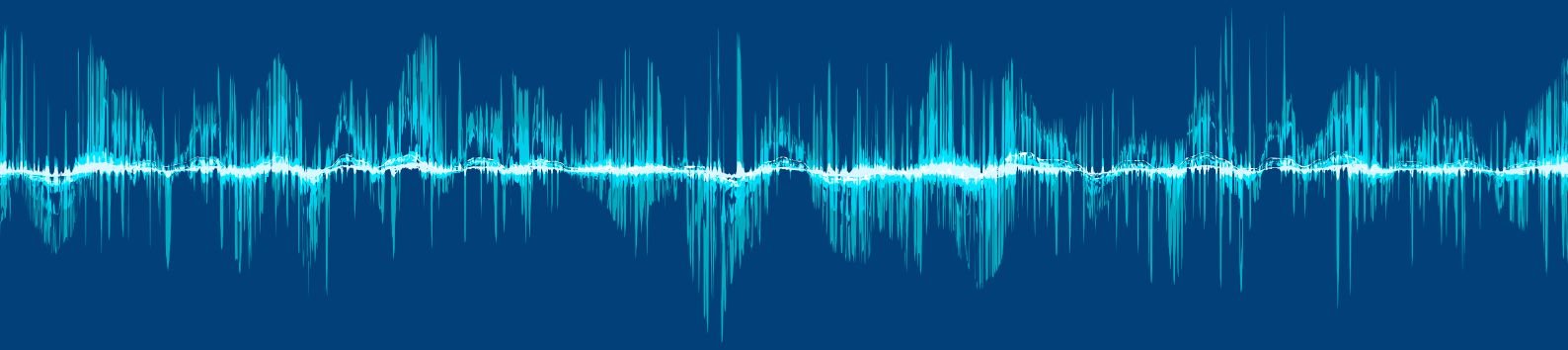
MPI ELETTRONICA
QUALITY VIBRATION CONTROL

SINCE 1988



CONTROLLER FOR INDUSTRIAL ELECTROMAGNETIC VIBRATORS

PRODUCT SPECIFICATION

MADE IN ITALY

MP Elettronica srl
Elettronica Industriale - Sistemi Elettronici - Engineering
Sesto S. Giovanni (MI) - Tel. 02 2403864 - Fax 02 2400643
www.mpelettronica.com - mp@mpelettronica.com

Electronic Controller for Electromagnetic Vibrator

COMPANY PROFILE

MP Elettronica was established more than **35** years ago in Italy and since **1998** the quality management system of the company is certified **ISO 9001:2015**. The company is based in Milan (Italy). Since its establishment MP Elettronica designs, engineers and manufactures controllers for electromagnetic vibrators and nowadays the company has affirmed its market leader position due to its innovative solutions and products. In **1994** the company turns to the current corporate structure and in **1996** opens the local branch in the region of Varese where products are designed and tested. Here the innovative first circuit Amplitude / Analog Frequency was designed and manufactured for the first time and during the years it has replaced the Microprocessor Digital series.

The strengths of MP Elettronica are:

- Technological Know How on designing and expertise in the field
- Customization of the products according the Customer needs (also for small quantity)
- High standards of certified Quality system (UNI EN ISO 9001:2015)
- 99.64% reliability of the products and warranty
- Prompt and lasting technical support through different communication channels
- Flexibility and Fast Delivery
- Excellent Relationship between Quality and Price

The products are highly reliable, certified and comply with the regulations. During the years MP ELETTRONICA has steadily expanded both in national and international markets due to its great experience and expertise in the field.
Nowadays MP Elettronica is a leader company in the field of **controllers for electromagnetic vibrators** and manufactures thousands of controls units which are employed in the different industrial sectors.
The company employs lasting resources in research and commitment aiming at the development of the controllers. The strong relationship between the Company and Customers has lead to improve the wide range of innovative products in the catalogue. The catalogue already includes electronic controllers driven by microprocessor with standard or customized software.
The **Mission** MP Elettronica supplies products and provides integrated solutions to fully meet the needs of its Customers. The company assures the right solution for all Customers' applications, fast and reliable technical support and a delivery time in the next 24 hours.

MP Elettronica is a growing company which successfully exports the products worldwide. Designing and Engineering regularly improve the functions and performances of the products and follow the trend of the Automation market by investing important resources in Research and Development fields.



IQNET Registrazione N° it-1329

QUALITY SYSTEM



Certificato CSQ N° 9105.MPEL

Special executions on request

Inox Box - IP66 (NEMA 4/4X) - Driving module for multiple vibrators - Double speed - Double output - Customized versions and labels - Voltage from 24Vac to 600Vac - Driving vibrators 1500 V/m - 750 V/m - Controllers with feedback for mills - engineering.

Codes of the Products

Our products are identified according to the following scheme: (Lack of model will be replaced by X)

PV YYYYY Z H KKK

Product name	Circuit	Tension/Feeding	Customization
• R3FCX • R5FCX • CV6X • FQPWM • CV20S	• A-circuit • D-din • Z-box	• **1**-115V / • **2**-230V • **3**-400V / • **4**-23/400V • **5**-till to 500V • **6**-400V three phase • **7**-400V 3 phase+neuter	• **STD**-standard • **ABC**-customer code • execution • **SM1-STM**-metal box • **STP**-plastic box

SINCE 1988

MPE ELETTRONICA QUALITY VIBRATION CONTROL

UNI EN ISO 9001:2015 - CERT.9105 MPEL

INDEX

SMART-ISO SERIES

SMART

Code :	***R3FC • R3FSC • R5FC • R4FC • VBS06 • *CV99 - ISO: R3FC-ISO • R3FSC-ISO • R5FC-ISO***
Voltage :	*230V/115V • 50/60Hz • corrent max 3/4/6/8/10 A RMS*
Features :	*ON/OFF • 3000/6000 V/min • min/max • ramp*
Applications :	*Linear feeders • small bowl feeders till 6A*
Options :	*IP65 (NEMA4/4X) • box aluminum • with sensor NPN/PNP*
*	*Input 0÷10V - 0÷20mA*

PRX SERIES

PRX

Code :	***PRX92 • PRX99 • PRX13***
Voltage :	*230V o 115V • 50/60Hz*
Features :	*For sensor NPN/PNP • 2 delay ON/OFF*
Applications :	*Linear and bowl feeder "OVERFULL" check*
Options :	*With circuits R5FC • CV99 • CV6*

INDUSTRIAL SERIES

INDUSTRIAL

Code :	***CV6/17-CV8/17 • CV12/17-CV15/17 • CV25/17 • CV40/17 • CV70/17 • CV100/17***
Voltage :	*230V • 400V till 550V • 50/60Hz • corrent max 6/8/12/15/20/25/40/70/100 A RMS*
Features :	*3000/6000 V/min • input PLC 0/10V-0/20mA• ramp • min/max (man•aut) • 3 ON/OFF • Alarm • Input* **double insulation**
Applications :	*linear vibrator • bowl feeders*
Options :	*IP65 • vertical assembly DIN35 (only CV8) • INOX box • 1500 vib/m • 750 vib/m • 25 Hz - 33 Hz*
Code :	***CV6S-CV8FS • CV12S-CV15FS • CV25FS • CV40FS • CV70FS • CV100FS***
Voltage :	*230V • 400V till 550V • 50/60Hz • corrent max 6/8/12/15/20/25/40/70/100 A RMS*
Features :	*3000/6000 V/min • input PLC 0/10V-0/20mA• ramp • min/max (man•aut) • 3 ON/OFF • Alarm*
Applications :	***linear vibrator • bowl feeders (with amplitude sensor SIND2)***
Options :	*IP65 • vertical assembly DIN35 (only CV8) • INOX box • 1500 vib/m • 750 vib/m • 25 Hz - 33 Hz*

DIGITAL SERIES AMPLITUDE/FREQUENCY

DIGITAL

Code :	***RF4 PWM • RF4 PWM/N • FQ1 PWM • FQ1 PWM/HC • FQ1NG • FQ2NG • FQ3NG***
Voltage :	*85/260V • 50/60Hz • current max 4/6/8/10/12/16 A RMS*
Features :	*0/10V - 0/20mA • 2 sensors PNP • 30÷130 Hz • 5÷200 Hz*
Applications :	***Amplitude/Frequency digital regulation for vibrator till 16A***
Options :	*Custom label • 5÷300 Hz • amplitude sensor SIND3*

MCP (DIGITAL) SERIES

MDL/MCP

Code :	***MCP01 • MCP02 • MCP03 • MCP01/LT • MCP02/LT***
Voltage :	*85/260V • 50/60Hz • current max 6,3/8A RMS*
Features :	*Drive system for linear • sensor NPN/PNP • Blow feeder • sensor NPN/PNP • Hopper or motor elevator*
Applications :	***Automatic feeders system***

MTR SERIES

MTR

Code :	***MTR01 • MTR01 DIG (DIGITAL)***
Voltage :	*3x400V • 50/60Hz • 3x230V • 50/60 Hz • 230V 50/60Hz*
Features :	***3 Phase Motor-Driven Feeder and input sensor NPN/PNP***
Applications :	***3 Phase Motor-Driven Feeder with NPN/PNP sensor On/Off delay and Allarm delay***
Options :	*Custom label • Din35 version (MTR01) • custom SW (MTR01 DIG)*

INSTRUMENTS SERIES

INSTRUMENTS

Code :	***AMP METER • VIBROMETER • ALIM01***
Voltage :	*230V/400V • 50/60Hz*
Features :	***Amplitude check control with alarms (ALIM01) • current control (AMP-VIB)***
Applications :	***Amplitude of vibration monitoring with alarms (ALIM01)• current max measurement in electromagnetic vibrators (AMP-VIB)***
Options :	*IP65 • % amplitude instrument (MTR01) • Voltmeter (AMP-VIB) • DIN35*

Stabilized electronic controller for electromagnetic vibrators

Code : *R3FC • R3FSC • R5FC • R4FC • VBS06 • *CV99 - ISO: R3FC-ISO • R3FSC-ISO • R5FC-ISO*

Voltage : *230V/115V • 50/60Hz • corrent max 3/4/6/8/10 A RMS*

R3FC PV R3FCX Z2 STD 4A RMS Max



Protection	Box
IP55	Plastic 100x100x50

R3FC PV R3FCX Z2 STM 4A RMS Max



Protection	Box
IP65	Aluminium 100x100x50

R3FSC PV R3FSC Z2 STD 5A RMS Max



Protection	Box
IP55	Plastic 165x100x67

R3FSC PV R3FSC Z2 STM 5A RMS Max



Protection	Box
IP65	Aluminium 140x115x60

CV6F PV CV617 Z2 STD 6,3A RMS Max

R5C PV R5FCX Z2 STD 6,3A RMS Max



CV6FS 6,3A



SIND2 Amplitude Sensor

Protection	Box
IP55	Plastic 165x130x70

R5C PV R5FCX Z2 STM 6,3A RMS Max

CV6F PV CV617 Z2 STM 6,3A RMS Max



CV6FS 6,3A



SIND2 Amplitude Sensor

Protection	Box
IP65	Aluminium 165x140x65

Cross reference : Controller serie SMART - serie ISO

	R3FC	R3FC-ISO	R3FSC	R3FSC-ISO	R5FC	R5FC-ISO	CV99	R4FC
Voltage 50/60 Hz	115 o 230	115 o 230	115 o 230	115 o 230	115 o 230	115 o 230	115 o 230	115 o 230
Amps	4	4	4	5	6	6/8	6	5/6
ON/OFF Free Voltage	●	●	●	●	●	●	●	●
ON/OFF Signal Voltage	–	●	●	●	●	●	●	●
Sensor NPN/PNP	●	●	●	●	●	●	●	●
0/10V 0/20 mA	–	–	–	–	–	–	●	●
Amplitude Regulation	Man. Pot.	Man. Pot.	Man. Pot.	Man. Pot.	Man. Pot.	Man. Pot.	Man. Pot. Autom.	Man. Pot. Autom.
Freq. Output 50/100 Hz 60/120 Hz	3000/6000 3600/7200	3000/6000 3600/7200	3000/6000 3600/7200	3000/6000 3600/7200	3000/6000 3600/7200	3000/6000 3600/7200	3000/6000 3600/7200	3000/6000 3600/7200
Slow/Fast Time Ramp	●	●	●	●	●	●	●	●
Reg. Volt Min/Max	●	●	●	●	●	●	●	●
EMC - CE	●	●	●	●	●	●	●	●
Overload	–	–	●	–	●	–	–	–
IP	65	65	65	65	65	65	65	65
Dimensions	100x100x50	100x100x50	100x150x80 115x140x60	100x150x80 115x140x60	130x165x70 140x165x65	130x165x70 140x165x65	100x200x80	100x150x80 115x140x60
DIN35	●	●	●	●	●	●	●	●
Photo	1-2	2	3-4	3-4	5-6	5-6	7	3

All controllers are stabilized

Other voltage on request

1/3/4 *with Circuit PRX92-PRX99 inside*


1


2


3


4


5


6


7


8

Electronic Controller for Electromagnetic Vibratory Feeders

R3FC

4A | 115V 230V | IP 65

General

Stabilized, compact and economic controller. This controller is available in the following versions: only circuit, circuit with DIN35 support and external potentiometer, plastic or metallic box.

General Characteristics

Voltage 115/230V, 50/60 Hz • 3000/6000 vpm • Input ON/OFF • Slow/fast ramp • Reg. vibration min/max •Led ON • Line input with schuko plug• Vibrator output with connector.

Applications

Regulations of linear feeders and small bowl feeders till 4 Amps.

Options

Box IP65 (NEMA 4/4X) • Customized label • Connector for vibrator.

Technical Specs

Feeding Tension:	115/230 V ± 10% – 50/60 Hz
Consumption:	1,5 W max
Max Current:	4 A (RMS)
Min Load:	50 mA (RMS)
Vibration Frequency:	3000/6000 vpm (50 Hz) RC-AC
Ramp Time:	0,2 sec. / 2 sec. (adjustable)
Min Regulation:	80 V ± 30%
Max Regulation:	220 V - 30%
On/Off:	free voltage contact
Protection Degree:	IP55 in box (IP65-NEMA 4/4X)
Storage Temperature:	–15°C / +80°C
Operation Temperature:	–5°C / +55°C
European Norms:	EMC CE
Warranty:	1 year (from date on circuit)



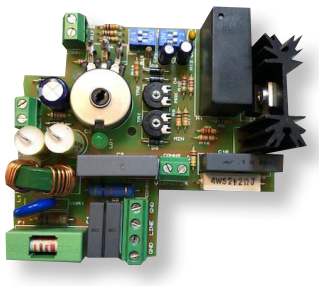
METALLIC BOX
PV R3FCX Z2 STM
100x100x50



METALLIC BOX
PV R3FCX Z2 SM1
100x100x50



PLASTIC BOX
PV R3FCX Z2 STD
100x100x50



CIRCUIT
PV R3FCX A2 STD

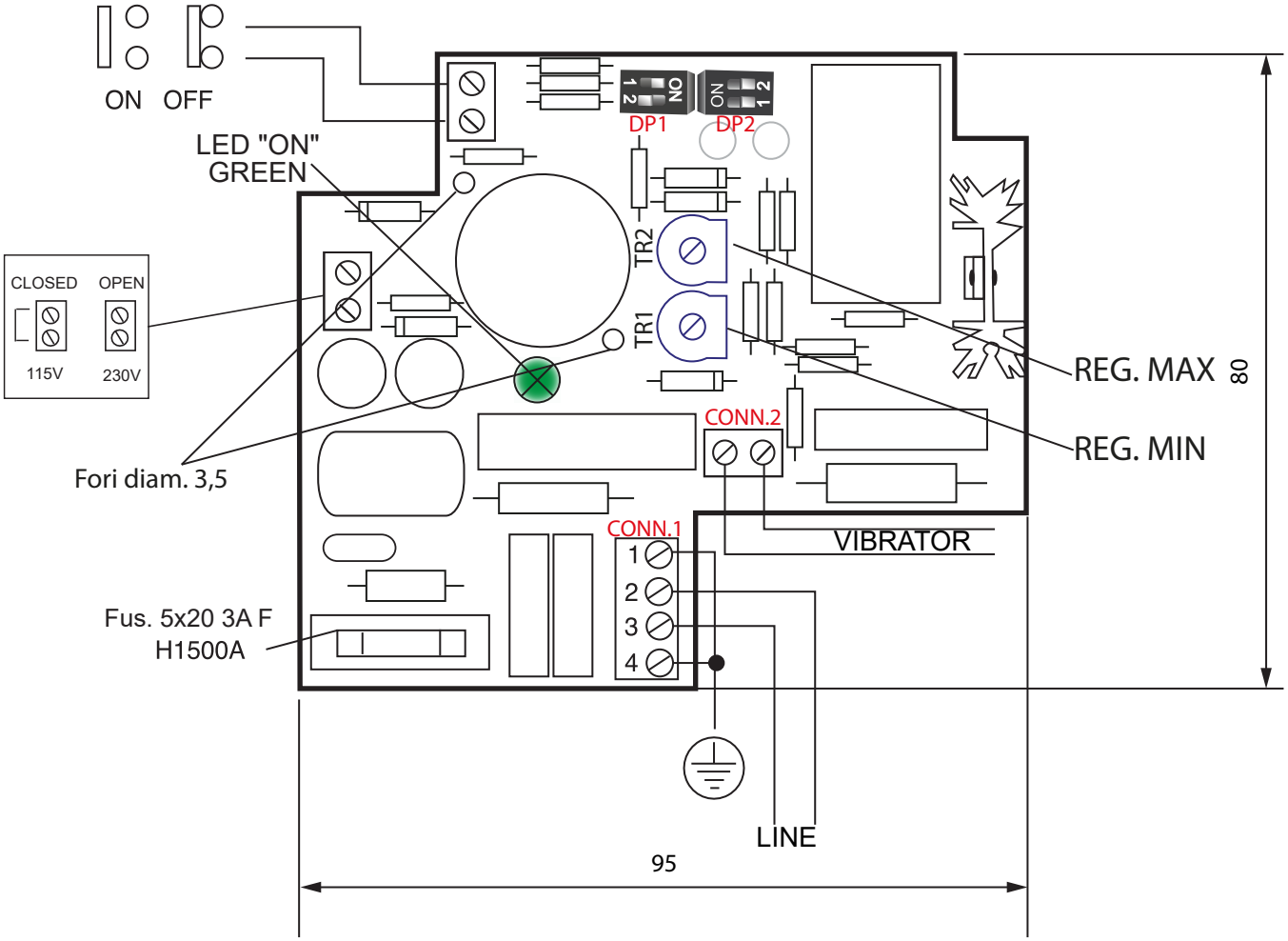
Available Versions

Type	Box	Colour	Dimensions	Code	Price €
R3FC	Circuit		80 x 95 x 35	PV R3FCX A2 STD	
R3FC	Fire-retardant plastic	RAL 7035	100 x 100 x 50	PV R3FCX Z2 STD	
R3FC	Aluminum	RAL 7035	100 x 100 x 50	PV R3FCX Z2 STM	
R3FC/DIN	Circuit DIN35		115 x 185 x 50	PV R3FCX D2 STD	
R3FC+PRX92	+ circuit for sensor NPN/PNP		100 x 100 x 50	PV R3P92 Z2 STD	

DP1 3000/6000		DP2 FAST/SLOW	
			
3000	6000	FAST	SLOW

SMART

USE CONTACS WITHOUT VOLTAGE !



NOTE

If you are using the circuit (IP00) insert it and wire it in a box that could guarantee a degree of safety that complies with current European regulations and isolate the terminals of the potentiometer with the rubbers supplied. We decline any responsibility for improper use of the circuit.

When change from 3000 to 6000 (vibration at minute) or from 6000 to 3000 to control MIN vibration.

Sketch and technical specs are subjected to modification without notice without warning.

MP ELETTRONICA
QUALITY VIBRATION CONTROL

Description: **CONTROL CIRCUIT R3FC (STABILIZED)**

CODE	REV	DATE	DRAFTSMAN	SHEET
DTR3FC	00	02/03	E. PEDRAZZI	1/1

Electronic Controller for Electromagnetic Vibratory Feeders

R3FSC 5/6A 115V 230V IP 65

General

Stabilized, compact and economic controller. This controller is available in the following versions: only circuit, circuit with DIN35 support and external potentiometer, plastic or metallic box.

General Characteristics

Voltage 115/230V, 50/60 Hz • 3000/6000 vpm • Input Double ON/OFF(free contact, signal voltage) • Slow/fast ramp • Reg. vibration min/max • Led ON • Overload function• Line input with schuko plug • Vibrator output with connector.

Applications

Regulation of linear feeders and small bowl feeders till 6 Amps.

Options

Box IP65 (NEMA 4X) • Customized label • Connector for vibrator.

Technical Specs

Feeding Tension:	115/230 V ± 10% – 50/60 Hz
Consumption:	1,5 W max
Max Current:	5/6A (RMS)
Min Load:	50 mA (RMS)
Vibration Frequency:	3000/6000 vpm (50 Hz) RC-AC
Ramp Time:	0,2 sec. / 2 sec. (adjustable)
Min Regulation:	80 V ± 30%
Max Regulation:	220 V - 30%
On/Off:	free voltage contact
Protection Degree:	IP55 in box (IP65-NEMA 4/4X)
Storage Temperature:	–15°C / +80°C
Operation Temperature:	–5°C / +55°C
European Norms:	EMC CE
Warranty:	1 year (from date on circuit)



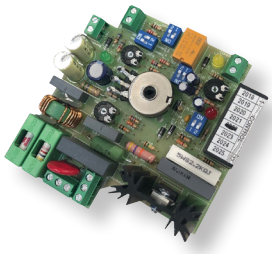
METALLIC BOX
PV R3FSC Z2 STM
140x115x60



METALLIC BOX
PV R3FSC Z2 SM1
150x100x80



PLASTIC BOX
PV R3FSC Z2 STD
165x100x67

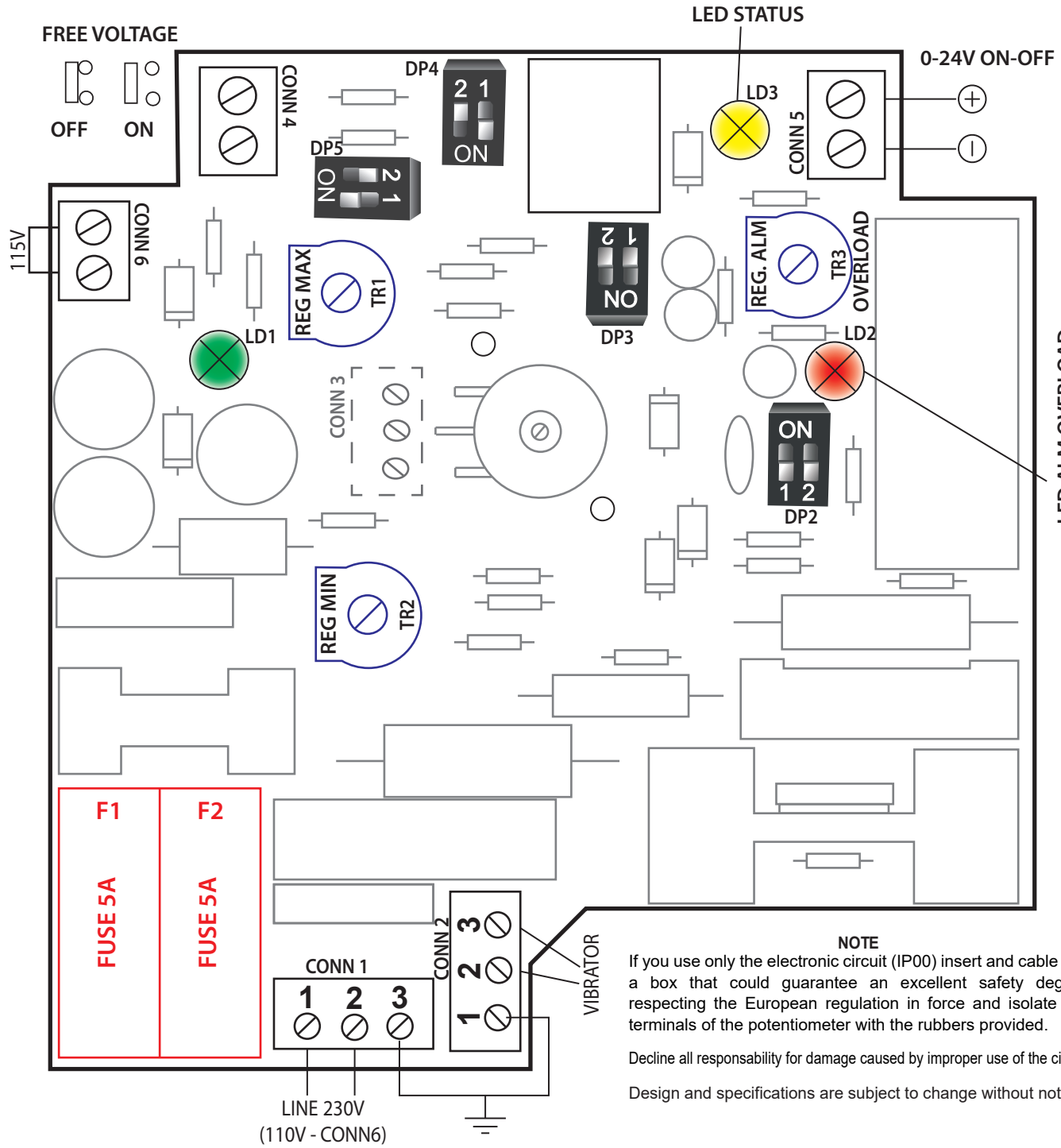


CIRCUIT
PV R3FSC A2 STD

Available Versions

Type	Box	Colour	Dimensions	Code	Price €
R3FSC	Circuit		94 x 94 x 35	PV R3FSC A2 STD	
R3FSC/DIN	Circuit		115 x 185 x 50	PV R3FSC D2 STD	
R3FSC	Fire-retardant plastic	RAL 7035	165 x 100 x 67	PV R3FSC Z2 STD	
R3FSC	Aluminum	RAL 7035	140 x 115 x 60	PV R3FSC Z2 STM	
R3FSC	Aluminum	RAL 7035	150 x 100 x 80	PV R3FSC Z2 SM1	

SMART



NOTE

If you use only the electronic circuit (IP00) insert and cable it in a box that could guarantee an excellent safety degree respecting the European regulation in force and isolate the terminals of the potentiometer with the rubbers provided.

Decline all responsability for damage caused by improper use of the circuit

Design and specifications are subject to change without notice

DP2 (RAMP)

FAST — ON 1 2

SLOW — ON 1 2

DP3 (OVERLOAD)

ALM OFF — ON 1 2

ALM ON — ON 1 2

DP4 (LOGIC ON/OFF)

NORMAL OFF — ON 1 2

NORMAL ON — ON 1 2

DP5 3000/6000 Vm)

6000
100Hz
7200
120Hz

ON 1 2

3000
50Hz
3600
60Hz

ON 1 2

MP ELETTRONICA
QUALITY VIBRATION CONTROL

Description: CONTROL CIRCUIT R3FSC STABILIZED

CODE	REV	DATE	DRAFTSMAN	SHEET
R3FSN	00	08/22	E. PEDRAZZI	1/1

Electronic Controller for Electromagnetic Vibratory Feeders

R5FC 6/8A 115V 230V IP 65

General

Stabilized, compact and economic controller. This controller is available in the following versions: only circuit, circuit with DIN35 support and external potentiometer, plastic or metallic box.

General Characteristics

Voltage 115/230V, 50/60 Hz • 3000/6000 vpm • Input Double ON/OFF(free contact voltage, signal voltage) • Slow/fast ramp • Reg. vibration min/max • Led ON • Overload function • Line input with schuko plug • Vibrator output with connector.

Applications

Regulation of linear vibrators and small bowl feeders till 8 Amps.

Options

Box IP65 (NEMA 4/4X) • INOX Box • Customized label • Connector for vibrator. Available with circuit PRX92 or PRX99.

Technical Specs

Feeding Tension:	115/230 V ± 10% – 50/60 Hz
Consumption:	1,5 W max
Max Current:	6/8 A (RMS)
Min Load:	50 mA (RMS)
Vibration Frequency:	3000/6000 vpm (50 Hz) RC-AC
Ramp Time:	0,2 sec. / 2 sec. (adjustable)
Min Regulation:	80 V ± 30%
Max Regulation:	220 V - 30%
On/Off:	free voltage contact
Protection Degree:	IP55 in box (IP65-NEMA 4/4X)
Storage Temperature:	–15°C / +80°C
Operation Temperature:	–5°C / +55°C
European Norms:	EMC CE
Warranty:	1 year (from date on circuit)



METALLIC BOX
PV R5FCX Z2 STM
165x140x65



METALLIC BOX
PV R5FCX Z2 SM3
195x130x90



PLASTIC BOX
PV R5FCX Z2 STD
165x130x70

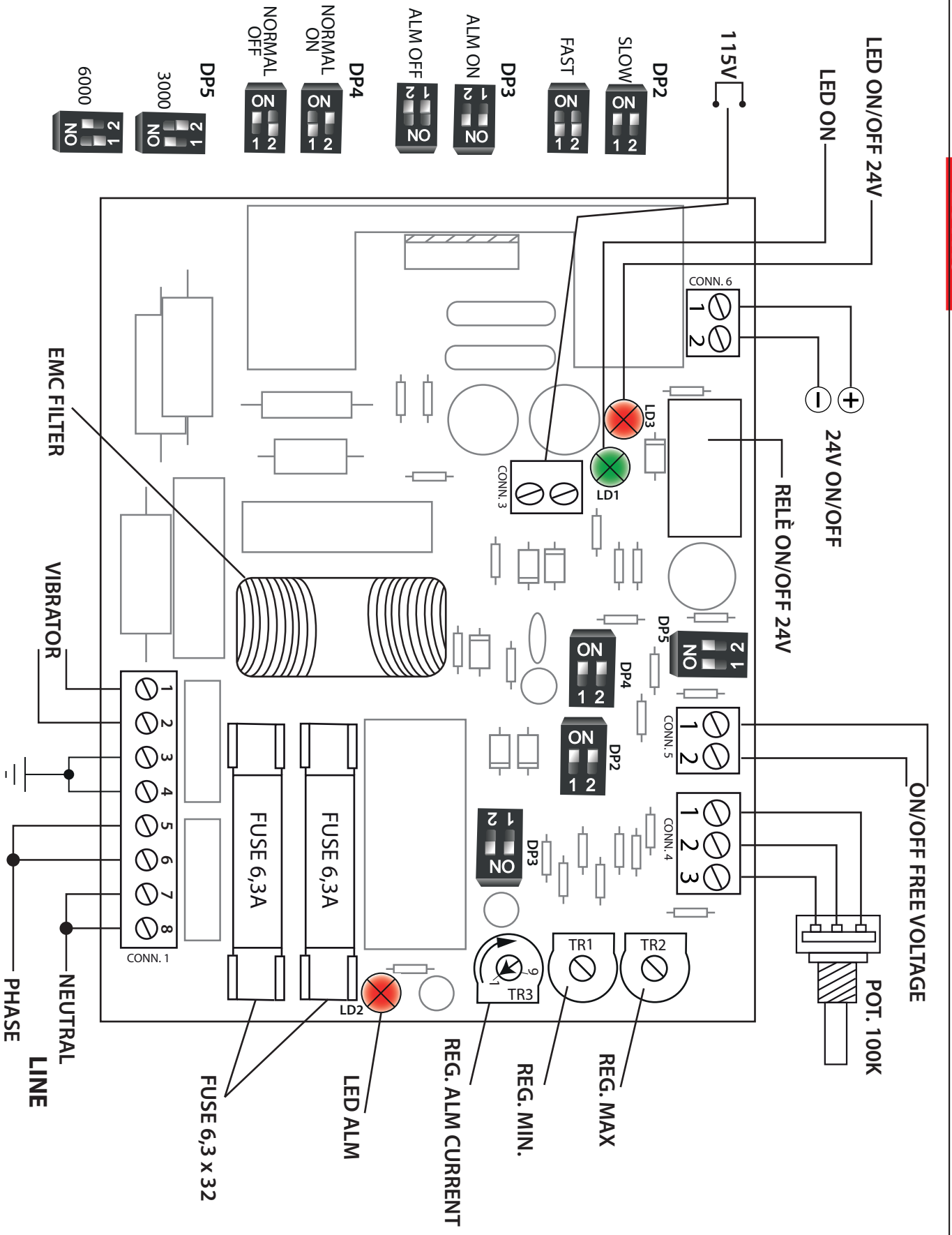


CIRCUIT
PV R5FCX A2 STD

Available Versions

Type	Box	Colour	Dimensions	Code	Price €
R5FC	Fire-retardant plastic	RAL 7035	165 x 130 x 70	PV R5FCX Z2 STD	
R5FC+PRX92	Fire-retardant plastic	RAL 7035	165 x 130 x 70	PV R5P92 Z2 STD	
R5FC	Aluminum	GREY CLEAR	165 x 140 x 65	PV R5FCX Z2 STM	
R5FC	Aluminum	RAL 7035	195 x 130 x 90	PV R5FCX Z2 SM3	
R5FC/DIN	Circuit DIN35		145 x 130 x 50	PV R5FCX D2 STD	

SMART



MP ELETTRONICA
QUALITY VIBRATION CONTROL

Description: **CONTROL CIRCUIT R5FN STABILIZED**

CODE	REV	DATE	DRAFTSMAN	SHEET
DTR5C	02	02/24	E. PEDRAZZI	1/1

Electronic Controller for Electromagnetic Vibratory Feeders

R4FC

5A | 115V 230V | 0/10V 4/20mA

General

Stabilized, optoisolated, compact and economic controller. This controller is available in the following versions: only circuit, circuit with DIN35 support and external potentiometer, plastic or metallic box.

General Characteristics

Voltage 115V/230V, 50/60 Hz • 3000/6000 vpm • Multiple ON/OFF input with double logic • Slow/fast ramp • Reg. vibration min/max • Line input with schuko plug • Vibrator output with connector • Automatic Input 0/5V-0/10V • Led ON (green) • Led OFF (red).

Applications

Regulation of linear feeders and small bowl feeders till 5 Amps.

Options

Box IP65 (NEMA 4/4X) • INOX Box • Customized label • Double speed • Connector for vibrator • Available with PRX92-PRX99 circuits for NPN-PNP sensor.

Technical Specs

Feeding Tension:	115/230V ± 10% – 50/60 Hz
Consumption:	1 W max
Max Current - Min Load:	5 A (RMS) - 30 mA (RMS)
Automatic Input:	0/10V-0/20 mAmp
Frequency of Vibration:	3000/6000 vpm (50 Hz) RC-AC
Ramp Time:	0,1 sec. / 1 sec. (adjustable)
Min Regulation:	80 V ± 30% (230V)
Max Regulation:	220 V - 30% (230V)
On/Off:	free voltage contact/voltage signal 0/24Vcc
Protection Degree:	IP55 in box (IP65-NEMA4-4X)
Storage Temperature:	–10°C / +80°C
Operation Temperature:	–5°C / +55°C
European Norms:	EMC CE
Warranty:	1 year (from date on circuit)



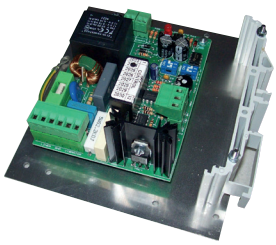
METALLIC BOX
PV R4FC Z2 STM
140x115x60



METALLIC BOX
PV R4FC Z2 SM1
150x100x80



PLASTIC BOX
PV R4FC Z2 STD
165x100x67

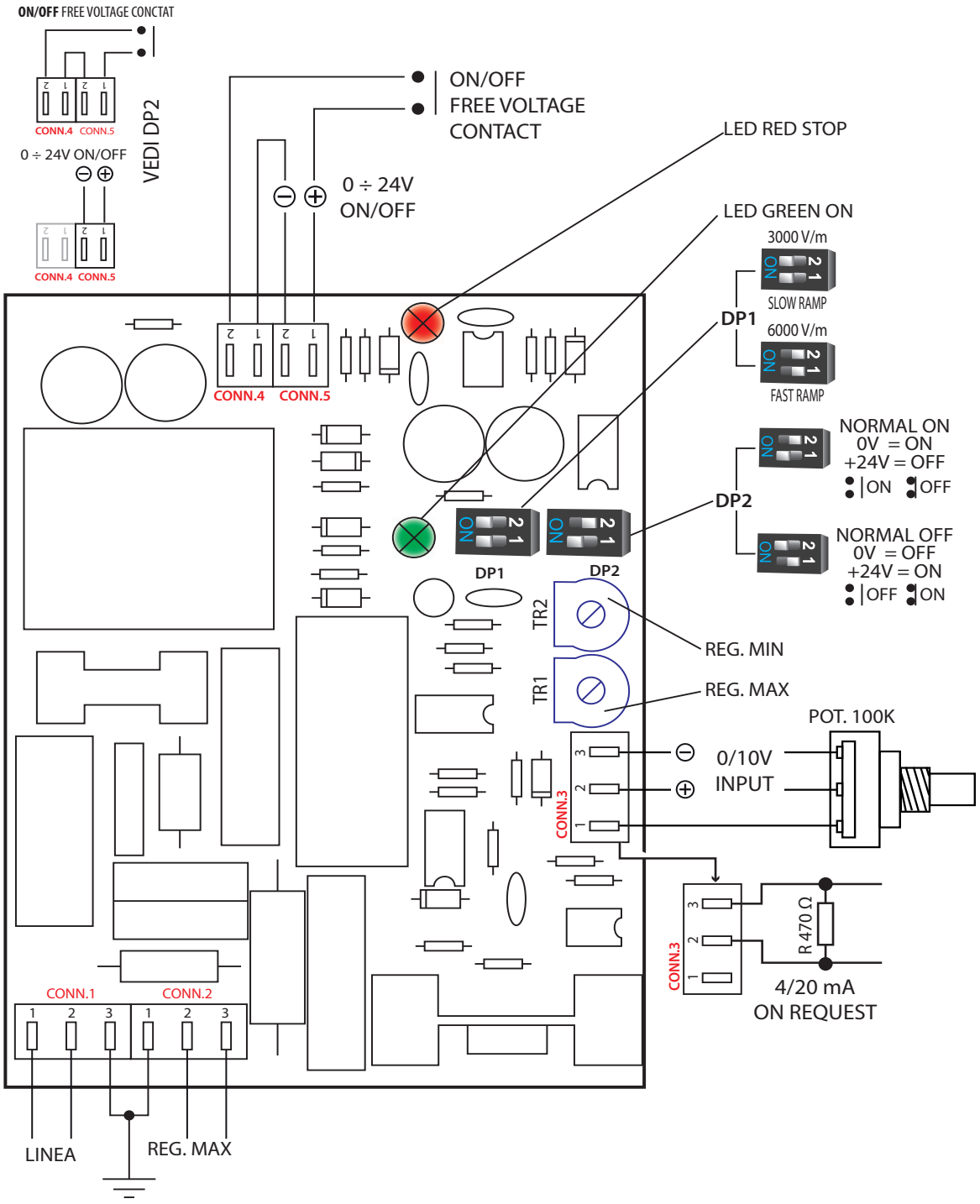


CIRCUIT DIN35
PV R4FC D2 STD

Available Versions

Type	Box	Colour	Dimensions	Code	Price €
R4FC	Circuit		108 x 84 x 33,5	PV R4FC A2 STD	
R4FC DIN	Circuit		125 x 85 x 64,5	PV R4FC D2 STD	
R4FC	Fire-retardant plastic	RAL 7035	165 x 100 x 67	PV R4FC Z2 STD	
R4FC	Aluminum	RAL 7035	140 x 115 x 60	PV R4FC Z2 STM	
R4FC	Aluminum	RAL 7035	150 x 100 x 80	PV R4FC Z2 SM1	

SMART-ISO



ADJUSTMENT:
WITH 0V ADJUST THE MINIMUM
WITH 10V ADJUST THE MAXIMUM
THE MINIMUM IS NOT INFLUENCED THE MAXIMUM
IS INFLUENCED BY THE MINIMUM 3000 AND 6000
HAVE DIFFERENT CALIBRATION

MP ELETTRONICA
QUALITY VIBRATION CONTROL

Description: **ELECTRONIC CIRCUIT R4FC**

CODE	REV	DATE	DRAFTSMAN	SHEET
DTR4FC	00	12/16	E. PEDRAZZI	1/1

Electronic Controller for Electromagnetic Vibrator

VBS06 6A 230V IP 65

General

Stabilized professional controller, compact, economic, current till to 6,3A rms in metallic or plastic box, only circuit or circuit with support DIN35 with external potentiometer.

General Characteristics

Voltage 230V, 50/60 Hz • 3000/6000 Vib/min • Double Input ON/OFF • Slow/fast ramp • Reg. vibration min/max • Led ON • Line input with schuko plug • Vibrator output with connector.

Applications

Regulation of linear and circular vibrators till 6,3 Amps.

Options

Box IP65 (NEMA 4/4X) • INOX Box • Personalized label • Connector for vibrator • Available with circuit PRX92 or PRX99 (NPN-PNP sensor).

