	ON	FLASH	ON	ON	FLASH	ON	FLASH	ON	FLASH	ON	FLASH
AB-NORMAL		ON	FLASH	ON	OFF	FLASH	ON	FLASH	ON	FLASH (I) STEADY (S)	ON	FAST FLASH
AB-NORMAL	MUTE	OFF	FLASH	OFF	OFF	FLASH	OFF	FLASH	OFF	FLASH (I) STEADY (S)	ON	FAST FLASH
AB-NORMAL	ACCEPT	OFF	STEADY	OFF	OFF	STEADY	OFF	STEADY	OFF	STEADY (S)	ON	STEADY
NORMAL	ACCEPT	OFF	STEADY	OFF	OFF	STEADY	OFF	OFF	OFF	STEADY (S)	ON	SLOW FLASH
AB-NORMAL	RESET	OFF	STEADY	OFF	OFF	STEADY	NA	NA	OFF	STEADY	OFF	STEADY
NORMAL	RESET	OFF	OFF	OFF	ON	OFF	NA	NA	OFF	OFF	OFF	OFF

(I)- Initial Fault (S)- Subsequent Fault Other Sequences available on specific demand

Salient Features

- ◆ Based on latest single chip micro-processor technology Sleek, Compact design for reliable and accurate operation.
- ◆ Fast response time.
- ◆ Models available from 4 to 64 windows.
- ◆ Field selectable operational sequences.
- ◆ Incorporates a group of super bright LED's instead of twin filament lamps for unlimited life at very less power consumption.
- ◆ Actuated through potential free fault input contacts.
- ◆ Fault input contacts NO/NC site selectable by means of DIP switches.
- ◆ Opto-isolated all fault inputs, immune to noise disturbances.
- ◆ Provision for external audible (Bell or Hooter) through potential free relay output contact.
- ◆ All models are available with built-in feather touch push buttons for Test, Mute, Accept and Reset operations.
- ◆ Test facility checks flashing, Mute, Accept and Reset operations.
- ◆ Specially designed power supply for high noise immunity, wide input variations and have built-in transient protection.
- ◆ The extensive protection provided to safeguards all I.C.'s and components from failure, thereby providing complete reliability.
- ◆ All cards interconnected with plug-in polarised connectors for easy servicing.
- ◆ ABS FRP enclosure with high strength.
- ◆ Designed to give an economic, 'No Frills' alarm annunciator system that is both easy to install, commission and maintain.
- ◆ Type tested for noise, impulse and functional tests as per various standards.
- ◆ Site selectable facility for grouping of trip and non-trip faults or trip and alarm faults for visual and audio discrimination through two separate output relay contacts.

Optional Features

- ◆ Multi colored inscription plate for easy differentiation of trip and non-trip fault annunciations.
- ◆ Extra relay output contact per channel for repeat annunciation.
- ◆ LIVE fault input contacts. (AC or DC)
- ◆ Provision for dual (AC & DC) power supply with automatic changeover with AC fail or DC fail.
- ◆ Communication port with MODBUS RS-485 RTU protocol.
- ◆ In Unmanned mode - faults will not be displayed ON window & will be stored in memory.
- ◆ In Manned mode- Whatever faults occurred in unmanned mode will be displayed.
- ◆ Power fail memory retention - At the time of power fail starts of all windows will be saved in memory. When power is resumed all faults will be displayed.

Technical Specifications

Supply voltage	: 1) 90-270 AC/DC SMPS OR 2) 20V/60V DC Optional 3) Dual power supply 110V DC and 230V AC 4) Dual power supply 24V DC and 230V AC
No. of windows	: 4 to 64 windows available in different configurations
No. of LED's per window	: Super bright 2 LED's in a rows
Power consumption	: 0.5VA per window
Terminals	: Suitable for 0.2 to 2.5 sq. mm cable
Scan time	: less than 10 ms
Response time	: less than 10 ms
Flash rate	: 60 Flashes/min - Fast flashing 30 Flashes/min - Slow flashing
Interrogation voltage	: 12 V DC/110V DC* (*optional)
Fault input contacts	: potential free NO or NC site selectable (potential contacts : optional)
Output connections	: For remote Test, Mute, Accept & Reset operations
Output relay contact	: 2 potential free contact (1 No. Alarm+1 No. Trip+1 No. (Optional for DC fail)
Output contact rating	: 7 Amps at 230 V AC (Resistive)
Noise immunity	: 2KV as per IEC 61000-4-12
Impulse test	: 5KV as per IEC 60255 -5
Enclosure	: ABS FRP with high strength
Environmental tests	: As per IS 9000 Part III, Section-5, 1977 & Part II, Section-2, 1977
Operating Sequences	: Multiple sequence option with site selection facility: 1) Manual reset 2) Manual Reset with Trip Circuit 3) Auto reset 4) First up 5) Ring back
Max.ambient temp.	: 0 - 60 C Humidity : 95% R.H.
Window dimension	: 30 (H) x 30 (W) mm, 30 (H) x 65 (W) mm
Window Colour	: Red, Yellow, Amber & White
Facia Type	: Printed on photo film replaceable from front
Push button controls	: For Test, Mute, Silence, Accept & Reset functions
Communication Port (Optional feature)	: Slave ID site selectable through DIP switch RS 485

Ordering Information

1. No. of windows and window configuration.
2. Supply voltage
3. Potential free or LIVE fault input contacts.
4. In case of LIVE fault inputs, the details of fault common connection.
5. Grouping of trip and non trip faults and required relay output contacts for the same.
6. Colour of windows
7. Details of window.
8. Any optional feature required.
 - ◆ Dual power supply requirement
 - ◆ Serial Port requirement.
 - ◆ Repeat relay requirement.



