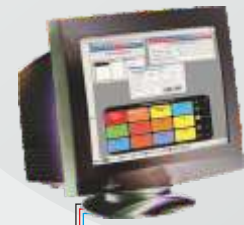


Annunciation with Computer Interfacing



- PC communication with RS 485 modbus protocol.
- 32 units can be interfaced.
- 2 way communication.
- Window configuration, colour and legends programmable.
- Reports generation.
- Password protected.



1 to 32 Annunciators can be interfaced

Ordering Specifications

- No. of windows and window configuration.
- Supply voltage.
- NO or NC fault input contacts.
- Potential free or LIVE fault input contacts.
- In case of LIVE fault inputs, the details of fault common connection.
- Operating sequence.
- Grouping of trip & non trip faults and required relay output contacts for the same.
- Push Buttons on front plate required or not.
- Push Button connections on backside terminal strip required or not.
- Colour of windows.
- Details of legends.
- Mounting - Horizontal or Vertical.
- Any optional feature required.

Company Profile

Proton is established in 1988 with a vision to provide dynamic and innovative solutions according to the need of industry. We are ISO 9001:2008 certified Company engaged in manufacturing a vast range of customized electronic controllers for process industry and industrial automation.

Operating from modern 6000 sq. ft. manufacturing facility, we carry out a comprehensive range of services ranging from Designing, Development and Manufacturing of electronic Products.

Our products are designed as per IEC and BS EN standards and we follow EMI/EMC norms. We have established a modern Research and Development wing which is managed by qualified technocrats and engineers who are constantly involved in improving the quality of our Products.

Our Products

- Alarm Annunciators
- Air Conditioner Controllers
- Motor Protection Relays
- Digital Panel Meters
- Auto Mains Failure Controllers
- Temperature and Humidity Controllers
- Protection Relays
- Generator Fuel Savers
- Controller for R.O. Plants
- AHU Controller

Location



We are located at 2 hrs drive from Mumbai International Airport.

Our Strengths

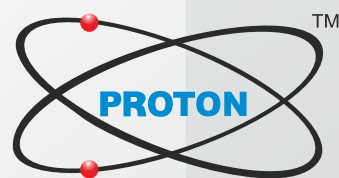
- Latest Microcontrollers 32 bit
- Customized Solutions
- In House Design Facility
- Timely Delivery
- RoHS Complaint
- CE Certified
- Latest Testing Setup
- As Per IEC Standards & EMI EMC Tested
- AHU Controller
- Controller for Water Treatment Plant



Alarm Annunciator



providing excellence with
latest technology
customized solution
timely delivery



PROTON POWER CONTROL PVT. LTD.

Address: Sr. No. 28, Jagtap Dairy, Pimple Nilakh
 Pune - 411 027, Maharashtra, INDIA.

Tel: +91 - 20 - 2727 0100
 Telefax: +91 - 20 - 2727 0800, 2727 6777
 Mobile: +91 97648 85010, 94220 09655

E-mail: rdpawar@protonpowercontrol.com
sales@protonpowercontrol.com
 Website: www.protonelectronic.com, www.accontroller.com

Prompt detection and rectification of any system failure or mal-operation is of vital importance for any power or process plant. PROTON Alarm Annunciators continuously monitor the various process parameters and equipment status in power-stations, process plants and these parameters are displayed at centralised control room or on control panel. PROTON Annunciators stand for instant alarming of any abnormal condition occurs during process and protect the valuable equipments. PROTON Annunciators ensure the higher order of reliability and thus provide a comprehensive service to the industry for monitoring, alarm and control of process plant parameters. These highly advanced and compact systems use the latest single chip micro-computer technology for its design and offer multipoint annunciation with operating sequences as per prevailing standards and with many optional features as indicated aside.

Salient Features

- Based on latest single chip microcontroller technology. Compact design for reliable and accurate operation.
- Fast response time.
- Models available from 4 to 24 windows.
- Field selectable operational sequences.
- Incorporates a group of super bright LED's instead of twin filament lamps for ultimate life at very less power consumption.
- Actuated thro' 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) thro' potential free relay output contact.
- All models are with built-in Test, Silence, Accept & Reset push buttons, provision on back side terminal strip.
- Specially designed power supply for high noise immunity, wide input variations & having built-in transient protection.
- The extensive protection so provided safeguards all I.C.'s & components from failure, thereby offering complete reliability.
- All cards interconnected with plug-in polaride connectors for easy servicing.
- Rugged Plastic enclosure with high strength.
- Type tested for noise, impulse and functional test as per various standards.