Technical Specs

Tension of Feeding:	230 V ± 5% – 50/60 Hz
Consumption:	1,5 W max
Current Max:	6,3A (RMS)
Load Min:	50 mA (RMS)
Frequency of Vibration:	3.000/6.000 V/min (50 Hz) RC-AC
Time of Ramp:	0,2 sec. / 2 sec. (modifiable)
Regulation Min.:	80 V ± 30%
Regulation max:	220 V -30%
On/Off:	free voltage contact/signal voltage 0/24Vcc
Degree of Protection:	IP55 in box (IP65-NEMA4-4X)
Temperature of Storage:	–15°C / +80°C
Temperature of Operation:	–5°C / +55°C
European Norms:	EMC CE
Guarantee:	1 year (from date on circuit)



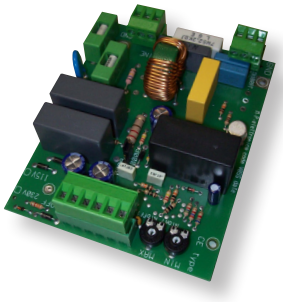
METALLIC BOX
PV VBS06 Z2 STM
165x140x65



METALLIC BOX
PV VBS06 Z2 SM3
195x130x90



PLAASTIC BOX
PV VBS06 Z2 STD
165x130x70

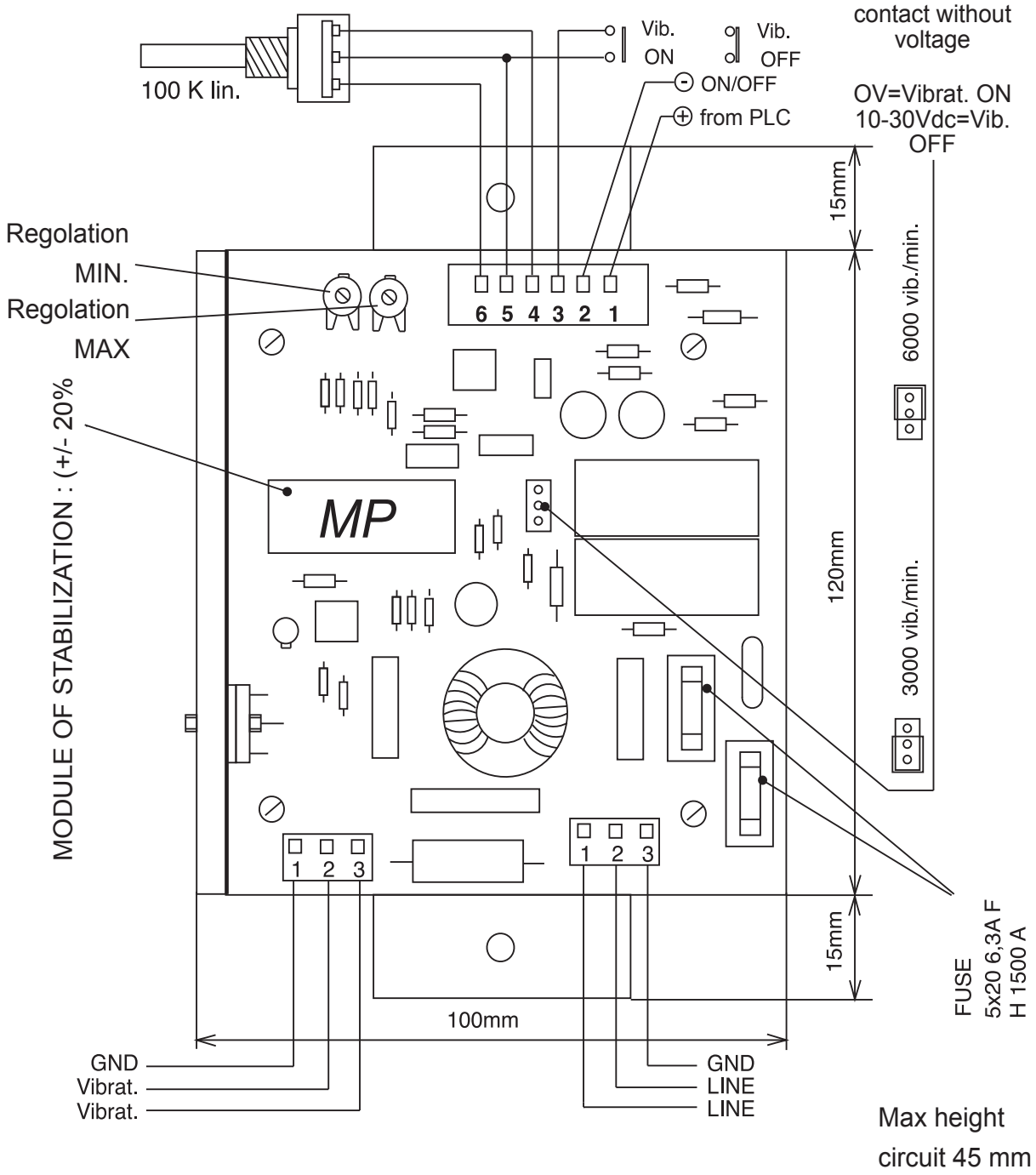


CIRCUIT
PV VBS06 A2 STD

Available Versions

Type	Box	Colour	Dimensions	Code	Price €
VBS06	Fire-retardant plastic	RAL 7035	165 x 130 x 70	PV VBS06 Z2 STD	
VBS06	Aluminum	GREY CLEAR	165 x 140 x 65	PV VBS06 Z2 STM	
VBS06	Aluminum	RAL7035	195 x 130 x 90	PV VBS06 Z2 SM1	
VBS06/DIN35	Circuit		145 x 130 x 50	PV VBS06 D2 STD	

NOTE: optoisolated and protect PLC contact against of polarity inversion



NOTE: The electronic circuit may be supplied with code vbs06/d, also with support for assembly on the Omega DIN 35 bar.

if only the open-frame board is used (IP00) insert it and wire it in a container that could guarantee an excellent safety degree respecting the current European Norms, and isolate the terminals of the potentiometer with the little rubbers in endowment. Each responsability from a wrong use of the open-frame board is declined. Sketch and technical characteristics are subject to modification without warning.

MP ELETTRONICA
QUALITY VIBRATION CONTROL

Description: CONTROL CIRCUIT VBS06

CODE	REV	DATE	DRAFTSMAN	SHEET
DTVBS06	00	12/97	E. PEDRAZZI	1/1

Electronic Controller for Electromagnetic Vibrator

CV99

6/8A | 115V 230V | 0/10V 0/20mA

General

Stabilized professional controller, compact, economic, current till to 6/8A rms in metallic box, only circuit or circuit with support DIN35 with external potentiometer.

General Characteristics

Voltage 230V, 50/60 Hz • 3000/6000 Vib/min • Double automatic input 0/10V-0/20mA • Multiple ON/OFF input• Slow/Fast ramp • Reg. vibration min/max Manual/Automatic • Line input with schuko plug • Vibrator output with connector.

Applications

Regulation of linear and circular vibrators till 8A with automatic input (PLC) Drive linear - Bowl feeder - Hopper.

Options

Box IP65 (NEMA 4/4X) • INOX Box • Personalized label • Double speed • Connector for vibrator.

Technical Specs

Tension of Feeding:	230 V or 400 V ± 20% – 50/60 Hz
Consumption:	1,5 W max
Current Max:	6,3A (RMS)
Load Min:	50 mA (RMS)
Frequency of Vibration:	3.000/6.000 V/min (50 Hz) RC-AC
Time of Ramp:	0,1 sec. / 1 sec. (modifiable)
Regulation Min.:	80 V ± 30% (230V) 140 V ± 30% (400V)
Regulation max:	220 V - 30% (230V) 380 V - 30% (400V)
On/Off:	free voltage contact/signal voltage 0/24Vcc
Input Consumption Autom. 0/10V:	1mA max
Input Impedance 0/10V-/0/20mA:	50 Komh-50 omh
Degree of Protection:	IP55 in box (IP65-NEMA4-4X)
Temperature of Storage:	–10°C / +80°C
Temperature of Operation:	–5°C / +55°C
European Norms:	EMC CE
Guarantee:	1 year (from date on circuit)



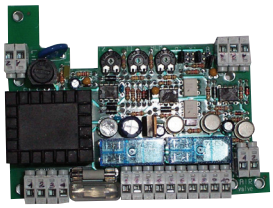
METALLIC BOX
PV CV99X Z2 SM1
200x100x80



PLASTIC BOX
PV CV99X A2 STD



CIRCUIT DIN35
PV CV99X D2 STD



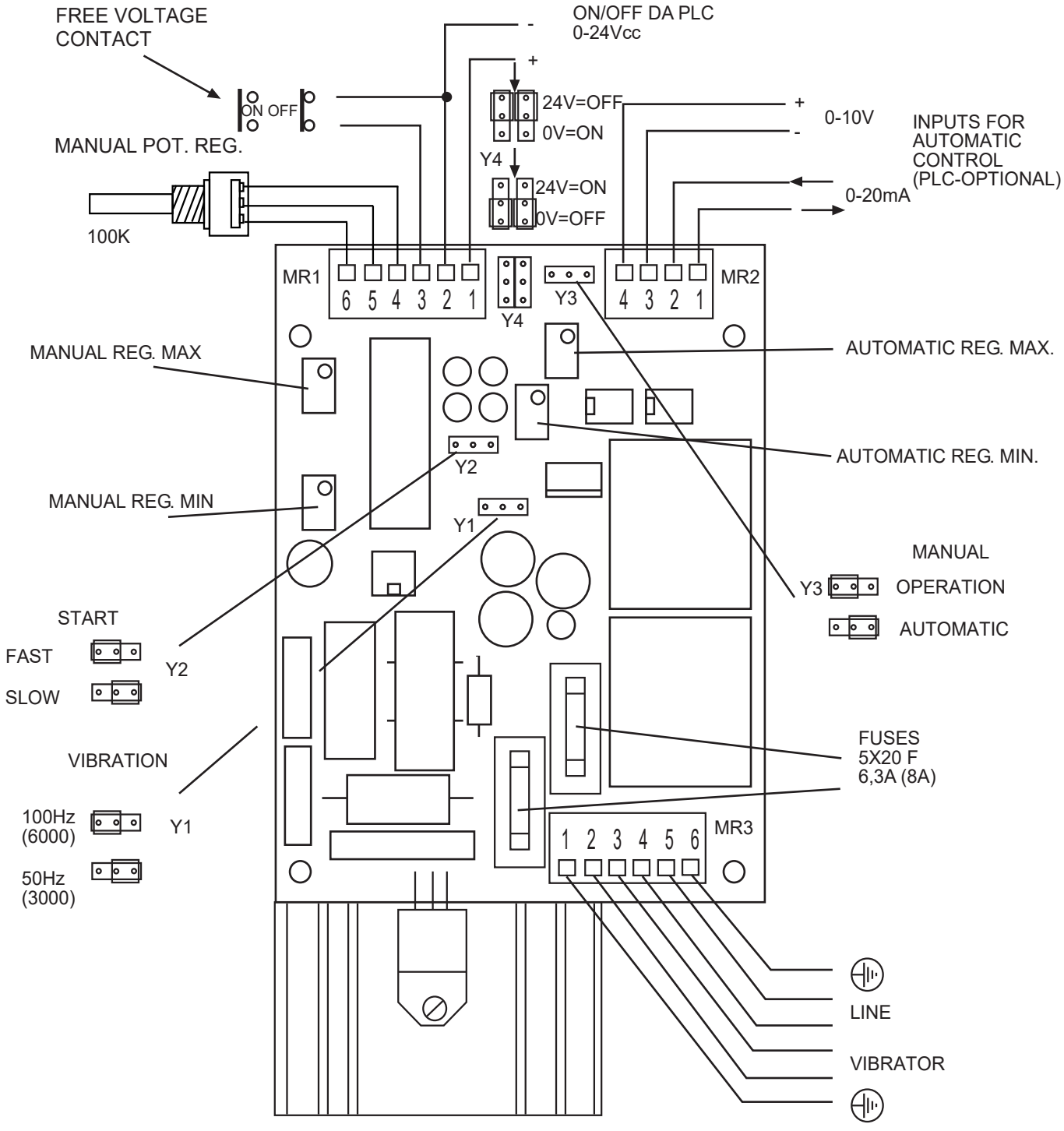
CIRCUIT PRX99
PV PRX99 A2 STD

Available Versions

Type	Box	Colour	Dimensions	Code	Price €
CV99	Aluminum	RAL 7035	200 x 100 x 80	PV CV99X Z2 SM1	
CV99	Circuit		150 x 85 x 40	PV CV99X A2 STD	
CV99/DIN35	Circuit DIN35		150 x 85 x 40	PV CV99X D2 STD	

IMPORTANT NOTE:

If using only the open-frame board (IP00), install and wire it in an enclosure that ensures a high level of safety in compliance with current European regulations, and insulate the potentiometer terminals with the supplied rubber caps. No responsibility is assumed for improper use of the open-frame board.



DRAWINGS AND TECHNICAL SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE

MP ELETTRONICA
QUALITY VIBRATION CONTROL

Description: STABILIZED CIRCUIT CV99

CODE	REV	DATE	DESIGNED	SHEET
DTCV99	00	12/99	E. PEDRAZZI	1/1

SMART

Electronic Controller for Electromagnetic Vibratory Feeders

R3FC-ISO

4A | 110V 230V | 2 ON/OFF

General

Stabilized, optoisolated, compact and economic controller. This controller is available in the following versions: only circuit, circuit with DIN35 support and external potentiometer, plastic or metallic box.

General Characteristics

Voltage 115V/230V, 50/60 Hz • 3000/6000 vpm • Multiple ON/OFF input with double logic • Slow/Fast ramp • Reg. vibration min/max • Line input with schuko plug • Vibrator output with connector • Led green (ON).

Applications

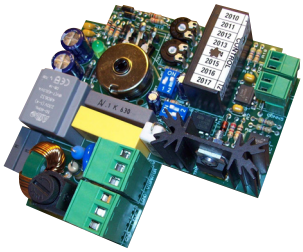
Regulation of linear and bowl feeders till 4 Amps.

Options

Box IP65 (NEMA 4/4X) • INOX Box • Customized label • Double speed • Connector for vibrator • Available with PRX92-PRX99 circuits for NPN-PNP sensor.



PLASTIC BOX
PV R3ISO Z2 STD
100x100x50



CIRCUIT
PV R3ISO A2 STD

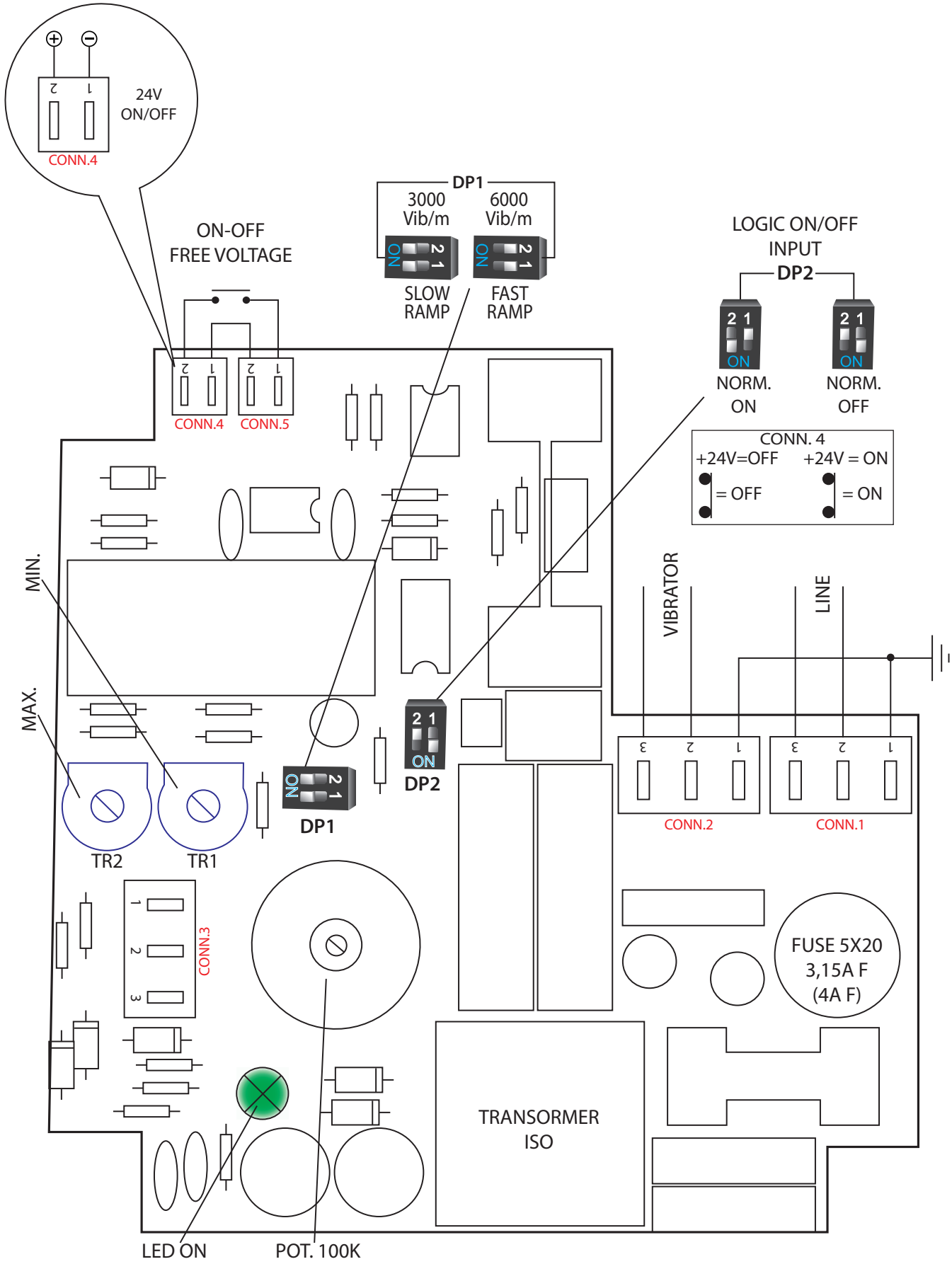
Technical Specs

Feeding Tension:	115/230 V ± 10% – 50/60 Hz
Consumption:	1,5 W max
Max Current:	4 A (RMS)
Min Load:	50 mA (RMS)
Vibration Frequency:	3000/6000 vpm (50 Hz) RC-AC
Ramp Time:	0,2 sec. / 2 sec. (adjustable)
Min Regulation:	80 V ± 30%
Max Regulation:	220 V - 30%
On/Off:	free voltage contact
Protection Degree:	IP55 in box (IP65-NEMA 4/4X)
Storage Temperature:	–15°C / +80°C
Operation Temperature:	–5°C / +55°C
European Norms:	EMC CE
Warranty:	1 year (from date on circuit)

Available Versions

Type	Box	Colour	Dimensions	Code	Price €
R3FC-ISO	Circuit		80 x 95 x 35	PV R3ISO A2 STD	
R3FC-ISO	Fire-retardant plastic	RAL 7035	100 x 100 x 50	PV R3ISO Z2 STD	
R3FC-ISO/DIN	Circuit DIN35		115 x 185 x 50	PV R3ISO D2 STD	
R3FC-ISO+PRX92	+ circuit for sensor NPN/PNP	RAL 7035	100 x 100 x 50	PV R3ISO Z2 P92	

SMART-ISO



MP ELETTRONICA QUALITY VIBRATION CONTROL	Description: **ELECTRONIC CIRCUIT R3FC ISO**				
	CODE	**REV**	**DATE**	**DRAFTSMAN**	**SHEET**
	DTR3FCISO	00	02/14	E. PEDRAZZI	1/1

Electronic Controller for Electromagnetic Vibratory Feeders

R3FSC-ISO

5A | 115V 230V | STATUS RELÈ

General

Stabilized, optoisolated, compact and economic controller. This controller is available in the following versions: only circuit, circuit with DIN35 support and external potentiometer, plastic or metallic box.

General Characteristics

Voltage (115V) 230V, 50/60 Hz • 3000/6000 vpm • Multiple ON/OFF input with double logic • Slow/fast ramp • Reg. vibration min/max • Line input with schuko plug • Vibrator output with connector • Status Relay • Led ON (green) • Led status (red).

Applications

Regulation of linear and bowl feeder till 5 Amps.

Options

Box IP65 (NEMA 4/4X) • INOX Box • Customized label • Double speed • Connector for vibrator • Available with PRX92-PRX99 circuits for NPN-PNP sensor.

Technical Specs

Feeding Tension:	(115) 230V ± 10% – 50/60 Hz
Consumption:	1 W max
Max Current:	5A (RMS)
Min Load:	50 mA (RMS)
Vibration Frequency:	3000/6000 vpm (50 Hz) RC-AC
Ramp Time:	0,2 sec. / 2 sec. (adjustable)
Min Regulation:	80 V ± 30% (230V)
Max Regulation:	220 V - 30% (230V)
On/Off:	free voltage contact/voltage signal 0/24Vcc
Degree of Protection:	IP55 in box (IP65-NEMA 4/4X)
Temperature of Storage:	–10°C / +80°C
Temperature of Operation:	–5°C / +55°C
European Norms:	EMC CE
Guarantee:	1 year (from date on circuit)



METALLIC BOX
PV R3SIS Z2 STM
140x115x60



METALLIC BOX
PV R3SIS Z2 SM1
150x100x80



PLASTIC BOX
PV R3SIS Z2 STD
165x100x67

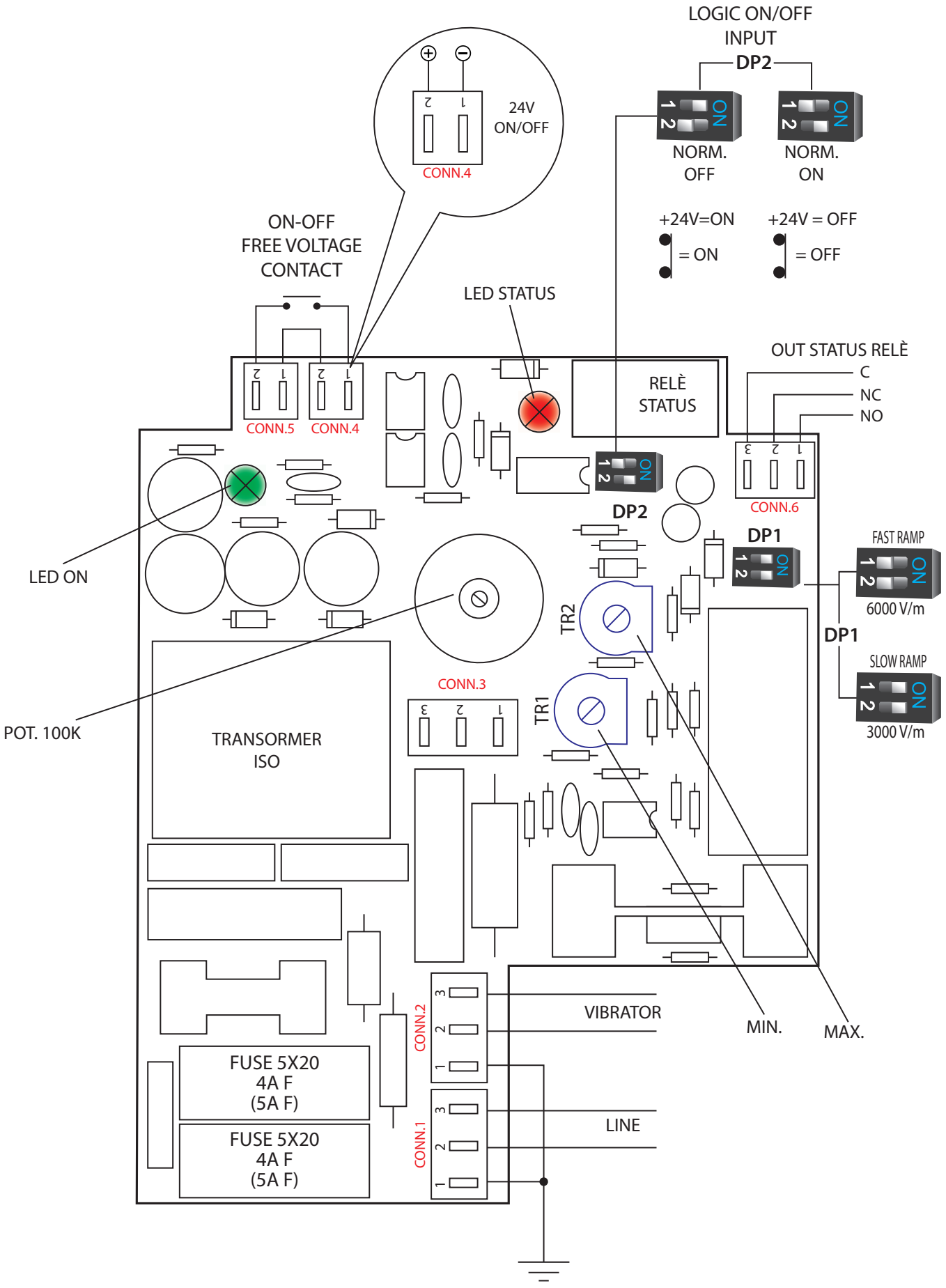


CIRCUIT
PV R3SIS A2 STD

Available Versions

Type	Box	Colour	Dimensions	Code	Price €
R3FS-ISO	Circuit		94 x 94 x 35	PV R3SIS A2 STD	
R3FS-ISO/DIN	Circuit		115 x 185 x 50	PV R3SIS D2 STD	
R3FS-ISO	Fire-retardant plastic	RAL 7035	165 x 100 x 67	PV R3SIS Z2 STD	
R3FS-ISO	Aluminum	RAL 7035	140 x 115 x 60	PV R3SIS Z2 STM	
R3FS-ISO	Aluminum	RAL 7035	150 x 100 x 80	PV R3SIS Z2 SM1	

SMART-ISO



MP ELETTRONICA
QUALITY VIBRATION CONTROL

Description: **ELECTRONIC CIRCUIT R3FSC ISO**

CODE	REV	DATE	DRAFTSMAN	SHEET
DTR3FSCISO	00	02/14	E. PEDRAZZI	1/1

Electronic Controller for Electromagnetic Vibrator

R5FC-ISO 6/8A 115/230V 400V STATUS RELÈ

General

Stabilized controller, compact, economic, current till to 6/8A rms in metallic or plastic box, only circuit or circuit with support DIN35 with external potentiometer.

General Characteristics

Voltage 110/230V or 400V, 50/60 Hz • 3000/6000 Vib/min • Input Double ON/OFF(free contact voltage, signal voltage) • Slow/fast ramp • Reg. vibration min/max • Led ON • Line input with schuko plug • Vibrator output with connector • Status Relay (led red).

Applications

Regulation of vibrators linear and small circular vibrators till 6/8 Amps - Drive linear - Bowl feeder - Hopper - Low-High speed.

Options

Box IP65 (NEMA 4/4X) • INOX Box • Personalized label • Connector for vibrator. Available with circuit PRX92 or PRX99.

Technical Specs

Tension of Feeding:	115/230 V or 400V ± 5% – 50/60 Hz
Consumption:	1,5 W max
Current Max:	6/8A (RMS)
Load Min:	50 mA (RMS)
Frequency of Vibration:	3.000/6.000 V/min (50 Hz) RC-AC
Time of Ramp:	0,2 sec. / 2 sec. (adjustable)
Regulation Min.:	80 V ± 30%
Regulation max:	220 V - 30%
On/Off:	free voltage contact/signal voltage 0/24Vcc
Degree of Protection:	IP55 in box (IP65-NEMA4-4X)
Temperature of Storage:	–15°C / +80°C
Temperature of Operation:	–5°C / +55°C
European Norms:	EMC CE
Guarantee:	1 year (from date on circuit)



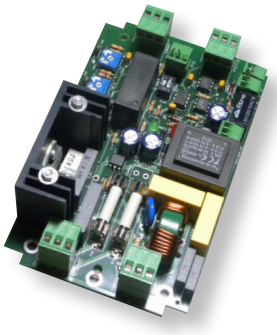
METALLIC BOX
PV R5ISO Z2 STM
165x140x65



METALLIC BOX
PV R5ISO Z2 SM3
195x130x90



PLASTIC BOX
PV R5ISO Z2 STD
165x130x70

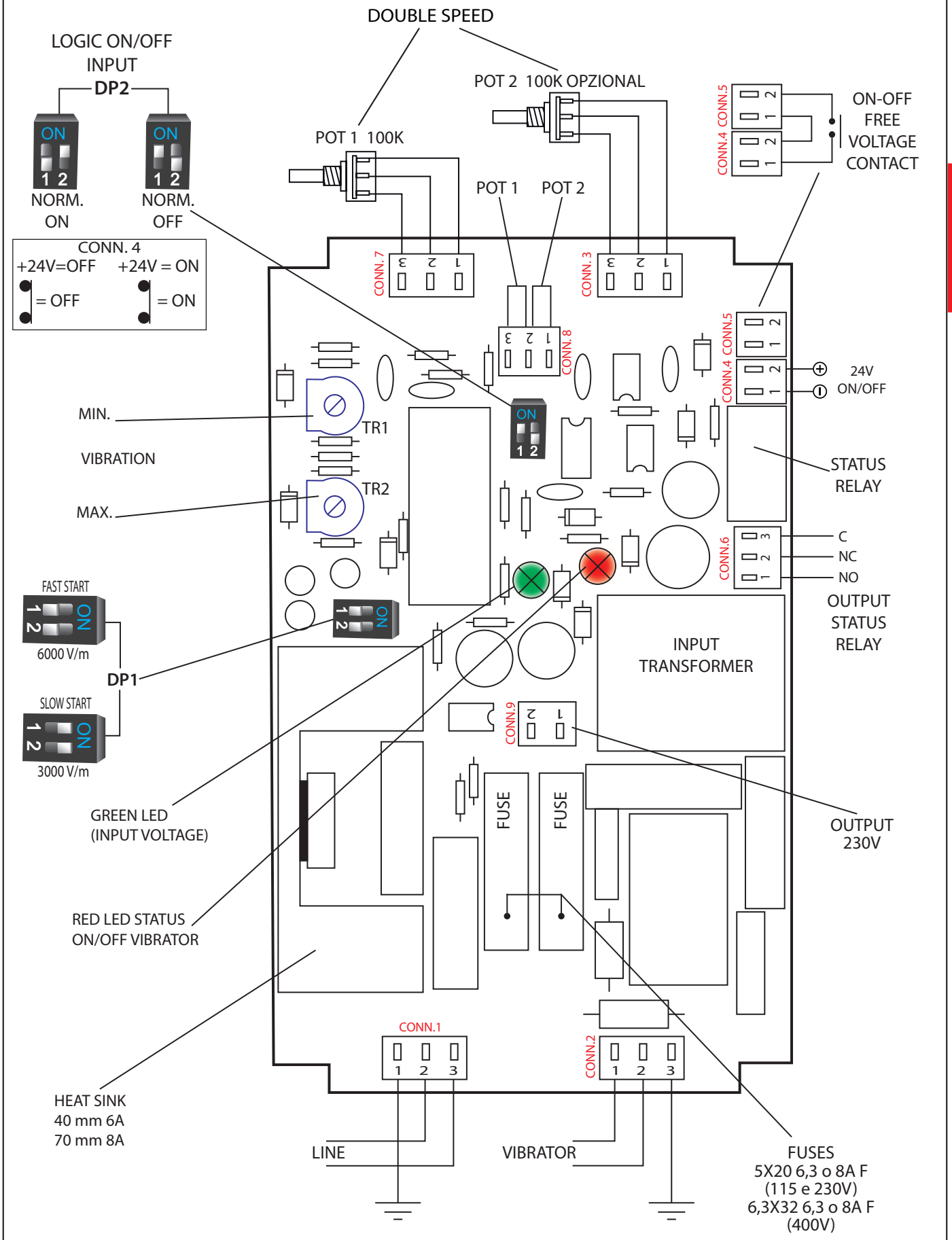


CIRCUIT
PV R5ISO A2 STD

Available Versions

Type	Box	Colour	Dimensions	Code	Price €
R5FC-ISO	Fire-retardant plastic	RAL 7035	165 x 130 x 70	PV R5ISO Z2 STD	
R5FC-ISO	Aluminum	GREY CLEAR	165 x 140 x 65	PV R5ISO Z2 STM	
R5FC-ISO	Aluminum	RAL 7035	195 x 130 x 90	PV R5ISO Z2 SM3	
R5FC/DIN-ISO	Circuit DIN35		145 x 130 x 50	PV R5ISO D2 STD	

SMART-ISO



MP ELETTRONICA
QUALITY VIBRATION CONTROL

Description: **ELECTRONIC CIRCUIT R5FC ISO**

CODE	REV	DATE	DRAFTSMAN	SHEET
DTR5FCISO	00	06/14	E. PEDRAZZI	1/1

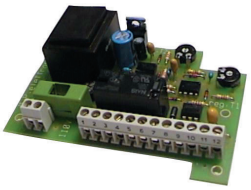
Electronic Controller for NPN/PNP sensor

PRX92

110V 230V | NPN | PNP

General

The PRX92 electronic vibrator stop circuit can be used to stop round electromagnetic vibrators or electromagnetic vibratory hoppers through mechanical, inductive, capacitive or optical (photocells)sensors with NPN /PNP outputs. the circuit also features 2 timed delays 0-12 sec. which are adjustable, for stop and start of the vibrator.



CIRCUIT
PV PRX92 A2 STD

Applications

The PRX92 electronic vibrator stop circuit can be used in various configurations, such as:

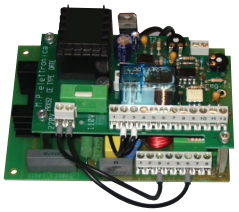
• For controlling overflow of a vibratory chute at the output of a round vibrator.

• For controlling the loading in a round vibrator from a hopper by means of mechanical level indicators.

• For energizing readout photocells instead of the mechanical device used as level sensor.

hence it is possible to couple our pc boards of the RC series and CV6-CV8, for commanding and automating a complete feeder system.

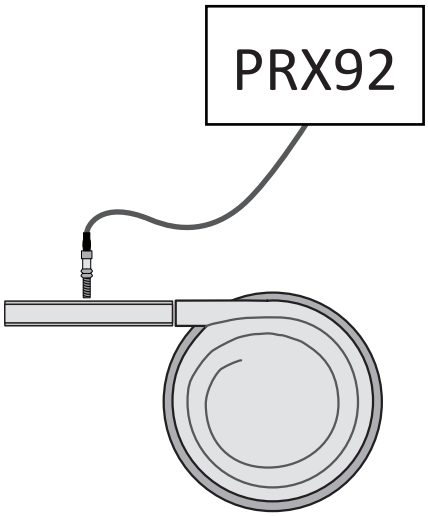
Thanks to the remarkable compactness and the great reliability guaranteed by galvanic and opto-isolation of the inputs,the PRX92 proves to be a valid help in all those cases where it is required to automate component loading and selection cycles with the aid of mechanical and electronic sensors



CIRCUIT R5FC+PRX92
PV R5P92 A2 STD

Options

Circuit PRX92 with external regulation by potentiometers-code PRX92/PEX.

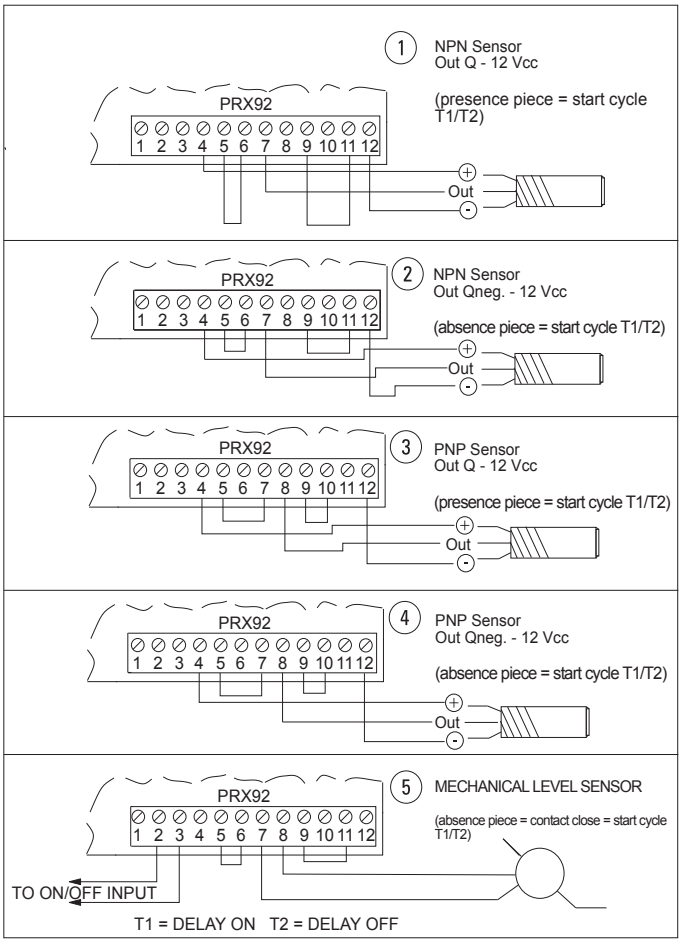


Technical Specs

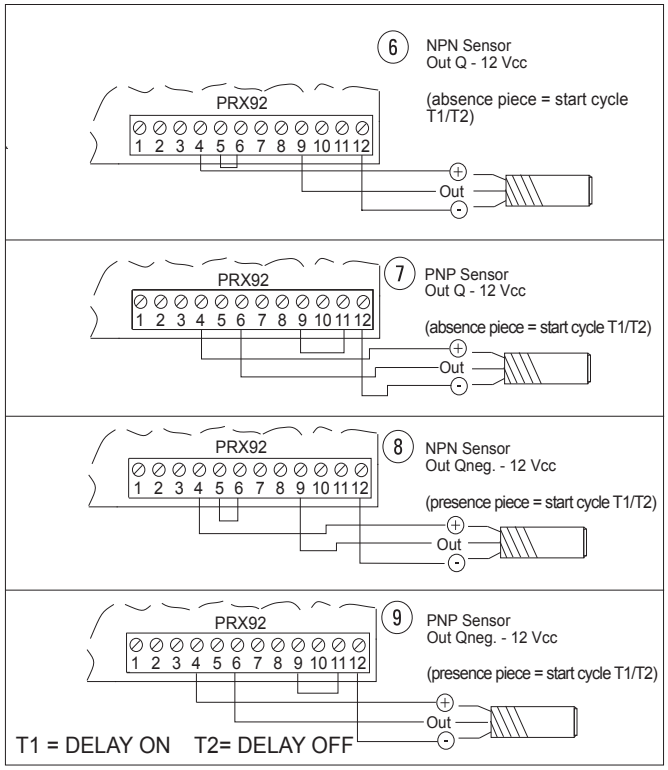
Supply Voltage:	230 Vca ± 5% – 50/60 Hz
Consumption:	1,5 W max
Fuses:	0,2A F 250V 5x20 H1500A
Inputs For Sensors:	Optoisolated NO/NC NPN/PNP
Type Of Sensors:	Mechan.Inductive.Capacitive Or Optical
Supply Voltage For Sensors:	12 Vcc
Energization Delay (T1): .	0-12 Sec.Reg
De-energization Delay (T2):	0-12 Sec.Reg.
Output For Vibrator Stop:	2 NO/NC 10A 250Vca Max
Position Of Assemblage:	Horizontal Or Vertical
Temperature Of Storage:	-10 °C /+80 °C
Temperature Of Operation:	–5°C / +55°C
Range Of Relative Humidity:	80%Till To 31 °C
Altitude:	Up to 2000 Meters

Available Versions

Type	Box	Colour	Dimensions	Code	Price €
PRX92	Circuit for sensor with trimmers		95 x 65 x 35	PV PRX92 A2 STD	
PRX92/PEX	Circuit for sensor with external potentiometers		95 x 65 x 35	PV PRX92 A2 PEX	
R5F+PRX92	Circuit R5F+PRX92		125 x 90 x 60	PV R5P92 A2 STD	

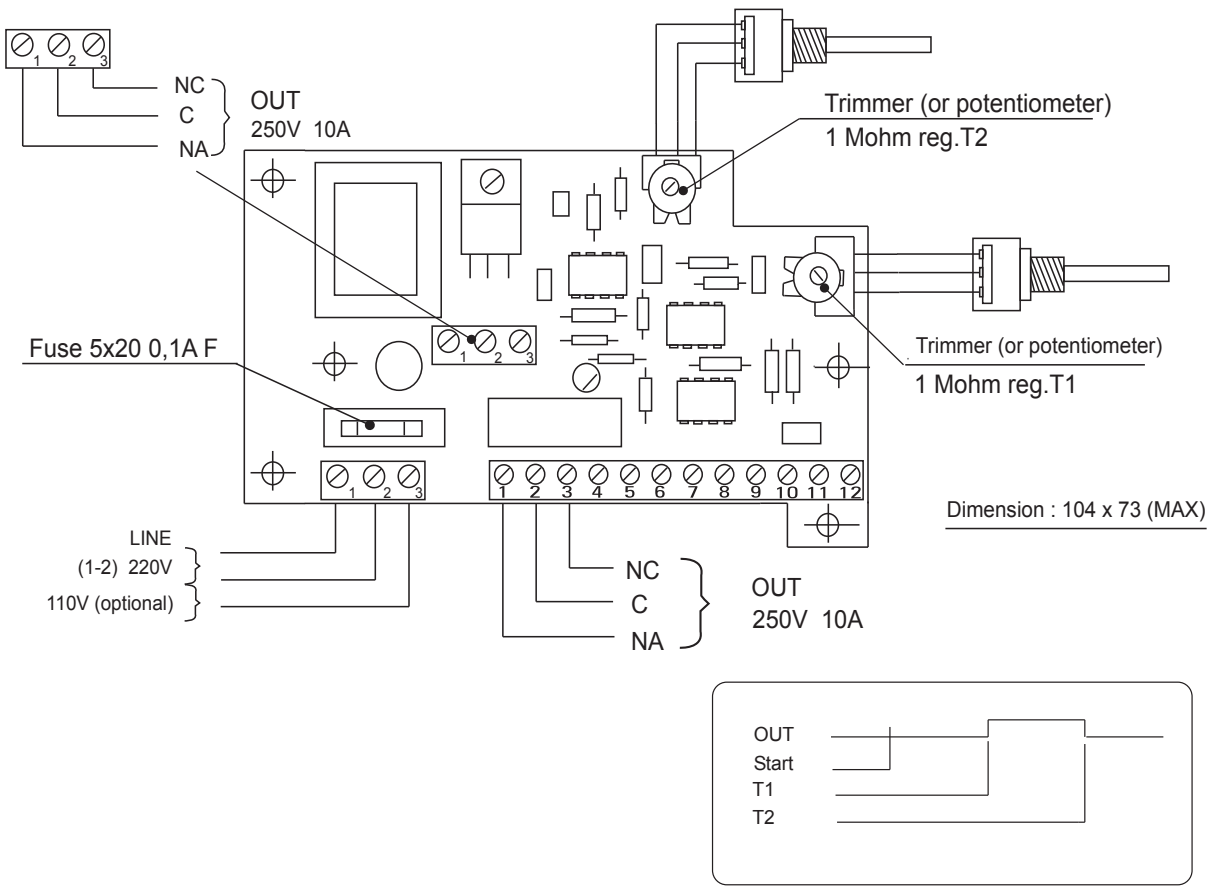


Description: PRX92 SCHEME OF CONNECTION				
CODE	REV	DATE	DRAFTSMAN	SHEET
DTPRX92	00	05/98	E. PEDRAZZI	2/3



Description: PRX92 SCHEME OF CONNECTION				
CODE	REV	DATE	DRAFTSMAN	SHEET
DTPRX92	00	05/98	E. PEDRAZZI	3/3

PRX



Description: ELECTRONIC CIRCUIT FOR TIME DELAYED VIBRATOR STOP

CODE	REV	DATE	DRAFTSMAN	SHEET
DTPRX92	00	05/98	E. PEDRAZZI	1/3

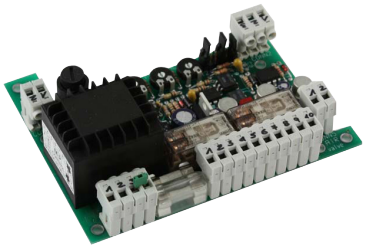
Electronic Controller for NPN-PNP sensor

PRX99

110V 230V | NPN PNP | Allarm

General

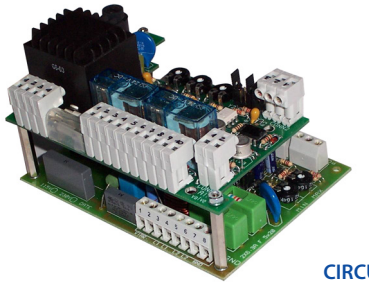
The PRX99 electronic vibrator stop circuit can be used to stop round electromagnetic vibrators or electromagnetic vibratory hoppers through mechanical, inductive, capacitive or optical (photocells) sensors with NPN or PNP outputs. the circuit also features 2 timed delays 0-12 sec. which are adjustable, for stop and start of the vibrator.



