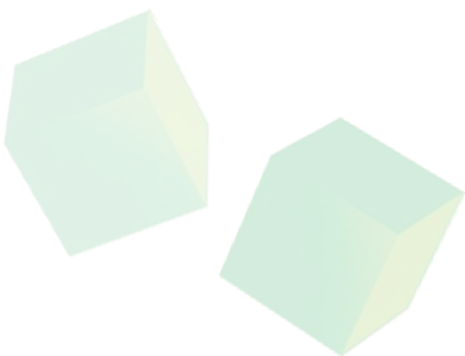




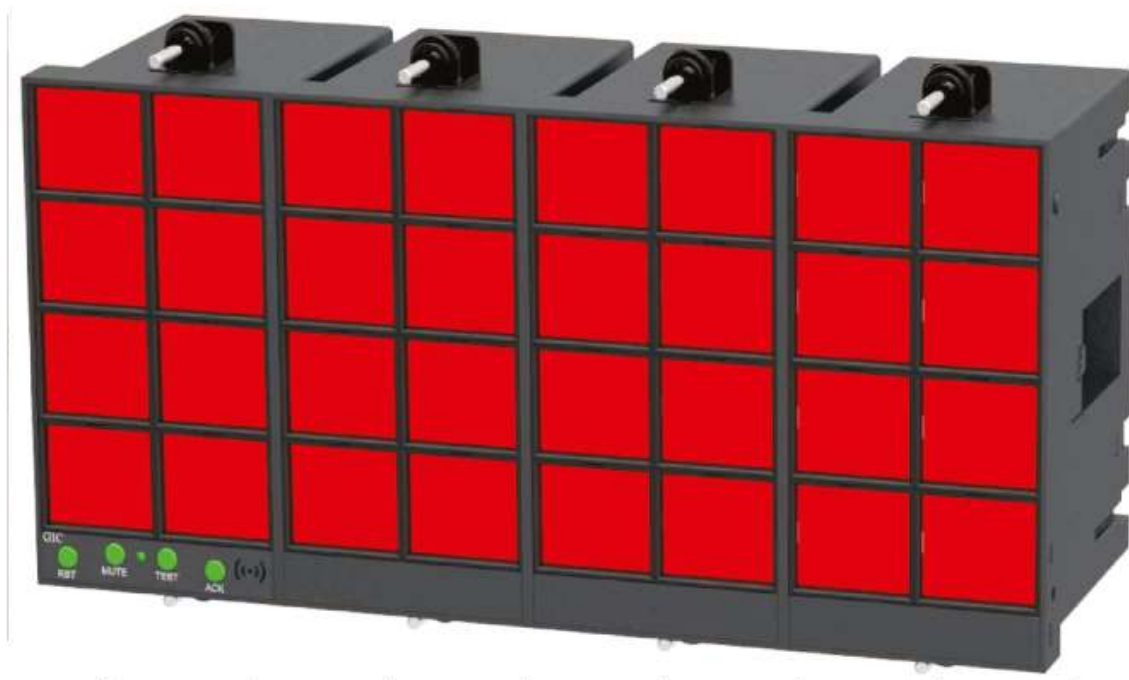
ALARM ANNUNCIATORS

2-48 Windows Alarm Annunciators



Alarm Annunciators

- Standard models available from 2 to 48 windows
- Choice of 3 window sizes and 6 different window colours
- Optically isolated fault inputs with wide fault input voltage range (12 - 240V AC/DC +/-10%)
- AC-DC Fail Annunciation
- Field selection for NO / NC fault input contacts, grouping of alarms, window size configuration
- Space saving due to lower depth of only 100mm
- Integral push buttons for Test, Acknowledge, Mute and Reset operations
- Four SPDT relay outputs (2 for grouping, 1 for external hooter, 1 for ring back sequence)
- 7 Field selectable operation sequences as per ISA standard
- Integral buzzer for audible alarm output of 90 dB
- Communication interface with RS485 Modbus RTU protocol
- Replaceable LEDs, Fast Scan, Manned / Unmanned, Supervisory Relay & Supply fail annunciation available



Working Principle



Whenever there is a change of input contacts from Normally Open to Close or from Normally Close to Open position, annunciator changes from rest condition to alarm condition.

Hence there is an immediate recognition of fault input which will have a corresponding visual and audio alarm as per the particular selected program sequence.