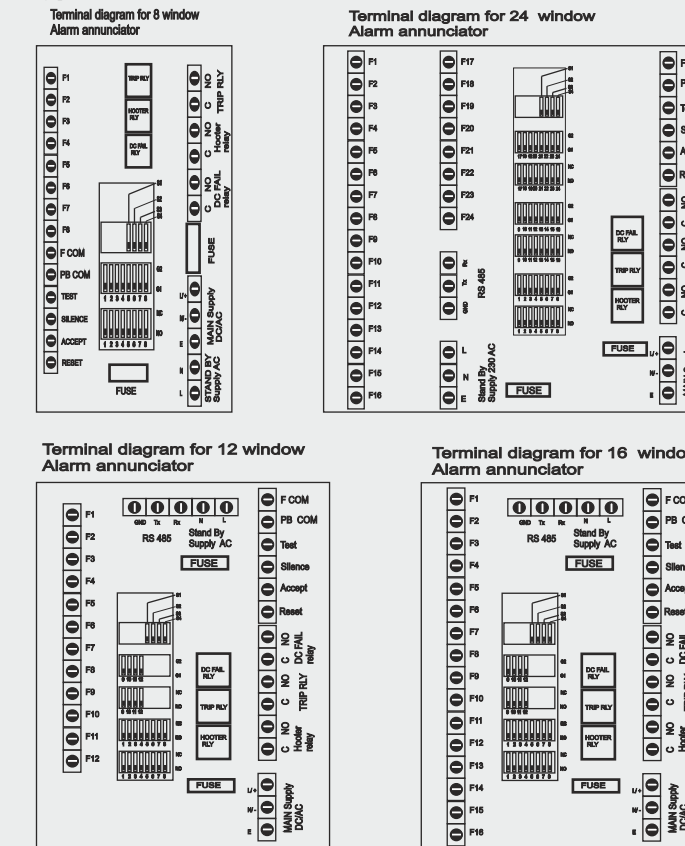
Optional features

- Multicoloured inscription plate for easy differentiation of Trip and Non-Trip fault annunciations.
- Site selectable facility for grouping of Trip and Non-Trip faults or Trip and Alarm faults for visual and audio discrimination thro' two separate output relay contacts.
- Extra relay output contact per channel for repeat annunciation.
- Actuated thro' LIVE fault input contacts. (AC or DC voltage directly can be given.)
- Provision for Dual (AC & DC) power supply with automatic changeover with A.C. fail or D.C. fail annunciation.
- Computer interface with 485 modbus ASCII protocol.
- Output connections for remote Test, Accept and Reset operations.
- Partly POTENTIAL FREE and partly LIVE fault input contacts can be given in one single unit.
- Choice of different window sizes 30 x 30 or 30 x 65mm.

Technical Specifications

Supply voltage	: 1) 90-270 AC/DC SMPS	2) 20V/60V DC	
No. of windows	: 4 to 24 windows available in different configurations		
No. of LED's per window	: Super bright 2 LED's in a rows		
Power consumption	: 0.8VA per window / 0.5 W		
Terminal	: Suitable for 0.2 to 2.5 mm cable		
Scan time	: 60 ms		
Response time	: less than 25 ms		
Flash rate	: 60 Flashes/min - Fast flashing 30 Flashes/min - Slow flashing		
Interrogation voltage	: 12 V DC		
Fault input contacts	: potential free NO or NC site selectable		
Output connections	: For remote Test, Accept & Reset operations on specific demand		
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	: 2.5 KV as per IS 8686 Refer type test chart.		
Impulse test	: 5 KV as per IS 8686		
Environmental tests	: As per IS 9000		
Operational Sequences	: 1. Auto Reset 2. Manual Reset 3. First Up 4. Ring Back Alarm		
Max. ambient temp.	: 0 - 60° C		
Humidity	: 95% R.H.		
Window dimension	: 30 x 30 mm, 30 x 65 mm		
Window Colour	: Red, Yellow, Green, Blue & White		
Facia Type	: Printed on photo film replaceable from front		
Push button controls	: For Test, Silence, Accept & Reset functions		
Dimensions	: 4/6/8 W	10/12/16 W	20/24W
Cutout size	: 138Hx68W	138Hx138W	138Hx210W
Overall Size	: 144Hx72W x 215D	144Hx144Wx215D	144Hx216Wx215D