CIRCUIT
PV PRX99 A2 STD

Applications

The PRX99 electronic vibrator stop circuit can be used in various configurations, such as:
1) for controlling overflow of a vibratory chute at the output of a round vibrator.
2) for controlling the loading in a round vibrator from a hopper by means of mechanical level indicators.
3) for energizing readout photocells instead of the mechanical device used as level sensor.
4) delay for alarm absance pieces - red led.
5) supply EV air blow (24Vcc) with delay (2 sec.)
6) delay on vibrator (0-12 sec.) - delay off vibrator (0-12 sec.)
7) pover supply 24Vca - 0.1A max.



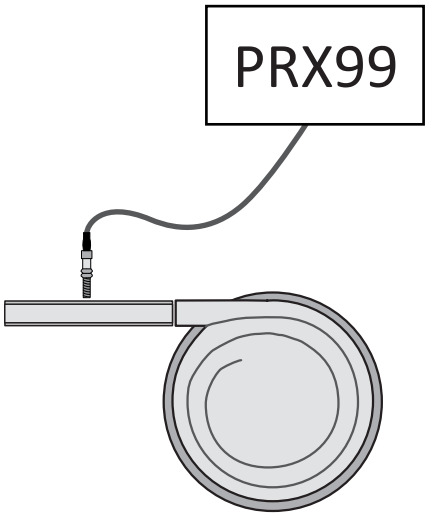
CIRCUIT R5FC+PRX99
PV R5P99 A2 STD

Options

Circuit PRX99 with external regulation by potentiometers-code PRX99/PEX.

Technical Specs

Supply Voltage:	230 Vca ± 5% – 50/60 Hz
Consumption:	1,5 W max
Fuses:	0,2A F 250V 5x20 H1500A
Inputs For Sensors:	Optoisolated NO/NC NPN/PNP
Type Of Sensors:	Mechan.Inductive.Capacitive Or Optical
Supply Voltage For Sensors:	12 Vcc
Energization Delay (T1):	0-12 Sec. Reg
De-energization Delay (T2):	0-12 Sec. Reg.
Output For Vibrator Stop:	2 NO/NC 10A 250Vca Max
Position Of Assemblage:	Horizontal Or Vertical
Temperature Of Storage:	-10 °C /+80 °C
Temperature Of Operation:	–5°C / +55°C
Range Of Relative Humidity:	80% Till To 31 °C
Altitude:	Up to 2000 Meters
Delay Alarm:	0-30 sec
Supply Voltage EV air blow:	24Vcc
Delay Voltage EV air blow: :	2 sec.



Available Versions

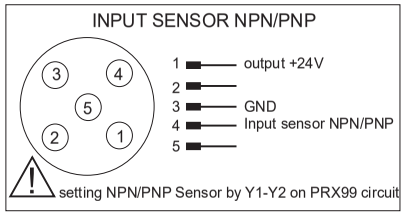
Type	Box	Colour	Dimensions	Code	Price €
PRX99	Circuit for sensor with trimmers		95 x 65 x 35	PV PRX99 A2 STD	
PRX99/PEX	Circuit for sensor with external potentiometers		95 x 65 x 35	PV PRX99 A2 PEX	
R5F+PRX99	Circuit R5F+PRX99		125 x 90 x 60	PV R5P99 A2 STD	

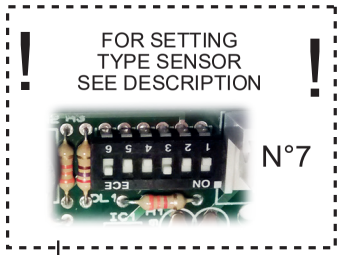
MPJ ELETTRONICA
QUALITY VIBRATION CONTROL

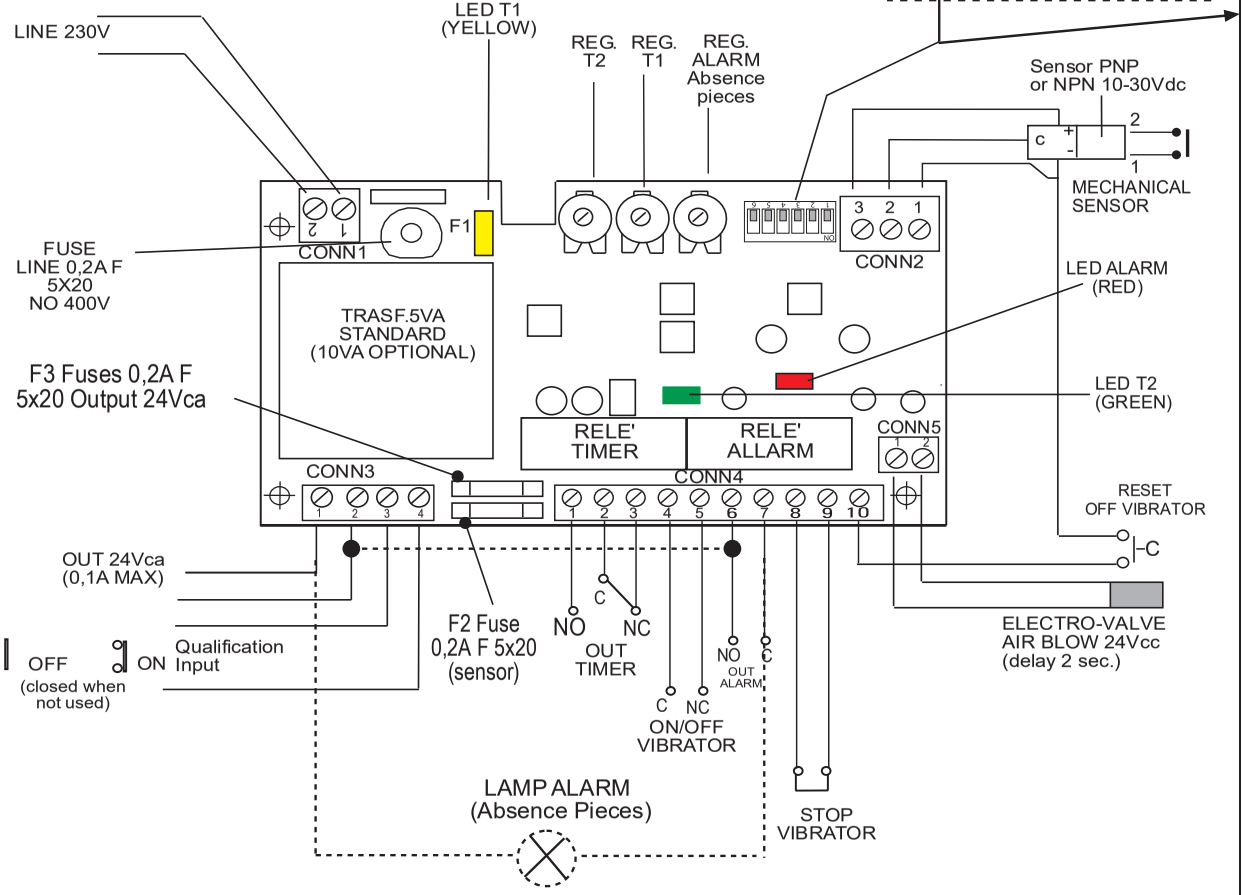
CODE	REV	DATE	DRAFTSMAN	SHEET
DTPRX99	02	10/15	E. PEDRAZZI	1/1

Description: INTERFACE CIRCUIT FOR SENSOR PRX99 WITH ALARMS

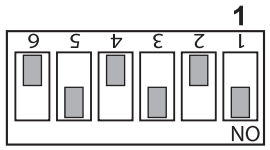
NOTE: Use for qualification input for the stop vibrator input and for the reset of it, free voltage contacts.



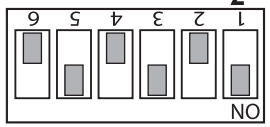




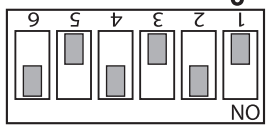
T1 = Delay ON T2 = Delay OFF



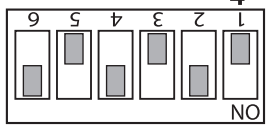
NPN SENSOR
OUT Q
PRESENCE PIECE
START CICLE T1/T2



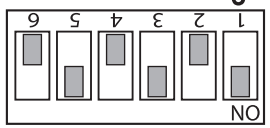
NPN SENSOR
OUT QN
ABSENCE PIECE
START CICLE T1/T2



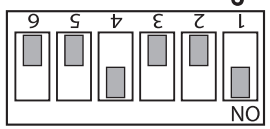
PNP SENSOR
OUT Q
PRESENCE PIECE
START CICLE T1/T2



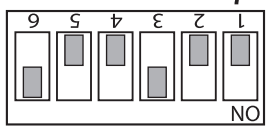
PNP SENSOR
OUT QN
ABSENCE PIECE
START CICLE T1/T2



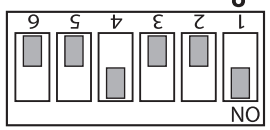
MECHANICAL SENSOR
LEVEL
ABSENCE PIECE
START CICLE T1/T2



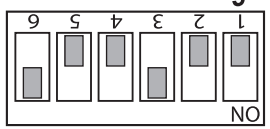
NPN SENSOR
OUT Q
ABSENCE PIECE
START CICLE T1/T2



PNP SENSOR
OUT Q
ABSENCE PIECE
START CICLE T1/T2



NPN SENSOR
OUT QN
PRESENCE PIECE
START CICLE T1/T2



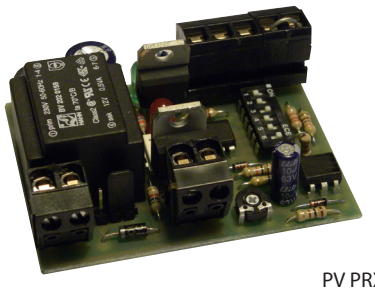
PNP SENSOR
OUT QN
PRESENCE PIECE
START CICLE T1/T2

PRX

Electronic Controller for NPN/PNP sensor

PRX13

110V 230V | NPN | PNP



CIRCUIT
PV PRX13 A2 STD

General

The PRX13 electronic vibrator stop circuit can be used to stop round electromagnetic vibrators or electromagnetic vibratory hoppers through mechanical, inductive, capacitive or optical (photocells)sensors with NPN or PNP outputs. the circuit also features 1 timed delays 0-12 sec. which are adjustable, for stop and start of the vibrator.

Applications

The PRX13 electronic vibrator stop circuit can be used in various configurations, such as:

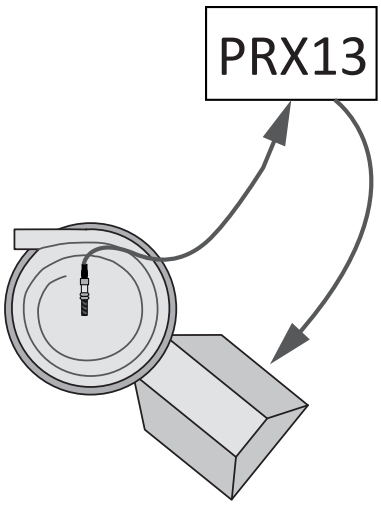
• For controlling overflow of a vibratory chute at the output of a round vibrator.

• For controlling the loading in a round vibrator from a hopper by means of mechanical level indicators.

• For energizing readout photocells instead of the mechanical device used as level sensor.

hence it is possible to couple our pc boards of the RC series and CV6-CV8, for commanding and automating a complete feeder system.

Thanks to the remarkable compactness and the great reliability guaranteed by galvanic and opto-isolation of the inputs,the PRX13 proves to be a valid help in all those cases where it is required to automate component loading and selection cycles with the aid of mechanical and electronic sensors



Options

Circuit PRX13with external regulation by potentiometers-code PRX13/PEX.

Technical Specs

Supply Voltage:	230 Vca ± 5% – 50/60 Hz
Consumption:	1,5 W max
Fuses:	0,2A F 250V 5x20 H1500A
Inputs For Sensors:	Optoisolated NO/NC NPN/PNP
Type Of Sensors:	Mechan.Inductive.Capacitive Or Optical
Supply Voltage For Sensors:	12 Vcc
Energization Delay (T1): .	0-12 Sec.Reg
De-energization Delay (T2):	0-12 Sec.Reg.
Output For Vibrator Stop:	2 NO/NC 10A 250Vca Max
Position Of Assemblage:	Horizontal Or Vertical
Temperature Of Storage:	-10 °C /+80 °C
Temperature Of Operation:	–5°C / +55°C
Range Of Relative Humidity:	80% up to 31 °C
Altitude:	Up to 2000 Meters

Available Versions

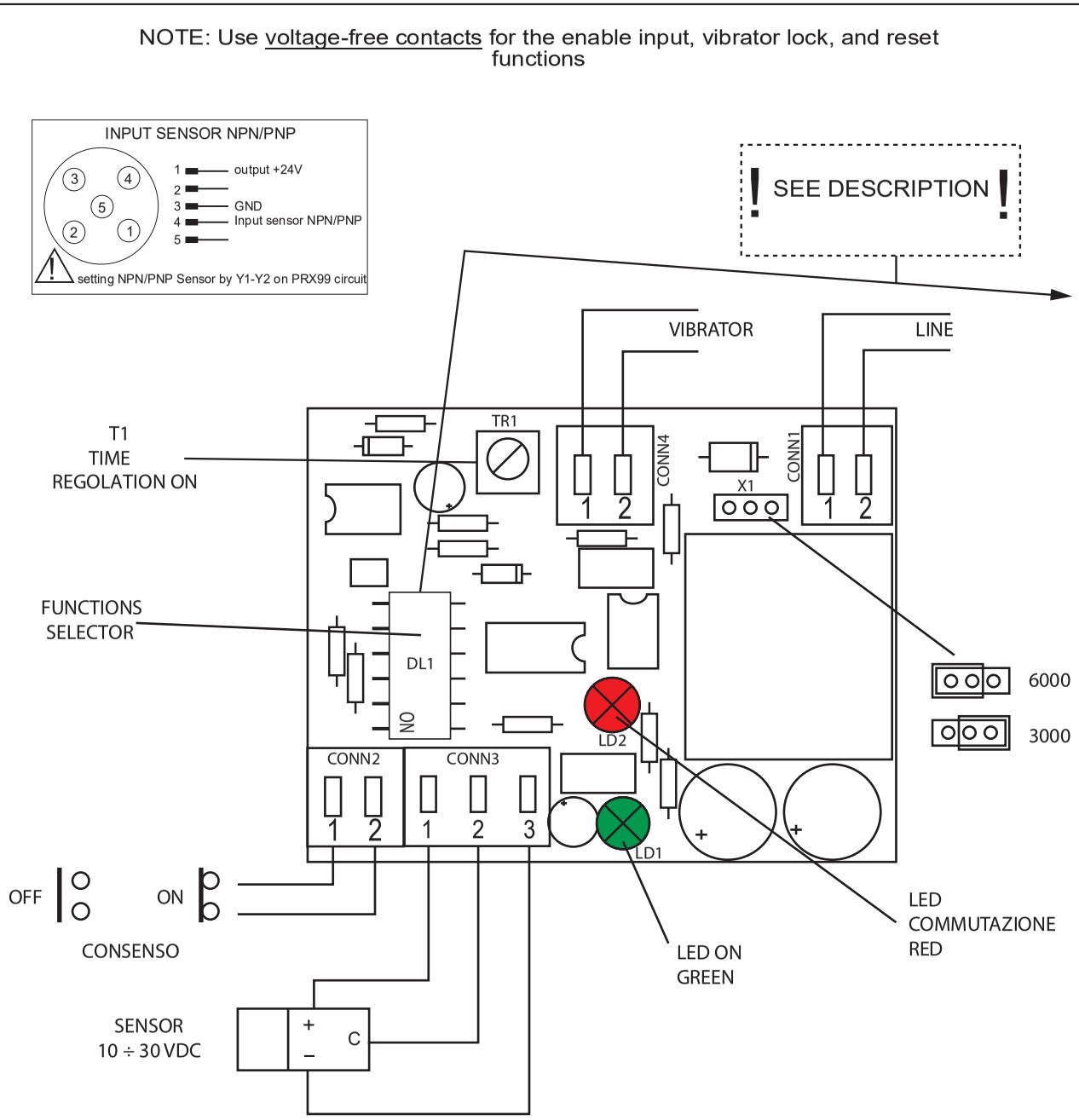
Type	Box	Colour	Dimensions	Code	Price €
PRX13	NPN/PNP Input with delay		60 x 45 x 25	PV PRX13 A2 STD	

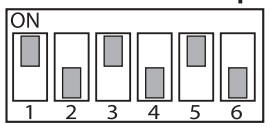
MP ELETTRONICA
QUALITY VIBRATION CONTROL

CODE	REV	DATE	DRAFTSMAN	SHEET
DTPRX13	01	05/11	E. PEDRAZZI	1/1

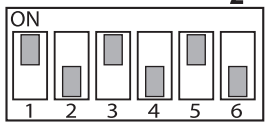
Description: INTERFACE CIRCUIT PRX13 WITH ALLARMS

NOTE: Use voltage-free contacts for the enable input, vibrator lock, and reset functions

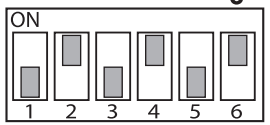


1


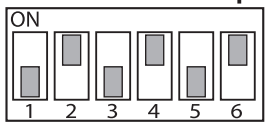
NPN Sensor - Out Q
(Presence piece =
= start cycle T1/T2)

2


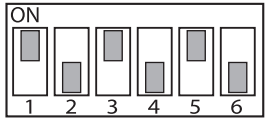
NPN Sensor - Out Qneg.
(Absence piece =
= start cycle T1/T2)

3


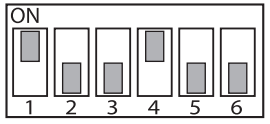
PNP Sensor - Out Q
(Presence piece =
= start cycle T1/T2)

4


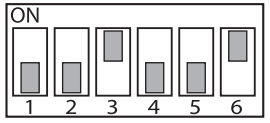
PNP Sensor - Out Qneg.
(Absence piece =
= start cycle T1/T2)

5


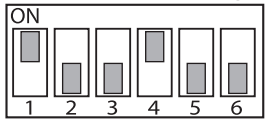
Mechanical level sensor
(Absence piece =
= start cycle T1/T2)

6


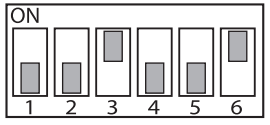
NPN Sensor - Out Q
(Absence piece =
= start cycle T1/T2)

7


PNP Sensor - Out Q
(Absence piece =
= start cycle T1/T2)

8


NPN Sensor - Out Qneg.
(Presence piece =
= start cycle T1/T2)

9


PNP Sensor - Out Qneg.
(Presence piece =
= start cycle T1/T2)

"CV" SERIES

Code : *CV6/17-CV8/17 • CV12/17-CV15/17 • CV25/17 • CV40/17 • CV70/17 • CV100/17*

Voltage : *230V • 400V till 550V • 50/60Hz • corrent max 6/8/12/15/20/25/40/70/100 A RMS*

CV6/17	PV CV617 Z2 STD	6A RMS Max



Protection		Box
IP65		Aluminium 240x130x110

CV6/17	PV CV617 Z2 SM1	6A RMS Max
CV8/17	PV CV817 Z2 SM1	8A RMS Max (10 A)



Protection		Box
IP65		Aluminium 195x130x90

CV12/17	PV C1217 Z4 STD	12A RMS Max
CV15/17	PV C1517 Z4 STD	15A RMS Max



Protection		Box
IP55		Steel Ver. 250x300x150

CV25/17	PV C2517 Z2 STD	25A RMS Max



Protection		Box
IP55		Steel Ver. 300x300x150

CV40/17	PV C4017 Z4 STD	40A RMS Max



Protection		Box
IP65		Steel Ver. 300x400x150

CVXY	PV C1017 Z2 STD	10/20/40A RMS Max



Protection		Box
IP66		Inox on request

Stabilized Electronic Control Circuits For Electromagnetic Vibrator

"CV" /17 SERIES

AVAILABLE VERSIONS

Type	Description	Code
CIRCUIT	CV6-8/17 230V-6A(8A)	PV CV6(8)17 A2 STD
CIRCUIT for DIN 35	CV6-8/17 230V-6A(8A)	PV CV6(8)17 D2 STD
CIRCUIT baseplate + plexiglass	CV6-8/17 230V-6A(8A)	PV CV6(8)17 A2 BSP
BOX	CV6-8/17 230V-6A(8A)	PV CV6(8)17 Z2 STD
BOX PLASTIC	CV6-8/17 230V-6A(8A)	PV CV6(8)17 Z2 STD
CIRCUIT	CV6-8/17 400V-6A(8A)	PV CV6(8)17 A3 STD
CIRCUIT for DIN 35	CV6-8/17 400V-6A(8A)	PV CV6(8)17 D3 STD
CIRCUIT baseplate + plexiglass	CV6-8/17 400V-6A(8A)	PV CV6(8)17 A3 BSP
BOX	CV6-8/17 400V-6A(8A)	PV CV6(8)17 Z3 STD
BOX PLASTIC	CV6-8/17 400V-6A(8A)	PV CV6(8)17 Z3 STP
CIRCUIT **	CV12/17 230V/400V-12A	PV C1217 A4 STD
BOX **	CV12/17 230V/400V-12A	PV C1217 Z4 STD
CIRCUIT **	CV12/17 TILL 500V-12A	PV C1217 A5 STD
BOX **	CV12/17 TILL 500V-12A	PV C1217 Z5 STD
CIRCUIT *	CV25/17 230V/400V-25A	PV C2517 A4 STD
BOX *	CV25/17 230V/400V-25A	PV C2517 Z4 STD
CIRCUIT *	CV25/17 TILL 500V-25A	PV C2517 A5 STD
BOX *	CV25/17 TILL 500V-25A	PV C2517 Z5 STD
CIRCUIT *	CV40/17 230V/400V-40A	PV C4017 A4 STD
BOX *	CV40/17 230V/400V-40A	PV C4017 Z4 STD
CIRCUIT *	CV40/17 TILL 500V-40A	PV C4017 A5 STD
BOX *	CV40/17 TILL 500V-40A	PV C4017 Z5 STD
CIRCUIT *	CV70/17 230/400V-70A	PV C7017 A4 STD **ON REQUEST**
BOX *	CV70/ 17 230/400V-70A	PV C7017 Z4 STD **ON REQUEST**
CIRCUIT *	CV100/17 230/400V-100A	PV C1017 A4 STD **ON REQUEST**
BOX *	CV100/17 230/400V-100A	PV C1017 Z4 STD **ON REQUEST**

INDUSTRIAL

Note: Is possible to supply all versions with double speed n. 2 potentiometers, to add after the last figures the code **S2V** or for the double output **S2U** (PV CV10F A4 STD S2V).

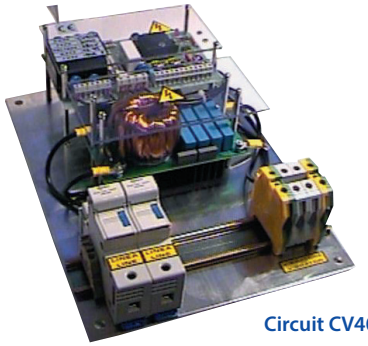
**** ON REQUEST 25 Hz/33 Hz** *** ON REQUEST 25 Hz**



Box CV6/17



Box CV12/17



Circuit CV40/17

Electronic Controller for Electromagnetic Vibrator

CV6/17-CV8/17

6/8 A | 115/230V 400V | 0/10V 4/20mA | IP65

General

Stabilized professional controller, compact, current till to 6,3A (CV6/17), 8A RMS (CV8/17) in metallic or plastic box, only circuit or circuit with support DIN35 with external potentiometer, with double insulation.

General Characteristics

Voltage (110V) 230V or 400V, 50/60 Hz • 3000/6000 VpM • Automatic input 0/10V-4/20mA • Multiple ON/OFF input • Slow/fast ramp • Reg. vibration min/max Manual/Automatic • Line input with schuko plug • Vibrator output with connector • Led green ON • Status relay (red led).

Applications

Adjustment of linear and bowl feeders up to 6.3/8 Amp for weighing and dosing systems, designed for anyone who uses any direct configuration from PLC (eg static relays for ON / OFF inputs and 0/10V signals) without the risk of connecting signals that interfere with each other.

Options

Box IP65 (NEMA 4/4X) INOX Box • Customized label • Double speed • Connector for vibrator • Available with PRX92-PRX99 circuits for NPN-PNP sensor • **IP20**.

Technical Specs

Feeding Tension:	110V or 230V or 400V ± 5% – 50/60 Hz
Consumption :	1,5 W max
Fuses CV12-CV15:	6,3/8A (RMS)
Min Load:	50 mA (RMS)
Potentiometr of reg.:	3000/6000 VPM (50 Hz) RC-AC
Vibration Frequency:	0,1 sec. / 1 sec. (modifiable)
Ramp Time:	80 V ± 30% (230V) 140 V ± 30% (400V)
Min Regulation:	220 V - 30% (230V) 380 V - 30% (400V)
Max Regulation:	free voltage contact/voltage signal 0/24Vcc
Consumption Input Autom. 0/10V:	1mA max
Impedance Input 0-10V/4-20mA:	50 Komh-50 omh
ON/OFF:	IP55-IP65 in box (only circuit IP00-IP20)
Protection Degree:	–35°C / +80°C
Storage Temperature:	–25°C / +50°C
Operation Temperature:	EMC CE
Warranty:	1 year (from date on circuit)



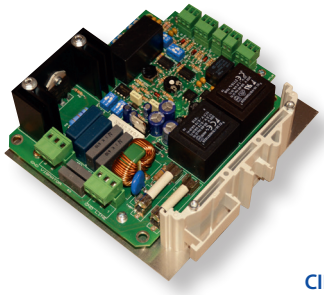
METALLIC BOX CV6/17
PV CV617 Z2 STM
165x140x65



METALLIC BOX CV6/17-CV8/17
PV CV817 Z2 SM1
195x130x90



PLASTIC BOX CV6/17
PV CV617 Z2 STP
165x130x70



CIRCUIT CV6/17-CV8/17
PV CV617 D2 STD

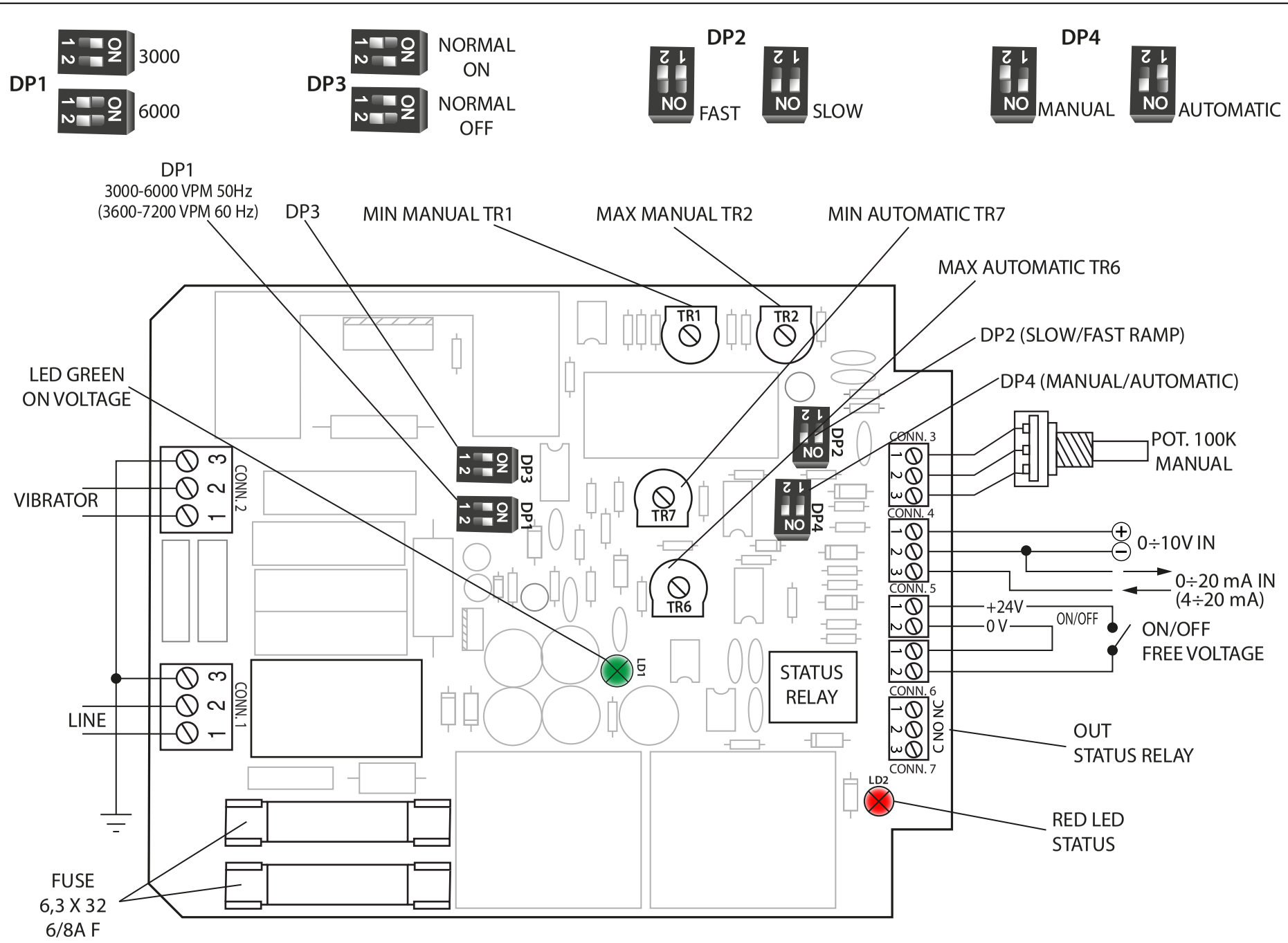
Available Versions ** on request*

Type	Box	Colour	Dimensions	Code	Price €
CV6/17	Fire-retardant plastic	RAL 7035	165 x 130 x 70	PV CV6 17 Z2 STP	
CV6/17	Aluminum	GREY RAL7040	165 x 140 x 65	PV CV6 17 Z2 STM	
CV8/17	Metallic Box	GREY	240 x 130 x 110	PV CV8 17 Z2 STD	
CV6/17-CV8/17	Circuit		145 x 115 x 45	PV CV6(8) 17 A2 STD	
CV6/17-CV8/17 DIN35	Circuit		145 x 140 x 55	PV CV6(8) 17 D2 STD	
CV6/17-CV/17	Aluminum	RAL 7035	195 x 130 x 90	PV CV6(8) 17 Z2 SM1	

MP ELETTRONICA
QUALITY VIBRATION CONTROL

CODE	REV	DATE	DRAFTSMAN	SHEET
DTCV6-8/17	00	09/18	E. PEDRAZZI	1/1

Description: CIRCUIT CV6/17 - CV8/17



INDUSTRIAL

Electronic Controller for Electromagnetic Vibrator

CV12/17-CV15/17

12/15A | 230V 400V | 0/10V 4/20mA | IP65

General

Stabilized professional controller, current till to 12A-15A RMS in metallic box, only circuit with external potentiometer, double insulation.

General Characteristics

Voltage (110V) 230V or 400V, 50/60 Hz • 3000/6000 VpM (**50/100 Hz**) • Automatic input 0/10V-4/20mA • Multiple ON/OFF input • Slow/fast ramp • Reg. vibration min/max Man/Automatic • Relay alarm ON vibrator • Led green ON • Status relay led red.

Applications

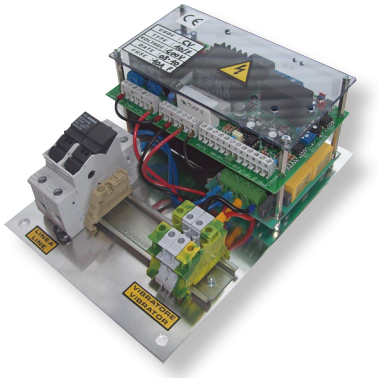
Adjustment of linear and bowl feeders up to 12 - 15 Amp for weighing and dosing systems, designed for anyone who uses any direct configuration from PLC (eg static relays for ON / OFF inputs and 0 / 10V signals) without the risk of connecting signals that interfere with each other.

Options

Box IP65 (NEMA 4/4X) INOX Box • Customized label • Voltage till 550V • Double speed • Double output • Module for 2 or more vibrators • **IP20** • **OUTPUT 25 Hz - 33 Hz** .



METALLIC BOX
PV C1217 Z4 STD
PV C1517 Z4 STD
250X300X150



CIRCUIT CV10F
PV C1217 A4 STD
PV C1517 A4 STD

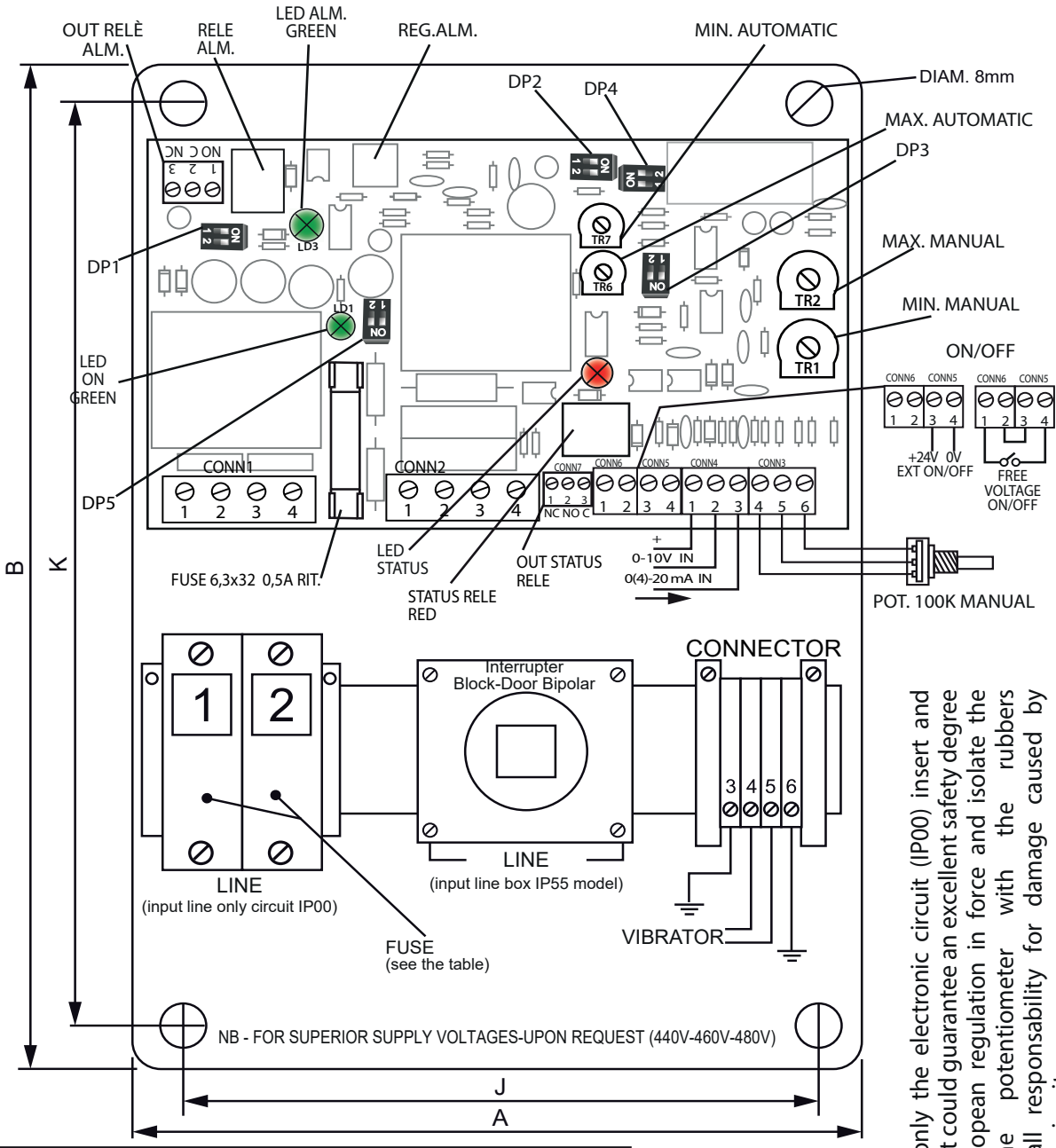
Technical Specs

Feeding Tension:	(110V) 230 V or 400V ± 5% – 50/60 Hz
Consumption :	3,5 W max
Fuses CV12-CV15:	double 12/15A F 660V 10x38 H 100000A
Min Load:	50 mA (RMS)
Potentiometr of reg.:	100K ohm linear
Vibration Frequency:	3000/6000 VPM (50 Hz) RC-AC
Ramp Time:	0,1 sec. / 2 sec. (adjustable)
Min Regulation:	80 V ± 30% (230V) 140 V ± 30% (400V)
Max Regulation:	200 V - 30% (230V) 380 V - 30% (400V)
Consumption Input Autom. 0/10V:	1mA max
Impedance Input 0-10V/0-20mA:	50 Komh-50 omh
ON/OFF:	free voltage contact /0-24Vcc
Protection Degree:	IP55 in box (IP65-NEMA4-4X)
Storage Temperature:	-35°C / + 80 °C
Operation Temperature:	–25°C / +50°C
Warranty:	1 year (from date on circuit)

Available Versions

Type	Box	Colour	Dimensions	Code	Price €
CV12/17-CV15/17	Circuit		230 x 170 x 100	PV C1217 A4 STD	
CV12/17-CV15/17	Metallic Box	GREY	250 x 300 x 150	PV C1217 Z4 STD	
CV12/17-CV15/17	Circuit (until 500V)		230 x 170 x 100	PV C1217 A5 STD	
CV12/17-CV15/17	Metallic Box (500V)	GREY	250 x 300 x 150	PV C1217 Z5 STD	
CV12/17-CV15/17	Circuit Doubles exit		230 x 170 x 100	PV C12S17 A5 S2U	
CV12/17-CV15/17	Circuit Doubles speed		230 x 170 x 100	PV C12S17 A5 S2V	

DP1	DP2	DP3	DP4	DP5
(50Hz) 3000 (60Hz) 3600 Only for CV12 CV25-CV40 only HALF WAVE	FAST SLOW	NORMAL OFF NORMAL ON	MANUAL AUTOMATIC	230V 400V OR MORE



MEASURE (mm) CIRCUITS FROM CV10 to CV100 (IP00)								
Circuit IP00 (*)	DIMENSION			BORING MEASURE		DIM. CONNECTORS	FUSE DIM./AMPERE	
	A	B	H	J	K			
CV 12/17	170	230	100	145	205	4 mmq	10,3 x 38	12A
CV 25/17	170	320	100	145	295	10 mmq	10,3 x 38	25A
CV 40/17	243	320	100	219	295	16 mmq	14 x 51	40A
CV 70/17	280	380	130	255	355	25 mmq	22 x 58	70A
CV 100/17	280	380	130	255	355	25 mmq	22 x 58	100A

NOTE: If you use only the electronic circuit (IP00) insert and cable it in a box that could guarantee an excellent safety degree respecting the European regulation in force and isolate the terminals of the potentiometer with the rubbers provided.Decline all responsibility for damage caused by improper use of the circuit.

SKETCH AND CHARACTERISTICS CAN BE MODIFY WITHOUT NOTICE

MP ELETTRONICA
QUALITY VIBRATION CONTROL

Descriptrion: STABILIZED ELECTRONIC CIRCUIT CVXY/F(*) HIGH STABILIZED

CODE	REV	DATE	DRAFTSMAN	SHEET
DT CVXY /17	00	28/02/19	E. PEDRAZZI	1/1

INDUSTRIAL

Electronic Controller for Electromagnetic Vibrator

CV25/17

25 A | 230V 400V | 0/10V 4/20mA | IP65

General

Stabilized professional controller, current till to 25A rms in metallic box, only circuit with external potentiometer, double insulation.

General Characteristics

Voltage (110V) 230V or 400V, 50/60 Hz • 3000/6000 VpM (**50/100 Hz**) • Automatic input 0/10V-4/20mA • Multiple ON/OFF input • Slow/fast ramp • Reg. vibration min/max Man/Automatic • Relay alarm ON vibrator • Relay alarm ON vibrator • Led green ON • Status relay led red.

Applications

Adjustment of linear and bowl feeders up to 25 Amp for weighing and dosing systems, designed for anyone who uses any direct configuration from PLC (eg static relays for ON / OFF inputs and 0 / 10V signals) without the risk of connecting signals that interfere with each other.

Options

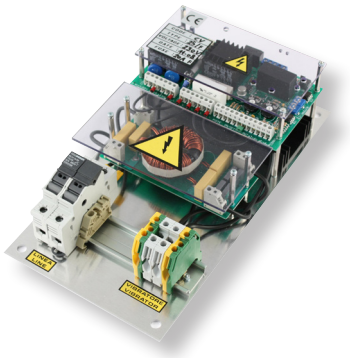
Box IP65 (NEMA 4/4X) • INOX Box • Customized label • Voltage till 550V • Double speed • Double output • Module for 2 or more vibrators • **IP20** • **OUTPUT 25 Hz**.

