

Electronic Controller for Electromagnetic Vibrator

**▶ CV40FS** **40A** **230V 400V** **0/10V 4/20mA**

### General

Stabilized professional controller with amplitude sensor SIND1/SIND2, current till to **40A** in metallic or INOX Box, only circuit with external potentiometer.

### General Characteristics

Voltage (110V) 230V or 400V, 50/60 Hz • 3000/6000 Vib/Min (**50/100 Hz**) • Automatic input 0/10V-4/20mA • Multiple ON/OFF input • Slow/fast ramp • Reg. vibration min/max Manual/Automatic • Relay alarm ON vibrator.

### Applications

Regulation of linear and small circular vibrators till **40A** Amps with automatic input (PLC) with stabilized amplitude.

### Options

Box IP65 (NEMA 4/4X) • INOX Box • Personalized label • Voltage till 500V • Double speed • Double output • Module for 2 or more vibrators • **OUTPUT 25 Hz.**

### Electrical Characteristics

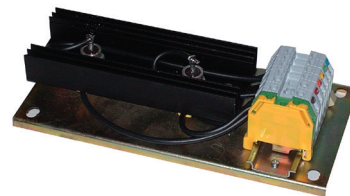
<i>Tension of Feeding:</i>	230 V or 400V ± 20% – 50/60 Hz
<i>Consumption :</i>	3,5 W max
<i>Fuses CV40:</i>	double 40A F 660V 10x38 H 100000A
<i>Load Min:</i>	50 mA (RMS)
<i>Potentiometr of reg.:</i>	100K ohm linear
<i>Frequency of Vibration:</i>	3.000/6.000 V/min (50 Hz) RC-AC
<i>Time of ramp:</i>	0,1 sec. / 2 sec. ( modifiable)
<i>Regulation Min.:</i>	80 V ± 30% (230V) 140 V ± 30% (400V)
<i>Regulation max:</i>	200 V - 30% (230V) 380 V - 30% (400V)
<i>Consumption Input Autom. 0/10V:</i>	1mA max
<i>Impedance Input 0-10V/4-20mA:</i>	50 Komh-50 omh
<i>ON/OFF:</i>	free voltage contact /0-24Vcc
<i>Degree of Protection:</i>	IP55 in box (IP65-NEMA4-4X)
<i>Temperature of Storage:</i>	-25 °C / + 80 °C
<i>Temperature of Operation:</i>	-15°C / +55°C
<i>Guarantee:</i>	1 year (from date on circuit)