Typical Connection

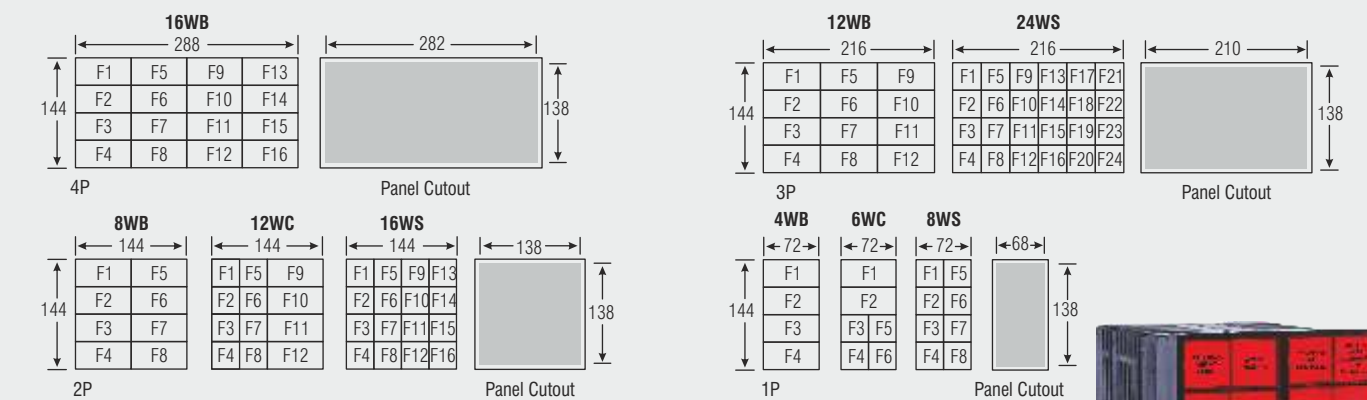


Operating Sequences Chart

Fault Condition	Manual Action	Auto Reset		Manual Reset		First up Audio	Ring Back Alarm			
		Audio	Visual	Audio	Visual		Audio	Visual	Ring Back Alarm	
Normal	Off	Off	Off	Off	Off	Off	Off	Off	Off	
AB-Normal		On	Flash	On	Flash	On	Flash (I) Steady (S)	On	Fast Flash	Off
Normal Before Accept		On	Flash	On	Flash	On	Flash (I) Steady (S)	On	Fast Flash	Off
Normal	Accept	Off	Off	Off	Steady	Off	Steady (I) Steady (S)	Off	Steady	Off
AB-Normal	Accept	Off	Steady	Off	Steady	Off	Steady (I) Steady (S)	Off	Steady	Off
Normal Before Reset		Off	Off	Off	Steady	Off	Steady (I) Steady (S)	Off	Slow Flash	Off
Normal	Reset	Off	Off	Off	Off	Off	Off	Off	Off	Off
AB-Normal	Reset	Off	Steady	Off	Steady	Off	Steady	Off	Steady	Off
Normal	Test	On	Flash	On	Flash	On	Flash	On	Slow Flash	Off

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

Dimensional Details



Type tests as per various standards conducted on 'PROTON' Annunciator unit

Electrical Tests

Test	Description	Reference
High voltage surge Susceptibility test	2 KV AC (RMS) for 1 min. or 2.5 KV for 1 sec.	IEC - 255-4, IEEE 472-1974 IS 3231
Impulse voltage withstand test	5 KV Impulse at all i/p and o/p points	IS 8686-1977 IEEE - 472 BS - 923
High voltage high frequency disturbance (Noise) test	Longitudinal (2.5 KV) Transverse (1 KV)	IS - 8686-1977
Mains supply variation	+ 10% - 15%	Mfr's test

Environmental Tests

Dry Heat test	60 Hrs. at 70°c	IS 9000/II/77
Burn in test in energised condition	90 Hrs. at 70°c	IS 9000/77
Damp Heat test	72 Hrs. at 55°c at 95% R.H.	IS 9000/IV/79
Cold test	-25oc for 48 Hrs.	IS 9000
Bump test	1000 Bumps/axes @ 3 bumps/sec.	IS 9000/VII/64

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, Hotels, Fire Alarm Systems and in telephone exchanges as Audio-Visual panels etc.

