

Thyristor control units for operating with resistive and inductive loads

The range of REOVIB 033 units are used for controlling the throughput of vibratory feeders. Power adjustment is achieved by using a triac with phase angle control. The set point for the output power is determined by a potentiometer. Trimmers Umin and Umax are used to set the control curve range to suit the load (see control curve). It is possible to switch the unit on and off by breaking the potentiometer circuit. The controller is suitable for feeder units with a mechanical frequency of 50 Hz or 100 Hz ie 3000 / 6000 cycles/minute (the same or double that of mains frequency). A jumper on the circuit board is used for selecting the frequency. Protection for short circuit or overhaeting must be provided externally. The unit can be fitted directly onto a mounting plate, or by using the required fixtures, onto a EN 50022-35 DIN rail.

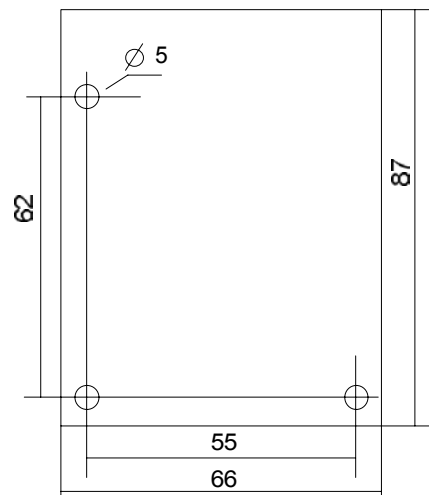
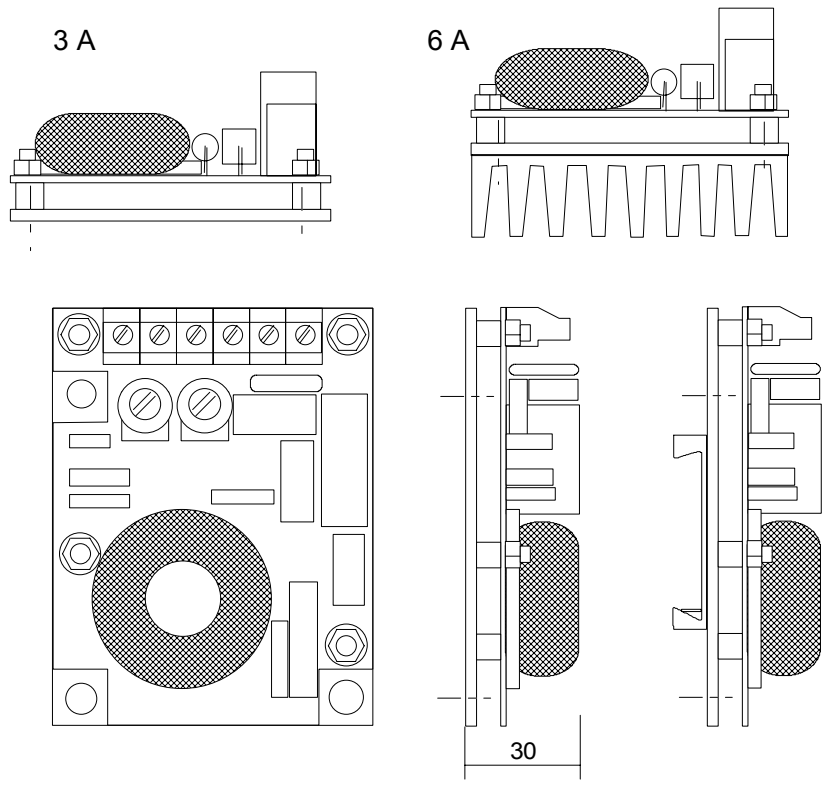
Technical data

Type	REOVIB 033
Supply voltage	230 V, +6% / - 10%, 50/60 Hz
Output voltage	40...210 V
Output current	0.5...6A from 3 A with additional heat sink
Set point source	Potentiometer 100 kΩ, 3 W
Operating temperature	0...45°
Dimensions h x w x d	87 x 66 x 30 mm
Enclosure protection	IP00
Standards	EN 50081-2, EN 50082-2



Ordering Codes: 3A open construction
 6A open construction

REOVIB 033 / ID No. 0331
 REOVIB 033 / ID No. 0333



Technical Safety Information for the User

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!

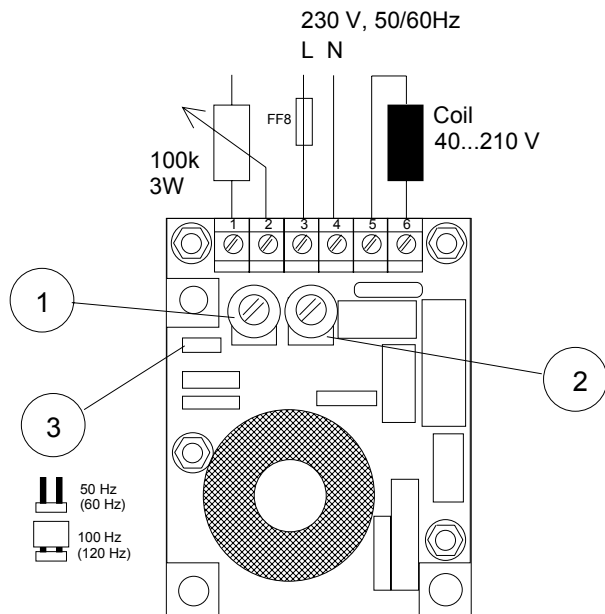
Hazardous Voltage. Failure to observe can kill, cause serious injury or damage.

- 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.
- **The electric connections must be covered!**
- **Earth connection must be checked for safe function after assembly!**

Specified Use

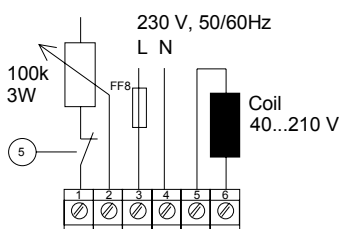
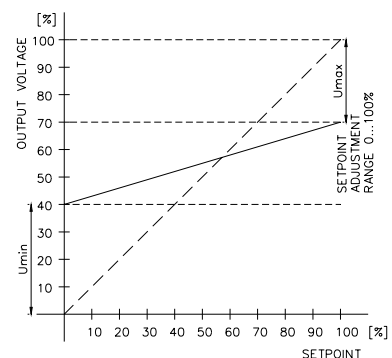
The units described herein are electrical controllers for installation in industrial plant. They are designed for use in control and automation applications, in particular for the control of vibratory feeders.

Connection Drawing



1	Umin	Output voltage for zero set point
2	Umax	Output voltage for maximum set point
3	3000 / 6000 (50 / 100 Hz)	Mechanical vibrating frequency with JUMPER 6000 cycles / minute (100 Hz) without JUMPER 3000 cycles / minute (50 Hz)

Effect of trimmers Umin and Umax



4 Switching is achieved by inserting potential free contacts in the potentiometer circuit.

BEWARE !

**All terminals are at mains potential!
 Use only set point potentiometers with a sufficiently isolated spindle (min 1 kV).**