

**ITEM NO. : 11****ITEM : CONDUCTIVITY TYPE LEVEL SWITCH.****REFER OUR G. A. DRG. NO. RCLS-1001-A/O.**

This type of Level Switch is used for electrically conductive media such as water, beverages, lye solutions, acid and graphites etc.

**PRINCIPLE OF OPERATION :**

The electronic control Circuit of a level control unit is connected to one electrode and to the wall of metal or steel container. Once the liquid in the container has reached the level of electrode, the control circuit between electrode and container wall is closed via the electrically conductive liquid, thereby activating the output relay. The control circuit is galvanically isolated from the mains by an isolating transformer and thus the use of an additional electrode is eliminated..

**MATERIAL SPECIFICATIONS :-**

1.	Type	:	Conductivity Type Level Switch
2.	Mounting	:	Field Vertical, Insertion from Top (internal)
3.	All wetted parts malt.	:	SS304 / SS 316/ PP / PVC / HDPE/ PVDF/ PTFE
4.	Malt. of Flange	:	CS/ SS304 / SS 316/ PP / PVC / HDPE/ PVDF/ PTFE
5.	Service	:	To Mention
6.	Op Press $\text{kg/Cm}^2$ / Temp ° C / Sp. Gr	:	To Mention
7.	Process Conn. Flange size & rating	:	2" ANSI 150# RF STD. OR To Mention
8.	Electrode Sleeve Material	:	SS sleeved with PP / PTFE
9.	Electrode Tip	:	SS316 / Monel / Hastalloy C
10.	No. of Electrodes	:	1 / 2 / 3 / 4 Nos. (HIHI, HI,LO & LOLO) & Reference
11.	Electrode length from bottom of the flange	:	To Mention
12.	HI & LO actuation point from bottom of the flange	:	To Mention
13.	Electrode Housing	:	Cast Aluminium weatherproof
14.	Electrical Cable entry	:	¾" ET (F)
15.	Repeatability	:	± 5mm
16.	Type of contact	:	1 No. SPDT For each level sensing

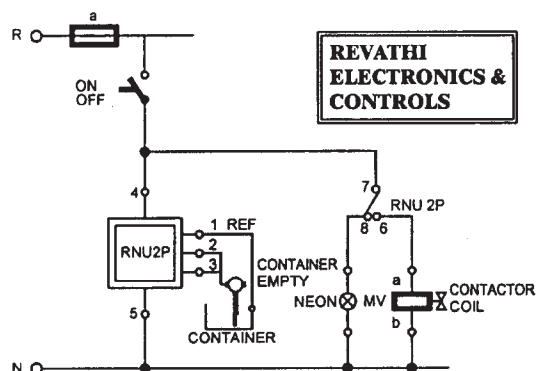
**TECHNICAL DATA OF THE CONTROLLER :**

1.	Main Supply	:	230 VAC/110 VAC/24 VDC (or) To Mention
2.	Power Consumption	:	Approximately 3 VA
3.	Output Contact	:	1 change over for each probe. Potential free
4.	Contact Rating	:	230 VAC 5 Amps
5.	Control Circuit	:	Protective extra low potential
6.	Electrode Current	:	0.2 – 3 mA
7.	Electrode Voltage	:	6 – 32 VAC adjustable
8.	Switching resistance between electrodes	:	Adjustable between 2 – 250 k ohm = 500 $\mu$ – 4 $\mu$ mhos
9.	Enclosure	:	Cast Aluminium or MS Power coated
10.	Electrical Cable entry	:	¾" ET (F) 3 Nos.
11.	Qty	:	To Mention

NOTE : In the case of non metallic containers the reference electrode is provided, which acts as a wall of the container.

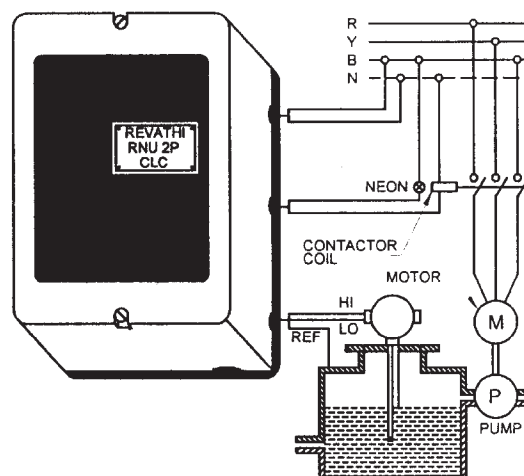
### CONDUCTIVITY TYPE LEVEL CONTROLLER

① AUTOMATIC EMPTYING OF CONTAINER  
(FULL EXTRACTION BY PUMPING)