The base unit of alarm annunciator has four programmable keys for Mute, Acknowledge, Reset & Test function. On pressing the Mute key the internal buzzer can be deactivated. Acknowledge key is used to accept the fault condition, Reset key enables to reset the alarm annunciator to its default state and Test key helps to perform the complete test of the system.



Technical Specifications

Parameters	Fast Scan	Normal Scan
Supply Voltage (≡)	90 - 270 V AC/DC or 18 - 60 V DC	
Supply Frequency (AC)	50/60 Hz	
LED Indication (Green)	ON - Healthy / Manned Mode	ON - Healthy
	Blinking - Unmanned Mode [Slow Blinking Rate - 300msec ON, 3sec OFF] Blinking - Error [Fast Blinking Rate - 500msec Cyclic ON/OFF] Error: 1) User selected wrong windows configuration 2) Slave Communication error	Blinking - Error [Fast Blinking Rate - 500msec Cyclic ON/OFF] Error: 1) User selected wrong windows configuration 2) Number of windows are more than number of fault inputs.
No. of Windows	2 to 48 windows in different configurations	
Window Size	Small: 34x31mm, Medium: 68x31mm, Large: 68x63mm	
Window Colour	Red, Yellow, Blue, Green, Amber and White	
Illumination	Low power super bright white LEDs (replacable LEDs available)	Low power super bright white LEDs
Fault Input Signal	Potential free (NO/NC field selectable)	
Fault Input Voltage	Internal: 12V DC (Potential free)	Internal: 12V DC / External: 12V-270V AC/DC
Scan Time	10 msec	100 msec
Flash Rate	1) Fast flash - 0.5 Sec ON / 0.5 Sec OFF (60 flashes/Min) 2) Slow flash - 0.5 Sec ON / 1.5 Sec OFF (30 flashes/Min)	
Terminal	Pluggable terminal blocks for conductor up to 2.5mm ²	
Output Relay Contact	4 C/O Relays (2 for grouping + 1 for external hooter + 1 for Ring back sequence)	
Relay Contact Rating	NO - 5A / NC - 3A @250V AC & NO - 5A / NC - 3A @ 30V DC (resistive), (Relay Actuation time 10 to 130ms after signal detection)	NO - 5A / NC - 3A @ 250V AC & NO - 5A / NC - 3A @ 30V DC (resistive), (Relay Actuation time 130ms after signal detection)
Audible Alarm Output	90 dB at 10 cm distance (In-built configurable Buzzer)	
Facia Type	Individual window lens, replaceable from front.	
Alarm Sequences	As per ISA standard (Field configurable) 1) Manual Reset (M-1) 2) Auto Reset (A-1) 3) Ring Back (R-1-12) 4) Auto Reset with No-lock(A-1-4) 5) Manual reset first out with no subsequent alarm flashing and silence push button (F2M-1) 6) Auto reset first out with no subsequent alarm flashing and silence push button (F2A-1) 7) Manual Reset (M-2) [Applicable for Fast Scan Module]	
Push Button Controls	Integral Push buttons for Test, Mute, Acknowledge and Reset functions. Provision of output connections for remote access of push buttons.	
Communication Port	Computer interface with RS 485 Modbus RTU protocol.	
Operating Temperature	-10°C to +55°C	
Storage Temperature	-15°C to +60°C	
Humidity	95% R.H.	
Mounting Type	Panel Mounting	
Certification	  Compliant	
Degree of Protection	Front panel IP40, Rear panel IP20	

EMI / EMC Compliance

Harmonic Current Emissions

ESD

Radiated Susceptibility

Electrical Fast Transient

Surge

Conducted Susceptibility

Voltage Dips and Interruptions(AC)

Conducted Emission

Radiated Emission

Safety Compliance

Test Voltage Between I/P and O/P

Impulse Voltage Between I/P

And O/P

Single Fault Test

Insulation Resistance

Leakage Current

Pollution Degree

Environmental Compliance

Cold Heat

Dry Heat

Vibration

IEC 61000-3-2 Class A

IEC 61000-4-2 Level II Class A

IEC 61000-4-3 Level III Class A

IEC 61000-4-4 Level III (Power Supply and Input Signal with external supply),

IEC 61000-4-4 Level III (Capacitive coupled on Input Signal and Remote keys with internal 12V supply),