Technical Specs

Feeding Tension:	(110V) 230 V or 400V ± 5% – 50/60 Hz
Consumption :	3,5 W max
Fuses:	double 25A F 660V 10x38 H 100000A
Min Load:	50 mA (RMS)
Potentiometr of reg.:	100K ohm linear
Vibration Frequency:	3000/6000 VPM (50 Hz) RC-AC
Ramp Time:	0,1 sec. / 2 sec. (adjustable)
Min Regulation:	80 V ± 30% (230V) 140 V ± 30% (400V)
Max Regulation:	200 V - 30% (230V) 380 V - 30% (400V)
Consumption Input Autom. 0/10V:	1mA max
Impedance Input 0-10V/0-20mA:	50 Komh-50 omh
ON/OFF:	free voltage contact /0-24Vcc
Protection Degree:	IP55 in box (IP65-NEMA4-4X)
Storage Temperature:	-35 °C / + 80 °C
Operation Temperature:	–25°C / +50°C
Warranty:	1 year (from date on circuit)



METALLIC BOX
PV C2517 Z4 STD
300x300x150

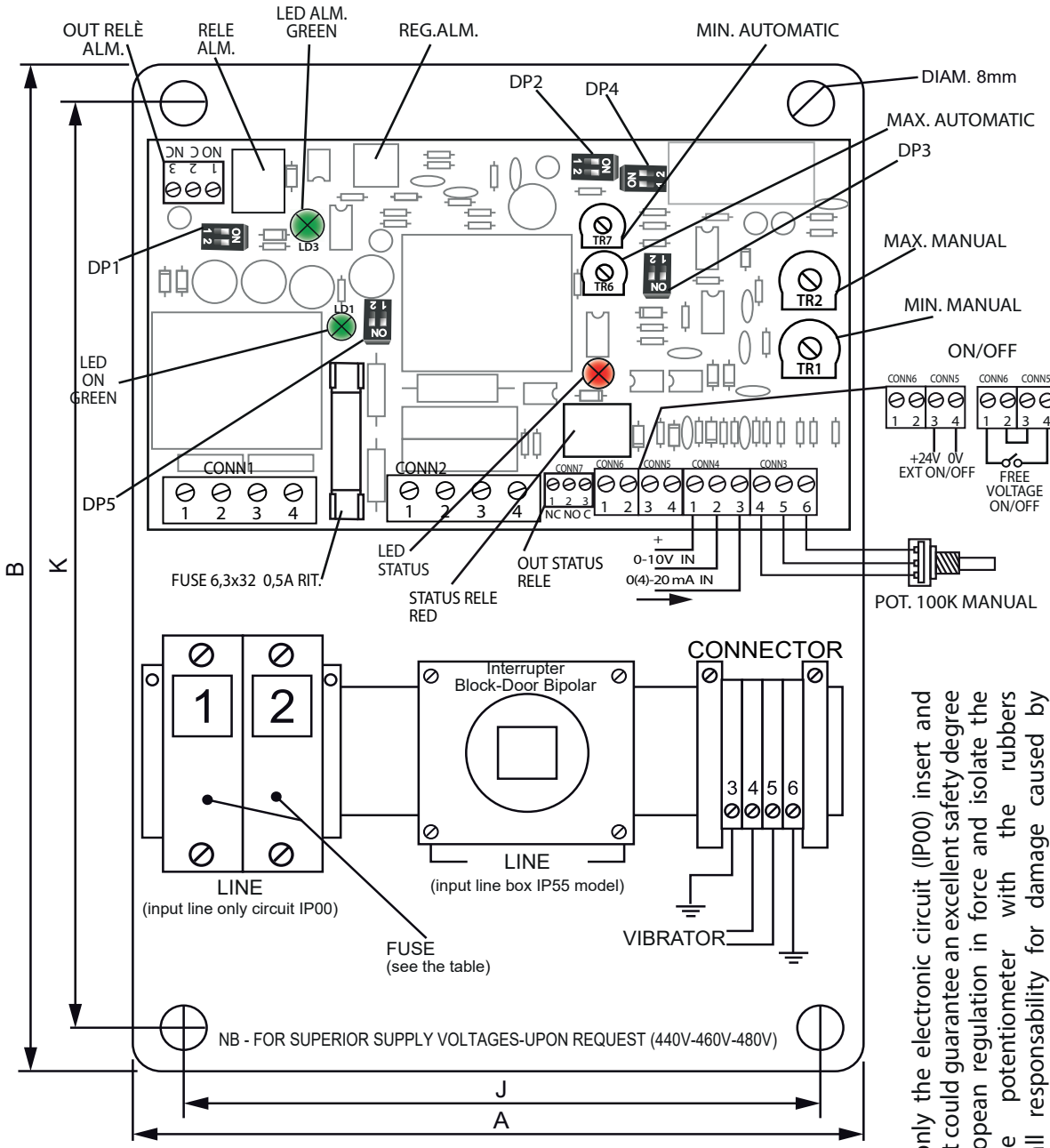


CIRCUIT CV25/17
PV C2517 A4 STD

Available Versions

Type	Box	Colour	Dimensions	Code	Price €
CV25/17	Circuit		170 x 320 x 100	PV CV20 17 A4 STD	
CV25/17	Metallic Box	GREY	300 x 300 x 150	PV CV20 17 Z4 STD	
CV25/17	Circuit (until 500V)		170 x 320 x 100	PV CV20 17 A5 STD	
CV25/17	Metallic Box (500V)	GREY	300 x 300 x 150	PV CV20 17 Z5 STD	
CV25/17	Circuit doubles exit		170 x 320 x 100	PV CV20 17 A5 S2U	
CV25/17	Circuit doubles speed		170 x 320 x 100	PV CV20 17 A5 S2V	

DP1	DP2	DP3	DP4	DP5
(50Hz) 3000 (60Hz) 3600 Only for CV12 CV25-CV40 only HALF WAVE	FAST SLOW	NORMAL OFF NORMAL ON	MANUAL AUTOMATIC	230V 400V OR MORE



MEASURE (mm) CIRCUITS FROM CV10 to CV100 (IP00)								
Circuit IP00 (*)	DIMENSION			BORING MEASURE		DIM. CONNECTORS	FUSE DIM./AMPERE	
	A	B	H	J	K			
CV 12/17	170	230	100	145	205	4 mmq	10,3 x 38	12A
CV 25/17	170	320	100	145	295	10 mmq	10,3 x 38	25A
CV 40/17	243	320	100	219	295	16 mmq	14 x 51	40A
CV 70/17	280	380	130	255	355	25 mmq	22 x 58	70A
CV 100/17	280	380	130	255	355	25 mmq	22 x 58	100A

NOTE: If you use only the electronic circuit (IP00) insert and cable it in a box that could guarantee an excellent safety degree respecting the European regulation in force and isolate the terminals of the potentiometer with the rubbers provided.Decline all responsability for damage caused by improper use of the circuit.

SKETCH AND CHARACTERISTICS CAN BE MODIFY WITHOUT NOTICE

MP ELETTRONICA
QUALITY VIBRATION CONTROL

Descriptrion: STABILIZED ELECTRONIC CIRCUIT CVXY/F(*) HIGH STABILIZED

CODE	REV	DATE	DRAFTSMAN	SHEET
DT CVXY /17	00	28/02/19	E. PEDRAZZI	1/1

INDUSTRIAL

Electronic Controller for Electromagnetic Vibrator

CV40/17

40 A | 230V 400V | 0/10V 4/20mA | IP65

General

Stabilized professional controller, current till to 40A rms in metallic box, only circuit with external potentiometer, double insulation.

General Characteristics

Voltage (110V) 230V or 400V, 50/60 Hz • 3000/6000 VpM (**50/100 Hz**) • Automatic input 0/10V-4/20mA • Multiple ON/OFF input • Slow/fast ramp • Reg. vibration min/max Man/Automatic • Relay alarm ON vibrator • Relay alarm ON vibrator • Led green ON • Status relay led red.

Applications

Adjustment of linear and bowl feeders up to 40 Amp for weighing and dosing systems, designed for anyone who uses any direct configuration from PLC (eg static relays for ON / OFF inputs and 0 / 10V signals) without the risk of connecting signals that interfere with each other.

Options

Box IP65 (NEMA 4/4X) • INOX Box • Customized label • Voltage till 550V • Double speed • Double output • Module for 2 or more vibrators • **IP20** • **OUTPUT 25 Hz**.

Technical Specs

Feeding Tension:	(110V) 230 V or 400V ± 5% – 50/60 Hz
Consumption :	3,5 W max
Fuses:	double 40A F 660V 10x38 H 100000A
Min Load:	50 mA (RMS)
Potentiometr of reg.:	100K ohm linear
Vibration Frequency:	3000/6000 VPM (50 Hz) RC-AC
Ramp Time:	0,1 sec. / 2 sec. (adjustable)
Min Regulation:	80 V ± 30% (230V) 140 V ± 30% (400V)
Max Regulation:	200 V - 30% (230V) 380 V - 30% (400V)
Consumption Input Autom. 0/10V:	1mA max
Impedance Input 0-10V/0-20mA:	50 Komh-50 omh
ON/OFF:	free voltage contact /0-24Vcc
Protection Degree:	IP55 in box (IP65-NEMA4-4X)
Storage Temperature:	-35 °C / + 80 °C
Operation Temperature:	–25°C / +50°C
Warranty:	1 year (from date on circuit)



METALLIC BOX
PV CV40F Z4 STD
300x400x150

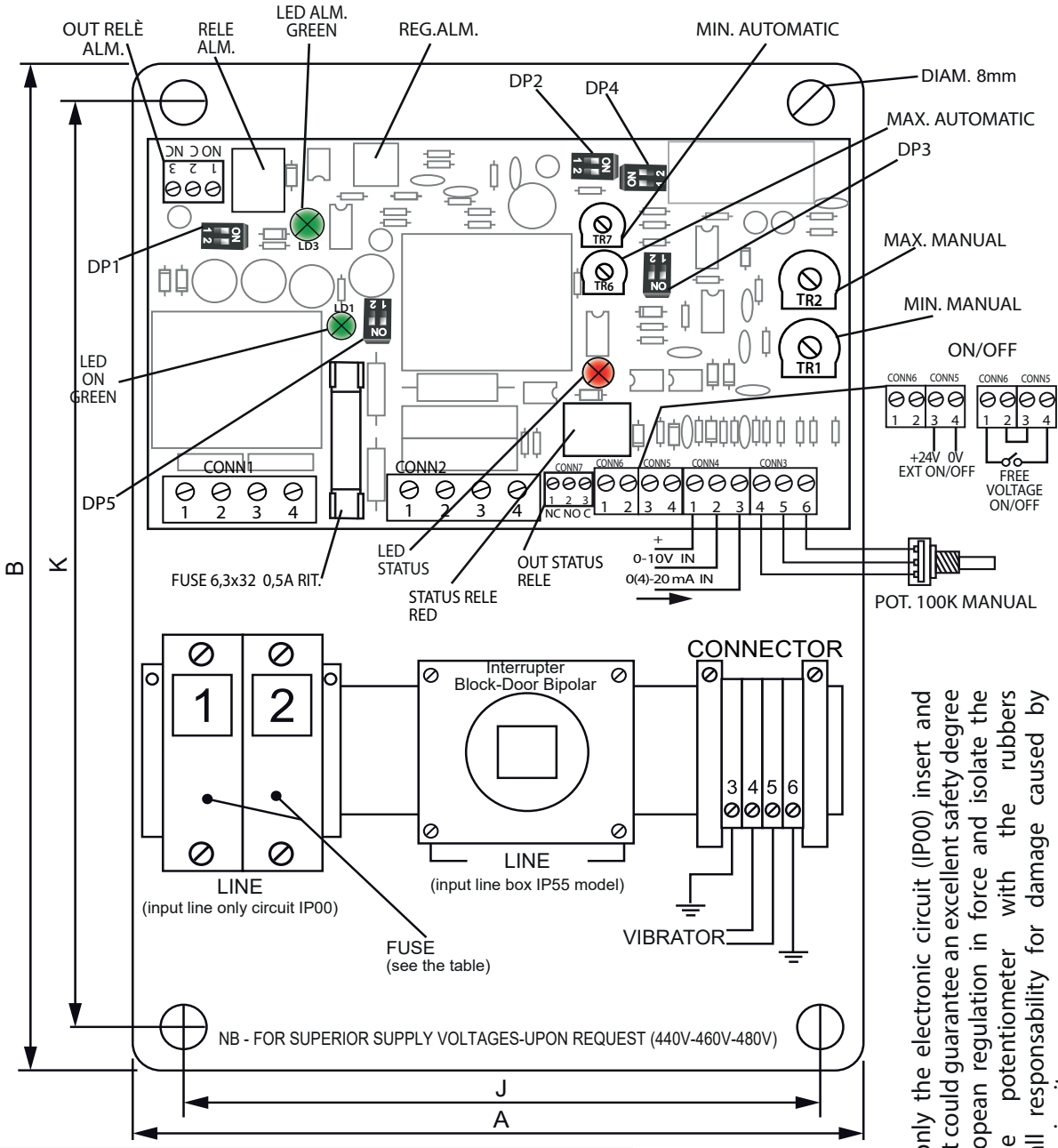


CIRCUIT
PV CV40F A4 STD

Available Versions

Type	Box	Colour	Dimensions	Code	Price €
CV40/17	Circuit		320 x 170 x 100	PV C4017 A4 STD	
CV40/17	Metallic Box	GREY	300 x 400 x 150	PV C4017 Z4 STD	
CV40/17	Circuit (until 500V)		320 x 170 x 100	PV C4017 A5 STD	
CV40/17	Metallic Box (500V)	GREY	300 x 400 x 150	PV C4017 Z5 STD	
CV40/17	Circuit doubles exit		320 x 270 x 100	PV C4017 A5 S2U	
CV40/17	Circuit doubles speed		320 x 170 x 100	PV C4017 A5 S2V	

DP1	DP2	DP3	DP4	DP5
(50Hz) 3000 (60Hz) 3600 Only for CV12 CV25-CV40 only HALF WAVE	FAST SLOW	NORMAL OFF NORMAL ON	MANUAL AUTOMATIC	230V 400V OR MORE



MEASURE (mm) CIRCUITS FROM CV10 to CV100 (IP00)								
Circuit IP00 (*)	DIMENSION			BORING MEASURE		DIM. CONNECTORS	FUSE DIM./AMPERE	
	A	B	H	J	K			
CV 12/17	170	230	100	145	205	4 mmq	10,3 x 38	12A
CV 25/17	170	320	100	145	295	10 mmq	10,3 x 38	25A
CV 40/17	243	320	100	219	295	16 mmq	14 x 51	40A
CV 70/17	280	380	130	255	355	25 mmq	22 x 58	70A
CV 100/17	280	380	130	255	355	25 mmq	22 x 58	100A

NOTE: If you use only the electronic circuit (IP00) insert and cable it in a box that could guarantee an excellent safety degree respecting the European regulation in force and isolate the terminals of the potentiometer with the rubbers provided.Decline all responsability for damage caused by improper use of the circuit.

SKETCH AND CHARACTERISTICS CAN BE MODIFY WITHOUT NOTICE

MP ELETTRONICA
QUALITY VIBRATION CONTROL

Descriptrion: STABILIZED ELECTRONIC CIRCUIT CVXY/F(*) HIGH STABILIZED

CODE	REV	DATE	DRAFTSMAN	SHEET
DT CVXY /17	00	28/02/19	E. PEDRAZZI	1/1

INDUSTRIAL

Cross reference : INDUSTRIAL CV-CVS series controller (with SIND2 amplitude sensor)

	CV6/17	CV8/17	CV12/17 CV15/17	CV25/17	CV40/17	CV6S/17	CV8S/17	CV12FS CV15FS	CV25FS	CV40FS
Tension 50/60 Hz	115 or 230 or 400	115 or 230 or 400	115 or 230/400	115 or 230/400	115 or 230/400	115 or 230 or 400	115 or 230 or 400	115 or 230/400	115 or 230/400	115 or 230/400
Amps	6	8	12/15	25	40	6	8	12/15	25	40
ON/OFF Dry Contact	●	●	●	●	●	●	●	●	●	●
ON/OFF Tension	●	●	●	●	●	●	●	●	●	●
Accelerometer SIND1 o SIND2	–	–	–	–	–	●	●	●	●	●
0/10V 0/20 mA	●	●	●	●	●	●	●	●	●	●
Amplitude Adjustment	Man. Pot. Autom.	Man. Pot. Autom.	Man. Pot. Autom.	Man. Pot. Autom.	Man. Pot. Autom.	Man. Pot. Autom.	Man. Pot. Autom.	Man. Pot. Autom.	Man. Pot. Autom.	Man. Pot. Autom.
Output Freq. 50/100 Hz 60/120 Hz	3000/6000 3600/7200	3000/6000 3600/7200	3000/6000 3600/7200	3000/6000 3600/7200	3000/6000 3600/7200	3000/6000 3600/7200	3000/6000 3600/7200	3000/6000 3600/7200	3000/6000 3600/7200	3000/6000 3600/7200
Slow/Fast Ramp	●	●	●	●	●	●	●	●	●	●
Reg. Volt Min/Max Man/Aut	●	●	●	●	●	●	●	●	●	●
EMC - CE	●	●	●	●	●	●	●	●	●	●
Dual Speed/Output	●	●	●	●	●	●	●	●	●	●
IP	65	65	65	65	65	65	65	65	65	65
Box Measurements	130x165x70 140x165x65	130x195x90	250x300x150	300x300x150	300x400x150	130x165x70 140x165x65	130x195x90	250x300x150	300x300x150	300x400x150
DIN35	●	●	–	–	–	●	●	–	–	–

All models are stabilized available CV70-CV70S (70A) INOX

Other voltages on request up to 500V CV12/CV25/CV40 are equipped with dual-stage power modules

CV12-CV15-CV25-CV40 33 Hz Output On Demand

CV12-CV15-CV25-CV40 25 Hz Output On Demand



SIND 2

END OF LIFE


SIND 1

Stabilized Electronic Control Circuits For Electromagnetic Vibrator

"CV" S SERIES

AVAILABLE VERSIONS

Type	Description	Code
CIRCUIT	CV6/8S 230V-6A(8A)	PV CV6(8)S A2 SSD
CIRCUIT for DIN 35	CV6/8S 230V-6A(8A)	PV CV6(8)S D2 SSD
CIRCUIT baseplate + plexiglass	CV6/8S 230V-6A(8A)	PV CV6(8)S A2 BSP
BOX	CV68/S 230V-6A(8A)	PV CV6(8)S Z2 SSD
BOX PLASTIC	CV6/8S 230V-6A(8A)	PV CV6(8)S Z2 SSD
CIRCUIT	CV6/8S 400V-6A(8A)	PV CV6(8)S A3 SSD
CIRCUIT for DIN 35	CV6/8S 400V-6A(8A)	PV CV6(8)S D3 SSD
CIRCUIT baseplate + plexiglass	CV6/8S 400V-6A(8A)	PV CV6(8)S A3 BSP
BOX	CV6/8S 400V-6A(8A)	PV CV6(8)S Z3 SSD
BOX PLASTIC	CV6/8S 400V-6A(8A)	PV CV6(8)S Z3 SSP
CIRCUIT **	CV12/FS 230V/400V-12A	PV CV12F A4 SSD
BOX **	CV12/FS 230V/400V-12A	PV CV12F Z4 SSD
CIRCUIT **	CV12/FS TILL 500V-12A	PV CV12F A5 SSD
BOX **	CV12/FS TILL 500V-12A	PV CV12F Z5 SSD
CIRCUIT *	CV25/FS 230V/400V-25A	PV CV25F A4 SSD
BOX *	CV25/FS 230V/400V-25A	PV CV25F Z4 SSD
CIRCUIT *	CV25/FS TILL 500V-25A	PV CV25F A5 SSD
BOX *	CV25/FS TILL 500V-25A	PV CV25F Z5 SSD
CIRCUIT *	CV40/FS 230V/400V-40A	PV CV40F A4 SSD
BOX *	CV40/FS 230V/400V-40A	PV CV40F Z4 SSD
CIRCUIT *	CV40/FS TILL 500V-40A	PV CV40F A5 SSD
BOX *	CV40/FS TILL 500V-40A	PV CV40F Z5 SSD
CIRCUIT *	CV70/FS 230/400V-70A	PV CV70F A4 SSD **ON REQUEST**
BOX *	CV70FS 230/400V-70A	PV CV70F Z4 SSD **ON REQUEST**
CIRCUIT *	CV100S1 230/400V-100A	PV CV100 A4 SSD **ON REQUEST**
BOX *	CV100S1 230/400V-100A	PV CV100 Z4 SSD **ON REQUEST**

INDUSTRIAL

Note: Is possible to supply all versions with double speed n. 2 potentiometers, to add after the last figures the code **S2V** or for the double output **S2U** (PV CV10F A4 SSD S2V)..

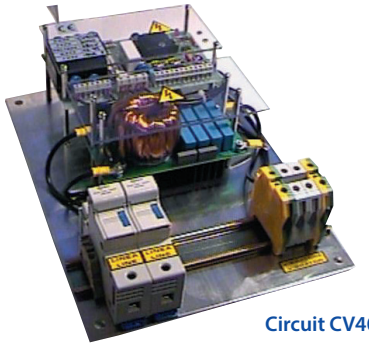
**** ON REQUEST 25 Hz/33 Hz** *** ON REQUEST 25 Hz**



Sensor SIND2



Box CV15/FS



Circuit CV40/FS

Electronic Controller for Electromagnetic Vibrator

CV6S-CV8S

Amp 6/8 | 110V 230V 400V | 0/10V 4/20mA

General

Stabilized Professional Controller, with or without amplitude sensor SIND1/SIND2, compact, fully opto-isolated - current up to 6.3A (CV6F), 8A RMS (CV8F) in metal or plastic casing, circuit only or circuit with DIN35 support with external potentiometer.

General Characteristics

Dual voltage (110V) 230V/400V, 50/60 Hz • 3000/6000 Vib/Min • Dual automatic inputs 0/10V-4/20mA • Triple ON/OFF • Slow/Fast ramp • Min/Max vibration adjustment Manual/Automatic • Status relay • Line input with schuko plug • Vibrator output with connector.

Applications

Regulation of linear vibrators and medium to large circular vibrators up to 6.3/8 Amps with manual or automatic control from PLC, with or without amplitude sensor SIND1/SIND2. For weighing and dosing systems.

Options

IP65 protection grade enclosures • Stainless steel (INOX) • Dual speed Vibrator connector • Use of PRX92, PRX99 circuit for NPN/PNP sensors • **IP20**.

Technical Specs

Tension of Feeding:	230 V or 400V ± 20% – 50/60 Hz
Consumption:	1,5 W max
Current Max:	6,3A/8A/10A (RMS)
Load Min:	50 mA (RMS)
Frequency of Vibration:	3000/6000 V/min (50Hz) RC-AC
Time of Ramp:	0,1 sec. / 1 sec. (modifiable)
Regulation Min.:	80V +/- 30% (230V) 140V +/- 30% (400V)
Regulation max:	200V - 30% (230V) 380V-30% (400V)
On/Off:	free voltage contact-signal voltage 0-24Vcc
Input Consumption Autom. 0/10V:	1mA max
Input Impedance 0-10V/4-20mA:	50 Komh-50 omh
Degree of Protection:	IP55 in box (IP65-NEMA4-4X)
Temperature of Storage:	-25 °C / + 80 °C
Temperature of Operation:	-15°C / +55°C
European Norms:	EMC CE
Guarantee:	1 year (from date on circuit)



METALLIC BOX CV6FS
CV6S
PV CV6SX Z2 STM
165x130x70



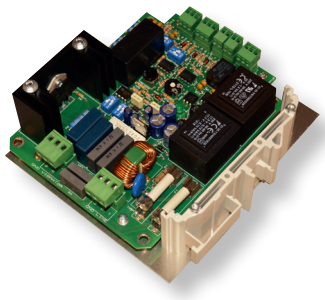
CASSETTA PLASTICA
CV8S
PV CV8SX Z2 STP
200 x 130 x 110



SENSOR SIND2
PV SIND2 ZX STD



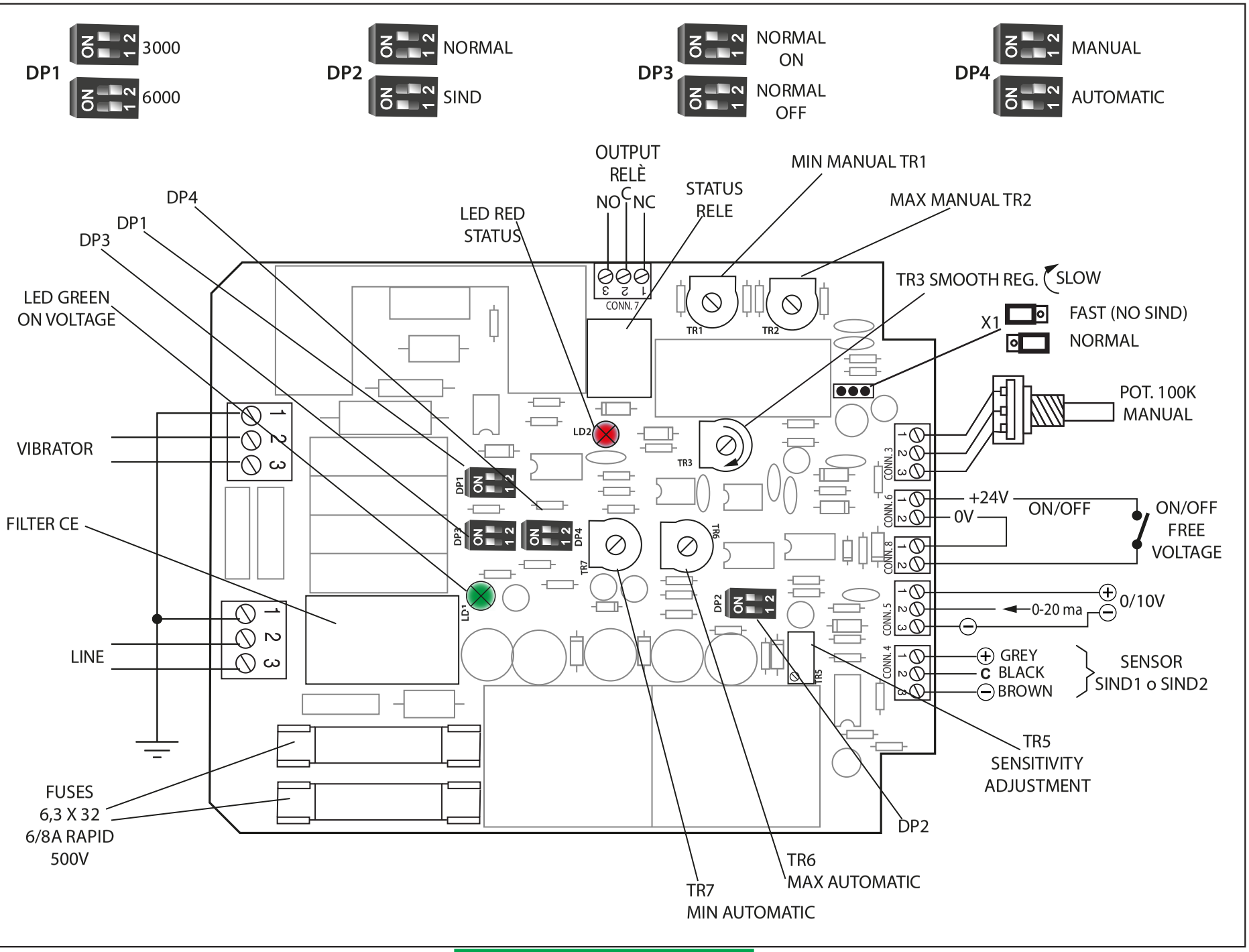
METALLIC BOX
CV6S
PV CV8SX Z2 SM1
195x130x90



CIRCUIT
CV6S
PV CV6SX D2 STD
120x145x7

Available Versions

Type	Box	Colour	Dimensions	Code	Price €
CV6S	Fire-retardant plastic	RAL7040	165 x 130 x 70	PV CV6FS Z2 STP	
CV6S	Aluminum	GREY RAL7040	165 x 140 x 65	PV CV6FS Z2 STM	
CV8S	Metallic Box	GREY	200 x 130 x 110	PV CV6FS Z2 STD	
CV6S-CV8S	Circuit		145 x 115 x 45	PV CV6(8)FS A2 STD	
CV6S-CV8S/DIN35	Circuit		145 x 140 x 55	PV CV6(8)FS D2 STD	
CV6S-CV8S	Circuit		145 x 140 x 55	PV CV6(8)FS A2 SBP	



INDUSTRIAL

Description: CIRCUIT CV6/S-CV8/S 230/400V 50/60 Hz	CODE	REV	DATE	DRAFTSMAN	SHEET
	DTCV6/8S	00	10/16	E. PEDRAZZI	1/1

Electronic Controller for Electromagnetic Vibrator

CV12FS-CV15FS

12/15A | 230V 400V | 0/10V 4/20mA

General

Stabilized professional controller with amplitude sensor sind1/sind2, current till to 12A-15A 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 circular vibrators till 12A-15A Amps with automatic input (PLC) with stabilized amplitude.

Options

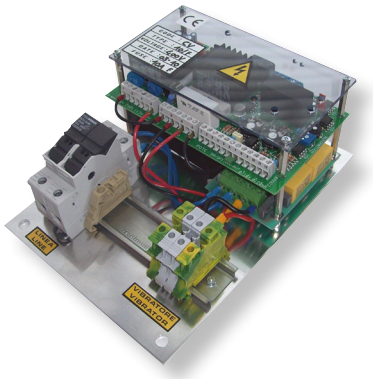
Box IP65 (NEMA 4/4X) • INOX Box • Personalized label • Voltage till 500V • Double speed • Double output • Module for 2 or more vibrators • **IP20** • **OUTPUT 25 Hz - 33 Hz**.

Technical Specs

Tension of Feeding:	230 V or 400V ± 20% – 50/60 Hz
Consumption :	3,5 W max
Fuses CV12-CV15:	double 12A/15A F 660V 10x38 H 100000A
Load Min:	50 mA (RMS)
Potentiometr of reg.:	100K ohm linear
Frequency of Vibration:	3.000/6.000 V/min (50 Hz) RC-AC
Time of ramp:	0,1 sec. / 2 sec. (modifiable)
Regulation Min.:	80 V ± 30% (230V) 140 V ± 30% (400V)
Regulation max:	200 V - 30% (230V) 380 V - 30% (400V)
Consumption Input Autom. 0/10V:	1mA max
Impedance Input 0-10V/4-20mA:	50 Komh-50 omh
ON/OFF:	free voltage contact /0-24Vcc
Degree of Protection:	IP55 in box (IP65-NEMA4-4X)
Temperature of Storage:	-25 °C / + 80 °C
Temperature of Operation:	-15°C / +55°C
Guarantee:	1 year (from date on circuit)



METALLIC BOX
PV CV12F Z4 SSD
PV CV15F Z4 SSD
250X200X130



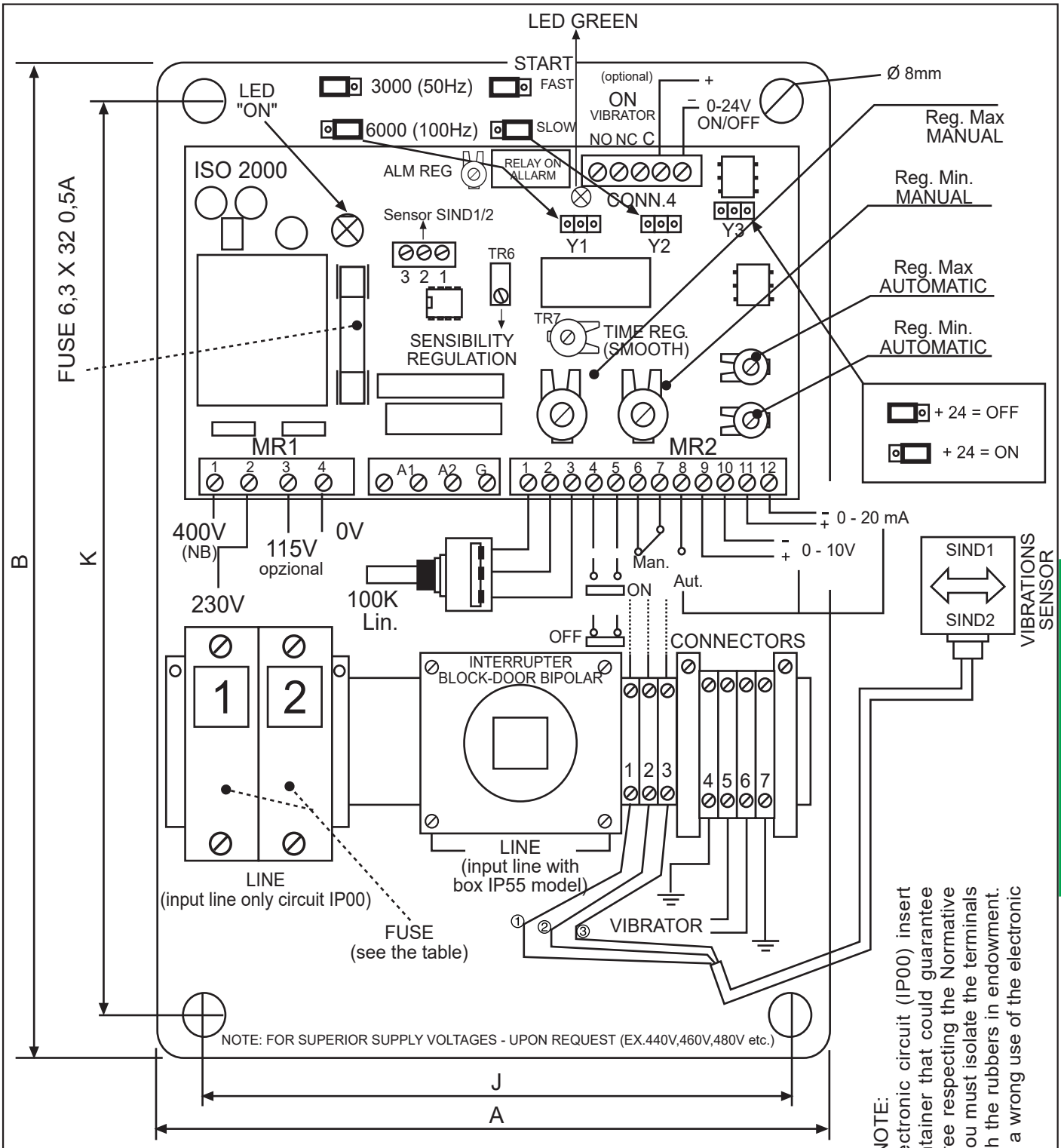
CIRCUIT CV12/FS
PV C12SX Z2 STD
195x130x90



SENSOR SIND2
PV SIND2 ZX STD

Available Versions

Type	Box	Colour	Dimensions	Code	Price €
CV12FS-CV15FS	Circuit		230 x 170 x 100	PV CV12F A4 SSD	
CV12FS-CV15FS	Metallic Box	GREY	250 x 200 x 130	PV CV12F Z4 SSD	
CV12FS-CV15FS	Circuit (until 500V)		230 x 170 x 100	PV CV12F A5 SSD	
CV12FS-CV15FS	Metallic Box (500V)	GREY	250 x 200 x 130	PV CV12F Z5 SSD	
CV12FS-CV15FS	Box doubles exit	GREY	230 x 170 x 100	PV CV12S Z5 S2U	
CV12FS-CV15FS	Box doubles speed	GREY	230 x 170 x 100	PV CV12S Z5 S2V	



INDUSTRIAL

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	ON REQUEST							

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 responsability from a wrong use of the electronic circuit is declined.

SKETCH AND CHARACTERISTICS TECHNIQUES SUBJECT TO MODIFICATIONS WITHOUT WARNING.

MP ELETTRONICA
QUALITY VIBRATION CONTROL

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

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

Electronic Controller for Electromagnetic Vibrator

CV25FS

25 A | 230V 400V | 0/10V 4/20mA | IP65

General

Stabilized professional controller with amplitude sensor SIND1/SIND2, current till to 20A-25A 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 big circular vibrators till 20A-25A Amps with automatic input (PLC) with stabilized amplitude.

Options

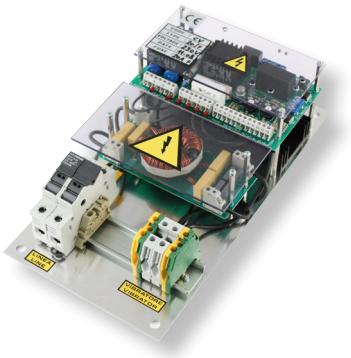
Box IP65 (NEMA 4/4X) INOX Box • Personalized label • Voltage till 500V • Double speed • Double output • Module for 2 or more vibrators • **IP20** • **OUTPUT 25 Hz**.

Technical Specs

Tension of Feeding:	230 V or 400V ± 20% – 50/60 Hz
Consumption :	3,5 W max
Fuses CV20-CV25:	double 20A F 660V 10x38 H 100000A
Load Min:	50 mA (RMS)
Potentiometr of reg.:	100K ohm linear
Frequency of Vibration:	3.000/6.000 V/min (50 Hz) RC-AC
Time of ramp:	0,1 sec. / 2 sec. (modifiable)
Regulation Min.:	80 V ± 30% (230V) 140 V ± 30% (400V)
Regulation max:	200 V - 30% (230V) 380 V - 30% (400V)
Consumption Input Autom. 0/10V:	1mA max
Impedance Input 0-10V/4-20mA:	50 Komh-50 omh
ON/OFF:	fre voltage contact /0-24Vcc
Degree of Protection:	IP55 in box (IP65-NEMA4-4X)
Temperature of Storage:	-25 °C / + 80 °C
Temperature of Operation:	-15°C / +55°C
Guarantee:	1 year (from date on circuit)



METALLIC BOX
PV CV25F Z4 SSD
250x200x130



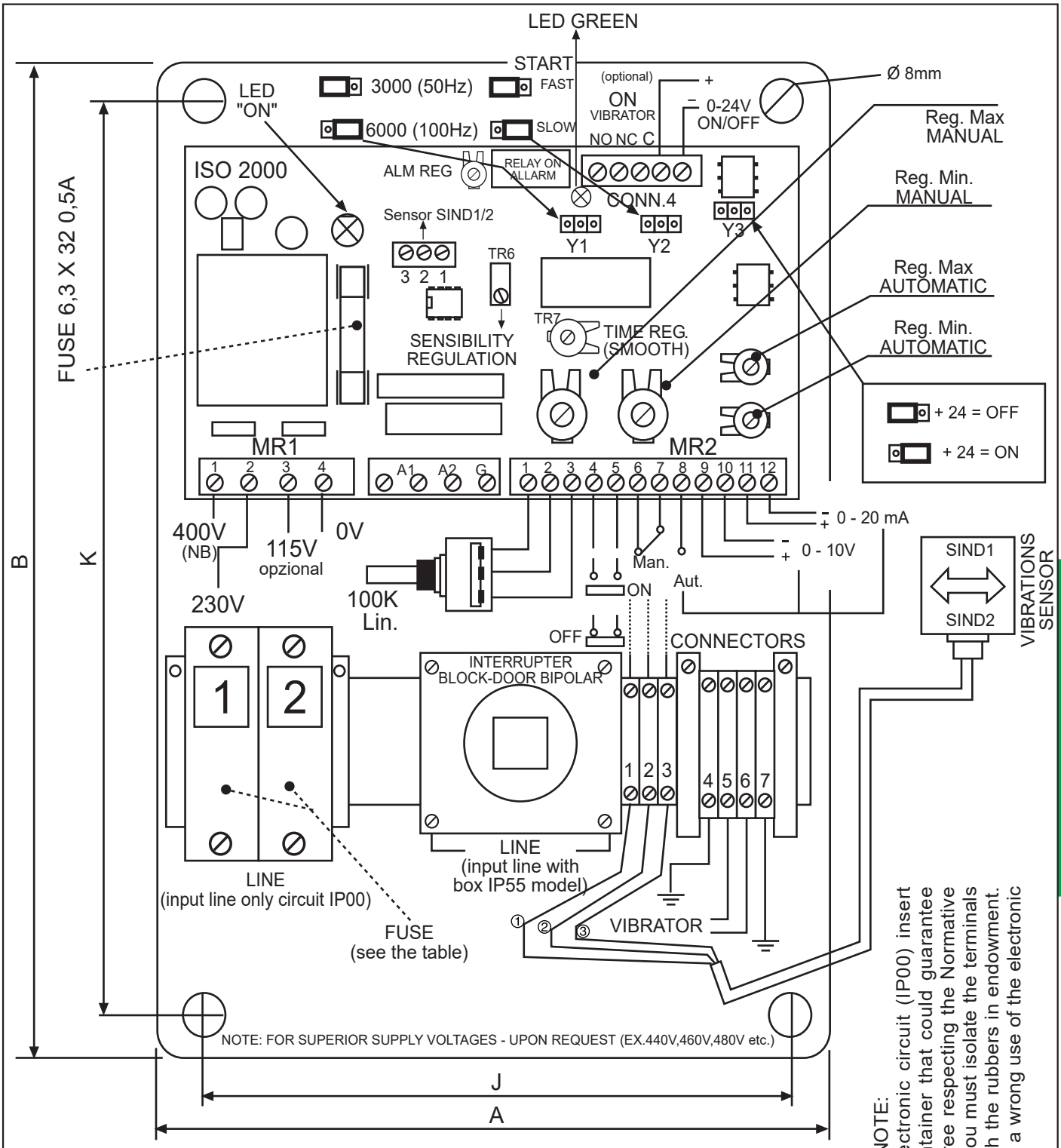
CIRCUIT
PV CV25F A4 SSD



SENSOR SIND2
PV SIND2 ZX STD

Available Versions

Type	Box	Colour	Dimensions	Code	Price €
CV20FS-CV25FS	Circuit		320 x 170 x 100	PV CV20F A4 SSD	
CV20FS-CV25FS	Metallic Box	GREY	300 x 300 x 150	PV CV20F Z4 SSD	
CV20FS-CV25FS	Circuit (until 500V)		320 x 170 x 100	PV CV20F A5 SSD	
CV20FS-CV25FS	Metallic Box (500V)	GREY	300 x 300 x 150	PV CV20F Z5 SSD	
CV20FS-CV25FS	Circuit Doubles exit		320 x 170 x 100	PV CV20F A5 S2U	
CV20FS-CV25FS	Circuit Doubles speed		320 x 170 x 100	PV CV20F A5 S2V	



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	ON REQUEST							

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 responsability from a wrong use of the electronic circuit is declined.

SKETCH AND CHARACTERISTICS TECHNIQUES SUBJECT TO MODIFICATIONS WITHOUT WARNING.

INDUSTRIAL

MP ELETTRONICA
QUALITY VIBRATION CONTROL

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

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

Electronic Controller for Electromagnetic Vibrator

CV40FS

40 A | 230V 400V | 0/10V 4/20mA | IP65

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 • **IP20** • **OUTPUT 25 Hz**.