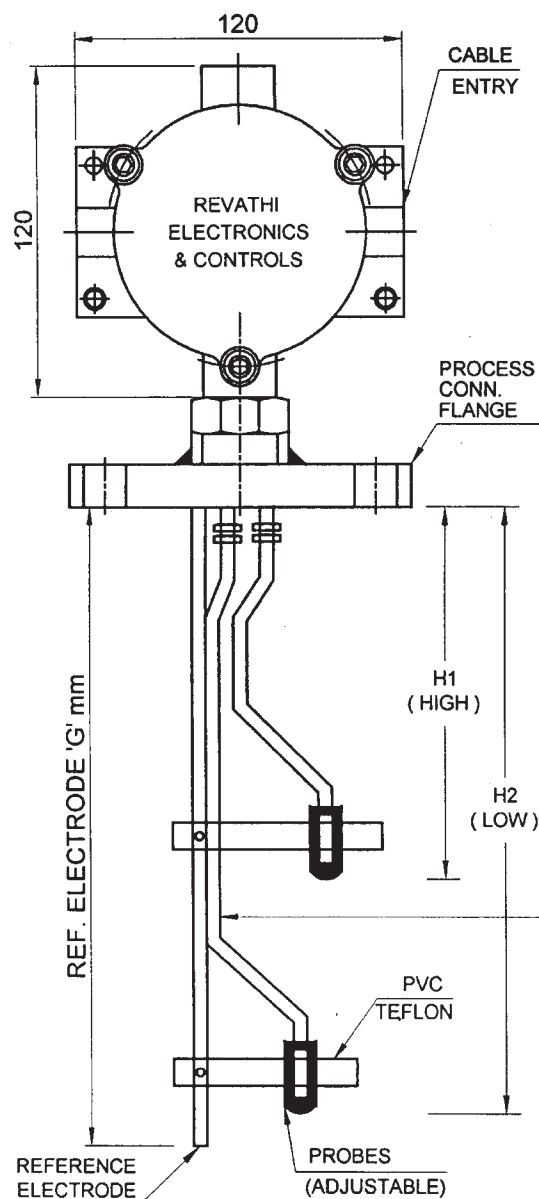
### GENERAL ARRANGEMENT OF START STOP OPERATION OF PUMP

### TWO PROBE LEVEL CONTROL STATION



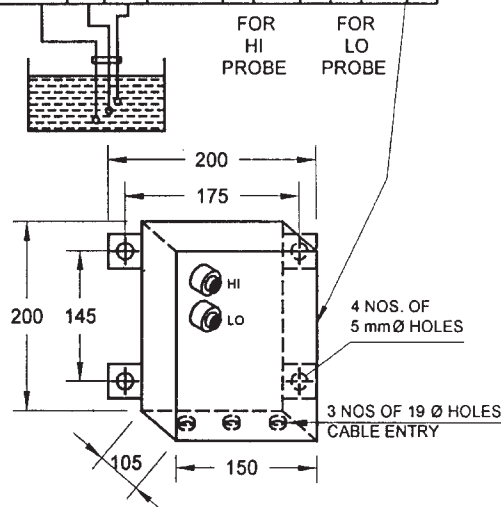
**RCLS-1001-A/O**

## FIELD



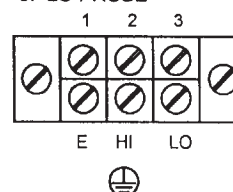
## DETAILS OF TERMINALS INSIDE THE ELECTRONIC MODULE ENCLOSURE

1	2	3	4	5	6	7	8	9	10	11
EARTH	HI	LO	L	N	NC	COM	NO	NC	COM	NC
			230 VAC							



ENCLOSURE USED FOR CONTROLLER UNIT  
M.S. POWDER COATED WEATHERPROOF TO BE  
MOUNTED TO CONTROL PANEL OR BACK OF PANEL

1. REFERENCE PROBE
2. HI PROBE
3. LO PROBE



### DETAILS OF TERMINALS INSIDE THE ENCLOSURE

**MODEL NO. RCLS-1002**