INSTRUCTION MANUAL

MODEL :LEGEND ALARM CONTROL PANEL

ERTL TESTED AS PER IS:2189

NATIONAL SECURITY DEVICES

NATIONAL
Security Devices

GENERAL FEATURES

The microprocessor based manual alarm Control and indication panel is designed to individual zoning the fire input and evacuated /alert fire in earliest practicable moment with the help 24 V hooter output .

The panel operates on 220 V AC Mains with 24 V DC Battery as a stand by power , The built in circuit provide constant voltage charging to maintain the battery capacity.

- Operates on 220 V AC supply.
- Stand by battery backup with Built in charging.
- Error free panel status in unambiguous colored LED indication.
- System on Mains ON battery Low status indication.
- Low battery visual warning with Audio able tone.
- Zone wise fire fault Operating indication Facility.
- Zone ON indication Facility.
- 24 V Hooter Output with silence facility.
- Manual test facility
- Rugged CRCA sheet with powder coated finish.
- Modular Construction.
- Relay Output for associate gadgets.

MECHANICAL CONSTRUCTION

The enclosure of the panel is constructed by CRCA Sheet with powder-coated finish and its designed to afford the degree of protection as per IP54 , The 20 mm Knock outs are given for cable entry at the top of the cabinet.

The Panel has a built in battery space for 2Nos of 12 V , 7 AH Batteries.

The front side of the panel consist of the following

1) Control Switches
2) LED Indication

INSTALLATION AND COMMISSIONING

Installation

The installation of the Fire detection and alarm should comply with

a)The installation of the Electrical engineers (IEE) wiring regulation and standards.

b)The Indian Standard of fire Detection and alarm for building.

c)The installation cable should not be in the area of proximity of high voltage cable or induce electrical interference.

Place the panel in its outing Position and fix the panel to the wall using the slot of the screw , Ensure the enclosure and the inner parts of the panel are given sufficient protection during installation period . All external cables are to be entered via the 20 mm performed knockout located at the top of the panel .

After the installation of all cables has been completed , clean the interior of the enclosure ensuring all masonry debris and drilling swords are removed.

COMMISSIONING

Check all entered wiring is correctly identified and also check all free from fault condition by a multi meter . Connect the external wiring into their respective terminal and ensure the end of line (EOL) resistor is placed at the last device of circuit.

Prior to the power up of the panel conduct the following preliminary checks

a) check for any external signs of damage caused during installation
b) Checks all PCBs are secure in its monitoring position.
c) Check all cable are secure and correctly connected.
d) Check all the cable termination is tight & Secure.
e) Connect the batteries ensuring the correct polarity.

All damages / Fault must be rectified before proceeding

INDICATOR AND CONTROLS
(uses and normal state)

ZONE MONITOR INDICATIONS

NORMAL: These are the green glowing LED of zone normal condition in case any events these LED's goes off .

FIRE : These are the Red glowing LED for fire conditioning. These LED are in pair In case of fire LED's glow . Normally these LED's retain off .

OPEN :This is the yellow glowing LED for open conditioning. This LED is in individual with open mark. In case of zone wire open , cables/ wire or EOL is not connected this is indication for respective fault. These LED's retain off.

SHORT : This is the yellow glowing LED for short conditioning. This LED is in individual with short mark. In case of zone wire short , cables/ wire or EOL is short this is indication for respective fault. These LED's retain off.

POWER INDICATION

1) SYSTEM ON
2) CHARGING
3) AC FAIL
4) BATTERY LOW
5) FUSE

CONTROL

RESET :- This switch has provided for restarting the system after any event or function .

S**ILENCE :-** Whenever any signal comes from field's device , the external buzzer beeping with the information on LED glow of respective zone . To mute that audio alarm press silence button or in case of fire the hooter sound can be muted by pressing this button.

LAMP TEST:- To check the LED in healthy position press this switch . All LED will be glow with the buzzer sound .

ISOLATE / OFF : This switch is provided for non functioning of respective zone..

TEST SWITCH

TEST: This switch is provided in individual zone & it is common for all test in that zone. It works with the combination of SHORT/OPEN/FIRE switch. If we press TEST switch & FIRE simultaneously then fire condition will occur in that zone.

FIRE: This switch is provided common for all zone. It works with the combination of TEST switch. If we press TEST switch & FIRE simultaneously then fire condition will occur in that zone.

OPEN: This switch is provided common for all zone. It works with the combination of TEST switch. If we press TEST switch & OPEN simultaneously then OPEN condition will occur in that zone.

SHORT: This switch is provided common for all zone. It works with the combination of TEST switch. If we press TEST switch & SHORT simultaneously then short condition will occur in that zone.

TERMINALS / OUTPUT

M.C.B. CONNECTOR :-
These are the input terminal to connect the manual call box the panel system . If glass removed or break at any manual call box then system provide provide 24 volt D.C. to respective hooter & potential free contact changes it state . So this panel act for conducting further operation for air handling unit or other associated gadgets. Be sure for EOL at appropriate point for right function of manual call box.

HOOTER:-
This connector provide power 24volt D.C. for alarming the hooter in case of break glass of manual call box . these are the individual zone wise activated along with one common hooter. Verify the hooter terminal protect form short circuit because it can damage the product.

COMMON HOOTER:-
This terminals 24 D.C. output is activated with the any break glass unit.

FIRE POTENTIAL FREE CONTACT :-
These are relay contact that change over its position in case of fire either it is multi zone or single zone.

FAULT POTENTIAL FREE CONTACT :-
These are relay contact that change over its position in case of fault either it is cross zone or single zone.

TECHNICAL DATA

OPERATING VOLTAGE	: 24 DC+ 10%
MAINS SUPPLY	: 230V AC 190V AC
STAND BY SUPPLY	: 24V/4.5Amper
HOOTER OUTPUT	: 24V/2Amax
RELAY RATING	: 24V/3Amp
POTENTIAL FREE CONTACT	: FIRE & FAULT
VOLTAGE CHARGER	: 26.6V
ZONE POWER NORMAL	: 15.6MA/ZONE
ALARM CURRENT	: 35MA ZONE
AC FUSE RATING	: 500MA
DC FUSE RATING	: 6Amp
BATTERY FUSE RATING	: 6Amp
DIMENSIONS	: (420X325X120)MM.
WEIGHT	: 10 KG APPROX..