

SAHYADRI ELECTRO CONTROLS (I) PVT. LTD.

SECO



ALARM ANNUNCIATOR INBUILT HOOTER (SPEAKER INVISIBLE)

10, VINAY COMPLEX, 1ST CROSS, RAJGOPAL NAGAR MAIN ROAD, GANAPATHI NAGAR,
PEENYA III PHASE, BANGALORE – INDIA - 560058

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SAHYADRI (SECO) Make Alarm Annunciator - SAN 200 series is designed with Micro controller based advance technology and field proven model for all types of fields and environmental conditions. This model is Type tested for all EMI, EMC tests (as per IEC), Temperature rise and Cold test at a NABL accredited Govt. Lab. Annunciator is approved and used in all Power Grids, Electricity Boards and OEM's in India.

FEATURES:-

- Advanced high speed Single Chip Microcontroller with reliability and accuracy
 - Available from 2 windows to 64 windows
 - Available in small, Big windows and combination of both
 - Low power consumption
 - Long life super bright SMD LED used
 - With multi-colour selection
 - Wide range AC/ DC Aux. supply
 - Standby power supply
 - DC supervision & fail Indication with Alarm contacts
 - AC fail Indication with Alarm contacts
 - Contacts for external Alarms
 - Inbuilt Alarm
 - RS 485 communication
 - Opto isolated inputs
 - Field selectable Window colour
 - Field selectable Trip & Non trip
 - Field selectable NO/NC inputs
 - Field selectable operating Mode
 - Field selectable window flash rate
 - Field selectable Alarm during Test
 - Provision for External Push buttons for Test, Mute, Accept & Reset
 - Built in Push buttons – Test, Mute, Accept & Reset
 - Potential free input contacts
 - Two sets of potential free normally open contacts for Audible Alarms (T & NT)
 - Watch dog LED with Flashing
 - Shock proof shrouded terminals
 - Low depth
- 

TECHNICAL SPECIFICATION:-

- **Windows available :-** 2, 4, 6, 8, 12, 14, 16, 18, 20, 22, 24, 26, 28, 30, 32, 34, 36 38, 40, 42, 44, 46, 48, 52, 56, 60 & 64 windows
- **Aux. supply: 1)** 10 to 18 V DC **2)** 20 to 150V DC **3)** 75 to 275V AC/DC
- **Window illumination:** Ultra high bright SMD LED
- **Window Colour:** All Red, Red/ Yellow, Red/ White – site selectable (other colours are optional)
- **Window size:** 34 (H) x 37(W) mm and 34 (H) x 74 (W) mm – combination of both sizes
- **Window Flash rate:** 100 / 60 flashes per minute –site selectable
- **Window Legend (Inscription):** Tracing sheet print or Photo negative
- **Power consumption :** 0.8W per window
- **Field input:** potential free protective relay Normally open contact (with potential is optional)
- **Input interrogation Voltage:** -24V DC (from the unit) – No external voltage required
- **Input Field contacts:** Normally open contact (site selectable NO/NC selection is optional)
- **Input Isolation:** Opto isolated (2 kv) (from internal circuits)
- **Response Time:** 20 mSec (other response time is upon request)
- **Sequence of operation:**
 - Site selectable – Type -1:- Normal, Ring Back, Auto Accept & Priority Mode (first out)
 - or
 - Site selectable – Type -2:- Manual Reset M , Auto Reset S, First UP and Manual Reset N
- **Output Contact:** 1 NO contact for Trip Alarm, 1 NO contact for Non Trip Alarm
 - 1 NO contact for DC fail alarm & 1 NO contact for AC Fail (Optional feature)
- **Output contact Rating:** 10A@30V DC/ 230V AC resistive load (make & carry)
- **Push buttons:** Inbuilt push buttons for Test, Mute, Accept & Reset and also terminals provided for external PB's
- **Built in Alarm:** Built in Alarm will be of 1 Tone, 2 Tone, 3 Tone (optional)
- **Sound Output:** 90 dB
- **Enclosure:** FR Grade ABS plastic
- **Protection:** Front: IP54 , Back: IP20