IEC 61000-4-4 Level II (Capacitive coupled on Communication)

IEC 61000-4-5 Level IV (Power supply and Input Signal with external supply)

IEC 61000-4-6 Level III Class A

IEC61000-4-11 All VII Level Pass

CISPR 11 / CISPR 14-1 Class A

CISPR 11 / CISPR 14-1 Class A

IEC 60255-5, 2.5kV, 50Hz, 1Min

IEC 60255-5, 5kV, 1.2/50us, 0.5J

IEC 61010-1

UL 508 > 50 kΩ

UL 508 < 3.5 mA

II

IEC 60068-2-1

IEC 60068-2-2

IEC 60068-2-6, 10 to 55Hz



Technical Specifications

Parameters	Description (AC-DC Fail Annunciator)
Supply Characteristics	
Supply Voltage	90V-270V AC/DC or 18-60 VDC
Supply Frequency (AC)	50/60 Hz
Power Consumption	0.5W per window
LED Indication (Green)	ON - Healthy /Manned Mode Blinking -Unmanned Mode [Slow Blinking Rate- 300msec ON, 3sec OFF] Blinking -Error [Fast Blinking Rate- 500msec Cyclic ON/OFF] Error: 1) User selected wrong windows configuration. 2) Slave Communication error.
Annunciator Characteristics	
No. of windows	2 to 32 windows in different configurations
Window size	Small-34x31mm, Medium-68x31mm, Large-68x63mm
Window colour	Red, Yellow, Blue, Green, Amber and White
Illumination	Low power super bright white LEDs
Fault input signal	Potential free (NO/NC field selectable)
Fault input voltage	Internal – 12V DC (Potential free)
Scan Time	40 msec
Terminal	Pluggable terminal blocks for conductor up to 2.5mm ²
Flash rate	1) Fast flash – 0.5 Sec ON / 0.5 Sec OFF (60 flashes/Min) 2) Slow flash – 0.5 Sec ON / 1.5 Sec OFF (30 flashes/Min)
Output relay Contact	4 C/O Relays (2 for grouping + 1 for external hooter + 1 for Ring back sequence)
Relay Contact Rating	NO– 5A / NC– 3A @250V AC & NO– 5A / NC– 3A @30V DC (resistive)
Alarm Sequences	As per ISA standard (Field configurable) 1) Manual Reset (M-1) 2) Auto Reset (A-1) 3) Ring Back (R-1-12) 4) Auto Reset with No-lock(A-1-4) 5) Manual reset first out with no subsequent alarm flashing and silence push button (F2M-1) 6) Auto reset first out with no subsequent alarm flashing and silence push button (F2A-1) 7) Manual Reset (M-2) [Applicable for Fast Scan Module]
Facia type	Individual window lens, replaceable from front.
Audible Alarm Output	90 dB from 10 cm Distance (inbuilt Buzzer) Buzzer Functionality can be enable or Disable by using Mute Key. Default Setting : Buzzer Functionality is Enable. To Disable, Press Mute Key continuously for 5 Sec, buzzer will beep for three times to indicate buzzer is disabled. To Enable, Press Mute key continuously for 5 Sec, buzzer will beep for two times to indicate buzzer is enabled.
Push Button Controls	Integral Push buttons for Test, Mute, Acknowledge and Reset functions. Provision of output connections for remote access of push buttons
Communication Port	Computer interface with RS485 Modbus RTU protocol.
Operating Temperature	-10 ° C to +55 ° C
Storage Temperature	-15 ° C to +60 ° C
Humidity	95% R.H.
Mounting Type	Panel Mounting

Ordering Information



Cat. No.	Product Size	No. of Windows	Window Size	Keys
AU1D8S	1D	8	Small	Small
AU1D6SP	1D	6	Small	Big
AD1D8S	1D	8	Small	Small
AD1D6SP	1D	6	Small	Big
AB1D8S	1D	8	Small	Small
AB1D6SP	1D	6	Small	Big