Technical Specs

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



METALLIC BOX
PV CV40F Z4 SSD
300 x 400 x 150



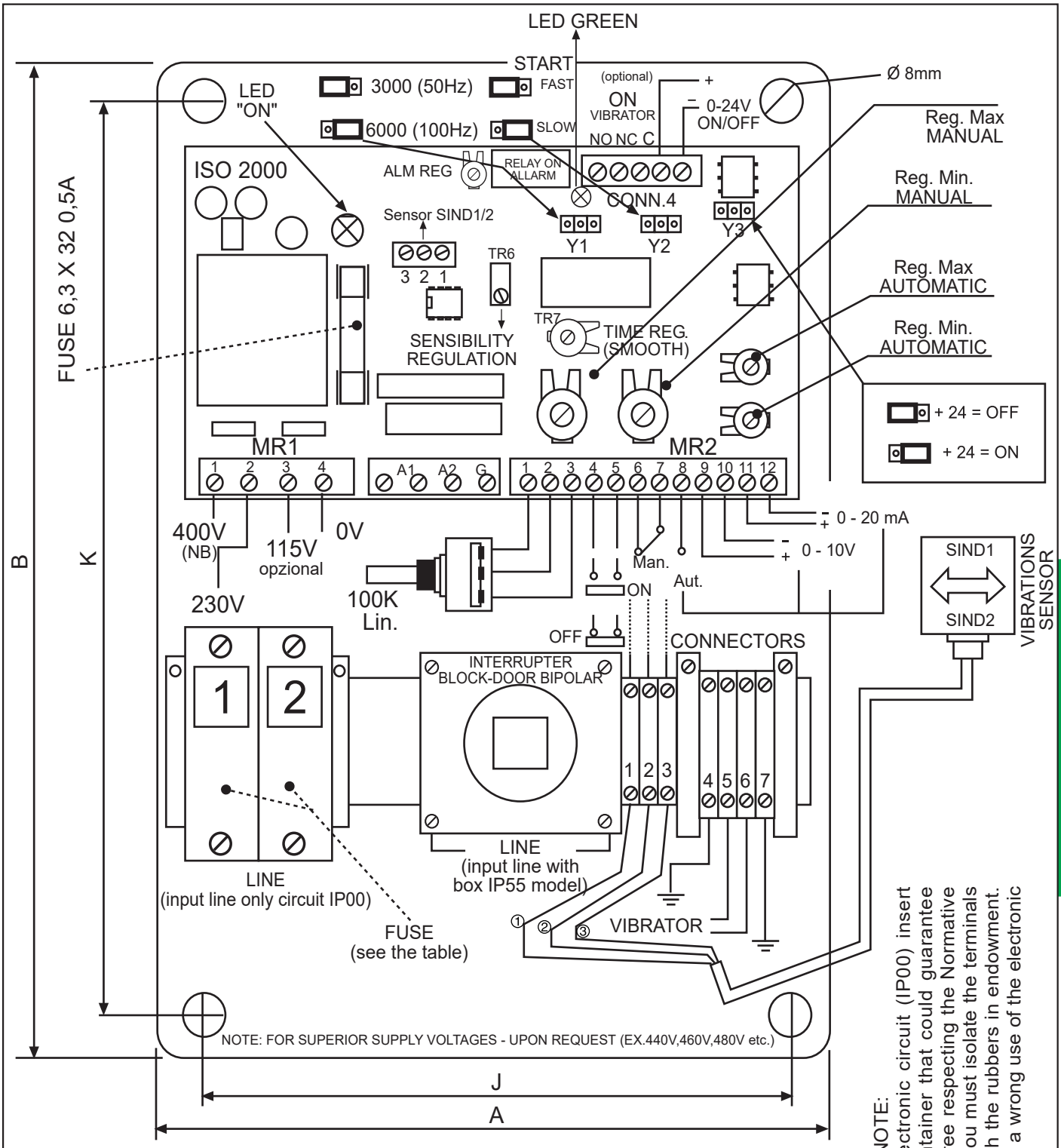
CIRCUIT
PV CV40F A4 SSD



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	300 x 400 x 150	PV CV40F Z4 SSD	
CV40FS	Circuit (until 500V)		320 x 243 x 100	PV CV40F A5 SSD	
CV40FS	Metallic Box (500V)	GREY	300 x 400 x 150	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	



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	ON REQUEST							

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 responsability from a wrong use of the electronic circuit is declined.

SKETCH AND CHARACTERISTICS TECHNIQUES SUBJECT TO MODIFICATIONS WITHOUT WARNING.

INDUSTRIAL

MP ELETTRONICA
QUALITY VIBRATION CONTROL

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

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

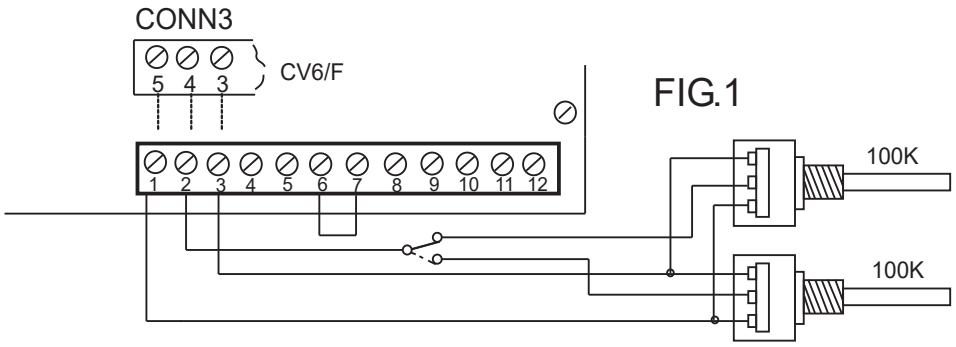


FIG.1

CONNECTION OF PARALLEL TYPE :

EACH POTENTIOMETER COULD COMPLETE THE WHOLE VARIATION OF THE VIBRATION

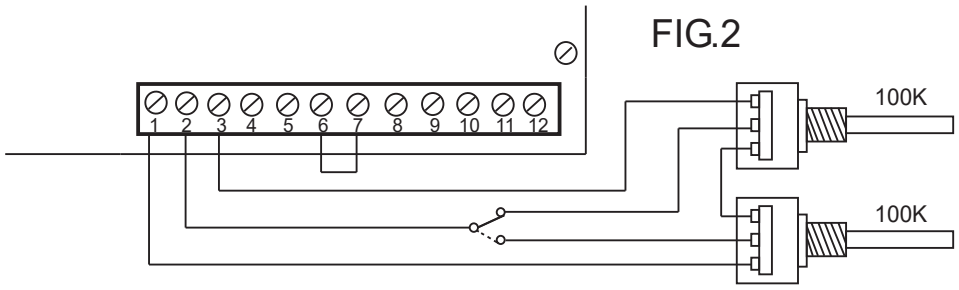


FIG.2

CONNECTION IN SERIES:

EACH POTENTIOMETER COULD COMPLETE ONLY HALF OF THE TOTAL VARIATION.

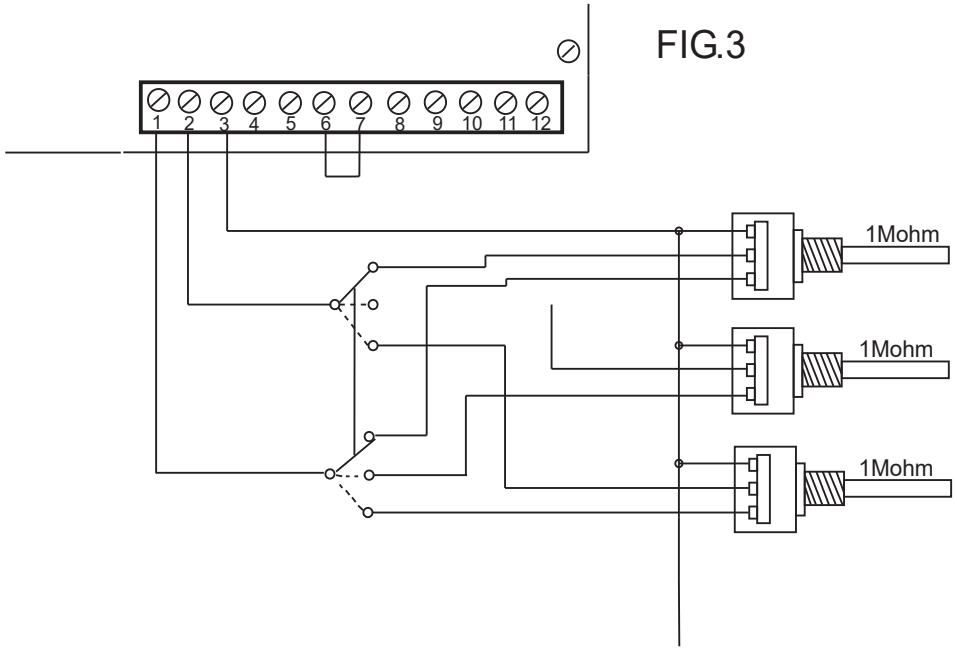


FIG.3

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).

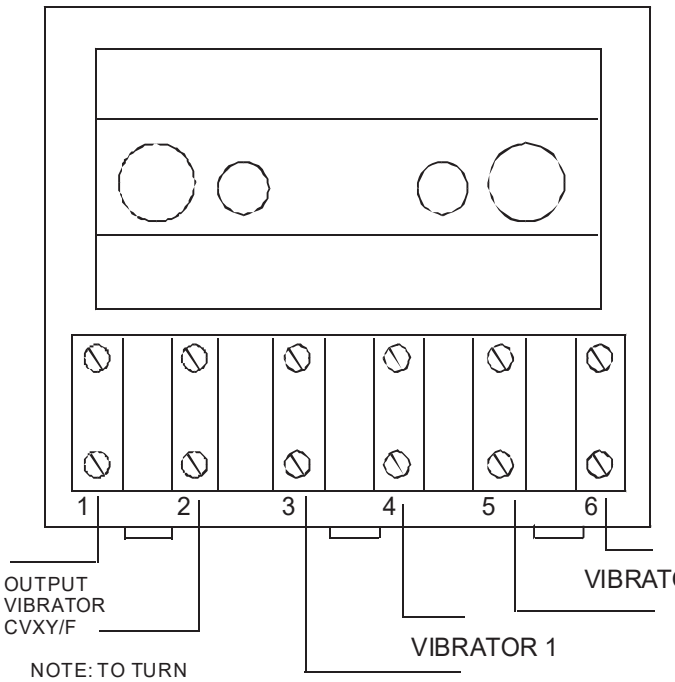
SCHEME OF CONNECTION VALID FOR:
CV12/17, CV25/17, CV40/17, CV70/17, CV100
For the CV6/17 enter with the potentiometer/s on the connector CONN3 - 1/2/3

MP ELETTRONICA
QUALITY VIBRATION CONTROL

Description: CONTROL CIRCUIT WITH MORE POTENTIOMETERS

CODE	REV	DATE	DRAFTSMAN	SHEET
DTCV2V	00	05/98	E. PEDRAZZI	1/1

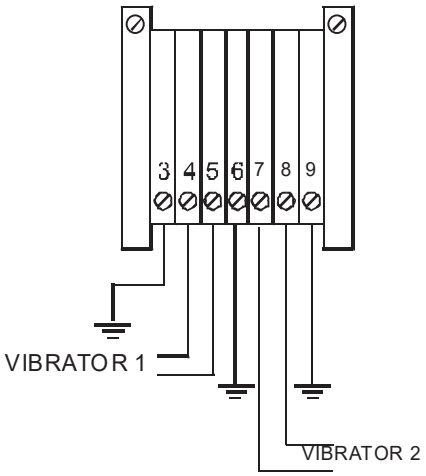
OPTIONAL MODULE FOR 1 VIBRATOR WITH 2 COILS



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)

CONNECTORS

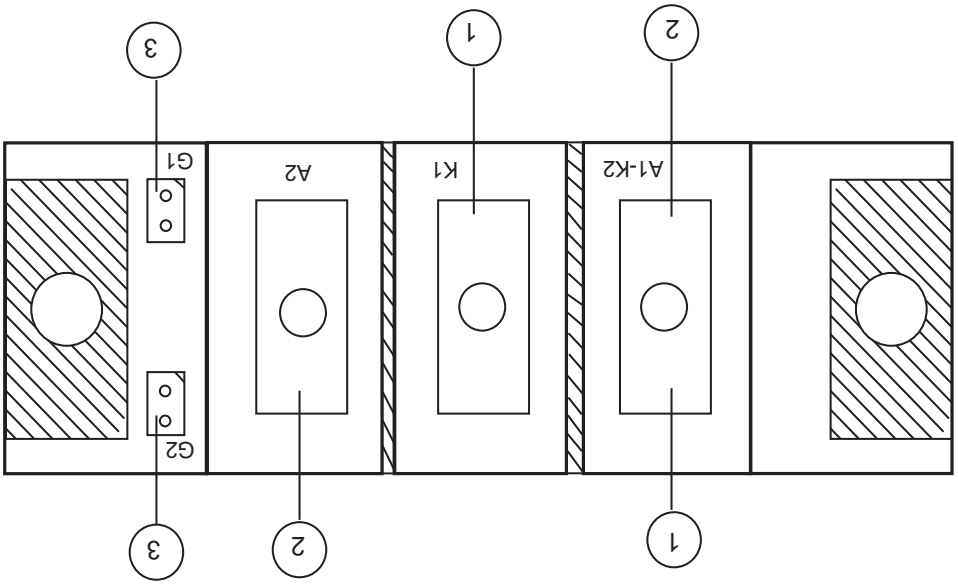


INDUSTRIAL

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)

MP ELETTRONICA
QUALITY VIBRATION CONTROL

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

END LIFE

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

VIBRATION WAY

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

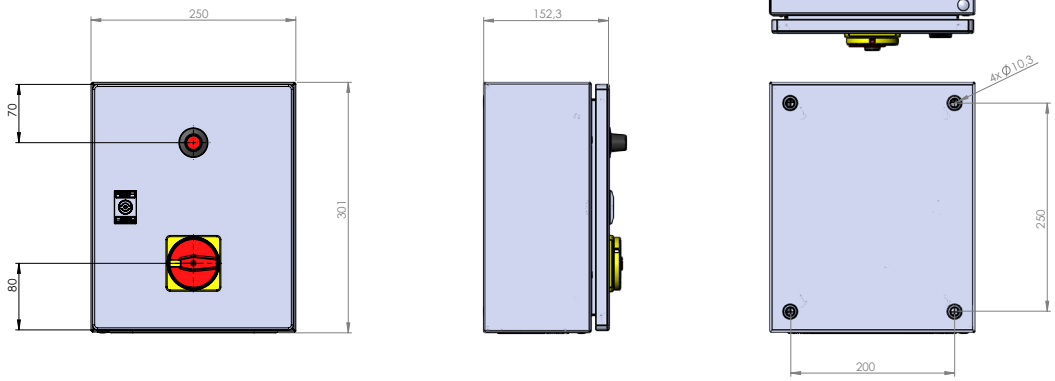
The sensor is put in manner such that the sensitive part is disposed according to the sense of the vibration in such position from hear again totally of the vibration.
In compatible way with the demands constructive of each vibrator are in fact possible other solutions provided that satisfy the conditions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

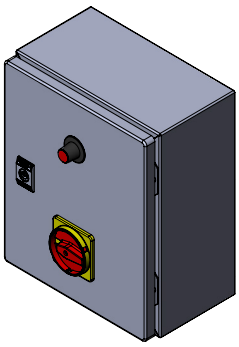
SKETCH AND CHARACTERISTIC TECHNIQUES SUBJECT TO MODIFICATIONS WITHOUT WARNING

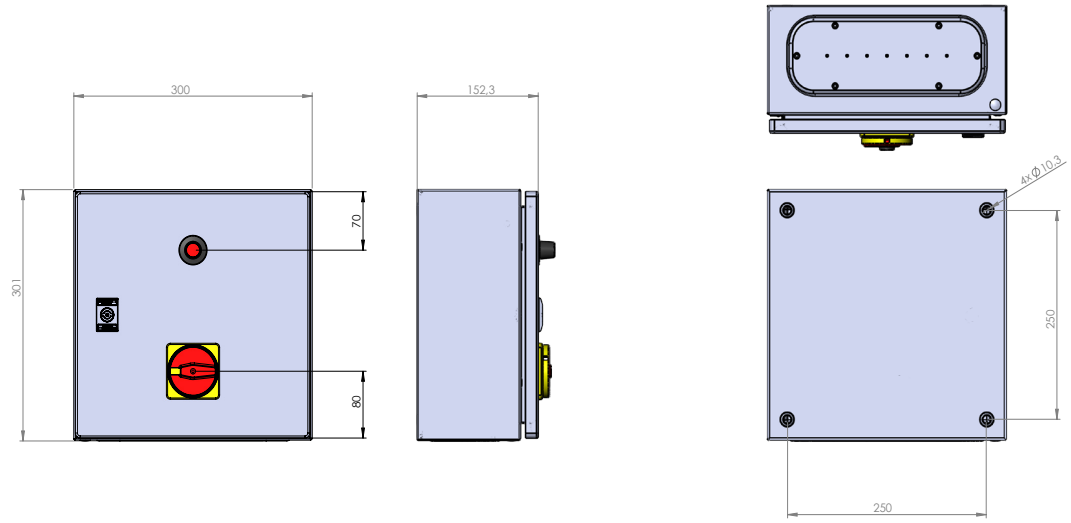
MP ELETTRONICA
QUALITY VIBRATION CONTROL

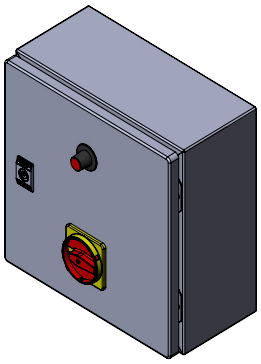
Description: VIBRATION SENSOR SIND1-SIND2

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









Dimension boxes from CV12 to CV100 (IP65)			
BOX	Dimension		
	A	B	h
CV 12	250	300	150
CV 25	300	300	150
CV 40	300	400	150
CV 70	ON REQUEST		
CV 100			

INDUSTRIALE

MP ELETTRONICA
QUALITY VIBRATION CONTROL

Description: DIMENSIONS OF THE BOXES OF REGOLATION CVXY/F IP65

CODE	REV	DATE	DRAFTSMAN	SHEET
DTCV55	01	12/08	E. PEDRAZZI	1/1

Variable Frequency/Amplitude controller

Code : *RF4 PWM • RF4 PWM/N • FQ1 PWM • FQ1 PWM/HC • FQ1NG • FQ2NG • FQ3NG*

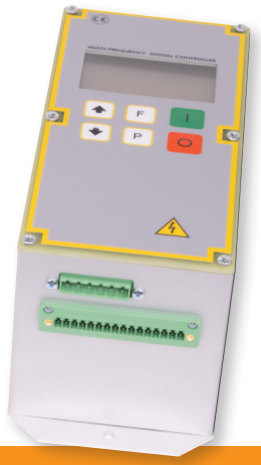
Voltage : *85/260V • 50/60Hz • current max 4/6/8/10/12/16 A RMS*

FQ2NG — PV FQ2NG Z2 STD — 6A RMS Max



Protection	Box
IP55	Aluminum 100x250x105

FQ2NG-M06 — PV FQ2NG Z2 M06 — 6A RMS Max



Protection	Box
IP55	Aluminum 100x240x105

FQ1NG — PV FQ2NG Z2 STD — 6A RMS Max



Protection	Box
IP65	Aluminum 100x225x210

FQ1NG-M10 — PV FQ1NG Z2 M16 — 16A RMS Max



Protection	Box
IP65	Aluminum 100x240x210

RF4 PWM — PV RFPWM Z2 STB — 5A RMS Max



Protection	Box
IP65	Aluminum 130x130x90

RF4 PWM — PV RFPWM Z2 STD — 5A RMS Max



Protection	Box
IP55	Aluminum 130x130x90

TECHNICAL FEATURES FQ2NG VS FQ1NG

Quiet-Powerful-Complete-Reliable	FQ2NG amplitude-frequency controller	FQ1N NG amplitude-frequency controller
Input voltage	***110 / 230 V Auto Detect - 50 / 60 Hz***	*230 V (110V on request) - 50 / 60 Hz*
Output voltage	*0 ... 100 V / 0 ... 205 V*	*0 ... 100 V / 0 ... 205 V*
Vibration amplitude regulation	✓	✓
Mains voltage compensation	✓	✓
Output current (6-8-10-12-16 A)	*max. 6A (8A on request)*	*max. 10/12 (on request) /16 A IP20-IP54*
Vibration frequency	*5…140 Hz (step 0,1Hz)*	*5…140 Hz (step 0,1Hz)*
Setpoint value	*LCD Display, Poti, 0 … 10 V, 0 (4) ... 20 mA*	*LCD Display, Poti, 0 … 10 V, 0 (4) ... 20 mA*
Setting U_{min} / U_{max}	*Keyboard*	*Keyboard*
Ext. Enable	*24 V DC, Switch contact*	*24 V DC, Switch contact*
Status signal	*Relay (250 V, 1 A)*	*Relay (250 V, 1 A)*
Sensor PNP supply	*24 V DC (100mA)*	*24 V DC (100mA)*
Soft start	*Adjustable 0…5 Sek.*	*Adjustable 0…5 Sek.*
Fill level/overflow control	*PNP, 24 V DC*	*PNP, 24 V DC*
Coarse/fine control	✓	✓
AC 230V motor	✓	✓
Pulse ON/OFF	✓	✓
Logic min/max twin track	✓	✓
2° pnp sensor with 2 delay+output 24V	✓	✓
Air flow	✓	✓
Resonant frequency search (AFC)	✓	✓
Limit max current reg.	✓	✓
Read real time working current	✓	✓
Amplitude sensor SIND3 (with M12)	✓ *Amplitude sensor Sind3*	✓ *Amplitude sensor Sind3*
Resident Software by M.P.	✓ *Sw user friendly*	✓ *Sw user friendly*
LCD display (FQ2)	✓	✓ *Graphic Display*
PW custom	✓ ***code 0000-no pw***	✓ ***code 0000-no pw***
5 save different setting	✓	✓
Multi language menu	✓	✓
Conformity	*CE, RoHS (**UL** work in progress)*	*CE, RoHS (**UL** work in progress)*
Protection class	*IP20 / IP54*	*IP20 / IP54*
Label custom available	*on request*	*on request*
Warranty	*30 months*	*30 months*





SINCE 1988

MP ELETTRONICA QUALITY VIBRATION CONTROL

3D ON REQUEST

UNI EN ISO 9001:2015 - CERT.9105 MPEL

CROSS REFERENCE FQ2NG/FQ3NG

Quiet-Powerful-Complete-Reliable	FQ3NG-LCD - FQ3NG-GFC*	FQ2NG-LCD - FQ2NG-GFC*
Mains Input	110/230V Auto Detect - 50/60Hz +/- 3Hz	110/230V Auto Detect - 50/60 Hz +/- 3 Hz
Output Voltage	0...100V / 0...205V	0...100V / 0...205V
Mains Voltage compensation	OK	OK
Output Current	max 6A (4A on request)	max 6A (**8A on request** - FQ2NG LCD / 8A)
Vibration Frequency	5...140Hz	5...140Hz
Setting U_{min} U_{max}	OK	OK
Limit max current 1-6A	OK	OK
Read real time working current	OK	OK
Feedback with amplitude sensor	Amplitude sensor SIND3	Amplitude sensor SIND3
Resonant frequency search	OK	OK
Setpoint value 0-10V,0(4)-20mA	X (OK for model FQ3NG-GFC with graphic display)	LCD Display, Pot, 0...10V, 0 (4)...20mA
Soft Start	Adjustable 0...20 sec	Adjustable 0...20 sec
Ext. Enable	24V DC, Free Voltage Switch	24V DC, Free Voltage Switch
Status Signal	Relay 250V, 1A	Relay 250V, 1A
Fill level/Overflow control	PNP, 24V DC	PNP, 24V DC
Coarse/fine control	OK	OK
PNP Sensor Supply (100mA)	24V DC	24V DC
PNP sensor with 2 delay	OK	OK (2° PNP sensor - 3 logic - AND - OR - min/max)
5 different save settings	OK	OK
Display	OK (LCD - *Graphic)	OK (LCD - *Graphic)
PW custom to block menu	OK	OK
Resident Software by MP	SW user friendly	SW user friendly
Label custom available	OK	OK
Protection class	IP20/IP54	IP20/IP54
Conformity	CE - RoHS	CE - RoHS - (UL working in progress)
Modbus RTU - Modbus TCP (option)	Only FQ3NG GFC (Ethernet on request)	Only FQ2NG GFC (Ethernet on request)
Dim	100 x 185 x 105	100 x 210 x 105
Warranty	30 months	30 months

SINCE 1988

MP ELETTRONICA
QUALITY VIBRATION CONTROL

3D ON REQUEST

UNI EN ISO 9001:2015 - CERT.9105 MPEL

Cross reference : Digital Amplitude/Frequency Controller with Microprocessor

	RF4PWM	RF4PWM/N	FQ1PWM	FQ1PWM/HC	FQ1NG 10/16 FQ1NG M10/ M16	FQ2NG 06 FQ2NG 08	FQ2NG M06 FQ2NG M08	FQ3NG GFC FQ3NG PLC
Voltage (50/60 Hz)	115 or 230	80/250	100/250	115 or 230	100/250	100/250	100/250	100/250
Amps	5	5	6	6	10/16	6/8	6/8	6
ON/OFF	●	●	●	●	●	●	●	●
Sensor NPN/PNP	●	●	●	●	●	●	●	●
0/10V- 0/20 mA	●	●	●	●	●	●	●	●
Amplitude/ Frequency regulation	Potenz. Key	Potenz. Key	Potenz. Key	Potenz. Key	KEYBOARD	KEYBOARD	KEYBOARD	KEYBOARD
Output Hz 50/100	30/80 80/130	30/80 80/130	30/80 80/130	30/80 80/130	5/140	5/140	5/140	5/140
Relay ON	●	●	●	●	●	●	●	●
Status Relay	●	●	●	●	●	●	●	●
EMC- CE	●	●	●	●	●	●	●	●
Amplitude Sensor SIND3	–	–	–	–	●	●	●	●
Display Volt	●	●	●	●	Alphanum.	Alphanum.	Alphanum.	Alphanum.
Display Hz	●	●	●	●	Alphanum.	Alphanum.	Alphanum.	Alphanum.
IP	65	65	65	65	55	55	55	55
Dimenzions Box	130x130x90	130x130x90	195x130x90	100x180x190	100x225x210	100x235x210	100x250x105	100x185x105
Photo	1	5	2	6	3-4	4	7	8

All stabilized models

Other voltage on request

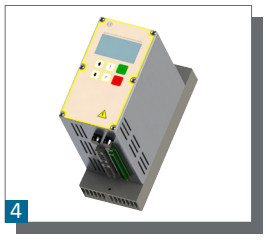
Digital regulation Amplitude/Frequency of linear and bowl feeder to 4/6/12/16 Amps

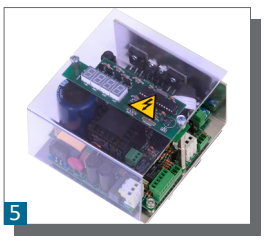
Input voltage at 60Hz with- vibrator at 50Hz or viceversa.


1


2


3


4


5


6


7


8

Electronic Controller for Electromagnetic Vibrator

FQ1NG

Amp. 10/16 | 115V 230V | 0/10V 4/20mA | option Modbus

General

Professional digital microprocessor controller with frequency and amplitude display – Start or stop delay of the vibrator via PNP sensor or mechanical contact (material presence) up to a maximum of 20 seconds, adjustable – 0–10 V automatic input – Status relay – Second PNP sensor – Air blow – Part-flow alarm – Alarm lamp – Load current limitation.

General Characteristics

Voltage 80V/260V, 50/60 Hz • ON/OFF input • Ramp (0 ÷ 5 sec) • Digital adjustment of minimum/maximum vibration and frequency (5–180 Hz) • Part-flow alarm • Delayed air blow (0 ÷ 2 sec) • Alarm lamp • Overcurrent protection.

Applications

Digital regulation of linear and bowl feeder till 10/16 Amps - Used to optimize the operation of the vibratory feeder by searching for its resonance frequency (max performance) thereby eliminating its lengthy and difficult mechanical calibration - Enable input for multiple electromagnetic system (linear - blow feeder - hopper).

Options

Customized label and SW • Connector for vibrator • Dual-track vibrator control (2 PNP sensors)

Technical Specs

Feeding Tension:	80/260V ± 5% 50/60Hz
Consumption:	2,5W max
Max Current:	10A - 16A (RMS)
Min Load:	50 mA (RMS)
Frequency:	5/200 Hz (5/300Hz on request)
Time of Ramp:	0/5 sec.
Min./Max:	50V ± 30% - 200V - 30%
On/Off:	Free contact - signal voltage
Hair Blow Delay:	2 sec.
Sensors Input:	Optoisolati NO/NC NPN/PNP
Sensors:	PNP1 (0 ÷ 20 sec.) - PNP2 - SIND3 (amplitude sensor)
Automatic Input:	0/10V - 0/20 mA
Temperature of Storage:	-10 °C /+80 °C
Temperature of Operation:	-5 °C / + 55 °C
Range of Relative Humidity:	80% till to 31 °C
Altitude:	Till to 2000 Meters
Degree of Protection	IP55 in box
European Norms:	EMC CE
Warranty:	1 year (from date on circuit)



c UL us
Certification coming soon

METALLIC BOX
FQ1NG
PV FQNGX Z2 STD
100x225x210



SENSOR SIND3
PV SIND3 A2 STD

FQ1NG-M10/M16

Amp. 10/16 | 115V 230V | 0/10V 4/20mA | option Modbus

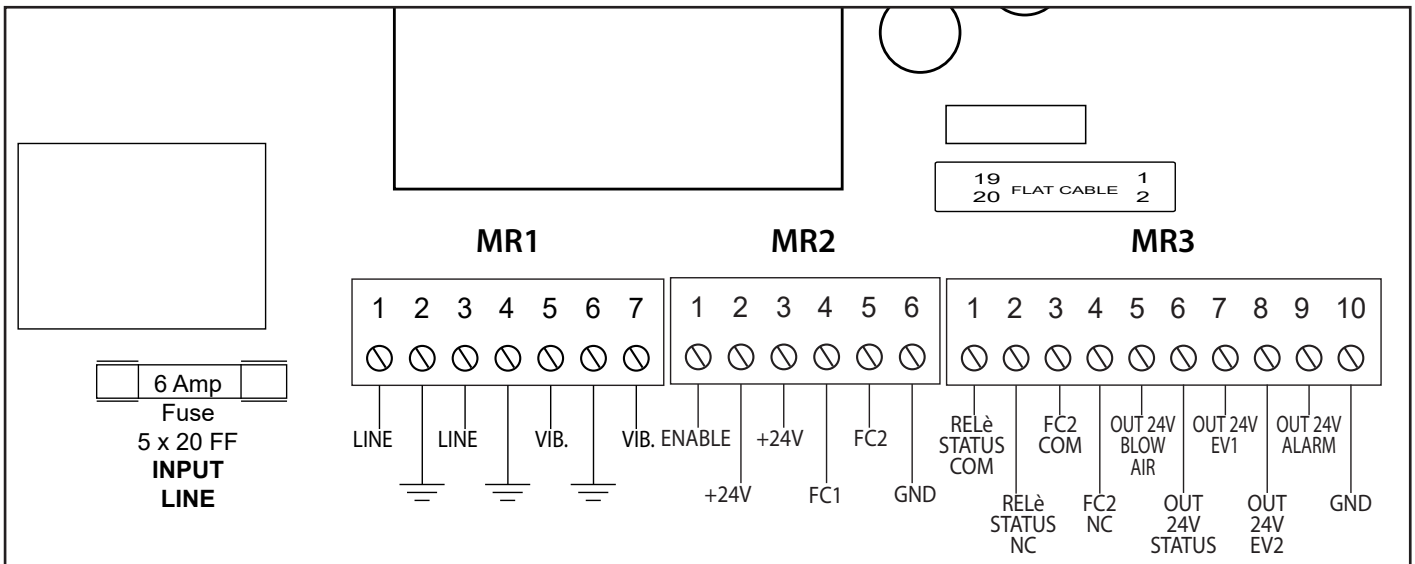


METALLIC BOX
FQ1NG-M16
PV FQ1NG Z2 M16
100x235x210

Available Versions

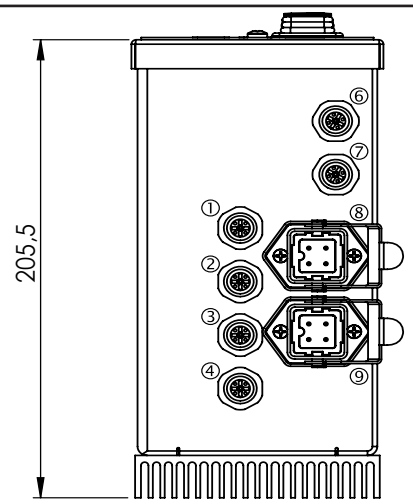
Type	Box	Colour	Dimensions	Code	Price
FQ1NG	Metallic	GRAY	100 x 225 x 210	PV FQ1NG Z2 10A	
FQ1NG	Metallic	GRAY	100 x 225 x 210	PV FQ1NG Z2 16A	
FQ1NG	Metallic	GRAY	100 x 235 x 210	PV FQ1NG Z2 M10	
FQ1NG	Metallic	GRAY	100 x 235 x 210	PV FQ1NG Z2 M16	
SENSOR SIND 3	Aluminium		45 x 43 x 19	PV SIND3 A2 STD	

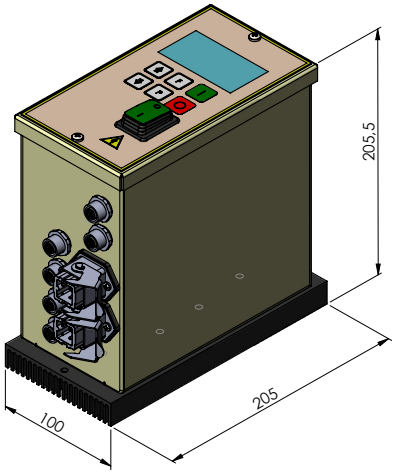
TECHNICAL DRAWINGS



	DESCRIPTION
5-7 MR1	*VIBRATOR*
4-6 MR1	*GND*
1-3 MR1	*LINE 230V/115V 50/60Hz*
1-2 MR2	*QUALIFICATION INPUT NC=ON - NO=OFF*
	INVERSION LOGIC MENÙ 4.1

CONNECTIONS





CONNECTORS M12

ON REQUEST

1 II PNP SENSOR

1	*+24V*
2	
3	*GND*
4	*INPUT*
5	

2 ENABLE

1	*+24V*
2	
3	*GND*
4	*IN*
5	

3 BLOW AIR

1	*+24V*
2	
3	*GND*
4	
5	

4 STATUS OUTPUT

1	*+24V*
2	
3	*GND*
4	
5	

6 I° PNP SENSOR

1	*+24V*
2	
3	*GND*
4	*INPUT*
5	

7 AMPLITUDE SENSOR3

1	*+24V-BROWN*
2	*INPUT-WHITE*
3	*GND-YELLOW*
4	*SHIELD*
5	

8 VIBRATOR

1	VIBRATOR
2	VIBRATOR
3	
PE	GND

9 LINE

1	L
2	N
3	
PE	GND

DIGITAL

Electronic Controller for Electromagnetic Vibrator

FQ1N DIG

Amp. 10/12/15 | 115V 230V | 0/10V 4/20mA

END OF LIFE

General

Professional digital microprocessor controller with frequency and amplitude display – Start or stop delay of the vibrator via PNP sensor or mechanical contact (material presence) up to a maximum of 20 seconds, adjustable – 0–10 V automatic input – Status relay – Second PNP sensor – Air blow – Part-flow alarm – Alarm lamp.

General Characteristics

Voltage 110V/230V, 50/60 Hz • ON/OFF input • Ramp (0 ÷ 5 sec) • Digital adjustment of minimum/maximum vibration and frequency (5–180 Hz) • Part-flow alarm • Delayed air blow (0 ÷ 2 sec) • Alarm lamp.

Applications

Digital adjustment of amplitude and frequency for linear vibrators and medium-sized circular vibrators up to 10/12/15 A – Used to optimize vibrator performance even when mechanical tuning is not perfect – Suitable for vibrators tuned to 50 Hz operating in markets with 60 Hz frequency – Suitable for systems with LINEAR, CIRCULAR, VIBRATING HOPPER, or ELEVATOR.

Options

Customized label and Software • Connector for vibrator • Vibrator control with dual track (2 PNP sensors)



METALLIC BOX
FQ1N DIG
PV FQNDI Z2 STD
100x180x190



SENSOR SIND3
PV SIND3 A2 STD

Technical Specs

Feeding Tension:	(115) 230V ± 5% 50/60Hz
Consumption:	2,5W max
Max Current:	10A - 12A - 15A (RMS)
Min Load:	50 mA (RMS)
Frequency:	5/200 Hz (5/300Hz on request)
Time of Ramp:	0/5 sec.
Min./Max:	50V ± 30% - 200V - 30%
On/Off:	Free contact - signal voltage
Air Blow Delay:	2 sec.
Sensors Input:	Optoisolati NO/NC NPN/PNP
Sensors:	PNP - PNP1 (0 ÷ 20 sec.)
Automatic Input:	0/10V - 4/20 mA
Temperature of Storage:	-10 °C /+80 °C
Temperature of Operation:	-5 °C / + 55 °C
Range of Relative Humidity:	80% till to 31 °C
Altitude:	Till to 2000 Meters
Degree of Protection	IP55 in box
European Norms:	EMC CE
Warranty:	1 year (from date on circuit)

Available Versions

Type	Box	Colour	Dimensions	Code	Price €
FQ1N DIG	Metallic	GRAY	100 x 180 x 190	PV FQNDI Z2 STD	
SENSOR SIND3	Aluminium		45 x 43 x 19	PV SIND3 A2 STD	

FQ1NG ETH

Amp. 10/16 | 115V 230V | 0/10V 4/20mA | Ethernet Modbus TCP

General

Professional digital microprocessor controller with frequency and amplitude display – Start or stop delay of the vibrator via PNP sensor or mechanical contact (material presence) up to a maximum of 20 seconds, adjustable – 0–10 V automatic input – Status relay – Second PNP sensor – Air blow – Part-flow alarm – Alarm lamp – Load current limitation. - **With Ethernet-Modbus TCP**

General Characteristics

Voltage 80V/260V, 50/60 Hz • ON/OFF input • Ramp (0 ÷ 5 sec) • Digital adjustment of minimum/maximum vibration and frequency (5–180 Hz) • Part-flow alarm • Delayed air blow (0 ÷ 2 sec) • Alarm lamp • Overcurrent protection.

Applications

Digital regulation of linear and bowl feeder till 10/16 Amps - Used to optimize the operation of the vibratory feeder by searching for its resonance frequency (max performance) thereby eliminating its lengthy and difficult mechanical calibration - Enable input for multiple electromagnetic system (linear - blow feeder - hopper).

Options

Customized label and SW • Connector for vibrator • Dual-track vibrator control (2 PNP sensors)

Technical Specs

Feeding Tension:	80/260V ± 5% 50/60Hz
Consumption:	2,5W max
Max Current:	10A - 16A (RMS)
Min Load:	50 mA (RMS)
Frequency:	5/200 Hz (5/300Hz on request)
Time of Ramp:	0/5 sec.
Min./Max:	50V ± 30% - 200V - 30%
On/Off:	Free contact - signal voltage
Hair Blow Delay:	2 sec.
Sensors Input:	Optoisolati NO/NC NPN/PNP
Sensors:	PNP1 (0 ÷ 20 sec.) - PNP2 - SIND3 (amplitude sensor)
Automatic Input:	0/10V - 0/20 mA
Temperature of Storage:	-10 °C /+80 °C
Temperature of Operation:	-5 °C / + 55 °C
Range of Relative Humidity:	80% till to 31 °C
Altitude:	Till to 2000 Meters
Degree of Protection	IP55 in box
European Norms:	EMC CE
Warranty:	1 year (from date on circuit)
Protocol:	Ethernet Modbus TCP



METALLIC BOX FQ1ET
PV FQ1ET Z2 STD
100x225x210



SENSOR SIND3
PV SIND3 A2 STD

Available Versions

Type	Box	Colour	Dimensions	Code	Price
FQ1NG ETH	Metallic	GRAY	100 x 225 x 210	PV FQ1ET Z2 10A	
FQ1NG ETH	Metallic	GRAY	100 x 225 x 210	PV FQ1ET Z2 16A	
SENSOR SIND 3	Aluminium		45 x 43 x 19	PV SIND3 A2 STD	

Electronic Controller for Electromagnetic Vibrator

FQ2N-DIG

6A | 115V 230V | 0/10V 0/20mA

END OF LIFE



METALLIC BOX
FQ2N DIG
PV FQ2DI Z2 STD
100x210x70

General

Microprocessor digital professional controller with visualized frequency and amplitude - Delay 20 sec max On/Off vibrator with sensor PNP or relay contact - Automatic input 0/10V-0/20mA - Status relay - 2° PNP sensor - EV air blow - Alarm absence pieces - Lamp alarm.

General Characteristics

Voltage (110V) 230V, 50/60 Hz • Input ON/OFF • Soft/Fast ramp (0 ÷ 5 sec.) • Digital Regulation amplitude/frequency min/max(5-140Hz) • Digital menu • Line input with schuko plug • Vibrator output with connector - Delay EV air blow (0 ÷ 2 sec.) - Alarm absence pieces (0 ÷ 180 sec.) - Lamp alarm (24Vcc) .

Applications

Digital regulation of linear and bowl feeder till 6 Amps - The FQ2NDIG allows optimizing operation of the vibratory feeder by searching for its resonance frequency (max performance) thereby eliminating its lengthy and difficult mechanical calibration - Qualification input for multiple electromagnetic system (linear - blow feeder - hopper).