ADDITIONAL FEATURES / OPTIONAL FEATURES

- **Standby power supply:** 230V AC - 45 to 55 Hz (it can withstand and work up to 75 to 350V AC)
- **DC Fail Indication:** Last window flashing with 1NO potential free contact for Alarm
(Any specific window no. is upon request)
- **AC Fail Indication:** Last but one window Flashing with Non trip contact for Alarm
(separate contact for Alarm is upon request)
- **Built in Event Logger contact:** 1 NO Potential free contact per window will be given for SCADA application
- **Built in serial Communication:** RS232/ 485 (with Modbus RTU is optional)

PANEL CUTOUT:-

BIG WINDOWS – 34 X 74 mm				BIG WINDOWS – 34 X 74 mm			
NO. OF WINDOWS	CASE	PANEL CUTOUT	FRONT BEZZEL SIZE	NO. OF WINDOWS	CASE	PANEL CUTOUT - mm	FRONT BEZZEL SIZE
4	1N	147(H) X 70 (W) X 120 (D)	154(H) X 78 (W)	40	10N	147(H) X 772 (W) X 120 (D)	154(H) X 780 (W)
8	2N	147(H) X 148 (W) X 120 (D)	154(H) X 156 (W)	44	11N	147(H) X 850 (W) X 120 (D)	154(H) X 858 (W)
12	3N	147(H) X 226 (W) X 120 (D)	154(H) X 234 (W)	48	12N	147(H) X 928(W) X 120 (D)	154(H) X 936 (W)
16	4N	147(H) X 305 (W) X 120 (D)	154(H) X 312 (W)	52	13N	147(H) X 1006 (W) X 120 (D)	154(H) X 1014 (W)
20	5N	147(H) X 383 (W) X 120 (D)	154(H) X 390 (W)	56	14N	147(H) X 1084 (W) X 120 (D)	154(H) X 1092 (W)
24	6N	147(H) X 461 (W) X 120 (D)	154(H) X 468 (W)	60	15N	147(H) X 1162 (W) X 120 (D)	154(H) X 1170 (W)
28	7N	147(H) X 538 (W) X 120 (D)	154(H) X 546 (W)	64	16N	147(H) X 1240 (W) X 120 (D)	154(H) X 1248 (W)
32	8N	147(H) X 616 (W) X 120 (D)	154(H) X 624 (W)				
36	9N	147(H) X 694 (W) X 120 (D)	154(H) X 702 (W)				

SMALL WINDOWS – 34 X 37 mm

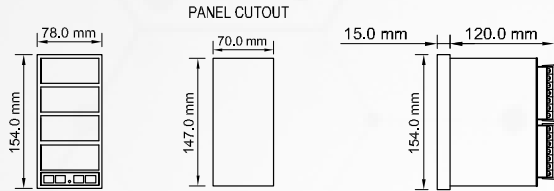
NO. OF WINDOWS	CASE	PANEL CUTOUT - mm	FRONT BEZSEL SIZE
8	1N	147(H) X 70 (W) X 120 (D)	154(H) X 78 (W)
16	2N	147(H) X 148 (W) X 120 (D)	154(H) X 156 (W)
24	3N	147(H) X 226 (W) X 120 (D)	154(H) X 234 (W)
32	4N	147(H) X 305 (W) X 120 (D)	154(H) X 312 (W)
40	5N	147(H) X 383 (W) X 120 (D)	154(H) X 390 (W)
48	6N	147(H) X 461 (W) X 120 (D)	154(H) X 468 (W)
56	7N	147(H) X 538 (W) X 120 (D)	154(H) X 546 (W)
64	8N	147(H) X 616 (W) X 120 (D)	154(H) X 624 (W)