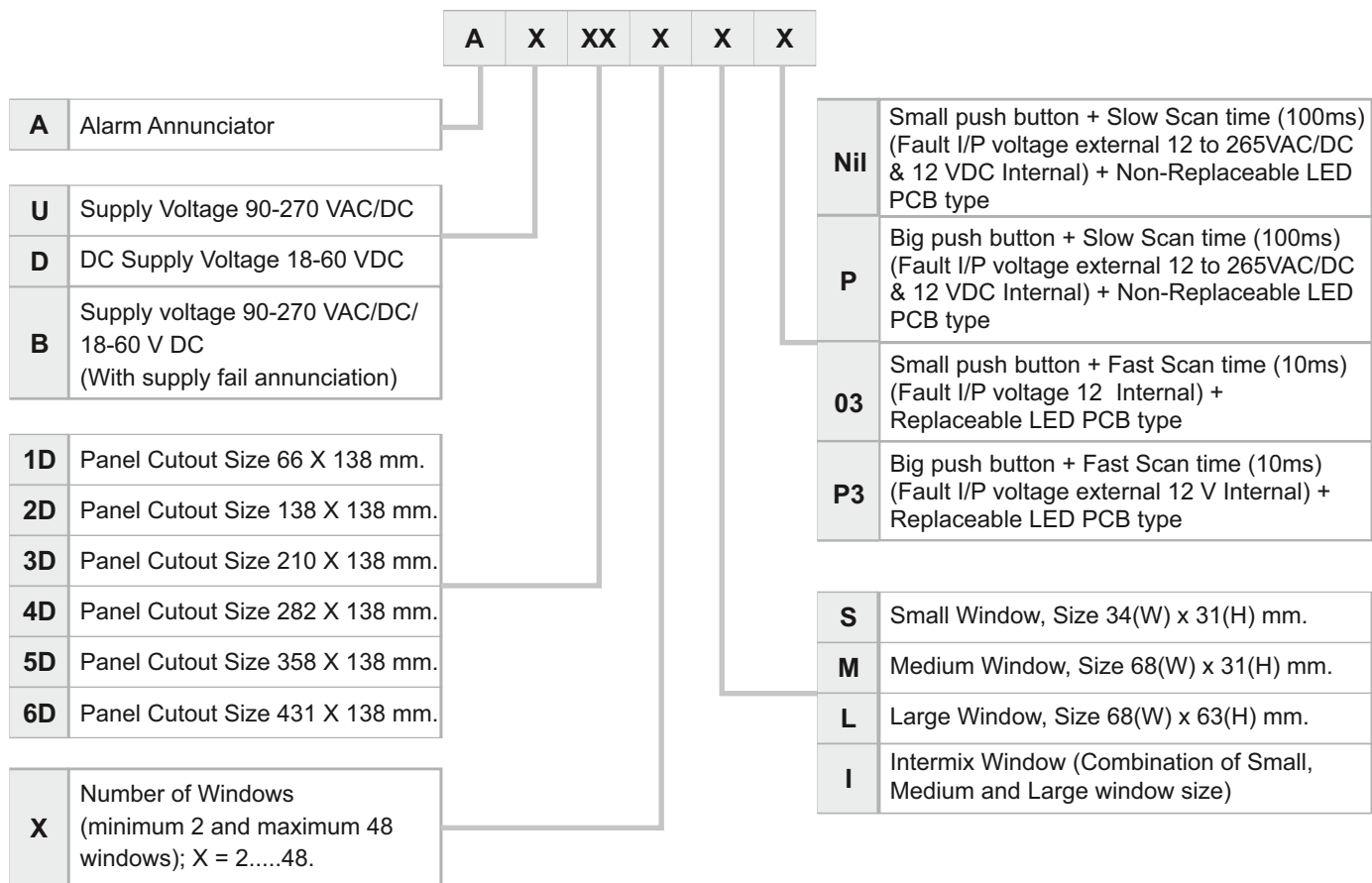
AU2D16S	2D	16	Small	Small
AU2D14SP	2D	14	Small	Big
AD2D16S	2D	16	Small	Small
AD2D14SP	2D	14	Small	Big
AB2D16S	2D	16	Small	Small
AB2D14SP	2D	14	Small	Big



AU3D24S	3D	24	Small	Small
AU3D22SP	3D	22	Small	Big
AD3D24S	3D	24	Small	Small
AD3D22SP	3D	22	Small	Big
AB3D24S	3D	24	Small	Small
AB3D22SP	3D	22	Small	Big



AU4D32S	4D	32	Small	Small
AU4D30SP	4D	30	Small	Big
AD4D32S	4D	32	Small	Small
AD4D30SP	4D	30	Small	Big
AB4D32S	4D	32	Small	Small
AB4D30SP	4D	30	Small	Big



