



## Operating Instruction

### REOVIB ATS 110

Control unit for Vibratory Feeders

With main voltage compensation and Track control

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# REOVIB

Control units for vibratory feeders

**User Technical Safety Information**

This description contains the necessary information for the correct application of the product described below. It is intended for use by technically qualified personal.

Qualified personnel are persons who, because of their training, experience and position as well as their knowledge of appropriate standards, regulations, health and safety requirements and working conditions, are authorised to be responsible for the safety of the equipment, at all times, whilst carrying out their normal duties and are therefore aware of, and can report, possible hazards (Definition of qualified employees according to IEC 364)

**Safety Instructions**

The following instructions are provided for the personal safety of operators and also for the protection of the described product and connected equipment.



**Warning!**  
 Hazardous Voltage  
 Failure to observe can kill, cause serious injury or damage

- Isolate from mains before installation or dismantling work, as well as for fuse changes or post installation modifications.
- Observe the prescribed accident prevention and safety rules for the specific application.
- Before putting into operation check if the rated voltage for the unit conforms with the local supply voltage.
- Emergency stop devices must be provided for all applications. Operation of the emergency stop must inhibit any further uncontrolled operation.
- **Electrical connections must be covered**
- **The earth connection must be checked, for correct function, after installation.**

**Specified Use**

The units described herein are electrical controllers for installation in industrial plant. They are designed for power adjustment on vibratory feed equipment.

**Contents**

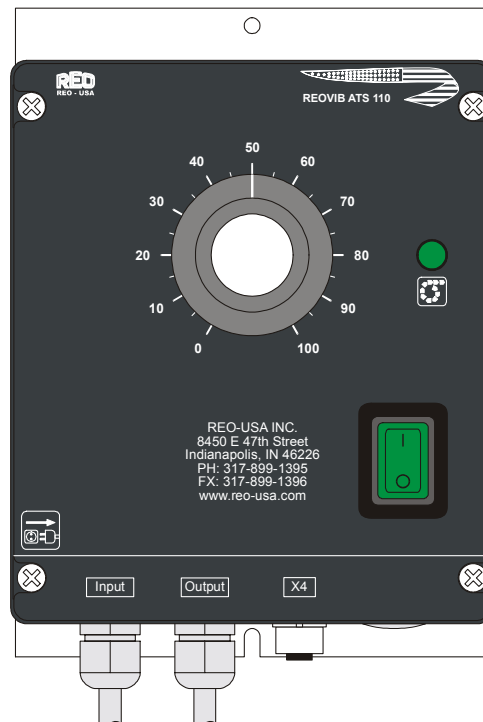
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**1.0 General**

Electronic control units for stepless adjustment of vibratory feeder throughput. The control units are suitable for feeders with a vibrating frequency of 60 Hz (50 Hz) and 120 Hz (100 Hz). The vibrator frequency is selected by using an internal link-switch on the printed circuit board. The feeder throughput can be adjusted by using the integrated potentiometer. An enable input is available for Stop/Start operation from contacts or a supervisory control system.  $U_{min}$  and  $U_{max}$  trimmers are provided to limit the throughput adjustment range.

An integral soft-start reduces jolting when the unit is switched on or enabled. An internal regulation loop eliminates main voltage variations.

The enclosed version includes mains input and feeder output cables. In the front panel there is a mains switch and a throughput adjustment potentiometer. The potentiometer can be used to set the feed rate from 10...100%, it's also possible to reduce the range of output voltage by using the internal  $U_{min}$  and  $U_{max}$  trimmers. The Track-control operate with a PNP track-sensor that calls for product when the level is low and this causes the feeder to switch on and off after preset time-delays (t-on, t-off) have elapsed.



**2.0 Technical Data**

	REOVIB ATS 110
Stock Code	6056 52
Supply voltage	110 V / 120 V, +/- 10 %, (factory setting) 220 V / 240 V, +/- 10 %
Mains frequency	50/60 Hz
Output voltage	20... 105 V, (factory setting) 40...210 V
Output current	0,2...15 A max.
Vibrating frequency	3000 (3600), 6000 (7200) (factory setting)
Set point source	Internal Potentiometer 0... 10 VDC, 22 kR 0(4)... 20 mA, 250 R
Enable	24 V, DC, 5 mA Contacts
Sensor supply	24 V, DC / 50 mA
Construction	IP 54
Operating temperature	0... 45 °C
Storage temperature	-20... +70 °C

**3.0 Declaration of Conformity**

We declare that these products conform with the following standards and directives.:  
EN 61000-6-2 and EN 61000-6-4 in accordance with Directive 2004/108/EG.