Options

Custom label and SW • Connector for vibrator • Vibrator control with dual track (2 PNP sensors)



SENSOR SIND3
PV SIND3 A2 STD

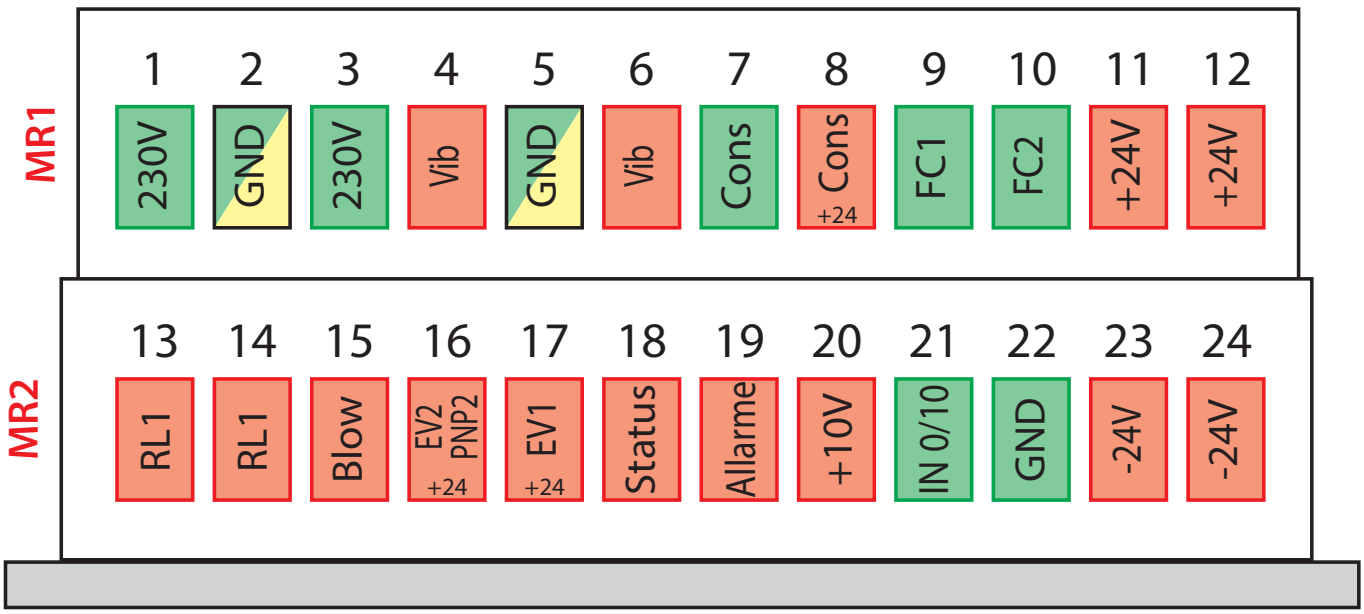
Technical Specs

Tension of Feeding:	115V or 230V ± 5% 50/60Hz
Consumption:	2,5 W max
Current Max:	6A (RMS)
Load Min:	50 mA (RMS)
Frequency of Vibration:	5-200Hz (300Hz on request)
Time of Ramp:	0 ÷ 5 sec.
Regulation Min./Max:	50V ± 30% - 200V - 30%
Automatic input:	0/10V - 0/20 mA
Sensor:	PNP - PNP1 (0 ÷20 sec.)
Air blow delay:	2 sec.
Delay alarm absence pieces:	10/180 sec.
On/Off:	free contact - signal voltage
Degree of Protection:	IP55 in box
Temperature of Operation:	–5°C / +55°C
Temperature of Storage	-10°C/+80°C
European Norms:	EMC CE
Warranty:	1 year (from date on circuit)

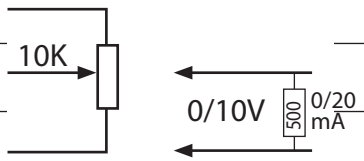
Available Versions

Type	Box	Colour	Dimensions	Code	Price €
FQ2DIG	Aluminium	GREY	100 x 210 x 70	PV FQ2DI Z2 STD	
SENSOR SIND3	Aluminium		45 x 43 x 19	PV SIND3 A2 STD	

MR1-MR2

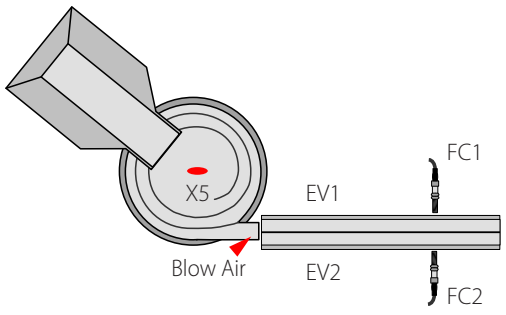


1	AC	INPUT 230V (110)	13	RL1	Status Relay
2	GND		14	RL1	
3	AC		15	Blow	+24V Blow Air
4	Vibrator	VIBRATOR	16	EV2	+24V EV2/PNP2
5	GND		17	EV1	+24V EV1
6	Vibrator		18	Status	+24V Status Output
7	Cons	Close ON	19	Allarm	+24V Time Out
8	Cons	Open OFF	20	+10V	
9	FC1	IN PNP Sensor 1	21	IN 0/10	
10	FC2	IN PNP Sensor 2	22	GND	
11	+24V		23	-24V	
12	+24V		24	-24V	



DIGITAL

Menù : ALT MODE>YES (Function with Blow Feeder - Linear Twin Track)



FC1	FC2	EV1	EV2	X5
0	0	0	0	1
1	0	1	0	1
0	1	0	1	1
1	1	1	1	0

Electronic Controller for Electromagnetic Vibrator

▶ FQ2NG

6/8A | 80V 250V | 0/10V 0/20mA | option Modbus

General

Professional digital microprocessor controller with frequency and amplitude display – Start or stop delay of the vibrator via PNP sensor or mechanical contact (material presence), adjustable up to 20 seconds – 0–10 V automatic input – Status relay – Second PNP sensor – Air blow – Part-flow alarm – Alarm lamp.

General characteristics

Voltage 80V/250V, 50/60 Hz • ON/OFF input • Ramp (0 ÷ 5 sec) • Digital adjustment of minimum/maximum vibration and frequency (5–180 Hz) • Part-flow alarm • Delayed air blow (0 ÷ 2 sec) • Alarm lamp.

Applications

Digital adjustment of amplitude and frequency for linear vibrators and medium-sized circular vibrators up to 6/8 A – Used to optimize vibrator performance even when mechanical tuning is not perfect – Suitable for vibrators tuned to 50 Hz operating in markets with 60 Hz frequency – Applicable in systems with LINEAR, CIRCULAR, VIBRATING HOPPER, or ELEVATOR.

Options

Customized label • Connector for vibrator • Vibrator control with dual track (2 PNP sensors) • Custom SW

Technical Specs

Tension of Feeding:	80V/250V ± 5% 50/60Hz
Consumption::	2,5W max
Max Current:	6A/8A (RMS)
Min. Load	50 mA (RMS)
Frequency of Vibration:	5/140 Hz
Time of Ramp:	0/20 sec.
Regulation Min./Max:	50V ± 30% - 200V - 30%
On/Off:	Free contact - signal voltage
Air Blow Delay:	20 sec.
Sensors Input:	Optoisolated NO/NC NPN/PNP
Sensors::	PNP - PNP1 (0 ÷ 20 sec.)
Automatic Input:	0/10V - 0/20 mA
Temperature of Storage:	-10 °C /+80 °C
Temperature of Operation:	-5 °C / + 55 °C
Relative Humidity Range:	80% up to 31 °C
Altitude:	Up to 2000 meters
Degree of Protection:	IP55 in box
European Norms:	EMC CE
Warranty:	12 months (from date on circuit)



METALLIC BOX
FQ2NG
PV FQ2NG Z2 006
100x250x105

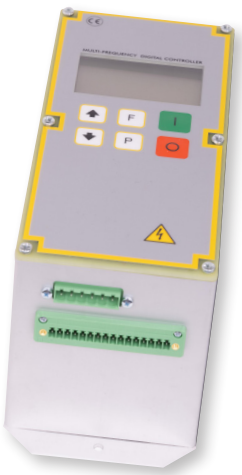
c UL us
Certification coming soon



SENSOR SIND3
PV SIND3 A2 STD

▶ FQ2NG-M06

Amp. 10/16 | 115V 230V | 0/10V 0/20mA | opzione Modbus



METALLIC BOX
FQ2NG-M06
PV FQ2NG Z2 M06
100x240x105

Available versions

Type	Box	Colour	Dimensions	Code	Price
FQ2NG	Aluminium	GRAY	100 x 250 x 105	PV FQ2NG Z2 006	
FQ2NG	Aluminium	GRAY	100 x 250 x 105	PV FQ2NG Z2 008	
FQ2NG	Aluminium	GRAY	100 x 240 x 105	PV FQ2NG Z2 M06	
FQ2NG	Aluminium	GRAY	100 x 240 x 105	PV FQ2NG Z2 M08	
SENSOR SIND 3	Aluminium		45 x 43 x 19	PV SIND3 A2 STD	

CONNECTIONS

1 ON/OFF +24 Vcc

1	
2	
3	*GND*
4	*+24V*
5	

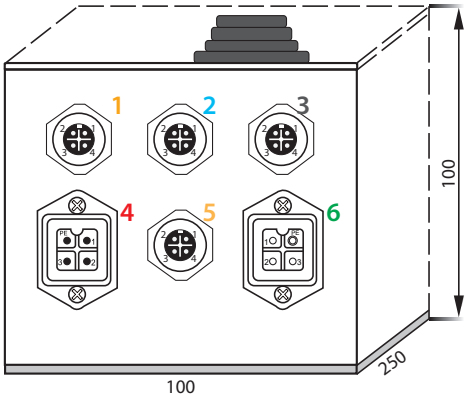
1 ON/OFF CONTACT

1	
2	
3	
4	
5	

OPTIONAL

1 OUTPUT STATUS

1	
2	
3	
4	
5	



Ask for the configuration M12 for your custom application

5 IN 0/10V - OUT BLOW AIR

1	*IN 0/10V*
2	*+24 BLOW*
3	*GND*
4	*- BLOW*
5	

SENSOR SIND3

3 SENSOR SIND3

1	
2	
3	
4	
5	

OPTIONAL



2 I° PNP SENSOR

1	*+24V*
2	
3	*GND*
4	*INPUT*
5	

CONNETTORS



4 LINE 230V

1	L
2	N
3	
PE	GND

2 ON/OFF +24 Vcc

1	
2	
3	*GND*
4	*+24V*

FC1 = OPEN o CLOSE

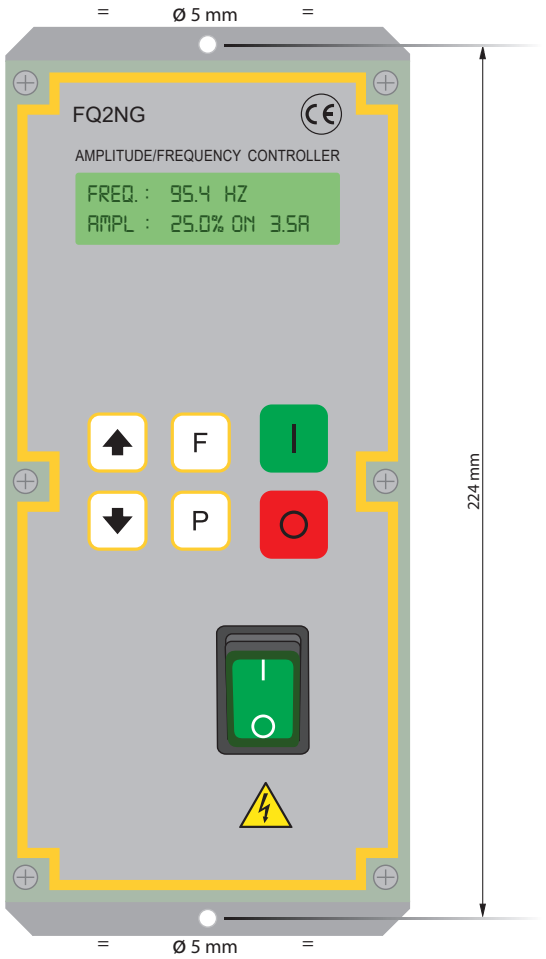
2 ON/OFF CONTACT

1	
2	
3	
4	

FC1 = OPEN o CLOSE

6 VIBRATOR

1	VIBRATOR
2	VIBRATOR
3	
PE	GND



STANDARD MODEL

Digital controller FQ2NG 6 Amp with connectors M12

❺PNP1 *(ON/OFF)*

Connector *M12 on request*

Input	: *2° PNP sensor*
Output	: *signal +24V (2° PNP)*
Input	: *consent 1-2 conn J5*
Output	: *signal status +24V - status relay*
Output	: *blow air +24V*
Output	: *time out +24V* PRODUCT MISSING*/alarm*

NOTE: is possible to use INPUT/OUTPUT available on terminal J4 with or without connector M12.
Ask for the configuration M12 for your custom application.

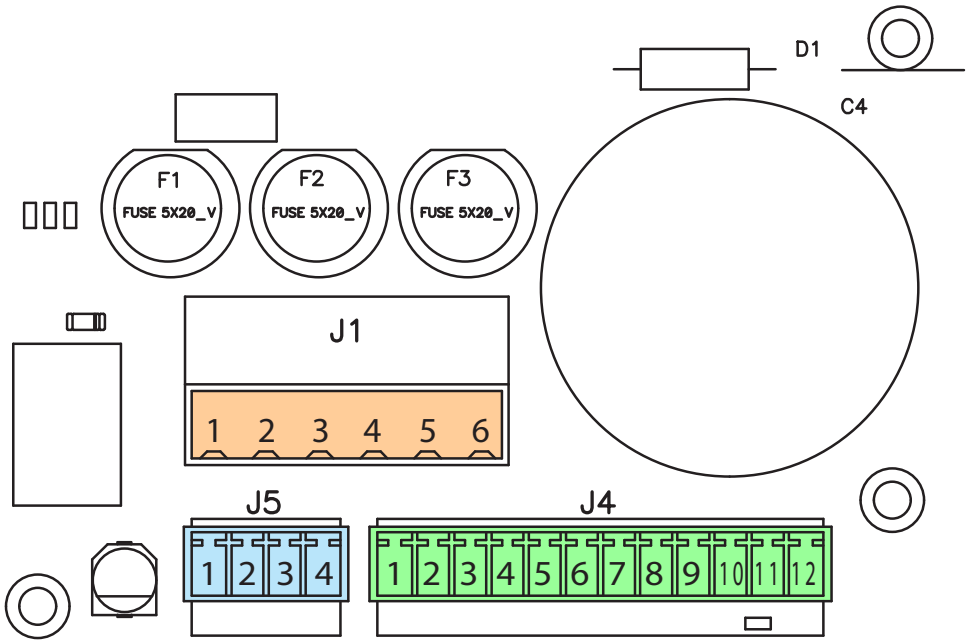
NORMS OF GUARANTEE

1) The controller is guaranteed for a period of 1 year from the date shown on the inside.

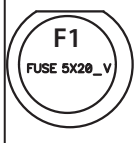
2) The guarantee covers the free replacement or repair of components parts that are defective at origin for manufacturing errors.

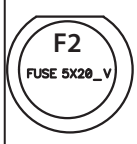
3) The guarantee is not valid for damage caused accidentally due to improper use or negligence and in case of alterations or repair carried out by unauthorized persons.

Design and specifications could be subjected to change without notice.

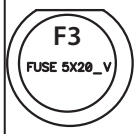


J1 - *Supply voltage AC and vibrator output*		**J5** - *Enable and photocells*		**J4** - *uscite (+24V) e ingresso 0-10V*	
1.	Line AC	1.	+24V	1.	Blow Air
2.	Ground	2.	Enable	2.	PNP2 o EV2
3.	Neutral AC	3.	PNP1	3.	EV1
4.	Vibrator	4.	PNP2	4.	Status
5.	Ground	5.		5.	Alarm
6.	Vibrator	6.		6.	Relay status C
7.		7.		7.	Relay status NO
8.		8.		8.	GND
9.		9.		9.	GND
10.		10.		10.	GND
11.		11.		11.	Input 0-10V
12.		12.		12.	+10V





POWER FUSES : 5X20 6,3A F 250V



VIBRATOR OUTPUT FUSE : 5X20 6,3A F 250V

DIGITAL

Multi-frequency electronic controller for electromagnetic vibrators

▶ FQ3NG

6A | 80V 250V | 0/10V 0/20mA | option Modbus

NEW

General

Professional digital microprocessor controller with frequency and amplitude display – Start or stop delay of the vibrator via PNP sensor or mechanical contact (material presence) up to a maximum of 20 seconds, adjustable – 0–10 V automatic input – Status relay – Second PNP sensor – Air blow – Part-flow alarm.

General Characteristics

Voltage 80V/250V, 50/60 Hz • ON/OFF input • Ramp (0 ÷ 5 sec) • Digital adjustment of minimum/maximum vibration and frequency (5–180 Hz) • Part-flow alarm • Delayed air blow (0 ÷ 2 sec)

Applications

Digital adjustment of amplitude and frequency for linear vibrators and medium-sized circular vibrators up to 6 A – Used to optimize vibrator performance even when mechanical tuning is not perfect – Suitable for vibrators tuned to 50 Hz operating in markets with 60 Hz frequency – Applicable in systems with LINEAR, CIRCULAR, VIBRATING HOPPER, or ELEVATOR.



METALLIC BOX
FQ3NG
PV FQ3NG Z2 GFC
100x185x105

Options

Customized label • Connector for vibrator • Custom SW • Vibrator control with dual track (2 PNP sensors)



SENSOR SIND3
PV SIND3 A2 STD

Technical Specs

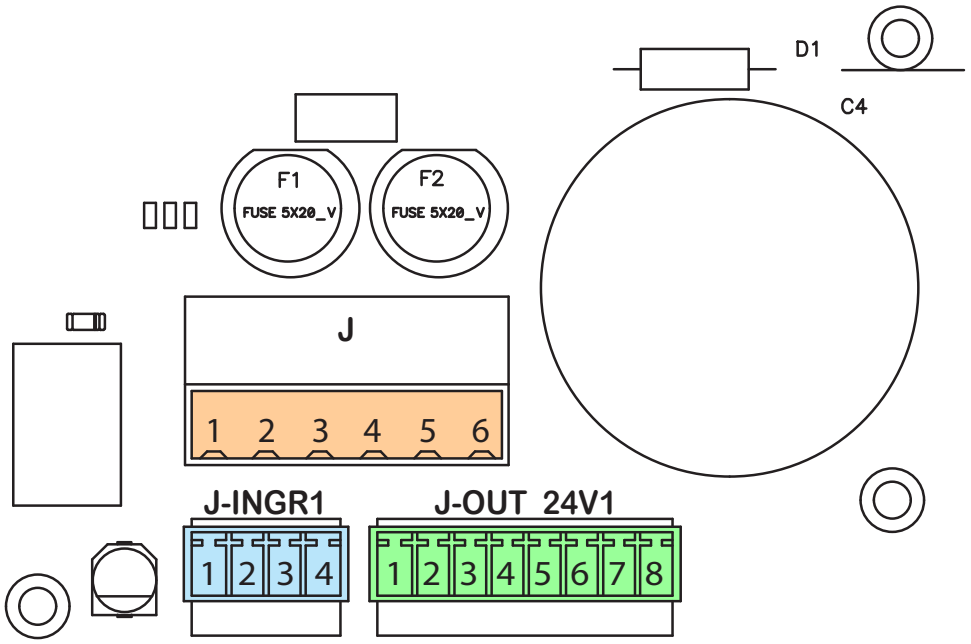
Tension of Feeding:	80V/250V ± 5% 50/60Hz
Consumption:	2,5W max
Max Current:	6A (RMS)
Min. Load:	50 mA (RMS)
Frequency of Vibration:	5/200 Hz (5/300Hz on request)
Time of Ramp:	0/5 sec.
Regulation Min./Max:	50V ± 30% - 200V - 30%
On/Off:	Free contact - signal voltage
Air blow delay:	20 sec.
Sensors Input:	Optoisolated NO/NC NPN/PNP
Sensors:	PNP - PNP1 (0 ÷ 20 sec.)
Automatic Input:	0/10V - 0/20 mA
Temperature of Storage:	-10 °C /+80 °C
Temperature of operation:	-5 °C / + 55 °C
Relative Humidity Range:	80% up to 31 °C
Altitude:	Up to 2000 Meters
Degree of Protection:	IP55 in box
European Norms:	EMC CE
Warranty:	12 months (from date on circuit)



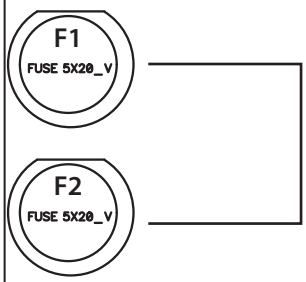
METALLIC BOX
FQ3 LCD
PV FQ3NG Z2 LCD
100x185x105

Available Versions

Type	Box	Colour	Dimensions	Code	Price €
FQ3NG	Aluminum	GREY	100 x 185 x 105	PV FQ3NG Z2 GFC	
FQ3NG	Aluminum	GREY	100 x 185 x 105	PV FQ3NG Z2 LCD	
SENSOR SIND3	Aluminum		45 x 43 x 19	PV SIND3 A2 STD	



J - *Supply voltage AC and output vibrator*		**J-INGR1** - *Enable and sensors*		**J-OUT** - *output (+24V) and input 0-10V*	
1.	La AC	1.	+24V	1.	Blow Air
2.	GND	2.	Enable	2.	
3.	N AC	3.	PNP1	3.	GND
4.	Vibrator	4.	GND	4.	Alarm
5.	GND	5.		5.	Out Status
6.	Vibrator	6.		6.	GND
7.		7.		7.	Contact ENABLE
8.		8.		8.	



SUPPLY FUSE : 5X20 6,3A F 250V

Electronic Controller for Electromagnetic Vibratory Feeders

▶ FQ1 PWM 6A 115V 230V DIGITAL

General

This controller is available in metallic box with two potentiometers and display, with keys and display, with a potentiometer without dispaly or in circuit with DIN35.

General Characteristics

Voltage (115V) 230V, 50/60 Hz • 3000/6000 vpm • Double Input ON/OFF • Soft/fast ramp • Manual Regulation amplitude/frequency (30/80Hz - 80/130Hz) min/max • Limitation Max Output current • Line input with schuko plug • Vibrator output with connector - Delay 8 sec max On/Off vibrator with sensor NPN/PNP or relay contact - Automatic Input from PLC 0/10V-0/20mA - Status relay

Applications

Digital regulation of linear and bowl feeder till 6 Amps - The FQ1 PWM allows optimizing operation of the vibratory feeder by searching for its resonance frequency (max performance) thereby eliminating its lengthy and difficult mechanical calibration.

Options

Customized label • Connector for vibrator • Frequency Meter • Frequency adjustment knob with lock.

Technical Specs

Feeding Tension:	115V or 230V ± 10% 50/60Hz
Consumption:	2,5 W max
Max Current:	6,3 A (RMS)
Min Load:	50 mA (RMS)
Vibration Frequency:	30/80Hz(50Hz) - 80/130Hz(100Hz)
Time of Ramp:	1 sec.
Input Sensor:	NPN/PNP or Free voltage contact
Automatic Input:	0/10V-0/20mA (with 470 Ohm)
On/Off:	free contact
Delay ON/OFF:	0/8 sec
Protection Degree:	IP65 in box (NEMA4-4X)
Storage Temperature:	-15°C./ + 80°C.
Operation Temperature:	–5°C / +55°C
Altitude:	Up to 2000 meters
European Norms:	EMC CE
Warranty:	1 year (from date on circuit)



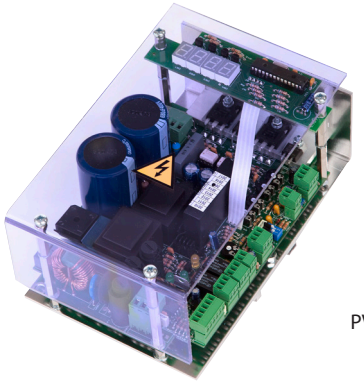
METALLIC BOX
FQ1 PWM
PV FQ1PW Z2 STD
195x130x90



METALLIC BOX
FQ1 PWM
PV FQ1PW Z2 STK
195x130x90



METALLIC BOX
FQ1 PWM
PV FQ1PW Z2 STB
195x130x90



CIRCUIT DIN35
PV FQ1PW D2 STD

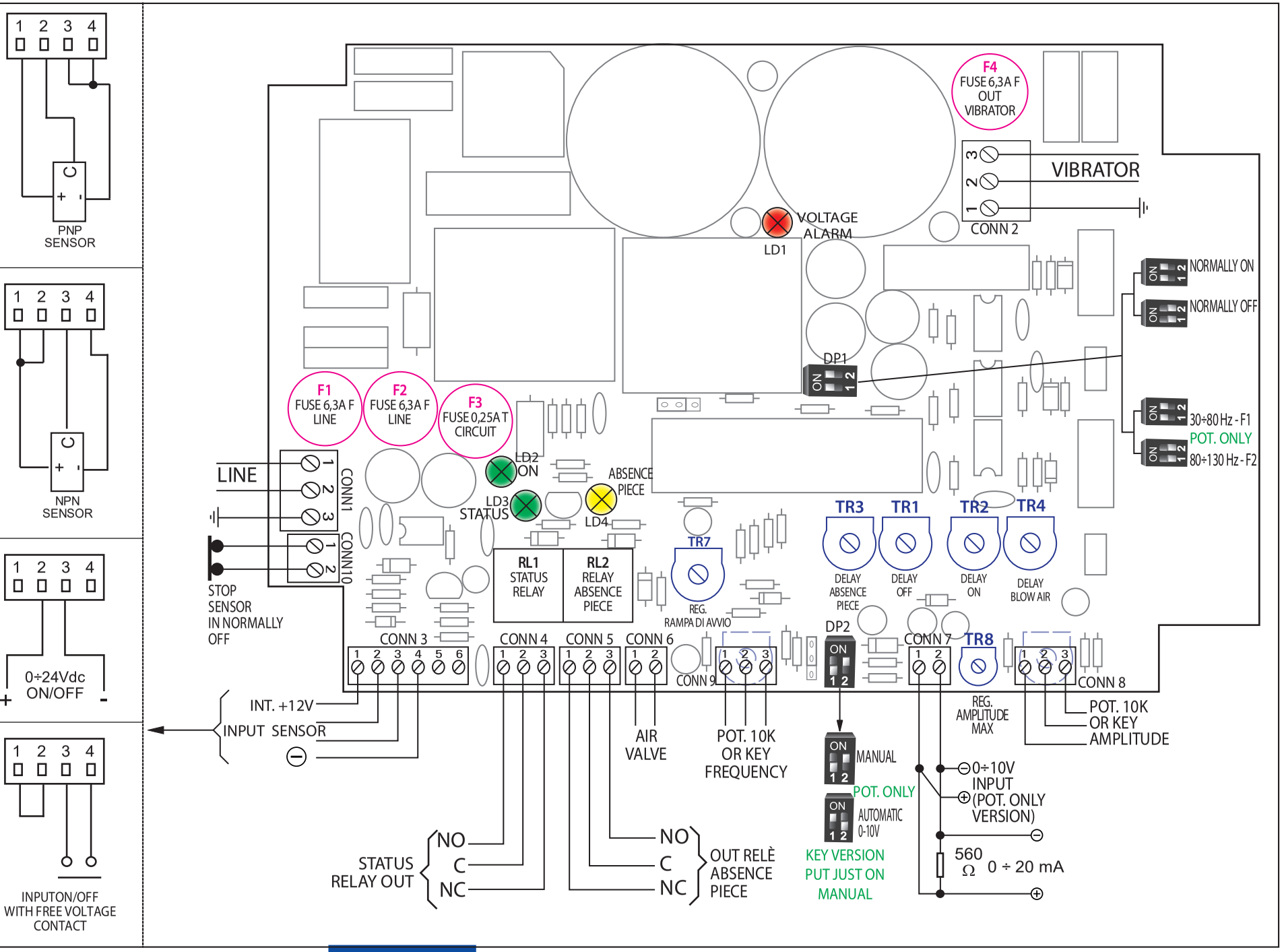
Available Versions

Type	Box	Colour	Dimensions	Code	Price €
FQ1PWMB	Metallic	RAL 7035	195 x 130 x 90	PV FQ1PW Z2 STB	
FQ1PWMB	Circuit Din35		195 x 120 x 50	PV FQ1PW D2 STB	
FQ1PWM	Metallic	RAL 7035	195 x 130 x 90	PV FQ1PW Z2 STD	
FQ1PWM	Circuit Din35		195 x 120 x 50	PV FQ1PW D2 STD	
FQ1PWMK	Metallic	RAL 7035	195 x 130 x 90	PV FQ1PW Z2 STK	

MP ELETTRONICA
QUALITY VIBRATION CONTROL

CODE	REV	DATE	DRAFTSMAN	SHEET
DTFQ1PWM	05	08/15	E. PEDRAZZI	1/1

Description: **FQ1-PWM DIGITAL PWM AMPLITUDE/FREQUENCY CIRCUIT**



DIGITAL

Electronic Controller for Electromagnetic Vibratory Feeders

▶ FQ1 PWM/4HC 6/8A 400V DIGITAL

NEW

General

This controller is available in metallic box with two potentiometers and display, with keys and display, with a potentiometer without dispaly or in circuit with DIN35.



METALLIC BOX
FQ1 PWM/HCD
PV FQ1PW Z3 HCD
265x130x90

General Characteristics

Voltage 400V, 50/60 Hz • 3000/6000 vpm • Double Input ON/OFF • Soft/fast ramp • Manual Regulation amplitude/frequency (30/80Hz - 80/130Hz) min/max • Limitation Max Output current • Line input with plug • Vibrator output with connector - Delay 8 sec max On/Off vibrator with sensor NPN/PNP or relay contact - Automatic Input from PLC 0/10V-4/20mA - Status relay



METALLIC BOX
FQ1 PWM/HCB
PV FQ1PW Z3 HCB
265x130x90

Applications

Digital regulation of linear and bowl feeder till 6/8 Amps - The FQ1 PWM/XHC allows optimizing operation of the vibratory feeder by searching for its resonance frequency (max performance) thereby eliminating its lengthy and difficult mechanical calibration.



METALLIC BOX
FQ1 PWM/HCBD
PV FQ1PW Z3 CBD
265x130x90

Options

Customized label • Connector for vibrator • Frequency Meter.

Technical Specs

Feeding Tension:	400V ± 5% 50/60Hz
Consumption:	2,5 W max
Max Current:	6/8 A (RMS)
Min Load:	50 mA (RMS)
Vibration Frequency:	30/80Hz - 80/130Hz
Time of Ramp:	0.1 - 2 sec.
Input Sensor:	NPN/PNP or Free voltage contact
Automatic Input:	0/10V-4/20mA (with 470 Ohm)
On/Off:	free contact - 0/24 Vdc
Delay ON/OFF:	0/8 sec
Protection Degree:	IP65 in box (NEMA4-4X)
Storage Temperature:	-25°C./ + 80°C.
Operation Temperature:	–15°C / +45°C
Altitude:	till to 2000 meters
European Norms:	EMC CE
Warranty:	1 year (from date on circuit)



METALLIC BOX
FQ1 PWM/HCBD
PV FQ1PW Z3 CBD
265x130x90

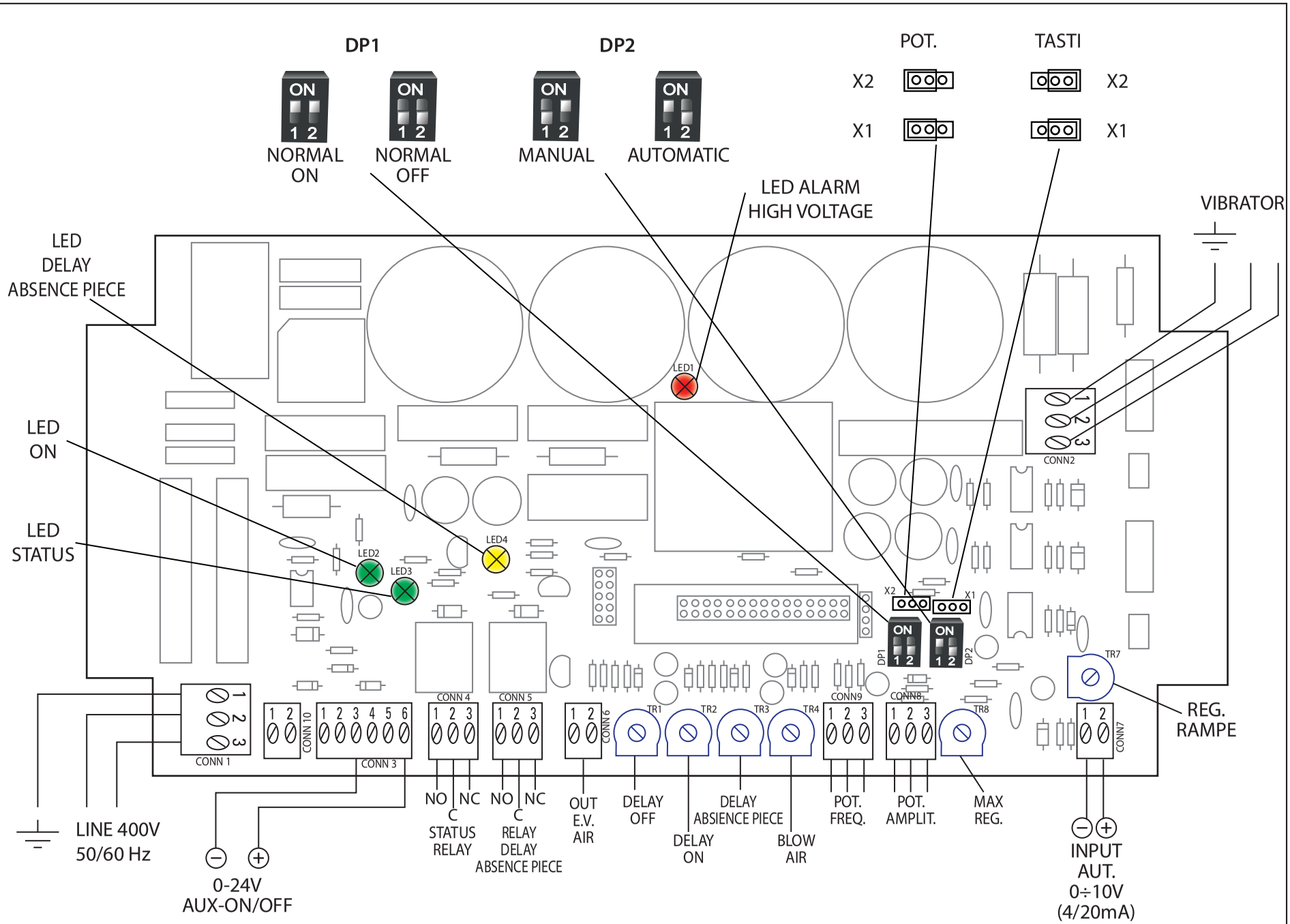
Available Versions

Type	Box	Colour	Dimensions	Code	Price €
FQ1PWM/4HC	Metallic	RAL 7035	265 x 130 x 90	PV FQ1PW Z3 HCD	
FQ1PWM/4HC	Circuit Din		265 x 120 x 50	PV FQ1PW D3 HCD	
FQ1PWM/4HC/B	Metallic	RAL 7035	265 x 130 x 90	PV FQ1PW Z3 HCB	
FQ1PWM/4HC/B	Circuit Din		265 x 120 x 50	PV FQ1PW D3 HCB	
FQ1PWM/4HC/BD	Metallic	RAL 7035	265 x 130 x 90	PV FQ1PW Z3 HBD	
FQ1PWM/4HC/BD	Circuit Din		265 x 120 x 50	PV FQ1PW D3 HBD	
FQ1PWM/4HC/K	Metallic	RAL 7035	265 x 130 x 90	PV FQ1PW Z3 HCK	

MP ELETTRONICA
QUALITY VIBRATION CONTROL

Description: **ELECTRONIC CIRCUIT FQ1 PWM/4HC**

CODE	REV	DATE	DRAFTSMAN	SHEET
DTFQ1PWM/4HC	00	07/19	E. PEDRAZZI	1/1



DIGITALE

Electronic Controller for Electromagnetic Vibratory Feeders

▶ FQ1 PWM/2(1)HC

12/15A | 115V 230V | DIGITAL

General

This controller is available in metallic box with two potentiometers and display, with keys and display, with a potentiometer without dispaly or in circuit with DIN35.

General Characteristics

Voltage 110/230V, 50/60 Hz • 3000/6000 vpm • Double Input ON/OFF • Soft/fast ramp • Manual Regulation amplitude/frequency (30/80Hz - 80/130Hz) • min/max • Limitation Max Output current • Line input with plug • Vibrator output with connector - Delay 8 sec max On/Off vibrator with sensor NPN/PNP or relay contact - Automatic Input from PLC 0/10V-4/20mA - Status relay

Applications

Digital regulation of linear and bowl feeder till 12/15 Amps - The FQ1 PWM/XHC allows optimizing operation of the vibratory feeder by searching for its resonance frequency (max performance) thereby eliminating its lengthy and difficult mechanical calibration.

Options

Customized label • Connector for vibrator • Frequency Meter.

Technical Specs

Feeding Tension:	115V or 230V ± 5% 50/60Hz
Consumption:	2,5 W max
Max Current:	12/15 A (RMS)
Min Load:	50 mA (RMS)
Vibration Frequency:	30/80Hz - 80/130Hz
Time of Ramp:	0.1 - 2 sec.
Input Sensor:	NPN/PNP or Free voltage contact
Automatic Input:	0/10V-4/20mA (with 470 Ohm)
On/Off:	free contact - 0/24 Vdc
Delay ON/OFF:	0/8 sec
Protection Degree:	IP65 in box (NEMA4-4X)
Storage Temperature:	-25°C./ + 80°C.
Operation Temperature:	-15°C / +45°C
Altitude:	till to 2000 meters
European Norms:	EMC CE
Warranty:	1 year (from date on circuit)



METALLIC BOX
FQ1 PWM/HCD
PV FQ1PW Z3 HCD
265x130x90



METALLIC BOX
FQ1 PWM/HCB
PV FQ1PW Z3 HCB
265x130x90



METALLIC BOX
FQ1 PWM/HCBD
PV FQ1PW Z3 CBD
265x130x90



METALLIC BOX
FQ1 PWM/HCBD
PV FQ1PW Z3 CBD
265x130x90

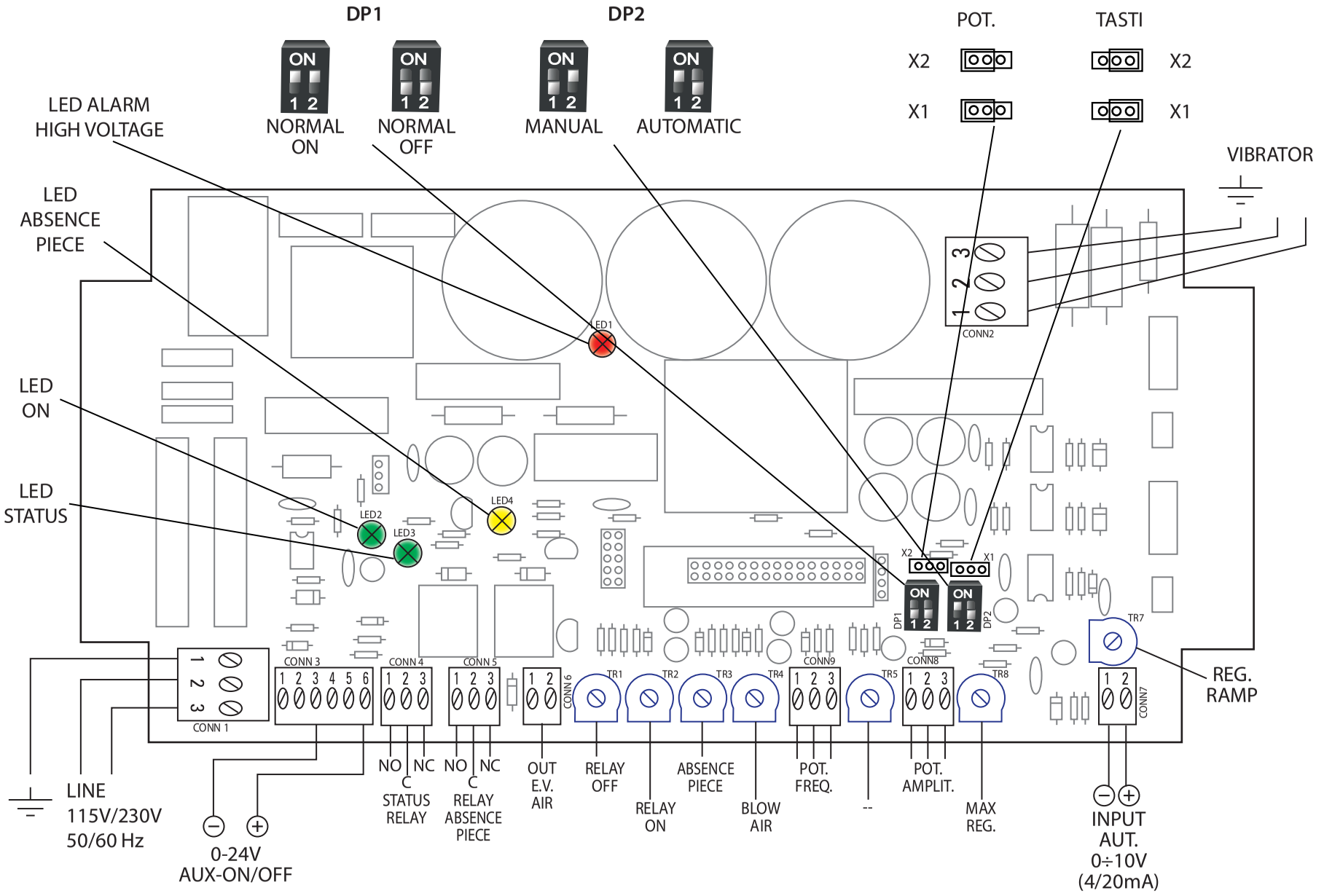
Available Versions

Type	Box	Colour	Dimensions	Code	Price €
FQ1PWM/2(1)HC	Metallic	RAL 7035	265 x 130 x 90	PV FQ1PW Z2(1) HCD	
FQ1PWM/2(1)HC	Circuit Din		265 x 120 x 50	PV FQ1PW D2(1) HCD	
FQ1PWM/2(1)HC/B	Metallic	RAL 7035	265 x 130 x 90	PV FQ1PW Z2(1) HCB	
FQ1PWM/2(1)HC/B	Circuit Din		265 x 120 x 50	PV FQ1PW D2(1) HCB	
FQ1PWM/2(1)HC/BD	Metallic	RAL 7035	265 x 130 x 90	PV FQ1PW Z2(1) HBD	
FQ1PWM/2(1)HC/BD	Circuit Din		265 x 120 x 50	PV FQ1PW D2(1) HBD	
FQ1PWM/2(1)HC/K	Metallic	RAL 7035	265 x 130 x 90	PV FQ1PW Z2(1) HCK	

MP ELETTRONICA
QUALITY VIBRATION CONTROL

Description: **ELECTRONIC CIRCUIT FQ1 PWM/2(1)/HC**

CODE	REV	DATE	DRAFTSMAN	SHEET
DTFQ1PWM/2(1)/HC	00	09/19	E. PEDRAZZI	1/1



DIGITALE

CROSS REFERENCE RF4 PWM FAMILY

Quiet-Powerful-Complete-Reliable	FAMILY RF4 PWM amplitude-frequency controller				FAMILY RF4 PWM NEW amplitude-frequency controller			
	RF4 STD PV RF4PW Z2 STD	**RF4/BASIC** PV RF4PW Z2 STB	**RF4/BD** PV RF4PW Z2 SBD	**RF4/K** PV RF4PW Z2 STK	**RF4 STN** PV RF4PW Z2 STN	**RF4/BN** PV RF4PW Z2 SBN	**RF4/BDN** PV RF4PW Z2 BDN	**RF4/KN** PV RF4PW Z2 SKN
Input voltage 110 or 230V Auto Detect - 50/60 Hz	110V or 230 V	110V or 230 V	110V or 230 V	110V or 230 V	80-265 V	80-265 V	80-265 V	80-265 V
Output Voltage 0...100V /0 ...205V	●	●	●	●	●	●	●	●
Vibration Amplitude regulation 0-100%	●	●	●	●	●	●	●	●
Mains Voltage compensation	●	●	●	●	●	●	●	●
Output current Max 5A	●	●	●	●	●	●	●	●
Limit Max Current 5A	—	—	—	—	●	●	●	●
Vibration Frequency Range	30/130 Hz	50/100 +/-12Hz	50/100 +/-12Hz	30/130 Hz	30/130 Hz	50/100 +/-12Hz	50/100 +/- 12Hz	30/130 Hz
Reg. Frequency 0/10V from PLC	—	—	—	—	●	—	—	—
Display (Amplitude/Frequency)	●	—	●	●	●	—	●	●
Setpoint value Pot, 0...10V, 0(4)...20mA	●	●	●	—	●	●	●	—
Setting U_{min} U_{max}	MAX	MAX	MAX	—	MIN/MAX	MIN/MAX	MIN/MAX	—
Soft start Adjustable 0-3 Sec	●	●	●	●	●	●	●	●
Sensor PNP/NPN supply 24V DC	●	●	●	●	●	●	●	●
Delay ON/OFF - PNP/NPN Sensor	0/10 s	0/10 s	0/10 s	0/10 s	0/10 s	0/10 s	0/10 s	0/10 s
Fill Level/overflow control delay	10 s	10 s	10 s	10 s	—	—	—	—
Ext. Enable 24 V DC, Switch Contact	●	●	●	●	●	●	●	●
Air Flow 24Vcc (delay 2 sec)	●	●	●	●	—	—	—	—
Status Signal Relay (250V, 1A) LED yellow	●	●	●	●	●	●	●	●
Sinewave current output	●	●	●	●	●	●	●	●
Resident Software by M.P.	●	●	●	●	●	●	●	●
Conformity CE, RoHS	●	●	●	●	●	●	●	●
Protection class DIN35 IP00-IP20 Box-IP65	●	●	●	No DIN35	●	●	●	No DIN35
Lebel custom available (on request)	●	●	●	●	●	●	●	●
Dim. (mm) - DIN35 available	130x130x95	130x130x95	130x130x95	130x130x95	130x130x95	130x130x95	130x130x95	130x130x95

SINCE 1988

MP ELETTRONICA
QUALITY VIBRATION CONTROL

3D ON REQUEST

UNI EN ISO 9001:2015 - CERT.9105 MPEL

RF4 STD PV RF4PW Z2 STD

RF4 STN PV RF4PW Z2 STN



RF4 BD PV RF4PW Z2 SBD

RF4 BDN PV RF4PW Z2 BDN



RF4 BASIC PV RF4PW Z2 STB

RF4 BN PV RF4PW Z2 SBN



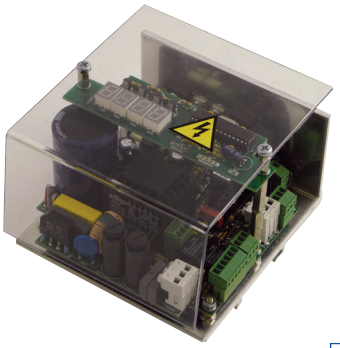
RF4 K PV RF4PW Z2 STK

RF4 KN PV RF4PW Z2 SKN



RF4 STD PV RF4PW Z2 STD

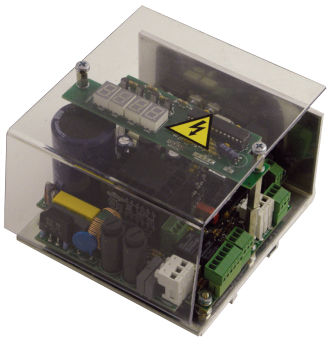
RF4 STN PV RF4PW Z2 STN



DIN35 IP00 IP20

RF4 BD PV RF4PW Z2 SBD

RF4 BDN PV RF4PW Z2 BDN



DIN35 IP00 IP20

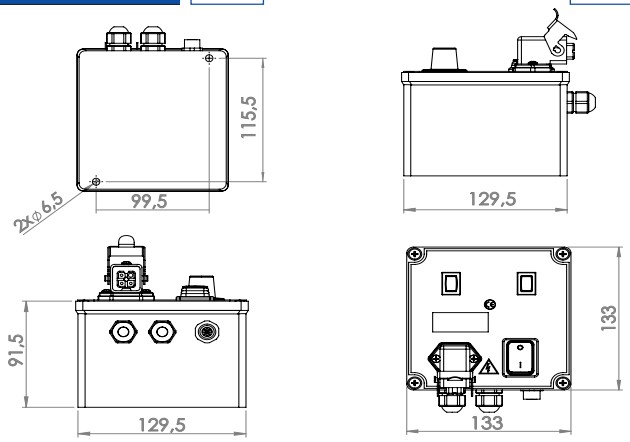
RF4 BASIC PV RF4PW Z2 STB

RF4 BN PV RF4PW Z2 SBN



DIN35 IP00 IP20

Dimensions IP65 3D



Electronic Controller for Electromagnetic Vibratory Feeders

▶ RF4 PWM

5A | 115V 230V | 0/10V 4/20mA

General

Microprocessor digital professional controller with visualized frequency (optional). This controller is available in metallic box with two potentiometers and display, with keys and display, with a potentiometer without dispaly or in circuit with DIN35.