**METALLIC BOX**  
PV CV40F Z4 SSD  
350x270x140



**CIRCUIT**  
PV CV40F A4 SSD



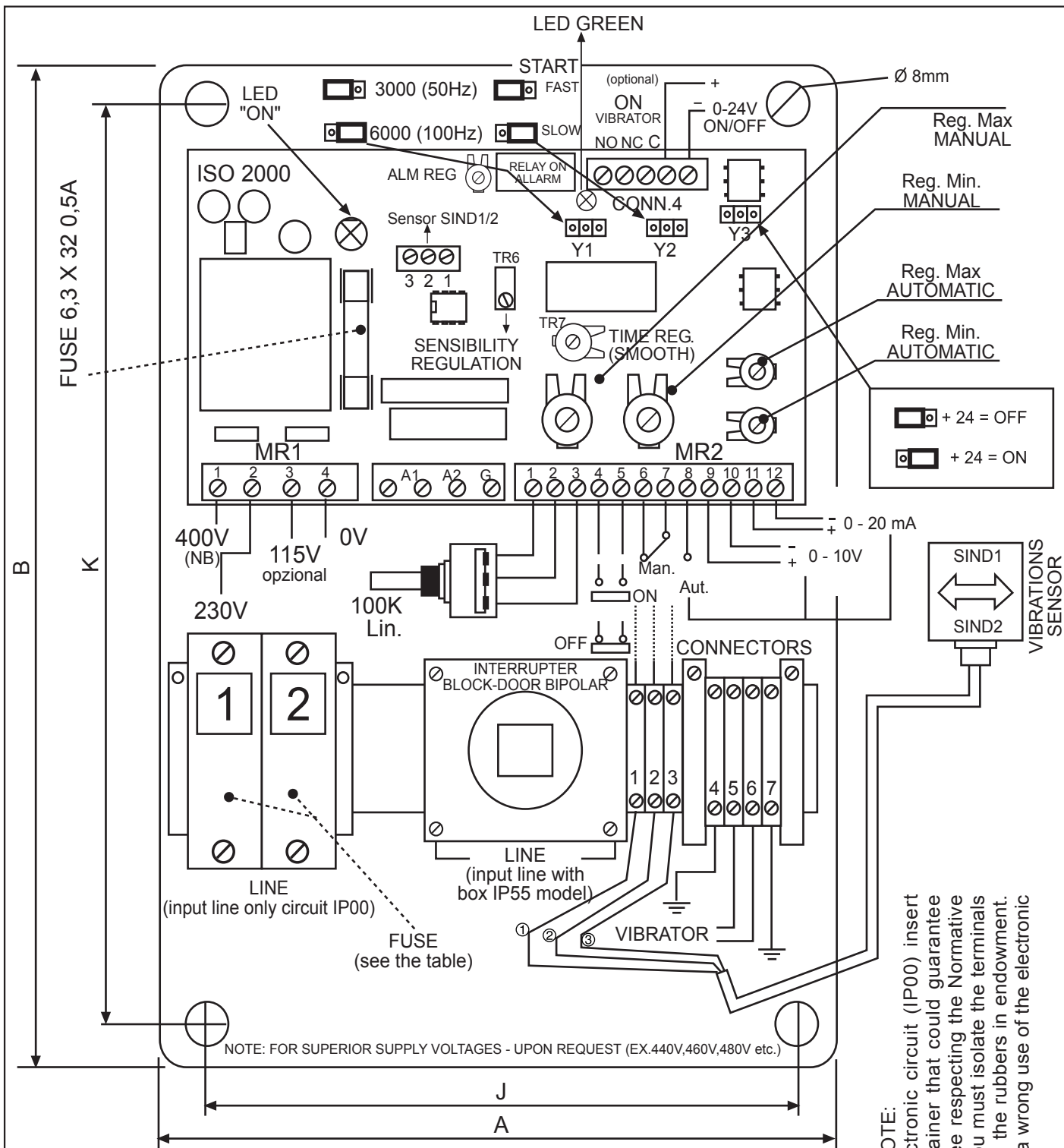
**MODULE DOUBLE OUTPUT**  
PV MOD2U AX EXT



**SENSOR SIND2**  
PV SIND2 ZX STD

### Available Versions

Type	Box	Colour	Dimensions	Code	Price €
CV40FS	Circuit		320 x 243 x 100	PV CV40F A4 SSD	
CV40FS	Metallic Box	GREY	350 x 270 x 140	PV CV40F Z4 SSD	
CV40FS	Circuit (until 500V)		320 x 243 x 100	PV CV40F A5 SSD	
CV40FS	Metallic Box (500V)	GREY	350 x 270 x 140	PV CV40F Z5 SSD	
CV40FS	Circuit doubles exit		320 x 243 x 100	PV CV40F A5 S2U	
CV40FS	Circuit doubles speed		320 x 243 x 100	PV CV40F A5 S2V	



NOTE: if you use only the electronic circuit (IP00) insert it and cable it in a container that could guarantee an excellent safety degree respecting the Normative European in force and you must isolate the terminals of the potenziometer with the rubbers in endowment. Each responsibility from a wrong use of the electronic circuit is declined.

MEASURE (mm) CIRCUITS FROM CV 10 TO CV 100 (IP00)								
Circuit IP00 (*)	DIMENSION			BORING MEASURE		DIM. CONNECTORS	FUSE DIM./AMPERE	
	A	B	h	J	K			
CV 12/F	170	230	100	145	205	4 mmq	10,3 x 38	12 A
CV 25/F	170	320	100	145	295	10 mmq	10,3 x 38	25 A
CV 40/F	243	320	100	219	295	16 mmq	14 x 51	40 A
CV 70/F	280	380	130	255	355	25 mmq	22 x 58	70 A
CV 100/F	280	380	130	255	355	25 mmq	22 x 58	100 A