Standard Compliances:-

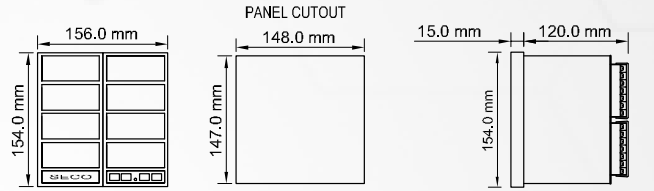
- Initiation Test : As per Manufacturer spec.
- Burden test : As per Manufacturer spec.
- Dielectric Test : As per : As per IS 3231
- Aux. supply Variation Test: As per Manufacturer Spec.
- Electromagnetic radiation disturbance measurement test : AS per CISPR11 : 2010 Class A
- Electrostatic discharge Immunity : As per IEC 61000 -4-2-2008
- Electrical fast transient / burst immunity: As per IEC 61000-4-4-2012
- Surge immunity : As per IEC-61000-4-5-2-14 Conducted Disturbances induced by RF Fields: IEC 61000-4-6-2013
- Voltage Dips : As per IEC 61000-4-11-2004
- Impulse Test :As per manufacturer spec.
- Dry Heat Oven test : As per IEC 60255-1-2009 CL 6.12.3.1
- Cold test : As per IEC 60255-1-2009 CL 6.12.3.2