General Characteristics

Voltage (115V) 230 V, 50-60 Hz • Double Input ON/OFF • Soft/fast ramp • Manual Regulation Amplitude/Frequency (30/80Hz - 80/130Hz) • 3000/6000 vpm • Line input with schuko plug • Vibrator output with connector. Delay 4 sec max ON/OFF vibrator with sensor NPN/PNP or relay contact - alarm absence pieces (8 sec.) - Air blow. Automatic Input from PLC 0/10V-4/20mA - Status Relay

Applications

Digital regulation of linear and bowl feeder till 5 Amps. The RF4 PWM allows optimizing operation of the vibratory feeder by searching for its resonance frequency (max performance) thereby eliminating its lengthy and difficult mechanical calibration.

Options

Customized label • Connector for vibrator • Display Frequency Meter • Available Frequency Regulation by inside trimmer • Frequency regulation with knob blocked or with keys.

Technical Specs

Feeding Tension:	115 V or 230 V ± 10% 50/60Hz
Consumption:	1,5 W max
Max Current:	5 A (RMS)
Min Load:	50 mA (RMS)
Vibration Frequency:	30 ÷ 130HZ
Time of Ramp:	0/2 sec.
Input Sensor:	NPN/PNP or Free voltage contact
Automatic Input:	0/10V-0/20mA (with 470 Ohm)
On/Off:	free voltage contact - signal voltage 0/24Vcc
Delay ON/OFF:	0/4 sec
Protection Degree:	IP65 in box (NEMA 4/4X) (POT. ONLY)
Storage Temperature:	-15°C./ + 80°C.
Operation Temperature:	–5°C / +55°C
Altitude:	till to 2000 meters
European Norms:	EMC CE
Warranty:	1 year (from date on circuit)



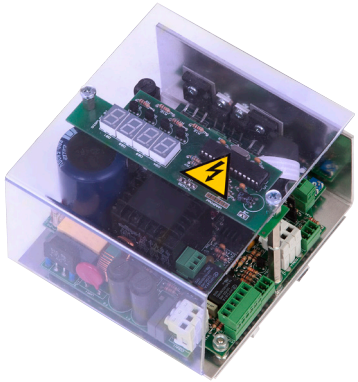
METALLIC BOX
RF4 PWM
PV RF4PW Z2 STD
133x133x91



METALLIC BOX
RF4 PWM
PV RF4PW Z2 STK
133x133x91



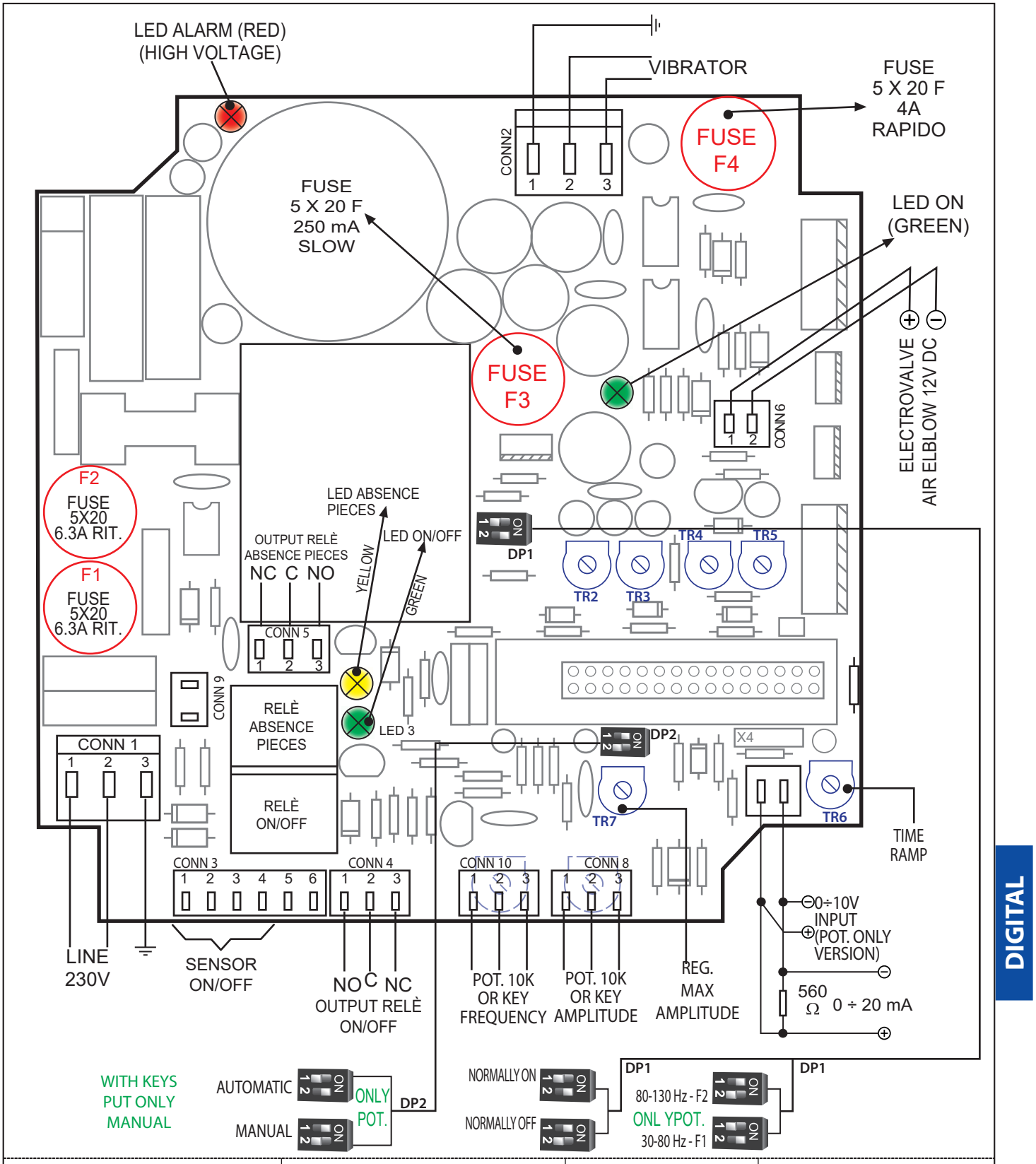
METALLIC BOX
RF4 PWM
PV RF4PW Z2 STB
133x133x91



CIRCUIT DIN35
PV RF4PW D2 STD

Available Versions

Type	Box	Colour	Dimensions	Code	Price €
RF4PWM/B	Metallic	RAL 7035	133 x 133 x 91	PV RF4PW Z2 STB	
RF4PWM/B	Circuit DIN35		120 x 126 x 90	PV RF4PW D2 STB	
RF4PWM	Metallic	RAL 7035	133 x 133 x 91	PV RF4PW Z2 STD	
RF4PWM	Circuit DIN35		120 x 126 x 90	PV RF4PW D2 STD	
RF4PWM/BD	Metallic	RAL 7035	133 x 133 x 91	PV RF4PW Z2 SBD	
RF4PWM/BD	Circuit DIN35		120 x 126 x 90	PV RF4PW D2 SBD	
RF4PWM/K	Metallic	RAL 7035	133 x 133 x 91	PV RF4PW Z2 STK	



DIGITAL

MP ELETTRONICA
QUALITY VIBRATION CONTROL

Description: **CIRCUIT RF4 PWM/K**

CODE	REV	DATE	DRAFTSMAN	PAGE
DTRF4PWM	03	11/13	E. PEDRAZZI	1/1

Electronic Controller for Electromagnetic Vibratory Feeders

▶ RF4 PWM/N

5A | 85/250V | 0/10V 4/20mA

General

Microprocessor digital professional controller with visualized frequency (optional). This controller is available in metallic box with two potentiometers and display, with keys and display, with a potentiometer without dispaly or in circuit with DIN35.

General Characteristics

Voltage 85/250V, 50-60 Hz • Double Input ON/OFF • Soft/fast ramp • Manual Regulation Amplitude/Frequency (30/80Hz - 80/130Hz) • 3000/6000 vpm • Line input with schuko plug • Vibrator output with connector. Delay 6 sec max ON/OFF vibrator with sensor NPN/PNP or relay contact - Automatic Input from PLC 0/10V-4/20mA - Status Relay

Applications

Digital regulation of linear and bowl feeder till 5 Amps. The RF4 PWM allows optimizing operation of the vibratory feeder by searching for its resonance frequency (max performance) thereby eliminating its lengthy and difficult mechanical calibration.

Options

Customized label • Connector for vibrator • Display Frequency Meter • Available Frequency Regulation by inside trimmer • Frequency regulation with knob blocked or with keys.

Technical Specs

Feeding Tension:	85/250V - 50/60Hz
Consumption:	1,5 W max
Max Current:	5 A (RMS)
Fuses:	double 5A F 250V 5x20 H 1500A
Min Load:	50 mA (RMS)
On/Off:	free voltage contact - signal voltage 0/24Vcc
Output Frequency:	50 ÷ 100Hz ± 12Hz
Automatic Input:	0/10V-4/20mA (with 470 Ohm)
Input Sensor:	NPN/PNP or Free voltage contact
Delay ON/OFF:	0/6 sec
Current Limit:	5 Amp.
Storage Temperature:	-40°C / + 80°C.
Operation Temperature:	-15°C / +45°C
Range of relative humidity:	80% till to 31°C
Altitude:	till to 2000 meters
European Norms:	EMC CE
Protection Degree:	IP65 in box (NEMA 4/4X) (POT. ONLY)
Warranty:	1 year (from date on circuit)



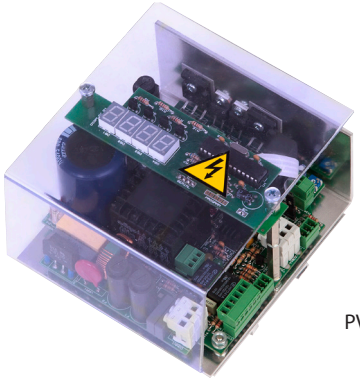
METALLIC BOX
RF4 PWM
PV RFPBN Z2 SBN
133x133x91



METALLIC BOX
RF4 PWM
PV RFBDN Z2 STN
133x133x91



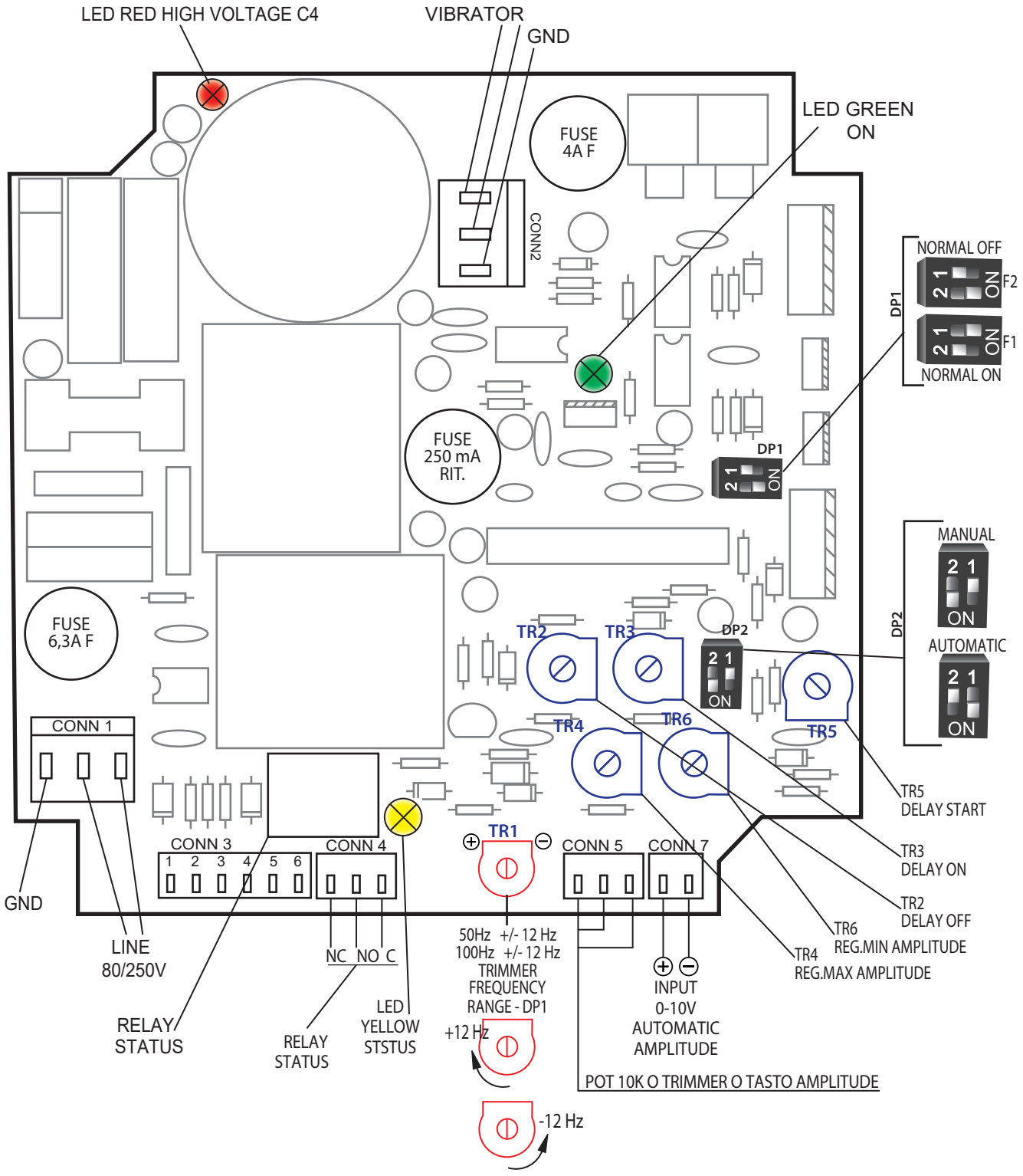
CIRCUIT DIN35
PV RFPBN D2 SBN
120x130x90

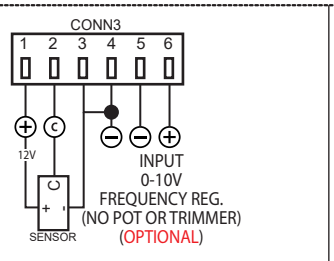


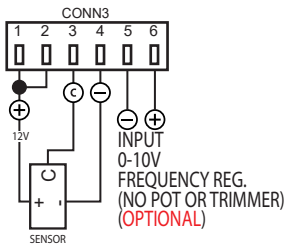
CIRCUIT DIN35
PV RFBDN D2 STN
120x130x90

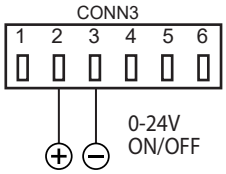
Available Versions

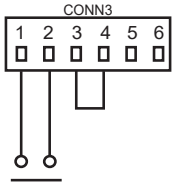
Type	Box	Colour	Dimensions	Code	Price €
RF4PWM/BN	Metallic	RAL 7035	133 x 133 x 91	PV RF4PW Z2 SBN	
RF4PWM/BN	Metallic	RAL 7035	133 x 133 x 91	PV RF4PW Z2 BDN	
RF4PWM/BDN	Circuit DIN35		120 x 130 x 90	PV RF4PW D2 SBN	
RF4PWM/BDN	Circuit DIN35		120 x 130 x 90	PV RF4PW D2 BDN	











DIGITALE

MP ELETTRONICA
QUALITY VIBRATION CONTROL

Description: **ELECTRONIC CIRCUIT RF4 PWM - BN**

CODE	REV	DATE	DRAFTSMAN	SHEET
DTRF4PWMBN	03	11/13	E. PEDRAZZI	1/1

Module for Automated Loading Systems (linear - circular - vibratory bowl feeder)

MCP01 PV MCP01 Z2 STD 10A RMS Max



Protection		Box
IP55		Aluminum 100x225x210

MCP02 PV MCP02 Z2 STD 10A RMS Max



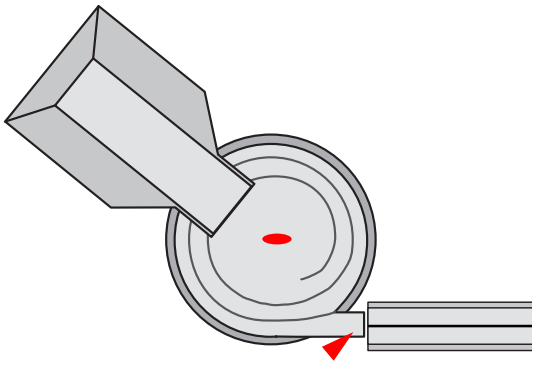
Protection		Box
IP55		Aluminum 100x225x210

MCP03 PV MCP03 Z2 STD 10A RMS Max



Protection		Box
IP65		Aluminum 100x225x210

APPLICATIONS



MCP01LT PV MCP01 Z2 SLT 6A RMS Max



OPTIONAL



Protection		Box
IP65		Aluminum 100x250x105

MCP02LT PV MCP02 Z2 SLT 6A RMS Max



OPTIONAL



Protection		Box
IP55		Aluminum 100x250x105

MPI ELETTRONICA
QUALITY VIBRATION CONTROL

3D ON REQUEST

UNI EN ISO 9001:2015 - CERT.9105 MPEL

Cross reference : Digital Amplitude/Frequency Controller with Microprocessor

	MCP01	MCP02	MCP03	MCP01 LITE	MCP02 LITE
Voltage (50/60 Hz)	80/250	80/250	80/250	80/250	80/250
Amps	15	5/10	3/6/3	6	6/6
ON/OFF	●	●	●	●	●
Sensor NPN/PNP	●	●	●	●	●
0/10V- 0/20 mA	●	●	●	●	●
Amplitude/ Frequency regulation	KEYBOARD	KEYBOARD	KEYBOARD	KEYBOARD	KEYBOARD
Output Hz 50/100	30/80 80/130	30/80 80/130	30/80 80/130	5/200	5/200
Relay ON	●	●	●	●	●
Status Relay	●	●	●	●	●
EMC- CE	●	●	●	●	●
IP	55	55	55	55	55
Dimenzions Box	100x225x210	100x225x210	100x225x210	100x250x105	100x250x105
Photo	1	2	3	4	5

All models are stabilized

Digital Amplitude/Frequency Control for Linear and Circular Vibrators, 4/6/12/16 Amp Versions

Other voltages available on request

Use of 50Hz vibrators in 60Hz markets or vice versa


1


2


3


4


5


6

Module for automatic loading systems (linear - circular - vibrating hopper)

MCP01

Amp. 6/8/10

115V 230V

option Modbus

General

This Module **MCP01** can be used for the automatic driving of a system made up by a vibratory hopper, cylindrical vibratory feeder, linear vibratory feeder or conveyor belt with 2 PNP sensor, output blow air, alarm time out.

General Characteristics

The **MCP01** module allows you to adjust the vibration amplitude of up to 2 vibrating systems • select 3000/6000 V/m • ramp time • ON/OFF delay of the vibrator with a PNP sensor • air blow • part-flow loss time with alarm. The total maximum current is 16A.

Applications

Control of vibrating hopper, circular vibrator or linear vibrator, with PNP level sensor in the circular or linear unit and PNP overflow sensor on the linear unit (both with time delay), and air blow for part-flow loss with alarm.

Options

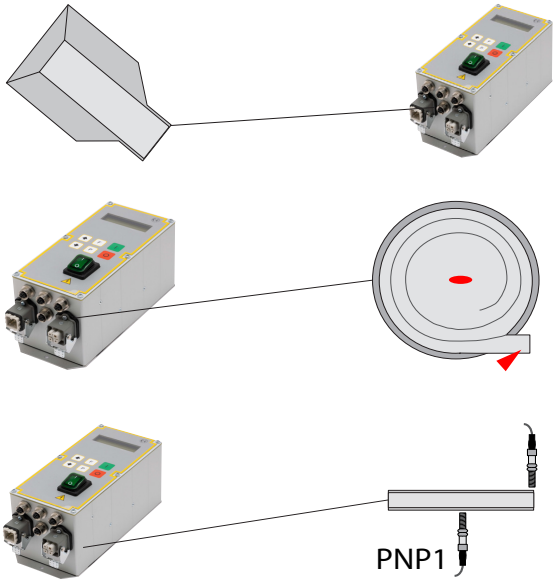
Personalized label • Connector for vibrator • SW custom.



METALLIC BOX
MCP01
PV MCP01 Z2 STD
100x225x210

Technical Specs

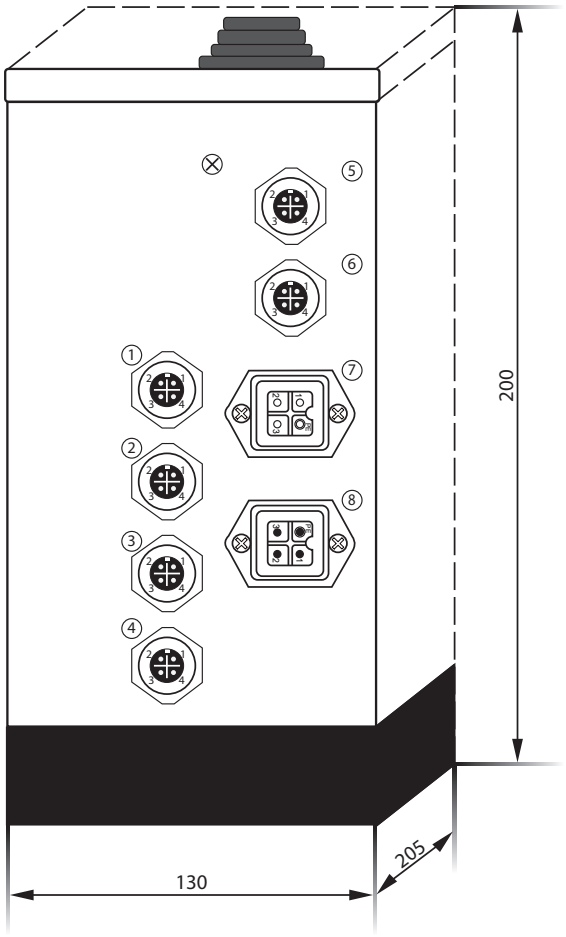
Supply Voltage:	(115V)230V +/- 5% 50/60Hz
Current Max:	16A
Fuses:	6,3A F 250V 5x20 H 1500 A (EN 627-2 CEI)
Min. Load:	50 mA (RMS)
Frequency of Vibration:	3000/6000 V/min. (50Hz)
Time of Ramp:	0,2 sec. or 2 sec. (modifiable)
Regolation Min.:	80V +/- 30%
Regolation Max:	200V - 30%
Delay T1/T2:	0-10 sec.
Alarm Time:	0-15 sec.
Sensor Input:	optoisolated NPN/PNP
Degree of pollution:	2
Position of Assemblage:	horizontal or vertcal
Degree of Protection:	IP54 in box (only circuit IP00)
Temperature of Storage:	-15 °C / + 80 °C
Temperature of Operation:	-5 °C / + 45 °C
Range of Relative humidity:	80% till to 31°C
Installation Class:	II
Altitude:	till to 2000 meters
European Norms:	EMC CE
Guarantee:	1 year (from date on circuit)



Available Versions

Type	Box	Colour	Dimensions	Code	Price €
MCP01	Metallic	GREY	100 x 225 x 210	PV MCP01 Z2 STD	

DIMENSIONS/CONNECTIONS





M12 CONNECTORS

1 SENSOR 1

1	*+24V*
2	
3	*GND*
4	*INPUT*
5	

6 SENSOR 4

1	*+24V*
2	*STATUS CH1*
3	*GND*
4	*INPUT FC4*
5	*EV ON/OFF*

2 SENSOR 3

1	*+24V*
2	
3	*GND*
4	*INPUT*
5	

7 CHANNEL 1

1	VIBRATOR
2	VIBRATOR
3	
PE	GND

3 ENABLE/CHANNELS

1	*+24V*
2	*CH1*
3	*GND*
4	
5	

8 LINEA 230V

1	L
2	N
3	
PE	GND

4 OUTPUT 1 - AIR JET

1	*+24V Out Air*
2	*Status*
3	*0 V*
4	*+24V Out 2*
5	

1	
2	
3	
PE	

5 TIME OUT/COUNTER

1	*+24V TO CH1*
2	*OUT COUNTER 24V*
3	*0 V*
4	
5	

1	
2	
3	
PE	

STANDARD MODEL

Digital Control MCP02 10Amp

M12 Connectors :

Input: *1°/3°/4° sensor PNP*

Input: *enable +24V – free-contact voltage*

Output: *Out1/Out2 signal +24V*

Output: *status +24V*

Output: *blow air +24V*

Output: *signal +24V time out*

NORMS OF GUARANTEE

1) The controller is guaranteed for a period of 1 year from the date shown on the inside.

2) The guarantee covers the free replacement or repair of components parts that are defective at origin for manufacturing.

3) The guarantee is not valid for damage caused accidentally due to improper use or negligence and in case of alterations or repair carried out by unauthorized persons.

Design and specifications could be subjected to change without notice.

Module for automatic loading systems (linear - circular - vibrating hopper)

MCP02

Amp. 6/8/10

115V 230V

option Modbus

General

The MCP02 module allows automatic operation of a feeding system composed of: vibrating hopper, circular vibrator, linear vibrator, with two PNP sensors, air-blow output, and part-flow alarm, with all parameters selectable via the keypad.

General Characteristics

The MCP02 module allows adjustment of the vibration amplitude for up to 2 vibrating systems – selection of 3000/6000 V/m – ramp time – ON/OFF delay of the vibrator via PNP sensor – air blow – part-flow loss time with alarm. The total maximum currents are 10 A, with 3 A for the linear vibrator, 6 A for the circular vibrator, and 3 A for the vibrating hopper.

Applications

Control of vibrating hopper, circular vibrator, or linear vibrator, with PNP level sensor in the circular or linear unit and PNP overflow sensor on the linear unit (both timed), plus air blow for part-flow loss with alarm.

Options

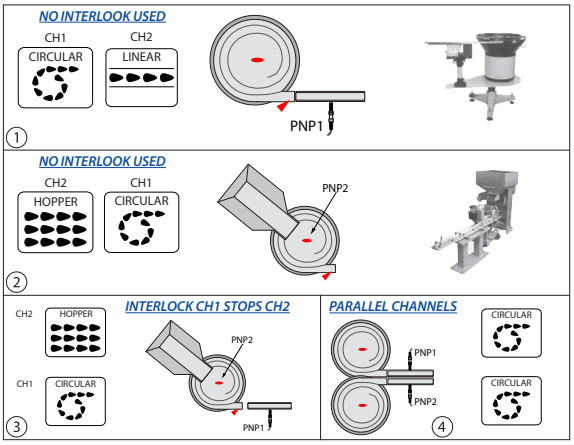
Personalized label • Connector for vibrator • SW custom.

Technical Specs

Supply Voltage:	85/250V +/- 5% 50/60Hz
Current Max:	3A - 6A - 3A (RMS)
Fuses:	6,3A F 250V 5x20 H 1500 A (EN 627-2 CEI)
Min. Load:	50 mA (RMS)
Frequency of Vibration:	3000/6000 V/min. (50Hz)
Time of Ramp:	0/10 sec.
Regolation Min.:	80V +/- 30%
Regolation Max:	200V - 30%
Delay T1/T2:	0-10 sec.
Alarm Time:	0-15 sec.
Sensor Input:	optoisolated NPN/PNP
Degree of pollution:	2
Position of Assemblage:	horizontal or vertcal
Degree of Protection:	IP55
Temperature of Storage:	-15 °C / + 80 °C
Temperature of Operation:	-5 °C / + 45 °C
Range of Relative humidity:	80% till to 31°C
Installation Class:	II
Altitude:	up to 2000 meters
European Norms:	EMC CE



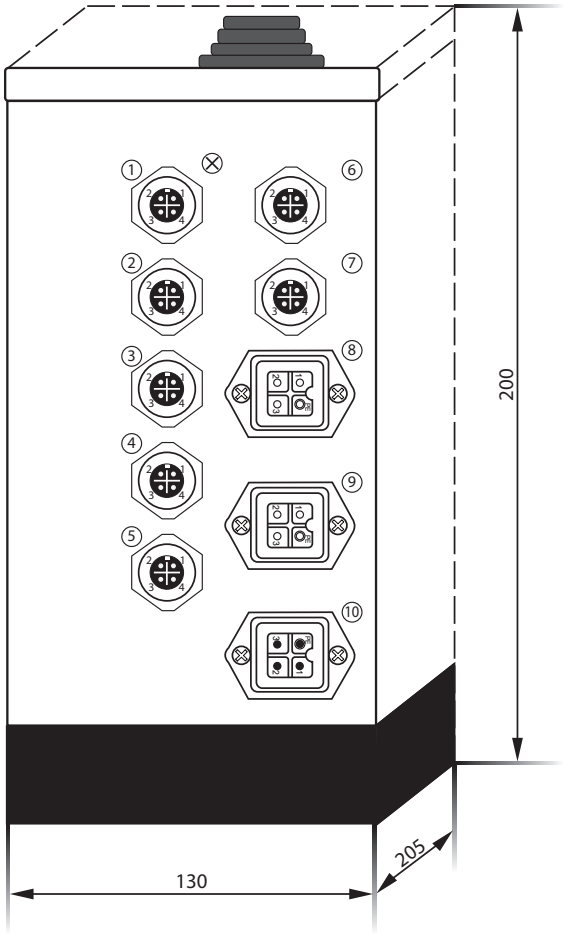
METALLIC BOX MCP02
PV MCP02 Z2 STD
100x225x210



Available Versions

Type	Box	Colour	Dimensions	Code	Price €
MCP02	Metallic	GREY	100 x 225 x 210	PV MCP02 Z2 STD	

DIMENSIONS/CONNECTIONS





M12 CONNECTORS

1 SENSOR 1

1	*+24V*
2	
3	*GND*
4	*INPUT*
5	

2 SENSOR 2

1	*+24V*
2	
3	*GND*
4	*INPUT*
5	

3 SENSOR 3

1	*+24V*
2	
3	*GND*
4	*INPUT*
5	

4 ENABLE/CHANNELS

1	*+24V*
2	*CH1*
3	*GND*
4	*CH2*
5	

5 OUTPUT 1-AIR JET

1	*+24V Out Air*
2	*Status*
3	*0V*
4	*+24V Out 2*
5	

6 TIME OUT/COUNTER

1	*+24V TO CH1*
2	*OUT COUNTER 24V*
3	*0V*
4	*+24V TO CH2*
5	

7 SENSOR 4

1	*+24V*
2	*STATUS CH1*
3	*GND*
4	*INPUT*
5	*STATUS CH2 - EV ON/OFF*

8 CHANNEL 2

1	VIBRATOR
2	VIBRATOR
3	
PE	GND

9 CHANNEL 1

1	VIBRATOR
2	VIBRATOR
3	
PE	GND

10 LINE 230V

1	L
2	N
3	
PE	GND

STANDARD MODEL

Digital Control MCP02 10Amp

M12 Connectors :

Input: *1°/2°/3°/4° sensor PNP*

Input: *enable +24V – free-contact voltage*

Output: *Out1/Out2 signal +24V*

Output: *status +24V*

Output: *blow air +24V*

Output: *signal +24V time out*

NORMS OF GUARANTEE

1) The controller is guaranteed for a period of 1 year from the date shown on the inside.

2) The guarantee covers the free replacement or repair of components parts that are defective at origin for manufacturing errors.

3) The guarantee is not valid for damage caused accidentally due to improper use or negligence and in case of alterations or repair carried out by unauthorized persons.

Design and specifications could be subjected to change without notice.

Module for automatic loading systems (linear - circular - vibrating hopper)

MCP03

Amp. 6/8/10 | 115V 230V | IP 55 | option Modbus

General

The MCP12 module enables automatic operation of a feeding system consisting of a vibrating hopper, circular vibrator, and linear vibrator, with two PNP sensors, air-blow output, and part-flow loss alarm, with all parameters selectable via the keypad.

General Characteristics

The MCP12 module allows adjustment of the vibration amplitude for up to three vibrating systems – selection of 3000/6000 V/m – ramp time – ON/OFF delay of the vibrator via PNP sensor – air blow – part-flow loss time with alarm. The total maximum currents are 10A, with 3A for the linear vibrator • 6A for the circular vibrator • 3A for the vibrating hopper.

Applications

Control of vibrating hopper, circular vibrator, and linear vibrator, with PNP level sensor in the circular unit and PNP overflow sensor on the linear unit (both timed), plus air blow for part-flow loss with alarm.

Options

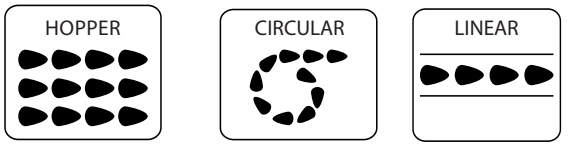
Personalized label • Connector for vibrator • SW custom.

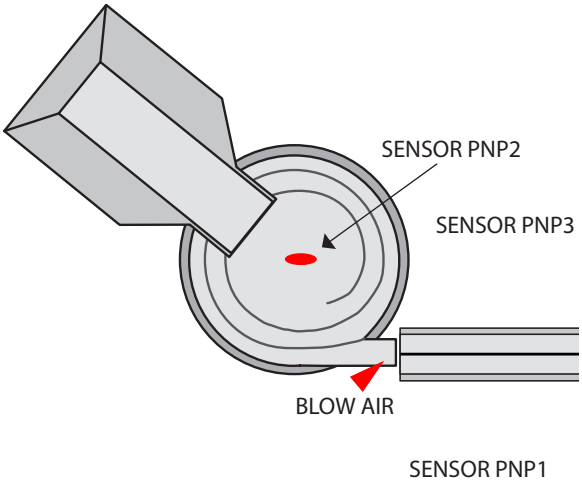
Technical Specs

Supply Voltage:	(115V) 230V ± 5% 50/60Hz
Current Max:	3A - 6A - 3A (RMS)
Fuses:	6,3A F 250V 5x20 H 1500 A (EN 627-2 CEI)
Min. Load:	50 mA (RMS)
Frequency of Vibration:	3000/6000 V/min. (50Hz)
Time of Ramp:	0,2 sec. or 2 sec. (modifiable)
Regolation Min.:	80V +/- 30%
Regolation Max:	200V - 30%
Delay T1/T2:	0-10 sec.
Alarm Time:	0-15 sec.
Sensor Input:	optoisolated NPN/PNP
Degree of pollution:	2
Position of Assemblage:	horizontal or vertcal
Degree of Protection:	IP54 in box (only circuit IP00)
Temperature of Storage:	-15 °C / + 80 °C
Temperature of Operation:	-5 °C / + 45 °C
Range of Relative humidity:	80% till 31°C
Installation Class:	II
Altitude:	till 2000 meters
European Norms:	EMC CE



METALLIC BOX
MCP12
PV MCP12 Z2 STD
100x225x210

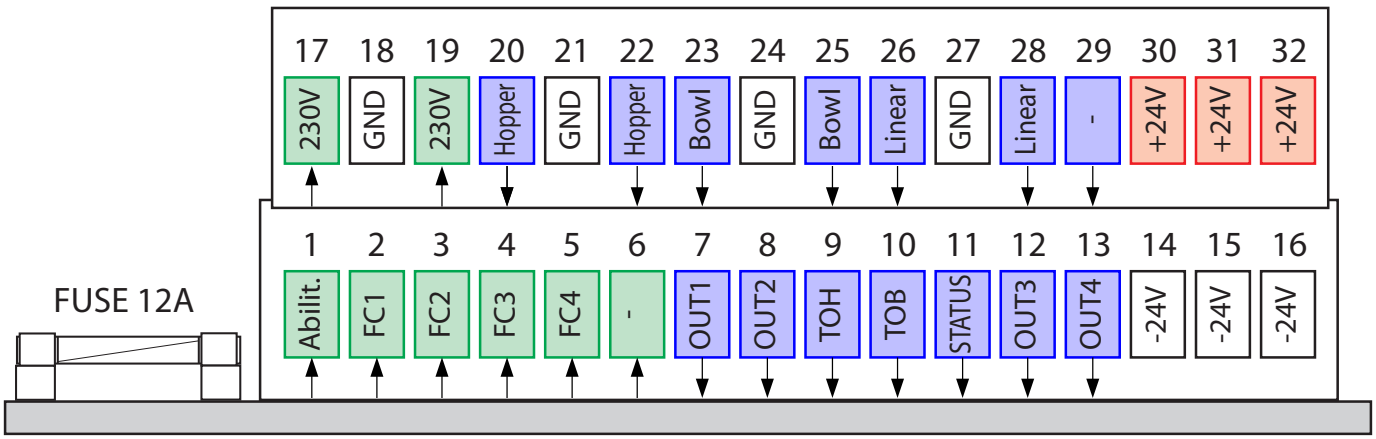




Available Versions

Type	Box	Colour	Dimensions	Code	Price €
MCP03	Metallic	GREY	130 x 225 x 210	PV MCP12 Z2 STD	

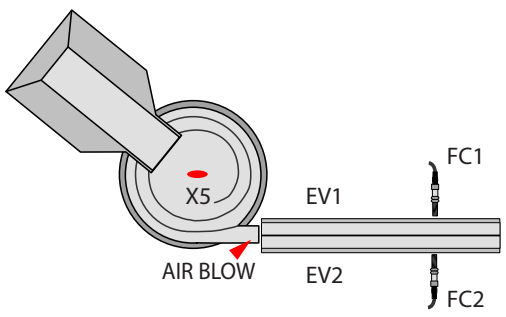
MORSETTIERA MR1-MR2



1	Enable	17	230V } LINE
2	FC1 - Sensor 1	18	GND } LINE
3	FC2 - Sensor 2	19	230V } LINE
4	FC3 - Sensor 3	20	Hopper } Hopper
5	FC4 - optional	21	GND } Hopper
6	Input 6	22	Hopper } Hopper
7	Out 1 - Air Blow	23	Circular Vibrator
8	Out 2 - Piece Presence	24	GND
9	TOH - Time Out Hopper	25	Circular Vibrator
10	TOB - Time Out Circular	26	Linear Vibrator } Linear
11	Stato +24V	27	GND } Linear
12	Out 3 - optional	28	Linear Vibrator } Linear
13	Out 4 - optional	29	Output 8 - optional
14	-24V	30	+24V
15	-24V	31	+24V
16	-24V	32	+24V

MDL/MCP

Menù : ALT MODE>YES (Circular operation with linear dual-track)



FC1	FC2	EV1	EV2	X5
0	0	0	0	1
1	0	1	0	1
0	1	0	1	1
1	1	1	1	0

Module for Automatic Loading Systems (Linear - Circular - Vibrating Hopper)

MCP01/LT

Amp. 6/8/10 | 115V 230V | SIND3

NEW



METALLIC BOX MCP01
PV MCP01 Z2 STD
100x250x105

General

The **MCP01** module allows the automatic operation of a feeding system composed of: Vibrating Hopper, Circular Vibrator, Linear Vibrator, with two PNP sensors, air blow output, piece flow absence alarm with all parameters selectable from the keyboard.