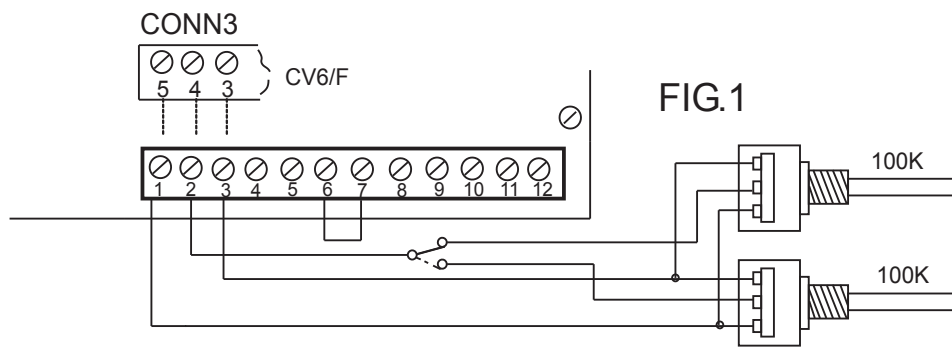
SKETCH AND CHARACTERISTICS TECHNIQUES SUBJECT TO MODIFICATIONS WITHOUT WARNING.



Description: CONTROL CIRCUIT CVXYS HIGH STABILIZED (WITH AMPLITUDE SENSOR)

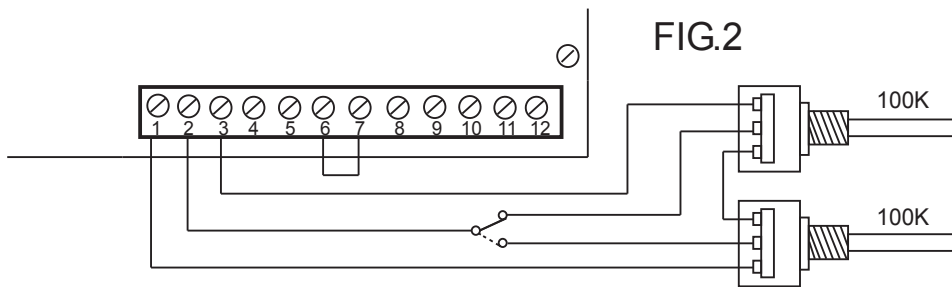
CODE	REV	DATE	DRAFTSMAN	SHEET
DTCVXYS	01	04/09	E. PEDRAZZI	1/1

INDUSTRIAL



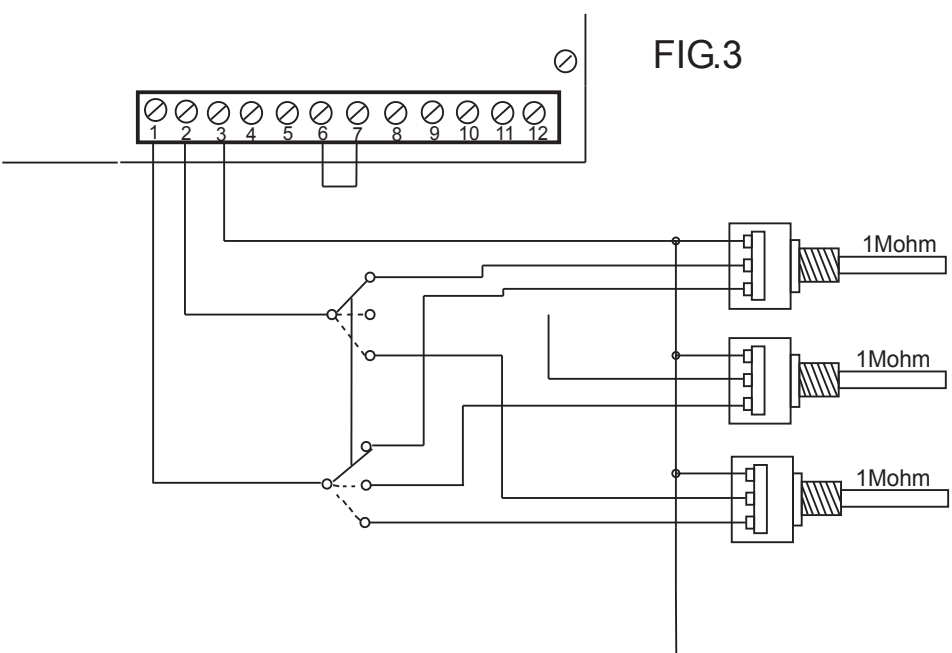
CONNECTION OF  
PARALLEL TYPE :

EACH POTENTIOMETER  
COULD COMPLETE THE  
WHOLE VARIATION  
OF THE VIBRATION



CONNECTION IN SERIES:

EACH POTENTIOMETER  
COULD COMPLETE ONLY  
HALF OF THE TOTAL  
VARIATION.