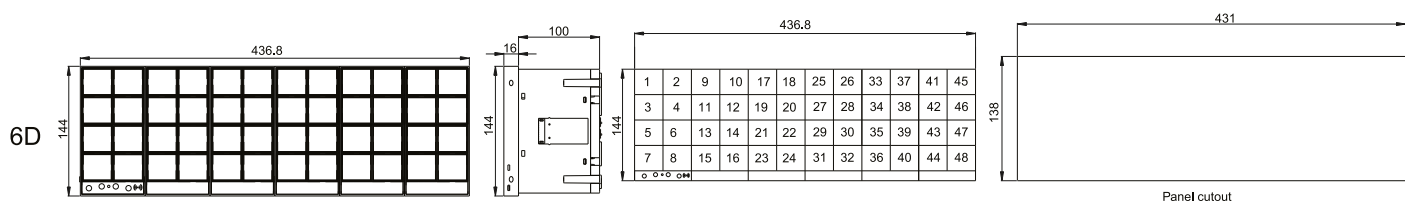
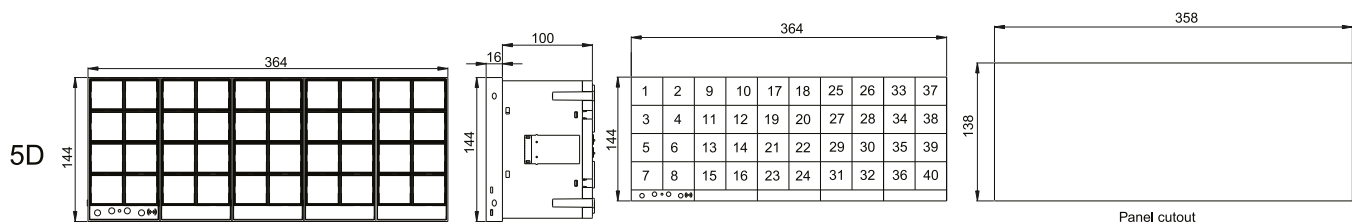
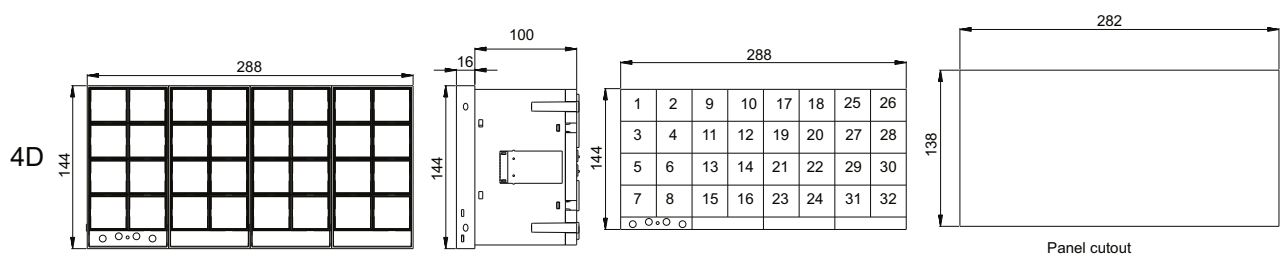
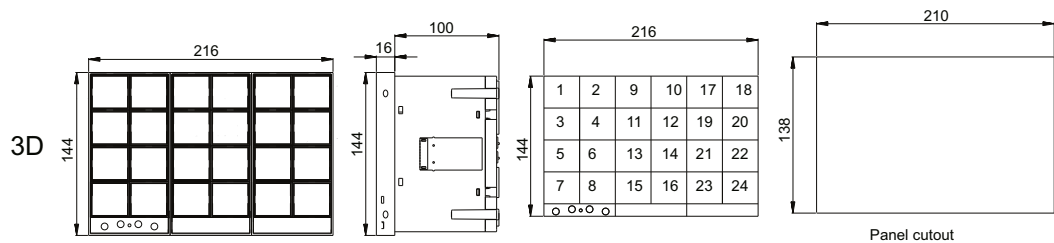
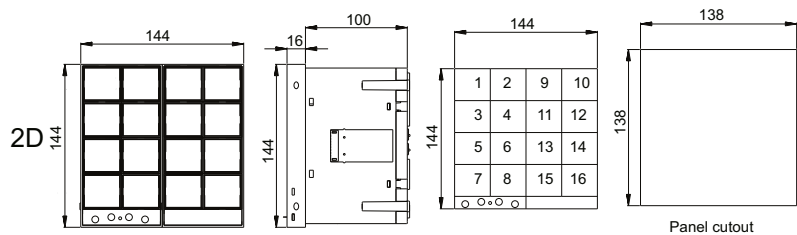
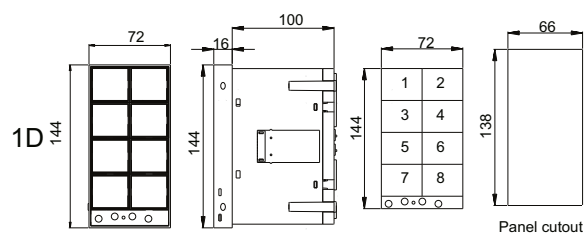
Product Ordering code

