

# VARI-O-STAT

Continuously Variable  
Voltage Auto Transformers



AN ISO  
9001 : 2000

Quality Reliability & Precision Work

# IEC



Manufactured By :  
**INDUSTRIAL ELECTRICAL CORPORATION**

VARI-O-STAT is a continuously variable autotransformer, having a single layer winding on a toroidal core of high grade Cold Rolled Grain Oriented Steel. On one face of the copper winding, along the periphery, a special durable contact surface of silver coating is made. A specially designed carbon brush slides smoothly on this surface. A contact arm holding the carbon brush is fitted to the central shaft. As the control knob is rotated, the carbon brush slides over the winding and taps off a portion of the voltage across the winding. Any desired voltage within the maximum range can be obtained by adjusting the position of the brush. The calibrated dial reads approximately the output voltage at no-load, when the input is at its rated value.

Single phase VARI-O-STAT takes the input from 240V-50 Hz AC line and the output can be varied from 0 to 270V. Single phase VARI-O-STAT are available in projection Mounting and Flush Mounting types. For better cooling, VARI-O-STAT of rating above 30 amps are made in oil - cooled construction. Output of these VARI-O-STAT can be varied from 0 to 270V input being 240V-50 Hz AC.

Ganged assemblies of 3 coils, connected in star are available for 3 phase supply. Contact arm of these coils are connected to common shaft. 3 phase VARI-O-STAT takes the input from 415V - 50 Hz AC and the output can be varied from 0 to 470V. For better cooling, 3 phase VARI-O-STAT of rating above 30 amps are supplied in oil cooled construction. The input of these VARI-O-STAT are 415V - 50 Hz 3 phase AC and the output can be varied from 0 to 470V.

VARI-O-STAT fitted with voltmeter, ammeter, fuse, switch, pilot lamp etc. can be made in portable type models with extra cost. For the control of the contact arm from a remote point, or automatic control of the output voltage, VARI-O-STAT can be made with motor drive. The motor is coupled to the central shaft of the VARI-O-STAT and as motor rotates, the contact arm

moves over the plated contact surface. The motors are noiseless in operation and works on 240 - 50 Hz single phase AC. The rotation of the motor can be reversed by interchanging the motor connection by means of a SPDT switch. The sweep of the motor driven VARI-O-STAT is about 330 (Degree/s) in 30 seconds / 15 seconds / 8 seconds.

VARI-O-STAT to suit any special voltage, current etc. can be made on request.

### SPECIAL FEATURES :

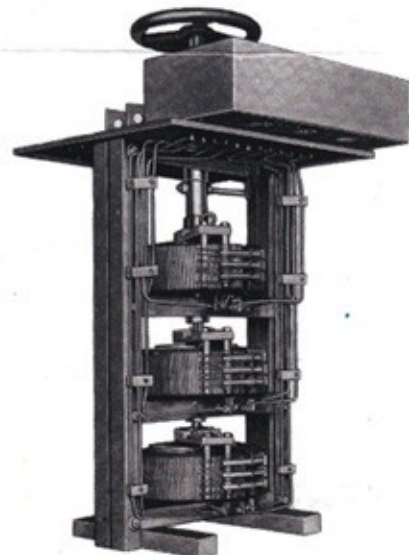
- ☛ Excellent voltage regulation and efficiency.
- ☛ No wave from distortion.
- ☛ Simple and easy to handle.
- ☛ Rugged mechanical construction.
- ☛ Moderate temperature rise.
- ☛ Smooth control of output voltage.
- ☛ High short time surge current capacity.
- ☛ Linear output voltage.

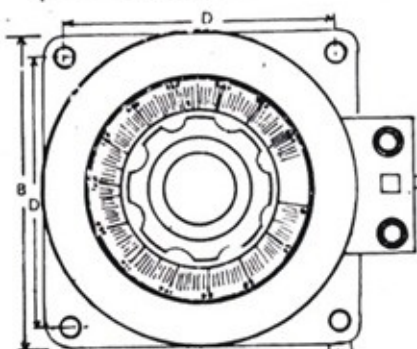
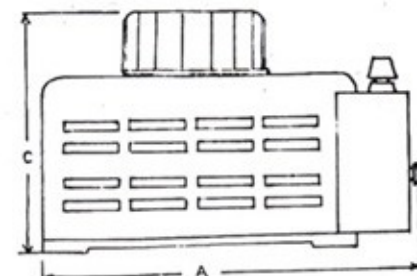
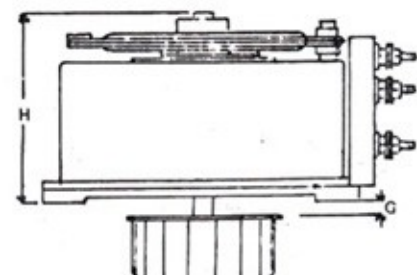
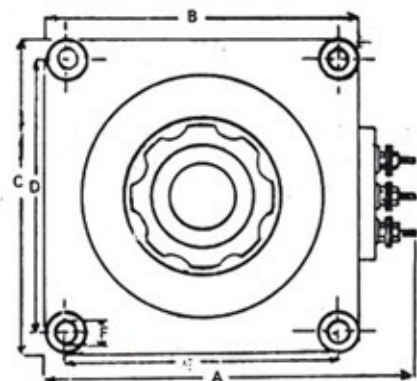
### APPLICATION :

- ☛ Anodising and Electroplating industries.
- ☛ Measuring and Testing equipments.
- ☛ Research Laboratories and Colleges etc.
- ☛ Lighting control in Theatres, Studios etc.
- ☛ Control of light heat, speed etc.