REO ELEKTRONIK AG, D-42657 Solingen

## 4.0 Commissioning

### 4.1 Assembling position



Please fasten the devices on a vibration-free underground and take care for sufficient air circulation.

### 4.2 Preliminary steps

- Check that the unit is correct for the local mains supply (rating plate information) and that it is correctly rated for the feed system.
- Connect the controller according to the connection diagram

#### 4.2.1 Important points



When applications with frequently on and off cycles are required, use the intended enable input. It is prohibited to open the current circuit with a switch or a contactor while the feeder is running, because that may cause damage to the controller.

#### 4.2.2 Operating frequency of the feeder coil

It is possible that the current flowing through the coil will increase for a small frequency adjustment, and so this should be checked with a true RMS instrument for each new application as well as monitoring the coil for heat build-up.

The coil should be designed for the correct operating frequency to prevent excessive current draw and the consequential overloading of the coil.

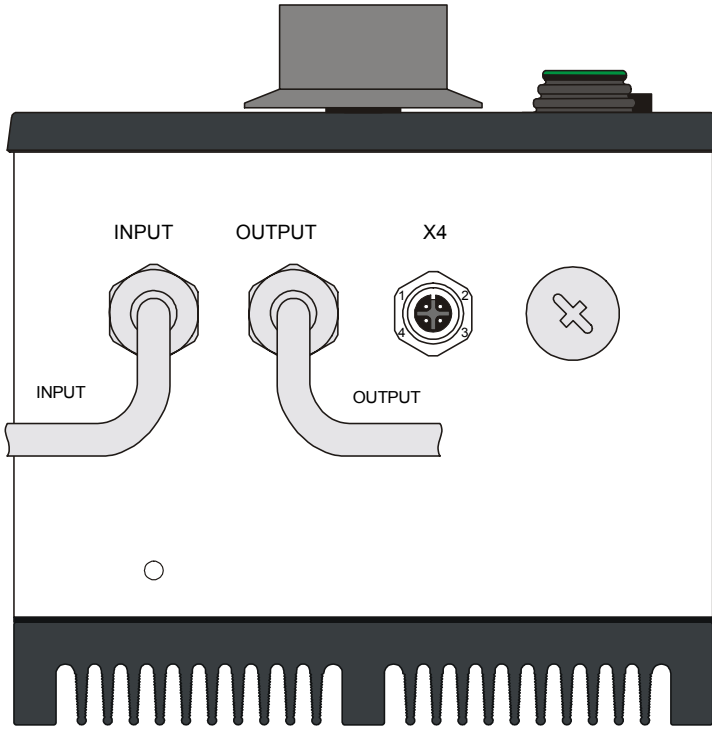
### 4.3 Settings

Check the input voltage before switching on the controller. The controller is factory set to 110 V / 120 V input Voltage, in case of main supply of 220 V / 240 V, please remove the cover and turn the switches into 220 V / 240 V position.

Check the Frequency of the Feeder and use the switch witch also can be found inside the controller for the right setting.

$U_{\min}$  and  $U_{\max}$  trimmers are provided to limit the throughput adjustment range, they are also located inside the controller.