CONNECTION  
OF THREE OR MORE  
POTENTIOMETERS.

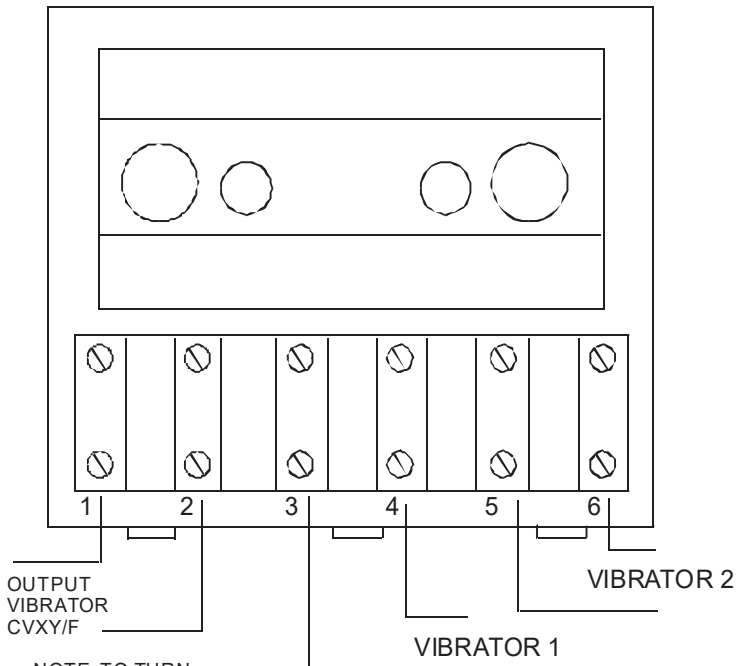
IN THIS CASE ACTS  
AN ONLY POTENTIOMETER  
FOR TIME ON THE TOTAL  
OF THE VIBRATION.

(IT IS POSSIBLE COMMUTE  
ONLY THE CENTRAL OF  
THE POTENTIOMETERS  
CONNECTING IN PARALLEL  
THE EXTREME LIKE IN  
FIG.1, USING, UNTIL TO A  
MAXIMUM OF 10,  
POTENTIOMETER FROM  
1M W LINEAR.  
POTENZIOMETRI DA 1M  
OHM LINEAR).

SCHEME OF CONNECTION VALID FOR:  
CV12/F, CV20/F, CV40/F, CV70/F, CV100/F

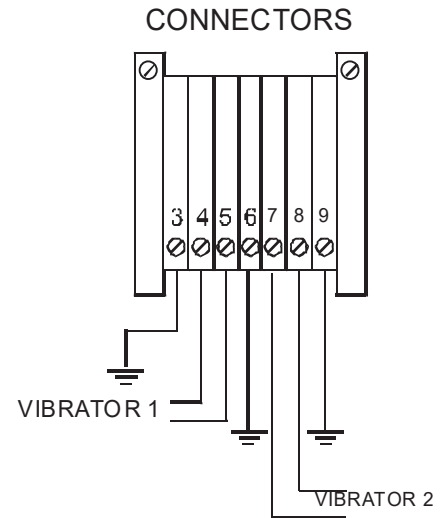
For the CV6 enter with the potentiometer/s on the connector CONN3 - 5/4/3