### GUARANTEE :

All VARI-O-STAT are guaranteed to be Free from defect in material or workmanship for a period of 12 months from the date of purchase. The guarantee does not stand for damage in transit, faulty installation, repaired by third party. The products if found defective, will be replaced or repaired free of cost.





## VARI - O - STATS - DIMENSIONAL DETAILS

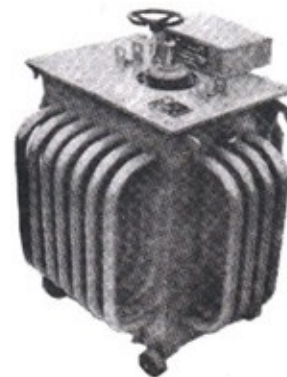
SINGLE PHASE FLUSH MOUNTING										
INPUT 240V, 50HZ, OUTPUT 0-270V										
Type	Capacity in Amps.	Approximate dimensions in mm								Approximate weight in Kg.
		A	B	C	D	E	F	G	H	
2V-1PF	2	145	120	120	102	102	8	7	110	3.200
4V-1PF	4	200	170	170	146	146	9.5	10	115	6.000
5V-1PF	5	200	170	170	146	146	9.5	10	115	7.200
10V-1PF	10	200	170	170	146	146	9.5	10	125	8.400
15V-1PF	15	250	220	220	175	175	12.5	10	135	13.000
20V-1PF	20	250	220	220	175	175	12.5	10	155	15.300
30V-1PF	30	330	290	290	240	240	12.5	10	165	23.700

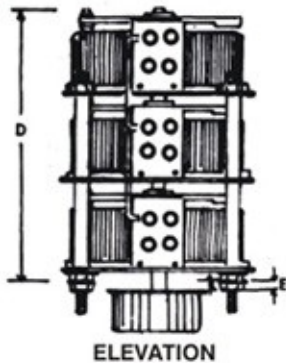
SINGLE PHASE PROJECTION MOUNTING										
INPUT 240V, 50HZ, OUTPUT 0-270V										
Type	Capacity in Amps.	Approximate dimensions in mm					Approximate weight in Kg.			
		A	B	C	D	E				
2V-1P	2	Box Size : 157 x 130 x 125mm					4.400			
4V-1P	4	225	170	155	146	9.5	6.900			
5V-1P	5	225	170	165	146	9.5	8.400			
10V-1P	10	225	170	175	146	9.5	9.600			
15V-1P	15	280	220	185	175	12.5	14.400			
20V-1P	20	280	220	200	175	12.5	17.000			
30V-1P	30	350	290	290	240	12.5	26.000			

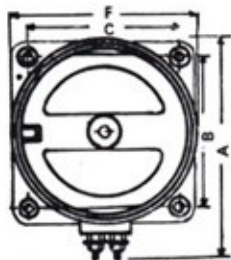
SINGLE PHASE OIL COOLED (ABOVE 30 AMPS CAPACITY)							
INPUT 415V, 50HZ, OUTPUT 0-470V							
Capacity in AMPS	40V-1T	50V-1T	60V-1T	75V-1T	100V-1T	150V-1T	200V-1T
Length in mm	575	715	715	840	840	1180	1400
Width in mm	495	575	795	710	710	760	860
Height in mm	735	885	975	835	835	1125	1125
Approximate weight (without oil) in Kgs.	70	80	85	115	135	195	240



THREE PHASE FLUSH MOUNTING

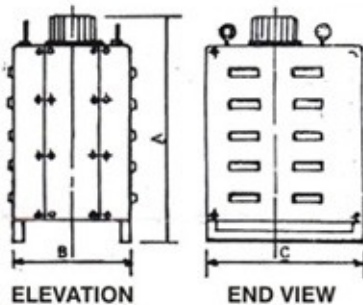


ELEVATION



PLAN

THREE PHASE FLOOR MOUNTING



ELEVATION

END VIEW

**THREE PHASE FLUSH MOUNTING**

INPUT 415V, 50HZ, OUTPUT 0-470V

Type	Capacity in Amps.	Approximate dimensions in mm						Approximate weight in Kg.
		A	B	C	D	E	F	
2V-3PF	2	145	102	102	350	10	120	10.300
4V-3PF	4	200	146	146	380	10	170	19.000
5V-3PF	5	200	146	146	425	10	170	23.500
10V-3PF	10	200	146	146	455	10	170	27.000
15V-3PF	15	250	175	175	460	10	220	40.500
20V-3PF	20	250	175	175	500	10	220	48.000
30V-3PF	30	330	240	240	655	10	290	73.000

**THREE PHASE PROJECTION MOUNTING**

INPUT 415V, 50HZ, OUTPUT 0-470V

Type	Capacity in Amps.	Approximate dimensions in mm			Approximate weight in Kg.
		A	B	C	
2V-3P	2	420	140	175	13.800
4V-3P	4	495	210	260	23.300
5V-3P	5	495	210	260	28.500
10V-3P	10	495	210	260	32.000
15V-3P	15	595	240	305	47.000
20V-3P	20	620	240	305	55.000
30V-3P	30	655	585	430	92.200

**THREE PHASE OIL COOLED (ABOVE 30 AMPS CAPACITY)**

INPUT 415V, 50HZ, OUTPUT 0-470V

Capacity in AMPS	40 A 40V-3T	50 A 50V-3T	60 A 60V-3T	75 A 75V-3T	100 A 100V-3T	150 A 150V-3T	200 A 200V-3T
Length in mm	575	715	715	840	840	1180	1400
Width in mm	495	495	575	710	710	860	860
Height in mm	1100	1100	1100	1300	1300	1325	1325
Approximate weight (Without oil) in Kg.	180	210	240	320	370	640	720



MANUFACTURED BY :

**INDUSTRIAL ELECTRICAL CORPORATION**

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