General Characteristics

The **MCP01** module allows you to adjust the vibration amplitude for up to 2 vibrating systems • Select 3000/6000 V/m • Ramp time • ON/OFF delay of the vibrator with PNP sensor • Air blow • Piece flow absence time with alarm . The total maximum currents are 10A total 3A for Linear Vibrator 6A for Circular Vibrator 3A for Vibrating Hopper.

Applications

Control of Vibrating Hopper, Circular Vibrator, or Linear Vibrator, Circular Vibrator, with PNP level sensor in Circular or Linear and PNP overflow sensor on the linear (both timed), air blow for piece flow absence with alarm.



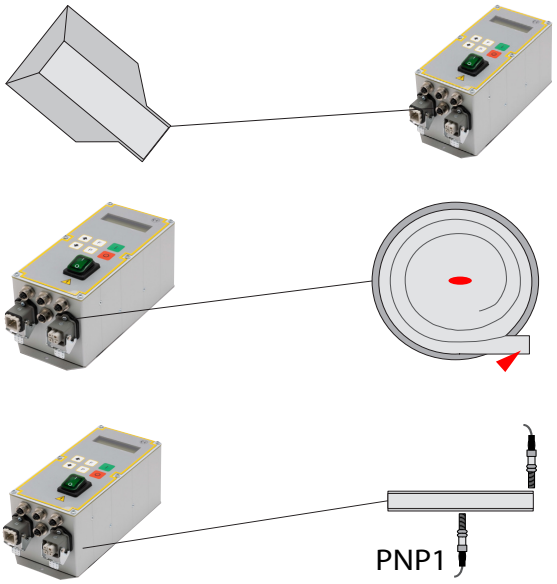
SENSOR SIND3
PV SIND3 A2 STD

Options

Customized front panel • Connector for vibrators • Customized software.

Technical Specs

Power Supply Voltage:	(115V) 230V ± 5% 50/60Hz
Consumption:	1,5W max
Max Current:	3A - 6A - 3A (RMS)
Minimum Load:	50 mA (RMS)
Vibration Frequency:	3000/6000 vib/min. (50Hz)
Ramp Time:	0/10 sec.
Min./Max. Adjustment:	0/210V
On/Off:	0-30 sec.
Blow Delay:	0/10 sec.
Piece Flow Absence Time:	30/180 sec.
Sensor Inputs:	Optoisolators
Sensors:	PNP 24V- NO/NC
Operating Temperature:	0/50° C
Relative Humidity Range:	80% up to 31°C
Altitude:	up to 2000 meters
Protection Degree:	IP55
European Standards:	EMC CE
Warranty:	12 months (from the date on the circuit).



Available Versions

Type	Box	Colour	Dimensions	Code	Price
MCP01/LT	Metallic	GRAY	100 x 250 x 105	PV MCP01 Z2 STD	

MCP01/LT

GENERAL

This module **MCP01/LT** can be used for the automatic driving of a system made up of: 1 vibrating system, with 1 **PNP** sensors, air blow output, absence pieces alarm, production counter, password, user menu with all parameters selectable from the keyboard.

MCP01/LT allows you to adjust the vibration amplitude of 1 Vibrating system • 3000/6000 Vpm • Ramp time • delay ON/OFF with PNP sensor • Air jet • Alarm absence pieces. High/Low speed function.

The total maximum current is **8A**.

- ☑ 1 PNP sensor inputs for the flow control of the material
- ☑ 2 24v outputs for air-jet, counter, Time Out channel
- ☑ 1 output status+ 24V (Power ON-enable ON), channel status CH1.
- ☑ 1 enable input 24V or with free-voltage contact.
- ☑ 1 power outputs 0/210V for adjusting the vibrator.



PARTICULAR INSTRUCTION

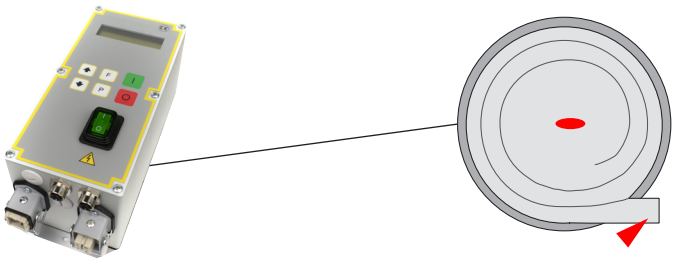
MCP01/LT Contoller has the output of 1 channel for the control and management of systems usually made up of 1 vibrator.

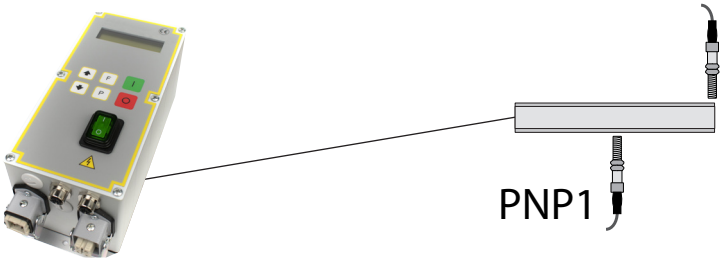
Up to 1 sensors can be used :

-FC1

FC1 is usually the sensor placed on the linear, to stop the (CH1) in case of overflow.







FUNCTIONS

Linear or Circular (CH1)

Feeder Speed
Invert Enable
Start Ramp
Stop Ramp
Vibration Limit max/min
Vibrating Frequency
50/100 Hz(60/120Hz)

Sensor PNP 1 Linear
Invert sensor 1
Delay ON
Delay OFF
Time out (absence pieces)

Output EV
Output 1: Air-Jet ON
Delay OFF Air-Jet

Speed Setting:
0/10V
0/20 mA
Key Board

Module for Automatic Loading Systems (Linear - Circular - Vibrating Hopper)

MCP02/LT

Amp. 6/8/10 | 115V 230V | SIND3

NEW

General

The **MCP02** module allows the automatic operation of a feeding system composed of: Vibrating Hopper, Circular Vibrator, Linear Vibrator, with two PNP sensors, air blow output, piece flow absence alarm with all parameters selectable from the keyboard.

General Characteristics

The **MCP02** module allows you to adjust the vibration amplitude for up to 2 vibrating systems • Select 3000/6000 V/m • Ramp time • ON/OFF delay of the vibrator with PNP sensor • Air blow • Piece flow absence time with alarm . The total maximum currents are 10A total 3A for Linear Vibrator 6A for Circular Vibrator 3A for Vibrating Hopper.



METALLIC BOX
MCP02
PV MCP02 Z2 STD
100x250x105

Applications

Control of Vibrating Hopper, Circular Vibrator, or Linear Vibrator, Circular Vibrator, with PNP level sensor in Circular or Linear and PNP overflow sensor on the linear (both timed), air blow for piece flow absence with alarm.



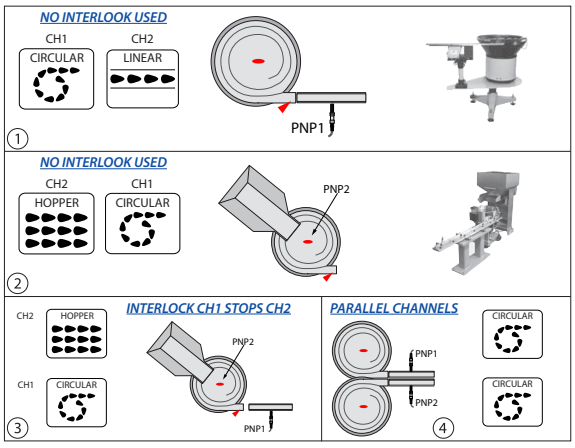
SENSOR SIND3
PV SIND3 A2 STD

Options

Customized front panel • Connector for vibrators • Customized software.

Technical Specs

Power Supply Voltage:	(115V) 230V ± 5% 50/60Hz
Consumption:	1,5W max
Max Current:	3A - 6A - 3A (RMS)
Minimum Load:	50 mA (RMS)
Vibration Frequency:	3000/6000 vib/min. (50Hz)
Ramp Time:	0/10 sec.
Min./Max. Adjustment:	0/210V
On/Off:	0-30 sec.
Blow Delay:	0/10 sec.
Piece Flow Absence Time:	30/180 sec.
Sensor Inputs:	Optoisolators
Sensors:	PNP 24V- NO/NC
Operating Temperature:	0/50° C
Relative Humidity Range:	80% up to 31°C
Altitude:	up to 2000 meters
Protection Degree:	IP55
European Standards:	EMC CE
Warranty:	12 months (from the date on the circuit).



Available Versions

Type	Box	Colour	Dimensions	Code	Price
MCP02/LT	Metallic	GRAY	100 x 250 x 105	PV MCP02 Z2 STD	

MODULE FOR ELECTROMAGNETIC VIBRATORS LINEAR - CIRCULAR – HOPPER
MCP02/LT

GENERAL

This Module **MCP02/LT** can be used for the automatic driving of a system made up by a linear vibratory with circular and bowl feeder or hopper, with 4 **PNP** sensor, output blow air, Alarm Time Out, production counter , password, user menu with all parameters selectable by keys.
MCP02/LT allows you to adjust the vibration amplitude up to two vibrating systems
• 3000/6000 V/m • ramp time • Delay ON/OFF with PNP sensor • Air-Jet • Alarm absence pieces. High/low speed function.
Total max current **8A**: Vibrating channel 1 max **6A** – vibrating channel 2 max **2A**.

- ☑ 2 sensor inputs PNP for track and jet control, presence signal (max 20 mA), counting pieces.
- ☑ 3 output 24V for air-jet, presence piece (max 100mA), Counter, Time Out channel and EV ON/OFF.
- ☑ 1 Output status +24V (Power ON - Enable ON), channel status CH1 and CH2.
- ☑ 2 Enable input 24VDC or volt-free contacts for each channel.
- ☑ 2 power outputs 0/210V for the 2 vibrators adjustment.

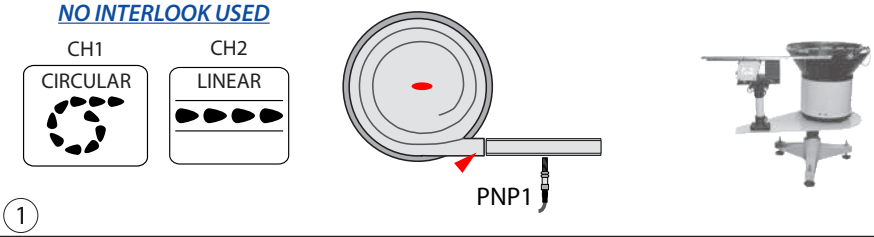
PARTICULAR INSTRUCTION

The controller MCP0/LT2 has the output of two channels for the control and the management
of systems usually made up of Linear and Circular, or hopper and Circular. It has 7 different logics to allow the use of the two vibrating channels in various other configurations.
In Logic menu, you can select the logic according to the requirements.
Sensor PNP1 e PNP2 can be used with:
- No Interlook used
- CH1 Interlook CH2
- Parallel Channels

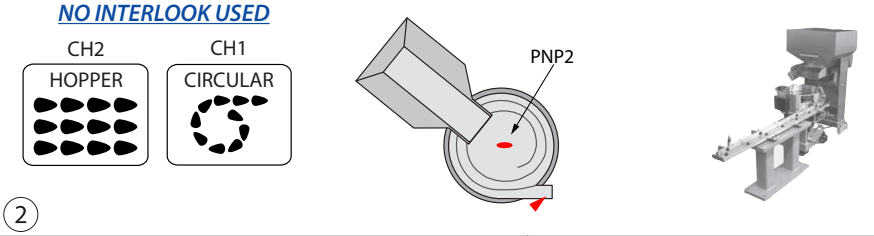
AVAILABLE VERSIONS

Linear-bowl feeder
Or bowl feeder and Hopper with 2 sensor

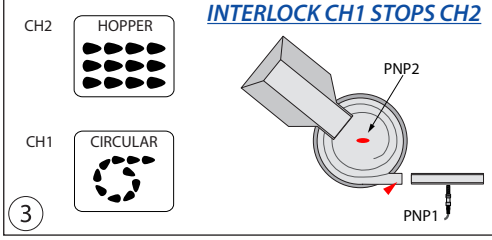
NO INTERLOOK USED



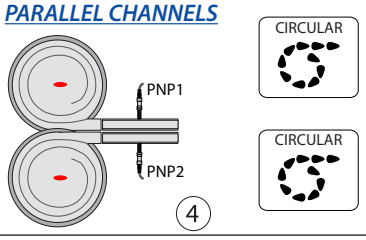
NO INTERLOOK USED



INTERLOCK CH1 STOPS CH2



PARALLEL CHANNELS





Functions

Linear-Circular (CH2-CH1)
Circular-Hopper (CH2-CH1)
Feeder Speed
Invert Enable
Start Ramp
Stop Ramp
Vibration Limit max/min
Vibrating Frequency
50/100 Hz(60/120Hz)

Sensor PNP 1 Linear
Invert sensor 1
Delay ON
Delay OFF
Time out (absence pieces)

PNP 2 Sensor Air-Jet
Invert sensor 2
Delay ON
Delay OFF
Time out (absence pieces)

Output EV
Output 1: Air-Jet ON
Delay OFF Air-Jet

Sensor Logic
NO Intelook used
CH1 Interlock CH2

Speed Setting:
0/10V
0/20 mA
Key Board

Electronic Controller for Electromagnetic Vibrator

MTR01

NPN PNP | 115V 230V | IP65

General

3 Phase Motor-Driven Feeder and input sensor NPN/PNP 3 delay (On/Off - Allarm absence pieces). Qualification input for multiple electromagnetic system (linear-bowl feeder hopper).

General Characteristics

Voltage 400V 3 phase • input sensor NPN/PNP • delay ON/OFF max 10 sec. • delay and allarm absence pieces (red Led) • supply EV air blow (24Vcc) with delay (2 sec.) pover supply 24Vca • 0.1A max. • Motor•Thermal overload relay 1•1,6A • IP65.

Applications

3 Phase Motor-Driven Feeder with NPN/PNP sensor On/Off delay and Allarm delay.

Options

Label custom • Din35 version.

Technical Specs

Supply Voltage:	3x400V ±10% 50/60 Hz
Consumption:	1,5 W max
Fuses:	0,2A F 250V 5X20 H1500A
Voltage Motor:	3x400V - 3x230V - 230V
Protection Motor:	Thermal Overload relay 1/1,6A
Inputs For Sensors:	Optoisolated No/Nc Npn/Pnp
Type Of Sensors:	NPN/PNP sensors
Supply Voltage For Sensors:	12 Vcc
Energization Delay (T1):	0-12 Sec.Reg.
De-energization Delay (T2):	0-12 Sec.Reg.
Output For Vibrator Stop:	2 No/Nc 10A 250Vca Max
Temperature Of Storage:	-10 °C /+80 °C
Temperature Of Operation:	–5°C / +55°C
Delay Alarm:	0-30 sec
Supply Voltage EV air blow:	24Vcc
Delay Voltage EV air blow: :	2 sec.
Degree of Protection:	IP65 in box
Range Of Relative Humidity:	80%Till To 31 °C
Altitude:	Up to 2000 Meters
Guarantee:	1 year (from date on circuit)



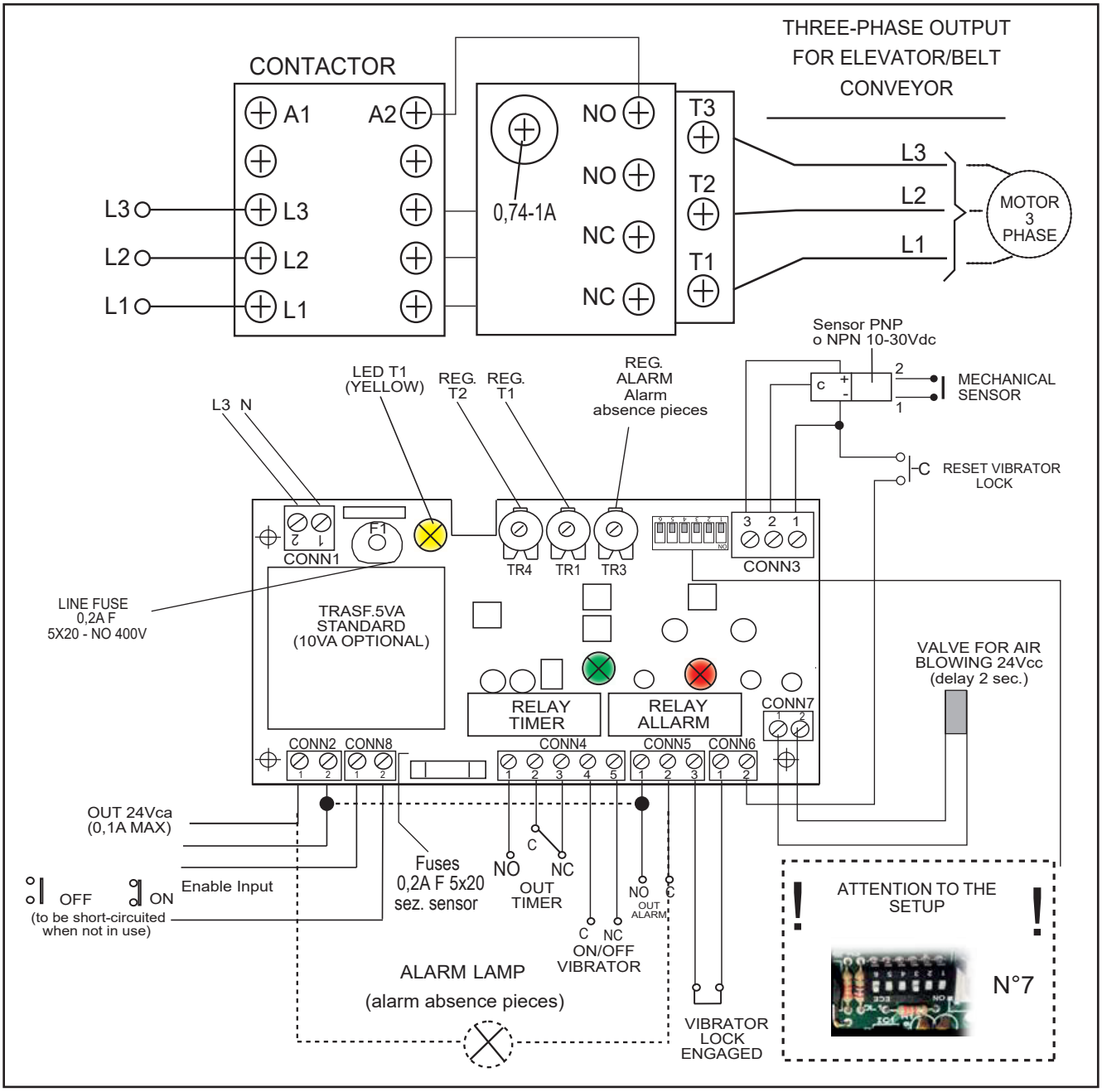
METALLIC BOX
PV MTR01 Z6 SM1
195x130x90

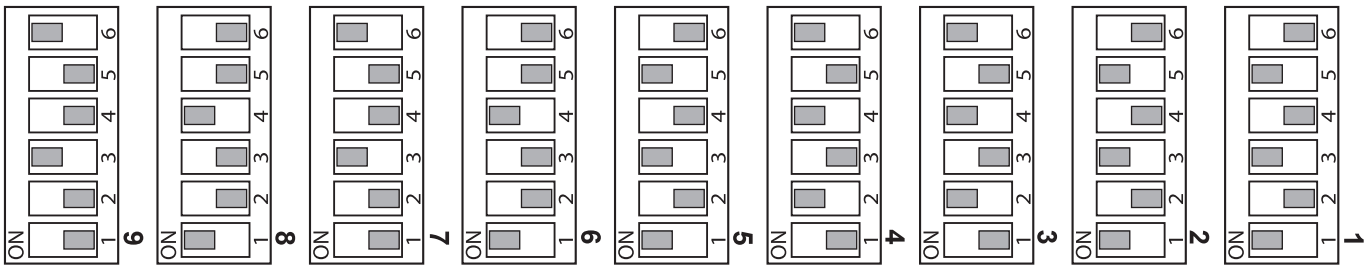


MTR01

Available Versions

Type	Box	Colour	Dimensions	Code	Price €
MTR01	Aluminum Box		195 x 130 x 90	PV MTR01 Z6 SM1	
MTR01	Circuit		152 x 114 x 50	PV MTR01 A6 STD	
MTR01/DIN35	Circuit Din35		152 x 130 x 50	PV MTR01 D6 DIN	





6	8	7	6	5	4	3	2	1
SENSOR PNP OUTPUT QN PRESENCE PIECE START CYCLE T1/T2	SENSOR NPN OUTPUT QN PRESENCE PIECE START CYCLE T1/T2	SENSOR PNP OUTPUT Q ABSENCE PIECE START CYCLE T1/T2	SENSOR NPN OUTPUT Q ABSENCE PIECE START CYCLE T1/T2	MECHANICAL PADDLE SENSOR ABSENCE PIECE START CYCLE T1/T2	SENSOR PNP OUTPUT QN ABSENCE PIECE START CYCLE T1/T2	SENSOR PNP OUTPUT Q PRESENCE PIECE START CYCLE T1/T2	SENSOR NPN OUTPUT QN ABSENCE PIECE START CYCLE T1/T2	SENSOR NPN OUTPUT Q PRESENCE PIECE START CYCLE T1/T2

MTR

MP ELETTRONICA
QUALITY VIBRATION CONTROL

Description: 3 PHASE MOTOR - DRIVEN FEEDER

CODE	REV.	DATE	DRAFTSMAN	SHEET
DT MTR01	02	02/25	E. PEDRAZZI	1/1

Electronic Controller for Electromagnetic Vibrator

MTR01-DIG PNP 230V IP55



METALLIC BOX
MTR01 DIG
PV MTRDI Z6 INV
130x210x200

General

Digital 3 Phase 230V Motor-Driven Feeder and input sensor NPN/PNP 3 delay (On/Off - Allarm absence pieces). Qualification input for multiple electromagnetic system (linear-bowl feeder - hopper) - Second PNP sensor with delay message alarm.

General Characteristics

Voltage 230V • input sensor NPN/PNP • delay ON/OFF max 10 sec. • delay and allarm absence pieces (10 ÷ 180 sec.) • supply EV air blow (24Vcc) with delay (2 sec.) pover supply 24Vca • Motor • Thermal overload • IP55.

Applications

3 Phase Motor-Driven Feeder with PNP sensor On/Off delay and Alarm delay.

Options

Label custom • Connector for motor - Line - SW custom.



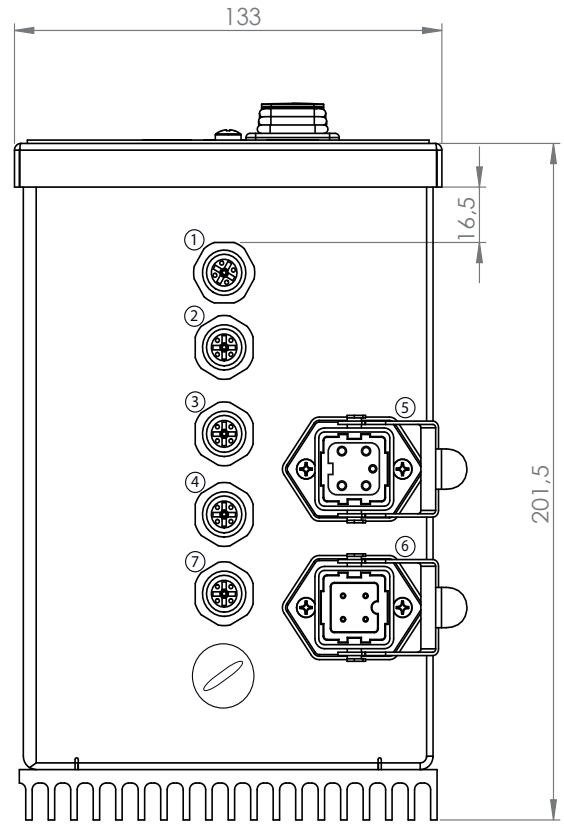
Technical Specs

Supply Voltage:	230V ±10% 50/60 Hz
Consumption:	1,5 W max
Voltage Motor:	3x230V
Protection Motor:	Thermal Overload
Sensor Input:	10/30Vcc
Type Of Sensors:	PNP sensors
Energization Delay (T1):	0-20 Sec.Reg.
De-energization Delay (T2):	0-20 Sec.Reg.
Air Blow Delay:	0/2 sec.
Delay Alarm:	10 ÷ 180 sec.
2° Sensor:	PNP (0 ÷ 20 sec.)
Supply Voltage EV air blow:	24Vcc (delay 2 sec.)
Degree of Protection:	IP55 in box
Temperature Of Storage:	-25 °C /+80 °C
Temperature Of Operation:	–15°C / +45°C
Range Of Relative Humidity:	80%up to 31 °C
Altitude:	up to 2000 Meters
European Norms:	EMC CE
Warranty:	1 year (from date on circuit)

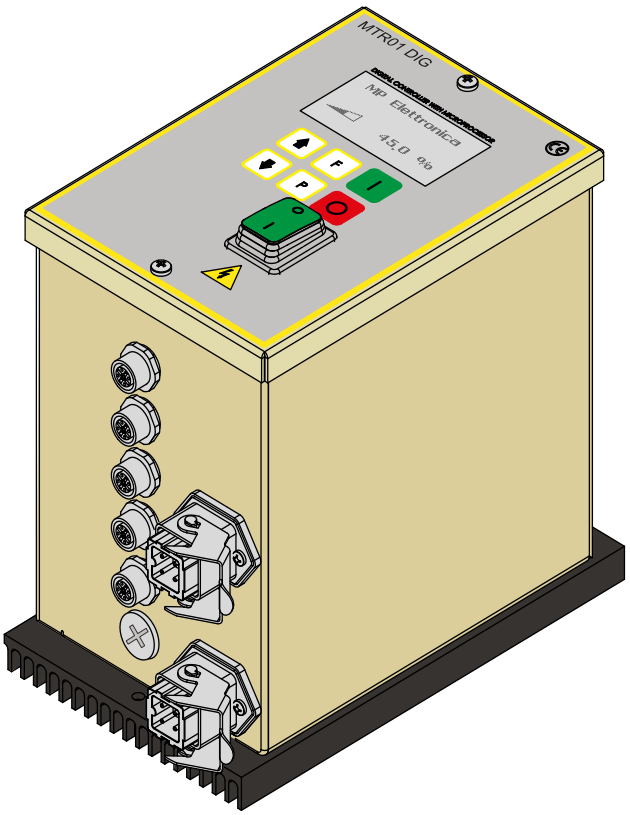
Available Versions

Type	Box	Colour	Dimensions	Code	Price €
MTR01 DIG	Metallic Box	Black	130 x 180 x 190	PV MTRDI Z6 SM1	
MTR01 DIG-INV	Metallic Box	Black	130 x 180 x 190	PV MTRDI Z6 INV	

DIMENSIONS/CONNECTIONS



CONNECTORS ON REQUEST
Female line 230V connector - Male motor connector
M12 connector



M12 CONNECTORS

1 SENSOR 1 Track

1	+24V
2	
3	GND
4	INPUT
5	

2 SENSOR PNP2

1	+24V
2	
3	GND
4	INPUT
5	

3 ENABLE/STATUS

1	+24V
2 In +24	ENABLE
3	GND
4	OUT STATUS
5	

7 OUT ALARM MOTOR

1	+24V ALARM
2	
3	0V
4	
5	

4 OUT TIME OUT/PNP2

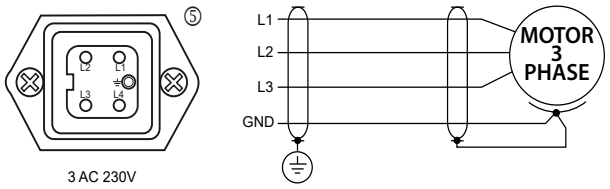
1	+24V TIME OUT
2	
3	0V
4	+24V OUT PNP2
5	

5 OUT MOTOR

L1	MOTOR
L2	MOTOR
L3	MOTOR
4	
5	GND

6 LINE 230V

1	L
2	N
3	
PE	GND



USCITA MOTORE 230V TRIFASE

STANDARD MODEL

Digital control MTR01 DIG

Connectors *M12 :*

Input: *2° sensor PNP*

Input: *enable +24V - Contact without voltage*

Output: *Status +24V*

Output: *+24V time out Alarm - OUT PNP2 (24V)*

GUARANTEE

1) The controller is guaranteed for a period of 1 year from the date shown on the inside.

2) The guarantee covers the free replacement or repair of components parts that are defective at origin for manufacturing errors.

3) The guarantee is not valid for damage caused accidentally due to improper use or negligence and in case of alterations or repair carried out by unauthorized persons.

Design and specifications could be subjected to change without notice.

Electronic equipments used to test power supply of the electromagnetic vibrators.

VIBROMETER 115V 230V IP55

General

The VBR25 vibrometer is a reliable and precise measuring equipment, useful for monitoring the dynamic parameters of both motor-driven and electromagnetic vibrators.

General Characteristics

Measurement of amplitude, acceleration, and frequency.

Applications

Monitoring the vibrator during manufacturing, testing, or maintenance.

Options

Modbus

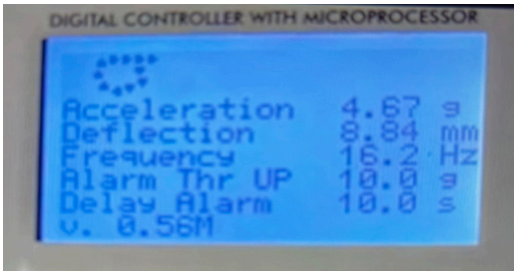
Technical Specs

Voltage:	115/230V • 50/60 Hz
Features:	Measurement of electromagnetic and mechanical vibrators.
Applications:	Measurement of amplitude, frequency, and acceleration.
Protection Index:	IP55

NEW



METALLIC BOX
VIBR25
PV VBR25 Z2 STD
100x185x70





Available Versions

Type	Box	Colour	Dimentions	Code	Price €
VBR25	Metallic IP55	Ral 7035	100 x 185 x 70	PV VBR25 Z2 STD	
SIND 3	Aluminum		45 x 43 x 19	PV SIND3 A2 STD	

Electronic equipments used to test power supply of the electromagnetic vibrators.

METER 230V

General

The AMP-VIB products are used to test accurately the electromagnetic vibrators' current at 3000 vib/min or 6000 vib/min.

General Characteristics

Current measurement at 3/8/10/15/20 Amps. • Safety fuse with the short circuit signal • Current measurement based on a specific algorithm.

Applications

Digital measurement of the electromagnetic vibrators' current.

Options

Modbus

Technical Specs

Voltage:	115/230V • 50/60 Hz
Features:	Ampere meter
Applications:	Measure real working current into vibratory feeder
Protection Index:	IP55

NEW



PLASTIC BOX
PV METER Z2 STD
165x140x80

Available Versions

Type	Box	Colour	Dimensions	Code	Price €
METER	Plastic Box	RAL 7035	165 x 140 x 80	PV METER Z2 STD	

Electronic Controller for Electromagnetic Vibrator

ALIM01

230V 400V | SIND1 | SIND2

General

The ALM01 circuit feeds the amplitude sensor SIND1 or SIND2 and makes it therefore possible to manage its reaction to the vibration so that any anomalous functioning can be detected (a too high or insufficient vibration).It is possible to regulate the level where the intervention will be required through a trimmer (T2 and T3).Moreover, thanks to the T1 trimmer it is possible to adapt the circuit to different types of vibrations.When the maximum vibration level is exceeded,the red Led indicator switches itself on (LD1) and the relay RL1 also goes off (such alarm can be kept in auto retention by closing the contacts number 4 and 5 of the connector number 3; the system is reset by opening said contacts again).When the vibration is too low the green Led (LD2) switches itself off and the RL2 net stops being excited. The circuit is designed to function with tensions of 230V; if required, however, it can also be designed for tensions of 400V/115V. The whole of the control section is isolated from the electrical network. An (optional) instrument capable of indicating vibrations can be connected to contacts 4 and 5 of the connector. This output V 0/10V can also be used for other purposes.

Usage instructions

Connect the amplitude sensor SIND1 to terminal 1 (+/green cable) and 2 (S/ black cable) and 3 (-/brown cable) of connector 2. Feed the circuit and bring the vibrator up to the maximum level of vibrations.Adjust trimmer T1 until the tension at terminal 4 and 5 of connector number 2, as measured with the voltmeter, reaches 10V+/-100mV (should the maximum vibration of 10V not be achievable, move bridge Y1 on High Gain), and check again that the tension is 10V+/-100mV. By adjusting trimmer T2, you should notice that, at a certain point, led LD1 (red) either switches itself on or turns itself off, if it was already on. Position the trimmer so that the led is swit ched off but near enough to the ignition level.Bring the vibrator at the minimum vibration level. By adjusting trimmer T3 you will find an area where, by rotating in both directions, the green led LD2 will switch on and off. Position the trimmer so that the green led is switched on but near enough to the area where it switches itself off. Connect the (optional) indicating instrument, respecting the +/- priorities, to be able to visualise the width of the vibrations in %.

Electrical Characteristis

Supply voltage:	230V (400V optional) 50/60 Hz
Power consumption:	1 watt
Fuses:	1A F 250V 5x20 H 1500A
Allarm max (RL1):	contact NO/NC 10A 250Vca max
Allarm ok vib:	contact NO/NC 10A 250Vca max
Altitude:	till to 2000 meters.
Degree of pollution:	2
Range of relat.humid.:	80% till to 31 °C
Installation class:	II
Degree protection:	IP 54
Temp. of operation:	–5°C / +55°C
Temp. of storage:	-15 °C / + 80 °C
Vibrazion Max:	Led red ON
Vibrazion Min:	Led green OFF
European norms:	EMC CE
Guarantee:	1 year (from date on circuit)



METALLIC BOX
PV ALIM1 Z2 STD
165x140x80



SENSOR SIND1
PV SIND1 ZX STD



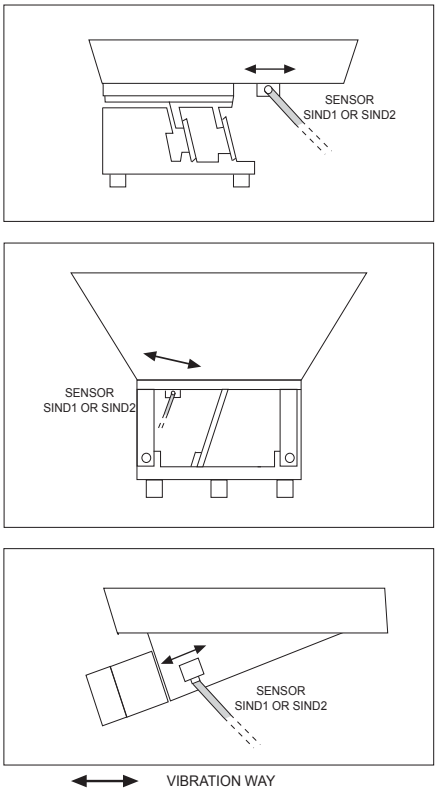
SENSOR SIND2
PV SIND2 ZX STD

Available Versions

Type	Box	Colour	Dimensions	Code	Price €
ALIM01	Aluminium	RAL 7035	165 x 140 x 80	PV ALIM1 Z2 STD	
SIND1	Aluminium	Gray	45 x 45 x 35	PV SIND1 ZX STD	
SIND2	Resinated	Black	60 x 25 x 15	PV SIND2 ZX STD	

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.

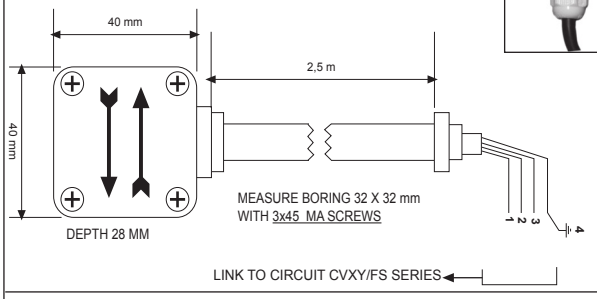
SKETCH AND CHARACTERISTIC TECHNIQUES SUBJECT TO MODIFICATIONS WITHOUT WARNING



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)**





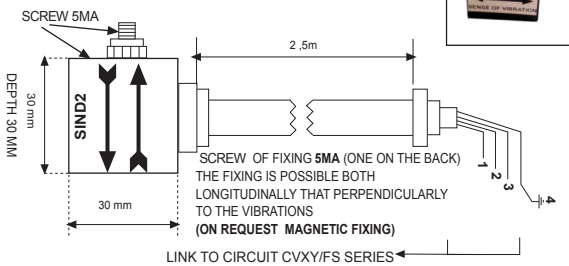
LINK TO CIRCUIT CVXY/FS SERIES

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.

VIBRATION WAY

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)**



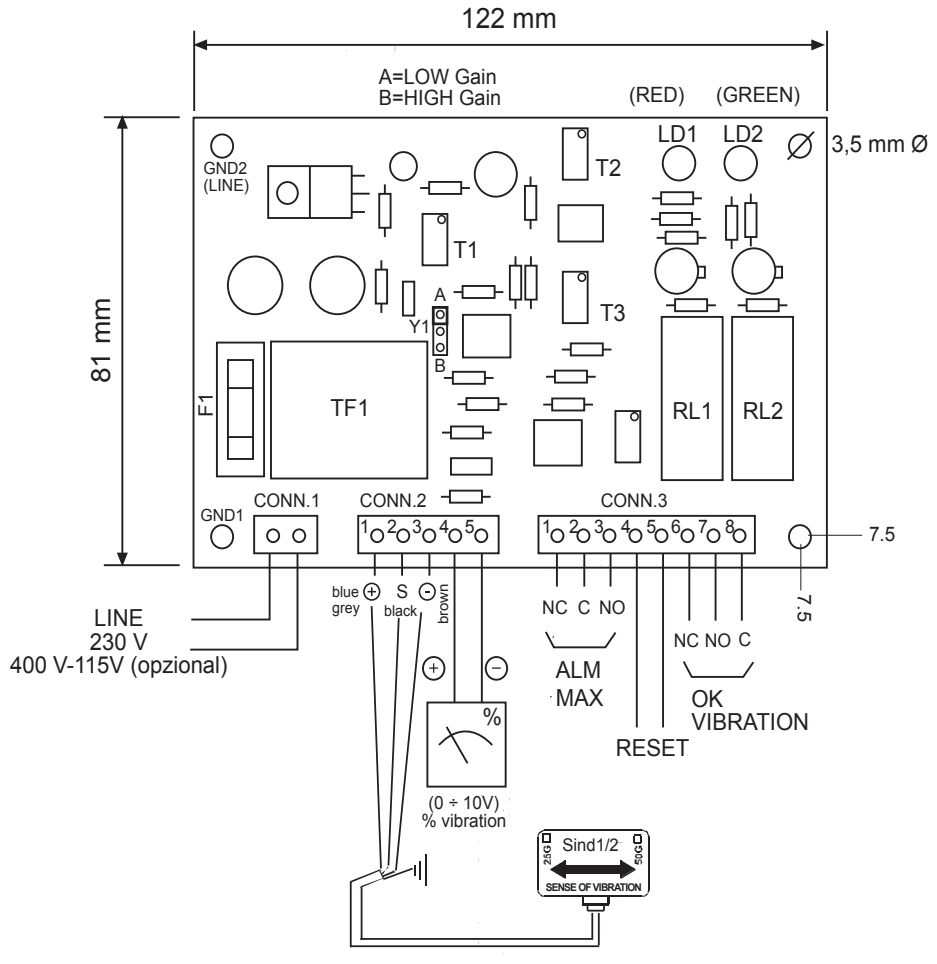


LINK TO CIRCUIT CVXY/FS SERIES

Description: VIBRATION SENSOR SIND1-SIND2

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

MP ELETTRONICA QUALITY VIBRATION CONTROL



Each responsability from a wrong use of the eletronic circuit is declined

Description: Electronic assembling circuit for electromagnetic and mechanical vibrators with amplitude sensor

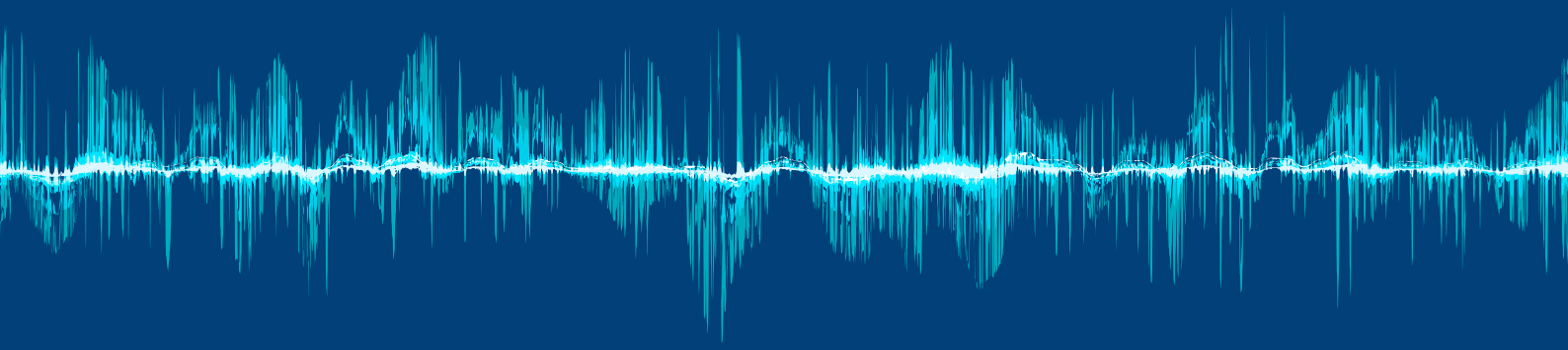
CODE	REV	DATE	DRAFTSMAN	SHEET
DTALIM01	01	09/09	E. PEDRAZZI	1/1

MP ELETTRONICA QUALITY VIBRATION CONTROL

INSTRUMENTS

Rev. 2026-09

www.mpelettronica.com



MP ELETTRONICA
QUALITY VIBRATION CONTROL

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