OPTIONAL MODULE FOR 1 VIBRATOR WITH 2 COILS



NOTE: TO TURN THE WIRES IF THE VIBRATOR DO NOT WORK

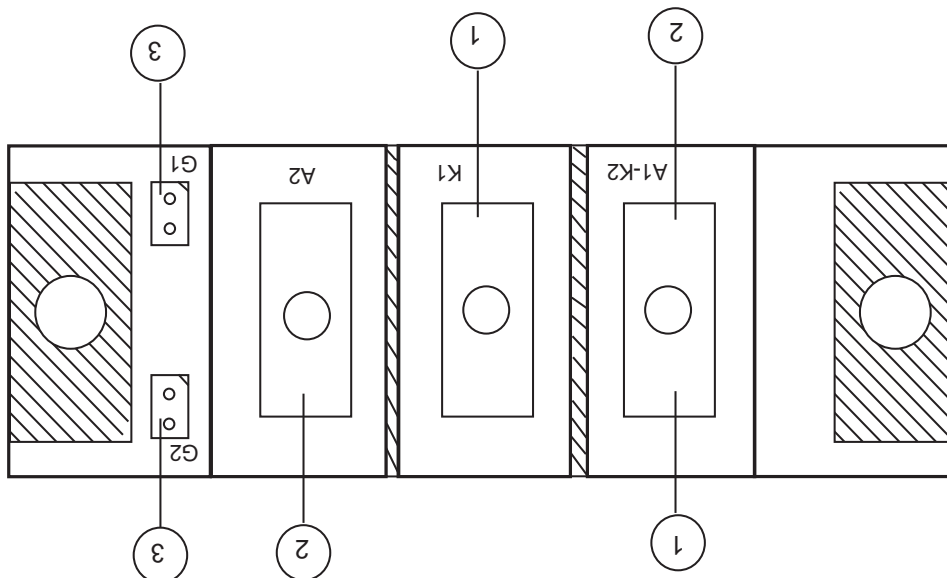
OPTIONAL OUTPUT FOR DOUBLE VIBRATORS (CIRCUIT CVXY) TO USE WITH 2 VIBRATORS (DOUBLE OUTPUT)



HOW TO UTILIZE THE SECOND SECTION OF THE POWER MODULE IN THE CASE OF BREAKAGE THE FIRST

In case of breakage to utilize : K1 - A1 - G1

- Move wire 1 from A1-K2 to K1
- Move wire 2 from A2 to A1-K2
- Move wire 3 from G2 to G1



Normal Utilize : K2 - A2 - G2

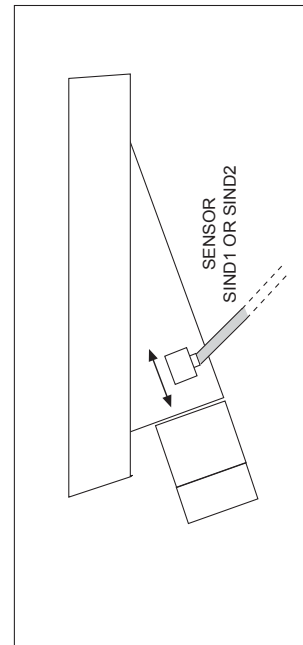
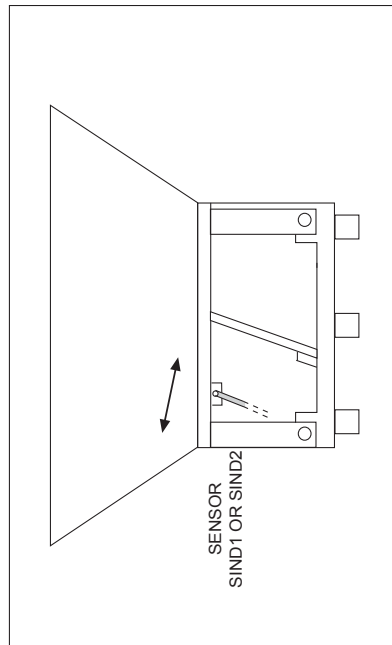
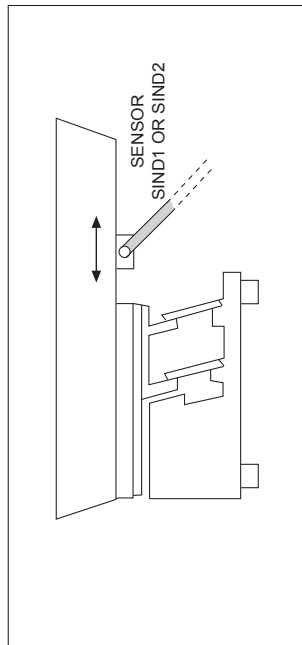
NOTE : (only CV20, CV40, CV70 and CV100)