DIMENSIONAL DETAILS

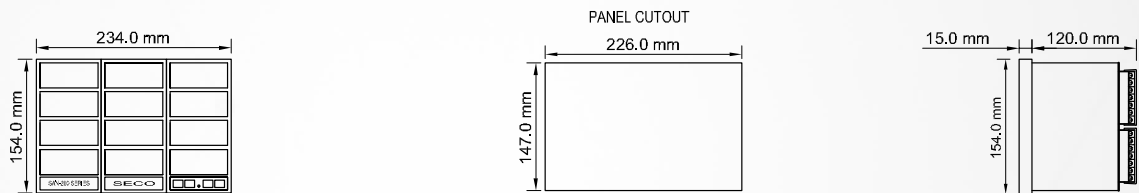
1N CASE



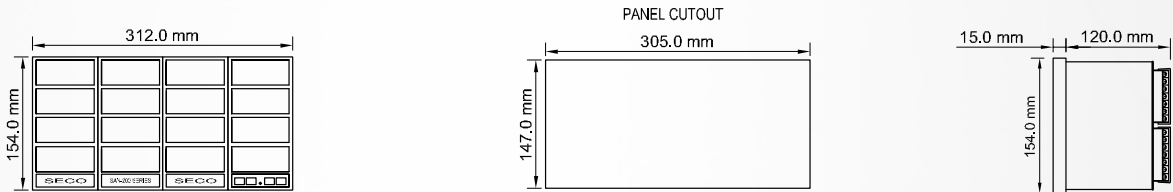
2N CASE



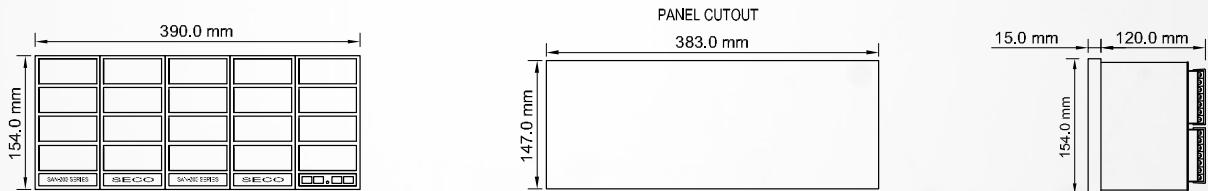
3N CASE



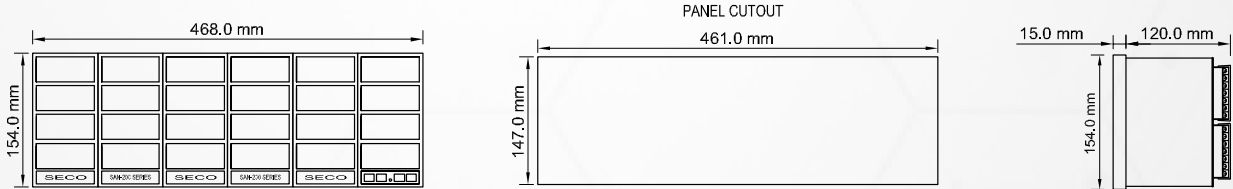
4N CASE



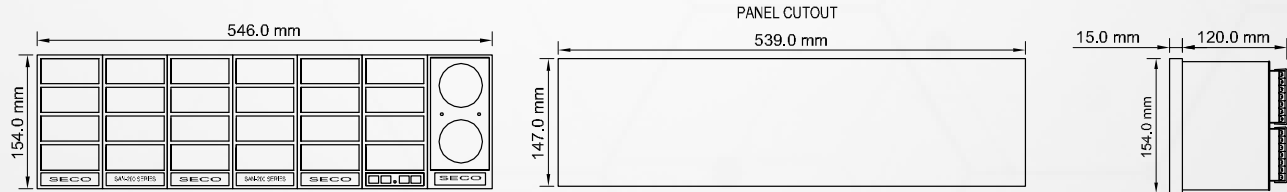
5N CASE



6N CASE

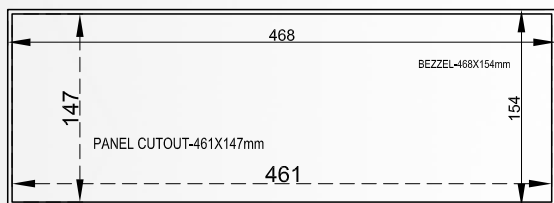


7N CASE



WIRING AND PANEL CUTOUT DRAWING

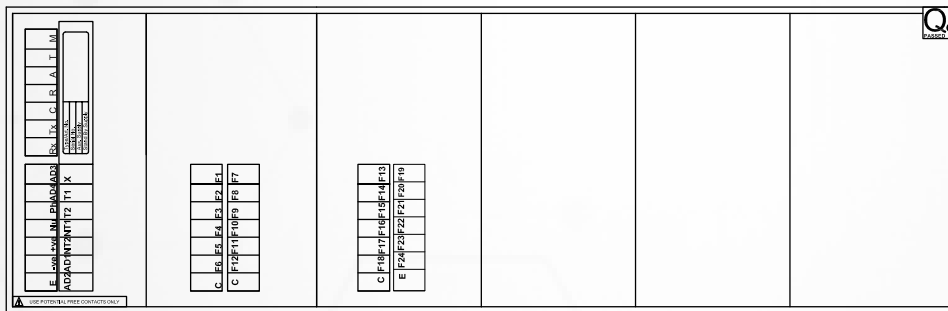
WINDOW NUMBERING					
1	2	3	4	5	6
7	8	9	10	11	12
13	14	15	16	17	18
19	20	21	22	23	24
SAN-200 SERIES	SECO	SAN-200 SERIES	SECO	SAN-200 SERIES	TRIP TEST RESET COMMON



NOTE:-

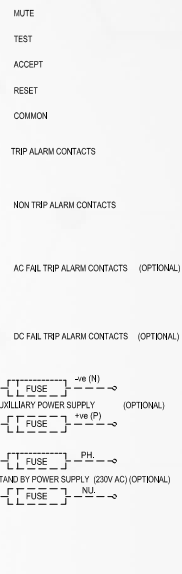
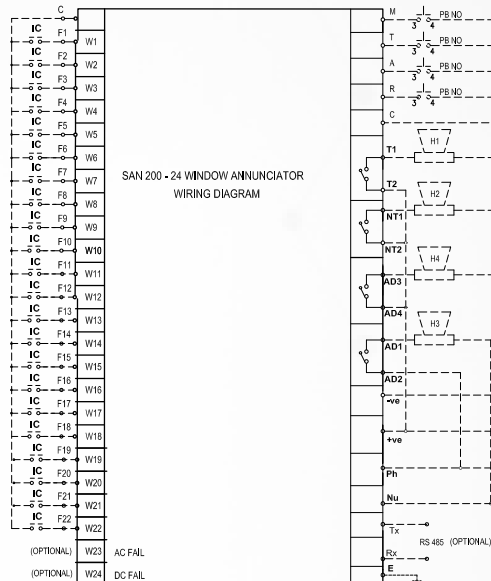
FOR AC FAIL ALARM CONTACTS KEEP S4 (MODE SELECTION SWITCH)
TOWARDS 1 AND 0 FOR TRIP / NON TRIP SELECTION