**5.0 Connections external**



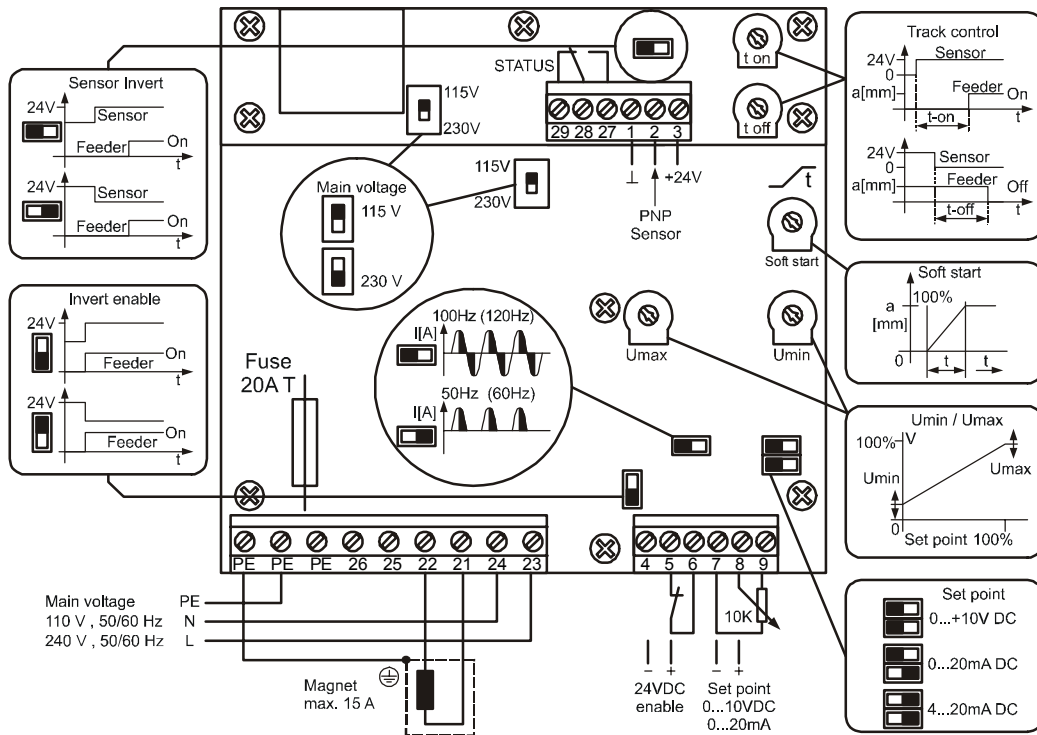
Sensor track control (X4)



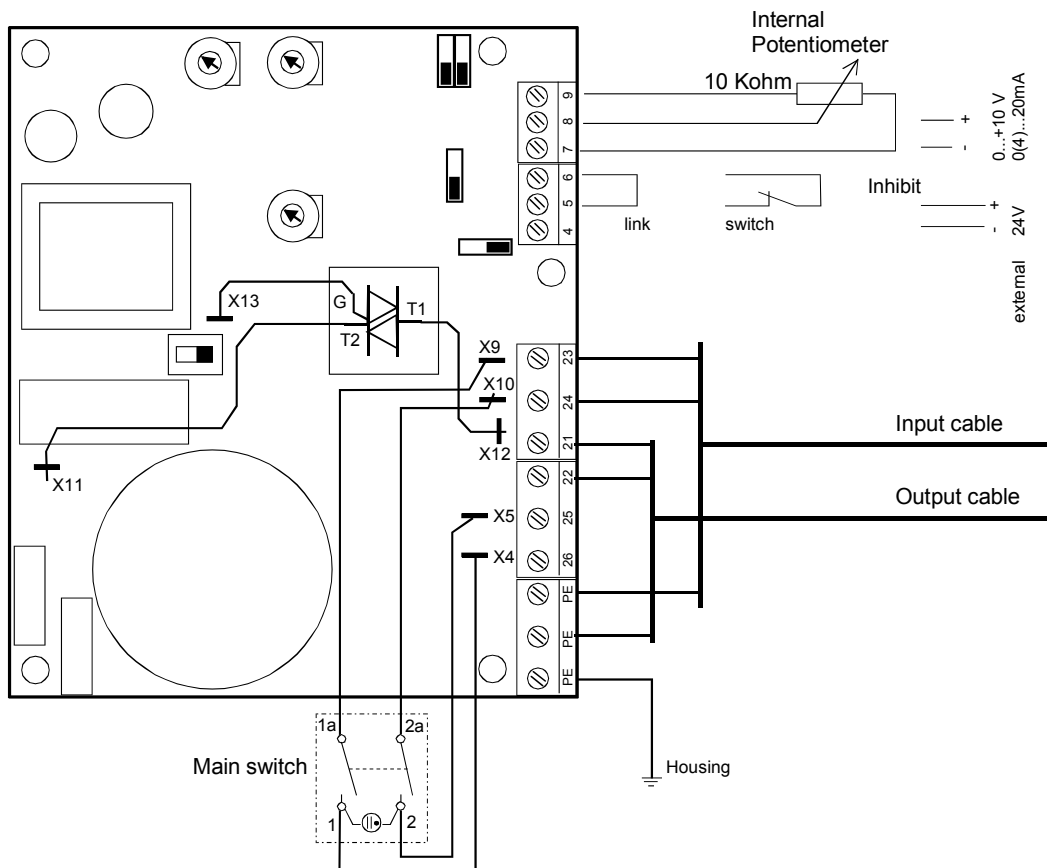
- 1 = Output 24V DC
- 2 =
- 3 = GND
- 4 = Input

**6.0 Connections internal**

adjustments



internal wiring



**7.0 Dimensions**