Description: OPTIONAL MODULE FOR 2 VIBROTORS ( CIRCUIT CVXY/F) AND SCR POWER MODULE

CODE	REV	DATE	DRAFTSMAN	SHEET
DTSCRMOD	00	12/97	E. PEDRAZZI	1/1

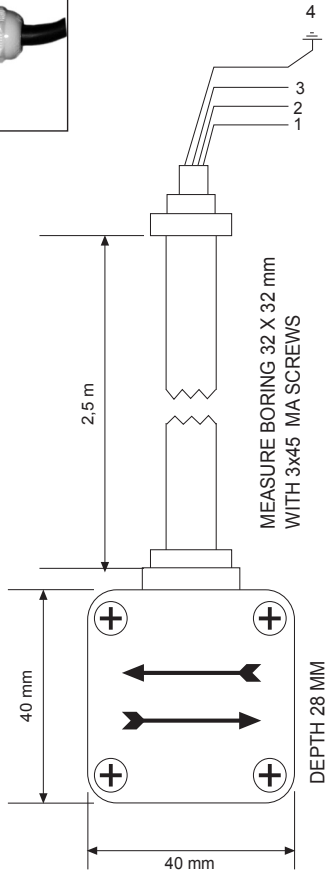
The sensor is put in manner such that the sensitive part is disposed according to the sense of the vibration in such position from hear again totally of the vibration.  
 In compatible way with the demands constructive of each vibrator are in fact possible other solutions provided that satisfy the conditions in said precedence.



SKETCH AND CHARACTERISTIC TECHNIQUES SUBJECT TO MODIFICATIONS WITHOUT WARNING

SENSOR MOD . SIND1  
 BOX LEAGUE ALUMINIUM  
 STANDARD CABLE 2.5 METERS 4X0.75 MMQ black  
 UTILIZATION: HEAVY USE

CODE : PV SIND2 ZX STD (25G)  
 CODE : PV SIND2 ZX 50G (50G)



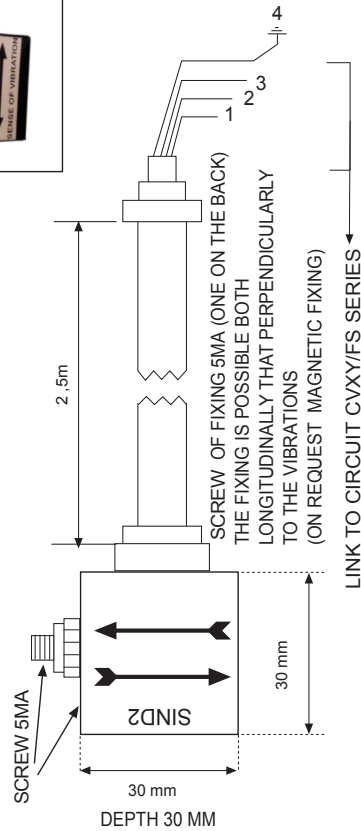
LINK TO CIRCUIT CVXY/FS SERIES

STANDARD MODELS: MAX. ACCELERATION 25G, I.E. MAX. AMPLITUDE 5 MM AT 3000 VIB./MIN OR 1.2 MM AT 6000 VIB./MIN ON THE FASTENING POINT OF THE SENSOR. IF EXCEEDING THESE DATA, THERE WILL BE NO PROBLEMS WITH THE FUNCTION OF THE SENSOR, HOWEVER THE OUTPUT SIGNAL SATURATES ITSELF AND COMPENSATION OF VARIATIONS THEREFORE WILL BE IMPERFECT.  
 IN CASE OF HIGHER VIBRATIONS MOD. 50G: MAX. ACCELERATION 50G, I.E. MAX. AMPLITUDE 10 MM AT 3000 VIB./MIN OR 2.5 MM AT 6000 VIB./MIN ON THE FASTENING POINT OF THE SENSOR. IF EXCEEDING THESE DATA, THE SENSOR MAY BE SUBJECT TO IRREPARABLE ELECTRICAL DAMAGES. THE VIBRATION AMPLITUDE CAN BE MEASURED APPROXIMATELY BY USING APPROPRIATE PLATES HAVING A SPREAD MILLIMETER SCALE.