REAR VIEW & TERMINAL DETAILS



Δ FAULT INITIATING CONTACTS SHOULD BE POTENTIAL/VOLT FREE ONLY

IC : INITIATING CONTACTS



CONTACT RATING OF ALARM CONTACTS
MAKE AND CARRY RESISTIVE LOAD
5A @ 250 VAC OR 5A @ 30 VDC

* AUXILIARY SUPPLY
U FOR 75-275 VAC/DC
D FOR 20-150 VDC
L FOR 07-18 VDC

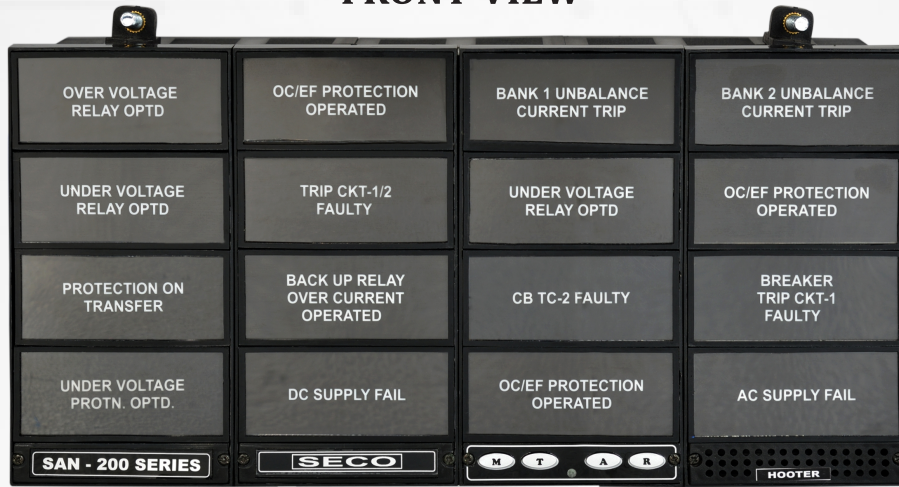
34X74

WINDOW SIZE

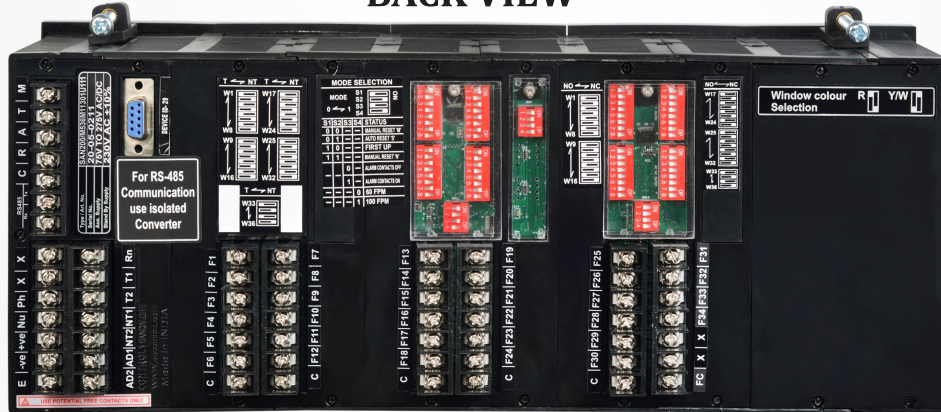
ALL DIMENSIONS ARE IN MM.
SECO-281

DRAWN BY	HSV	REV. NO.	0	ISSUED ON	10.05.20	DRAWING TITLE:	CUTOUT DETAILS AND WIRING DIAGRAM OF	DRG NO.	SECO/AD/M624CWD	SH.NO	01	SECO
APPD. BY	HSV			DRAWN ON	10.05.20		SAN200, 6N CASE 24 WINDOW ANNUNCIATOR WITH DCF, ACF & RS 485			CONTD.	-	

FRONT VIEW



BACK VIEW



SAHYADRI®
ISO 9001:2015 Certified



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