Models with window size and cutout details

Alarm Annunciator Cutout Details		Alarm Annunciator (ABS FRP Enclosure)		
No of Window	Model No	Window Size(mm)	Cutout Size(mm) W x H	Overall Size(mm) W X H X D
4 Window	PRO4-1D	30 x 65	68 x 138	72 x 144 x 195
4 Window with Hooter	PRO4-1D-H	30 x 30	68 x 138	72 x 144 x 195
6 Window	PRO6-1D	30 X 30	68 X 138	72 X 144 X 195
8 Window	PRO8-1D	30 x 30	68 x 138	72 x 144 x 195
6 Window with Hooter	PRO6-2D-H	30 X 65	138 X 138	144 x 144 x 195
8 Window	PRO8-2D	30 x 65	138 x 138	144 x 144 x 195
8 Window with Hooter	PRO8-2D-H	30 X 30-4 Nos. 30 X 65-4 Nos.	138 X 138	144 X 144 X 195
10 Window	PRO10-2D	30 x 30-4 Nos. 30 x 65-6 Nos.	138 x 138	144 x 144 x 195
12 Window	PRO12-2D	30 x 30-8 Nos. 30 x 65-4 Nos.	138 x 138	144 x 144 x 195
12 Window with Hooter	PRO12-2D-H	30 x 30	138 x 138	144 x 144 x 195
16 Window	PRO16-2D	30 x 30	138 x 138	144 x 144 x 195
12 Window	PRO12-3D	30 x 65	210 x 138	216 x 144 x 195
20 Window	PRO20-3D	30 x 30-16 Nos. 30 x 65-4 Nos.	210 x 138	216 x 144 x 195
20 Window with Hooter	PRO20-3D-H	30 x 30	210 x 138	216 x 144 x 195
24 Window	PRO24-3D	30 x 30	210 x 138	216 x 144 x 195
16 Window	PRO16-4D	30 x 65	282 x 138	288 x 144 x 195
28 Window	PRO28-4D	30 x 30-24 Nos. 30 x 65-4 Nos.	282 x 138	288 x 144 x 195
28 Window with Hooter	PRO28-4D-H	30 x 30	282 x 138	288 x 144 x 195
32 Window	PRO32-4D	30 x 30	282 x 138	288 x 144 x 195
20 Window	PRO20-5D	30 x 65	355 x 138	365 x 144 x 195
36 Window	PRO36-5D	30 x 30-32 Nos. 30 x 65 - 4 Nos.	355 x 138	365 x 144 x 195
40 Window	PRO40-5D	30 x 30	355 x 138	365 x 144 x 195
24 Window	PRO24-6D	30 x 65	428 x 138	435 x 144 x 195
48 Window	PRO48-6D	30 x 30	428 x 138	435 x 144 x 195
32 Window	PRO32-8D	30 x 65	565 x 138	575 x 144 x 195
64 Window	PRO64-8D	30 x 30	565 x 138	575 x 144 x 195

Application Areas

Thermal power stations and sub-stations of Electricity Boards, Steel Plants, Sugar Industries, Cement and Chemical Industries, A.C. Plants, Process Plants, Heat Treatment Plants, HT Brecker Panels, Generator Panels, Hotels, Fire Alarm Systems and in telephone exchanges as Audio-Visual panels etc.



Proton power Control Pvt. Ltd. was established in 1988 with a vision to provide innovative products and reliable solutions for optimum power management, added many more professional electronic systems and products through in-house Design and Development.

Microcontrollers with their inherent advantages are being increasingly used in the industry. Any manufacturing controlling system requires centralized and accurate monitoring. Annunciator is one of the equipment among these systems. After studying numerous site requirements, Proton Power Control Pvt. Ltd. have developed and perfected the Annunciator with latest technology. The user-friendly design fulfills the expectations and demands of the customer.

In house design facility, timely delivery, CE certified, latest testing setup, as per IEC standards & EMI EMC tested.

We, at Proton Power Control, are committed to design, development, manufacturing and supply of professional electronic equipment for the customer and strive for their complete satisfaction.

We cater to customer requirements, which are dynamically changing due to advancement of technology. Our strength is to adapt to these changes and bring out solutions in the form of products and systems in a minimal throughput time, without sacrificing on quality, reliability and delivery commitments.

We achieve quality through high level of commitment to it while optimizing costs. This has been possible due to continued improvement in the areas of design, operations and an ability to embrace latest technology.

We continuously invest in our technology base, maintain a strong team with an eye on customer satisfaction and service support.



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