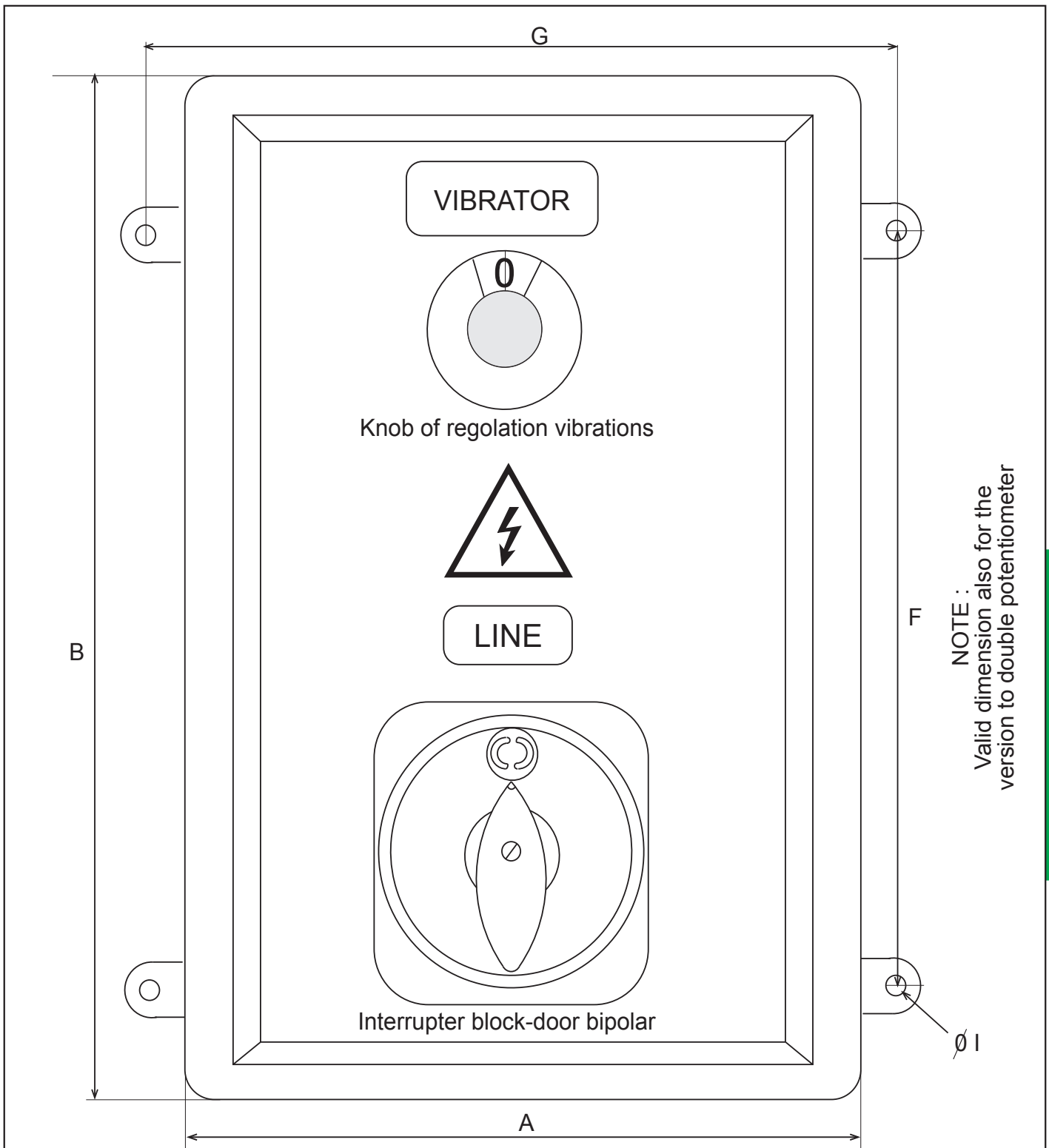
SENSOR MOD. SIND2

PLASTIC BOX WITH SCREW TO FIX  
 STANDARD CABLE 2.5 mt - 4X0.75 MMQ black  
 UTILIZATION : GENERAL INDUSTRIAL USE  
 CODE : PV SIND2 ZX STD (25G)  
 CODE : PV SIND2 ZX 50G (50G)



LINK TO CIRCUIT CVXY/FS SERIES





NOTE :  
Valid dimension also for the  
version to double potentiometer

INDUSTRIAL

Dimension boxes from CV6 to CV100 (IP55)						
BOX	Dimension			G	F	Ø1
	A	B	h			
CV 06/F	130	250	111	140	170	8,5
CV 12/F	200	250	140	230	181	10
CV 25/F	235	265	140	265	196	10
CV 40/F	300	400	140	325	315	10
CV 70/F	312	412	140	328	240	13
CV100/F	372	462	235	400	240	13



Description: DIMENSIONS OF THE BOXES OF REGULATION CVXY/F IP55

CODE	REV	DATE	DRAFTSMAN	SHEET
DTCV55	00	12/97	E. PEDRAZZI	1/1