Note 1 : AC/DC Fail annunciator (cat id starting with **AB**) comes with 40ms scan time & 12V fault input voltage

Note 2 : For other customised products, use live product configurator available on our website to generate part number & enquiry request form: www.gicindia.com

Note 3 : Legend templates are available on our website : www.gicindia.com

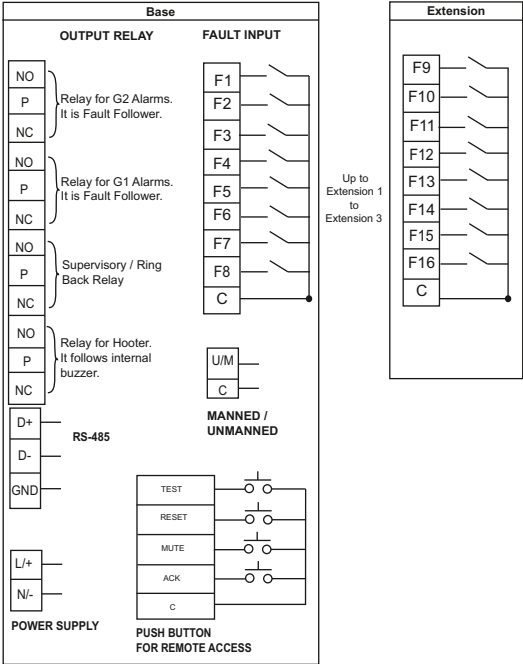
MOUNTING DIMENSIONS (mm)



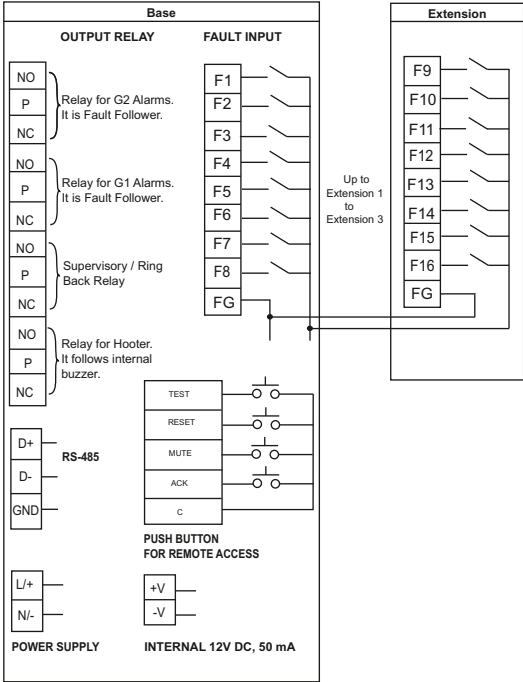
Weight with box (approx.): 1D=580g, 2D=950g, 3D=1320g, 4D=1690g, 5D=2060g, 6D=2430g

CONNECTION DIAGRAM

Fast Scan



Normal Scan



Terminal Connection: For Output Relay, Fault Input, Remote Keys,
Power Supply Connection: AWG 28 to 12, Ph1- 3.5mm, Torque 0.5Nm(4.5lb.in)
For Internal 12V supply, RS485 Connection: AWG 28 to 16, Flat- 2.5mm, Torque 0.2Nm(1.77lb.in)

AC-DC FAIL ANNUNCIATOR

