

# REOVIB 514

**DIN rail mounted electronic control module for the control of Electromagnetic feeders**



## Technical Specification - REOVIB 514

Supply Voltage	230 V, 50/60 Hz (110V available)
Output Current	0.2 - 6 A
Output Frequency	Full (100 Hz) or Half (50 Hz)
Setpoint	Potentiometer, 0-10V, 0(4)-20 mA
Inhibit/Enable Input	12-24V,DC or volt-free contacts
Soft Start	Fixed 0.1 secs
Enclosure	Plastic casing with screw terminals
Protection rating	IP00 - VBG 4
Ambient temp	0 - 45 degrees C
Dimensions LxWxH	80 x 102 x 114 mm

## Important Features

**The 514 has the following as standard**


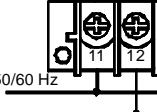



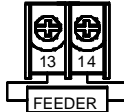


- Power ON LED
- User serviceable fuse to protect unit
- Trimmers for Minimum and Maximum vibration
- Full or Half wave selectable output
- Inputs for Remote ON/OFF switching
- Choice of setpoint control
- Durable housing
- Screw or Din rail fixing
- CE marked


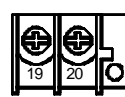
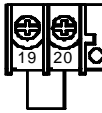
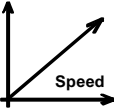
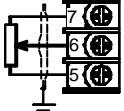
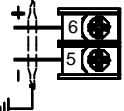
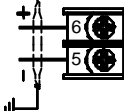
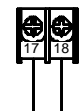
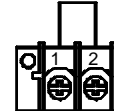




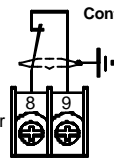
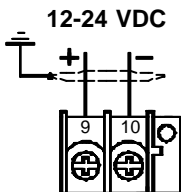

### ***Special Function!***

The mains supply is always fluctuating, typically between 216V and 253V this is a fact of life. Obviously feed rate is heavily dependant on the applied voltage so these changes can have a detrimental effect on the performance of automation systems.

REO controllers have inbuilt stabilisation electronics, which constantly monitor the mains input and adjust the output level accordingly ensuring that the feed rate is maintained.

# Standard Rating 6 Amps. Refer to accompanying drawing when following this guide

Drawing Reference	Check Point	Connections	Important	
1	<b>Supply Voltage</b> 	The 514 is rated for use with a 230 V, 50/60 Hz supply Connect <b>Live to Terminal 11</b> <b>Neutral to Terminal 12</b>  230 V 50/60 Hz 	Connect Earth connection to: <b>Terminal 15</b>  Ensure unit and feeder are earthed at all times	Unsure of your mains voltage? *** <b>CHECK</b> *** Damage will occur if incorrect
2	<b>Feeder Connection</b> 	The 514 is rated for use with a maximum feeder load of 6 Amps Connect <b>L1 to Terminal 14</b> <b>N1 to Terminal 13</b>  	Connect Feeder Earth connection to: <b>Terminal 16</b>  Ensure unit and feeder are earthed at all times	Unsure of your feeder rating? *** <b>CHECK</b> *** Damage could occur if incorrect

Drawing Reference	Check Point	Options	Important
3	<b>Feeder Frequency</b> 	The unit can be used on either FULL WAVE (100 Hz, 6000 cyc/min) or HALF WAVE (50 Hz, 3000 cyc/min) feeders. The unit is supplied ready for HALF WAVE operation i.e. with no link between terminals 19 and 20  For a <b>HALF WAVE</b> feeder ensure that there is no connection between terminals 19 & 20  For a <b>FULL WAVE</b> feeder ensure that there is a <b>LINK</b> connection between terminals 19 & 20	Unsure of your feeder frequency? *** <b>CHECK</b> *** Damage could occur if incorrect
4	<b>Feeder Speed</b> 	<b>POTENTIOMETER</b> Connect a 10 kOhm to terminals: 5, 6 and 7 6 is the wiper  <b>0-10 VDC signal</b> Connect 0 V to terminal 5 and Positive to terminal 6  <b>0-20 mA SIGNAL</b> Connect (-) to terminal 5 and (+) to terminal 6 Fit link between 17 & 18  Insert link between 17 and 18 for 0-20mA control 	Ensure that a link is fitted between terminals 1 & 2 at all times 
5	<b>Control Range</b> 	To allow the widest possible control range - the trimmers Umin and Umax are provided to customise the control output to each individual feeder. Adjustments can easily be made using a flat bladed terminal screw driver or pot trimmer. <b>Step 1</b>  U <sub>min</sub> Turn the main control knob to 0% and adjust Umin until the feeder just begins to vibrate <b>Step 2</b>  U <sub>max</sub> Turn the main control knob to 100% and adjust Umax until the feeder vibrates at the required amplitude - It may be necessary to repeat Step 1	The unit has a user-serviceable fuse. In the event of this failing it must be replaced with an identical type <b>FF8 Ultra Fast Blow</b>
6 & 7	<b>Remote Switching</b>  The remote switching facilities are usually used when the feeder needs to be regularly stopped and started automatically as part of an industrial process	The feeder control unit can be remotely stopped or started by using either 1 of 2 methods:- <b>Volt Free Contacts or 12-24VDC Control Signal</b> <b>CONTACTS</b> Connect volt-free contacts between terminals 8 and 9. Open contacts to stop feeder Close contacts to start feeder  <b>12-24V DC</b> Connect (+) to terminal 9 and connect (-) to terminal 10 Voltage ON = Unit ON Voltage OFF = Unit OFF 	The 514 can be used in conjunction with other products in the System 500 range to provide a automated feed solution - Contact your supplier for more details  The cables for connection of the control setpoint source and the inhibit input must be screened and should not be routed with the mains input or the supply to the feeder - Installation must be carried out by a competent person

Enable override  
Always fit a link!  
Pins 1 & 2

10 kΩ  
Pot

Contacts:  
Closed = ON

Setpoint

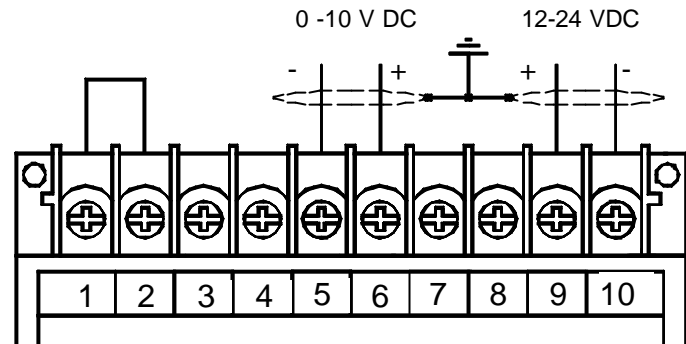
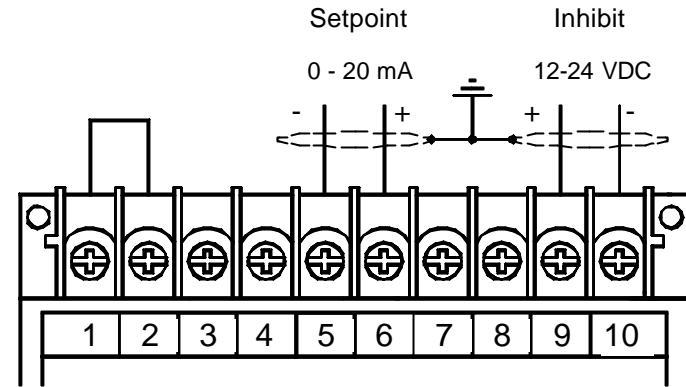
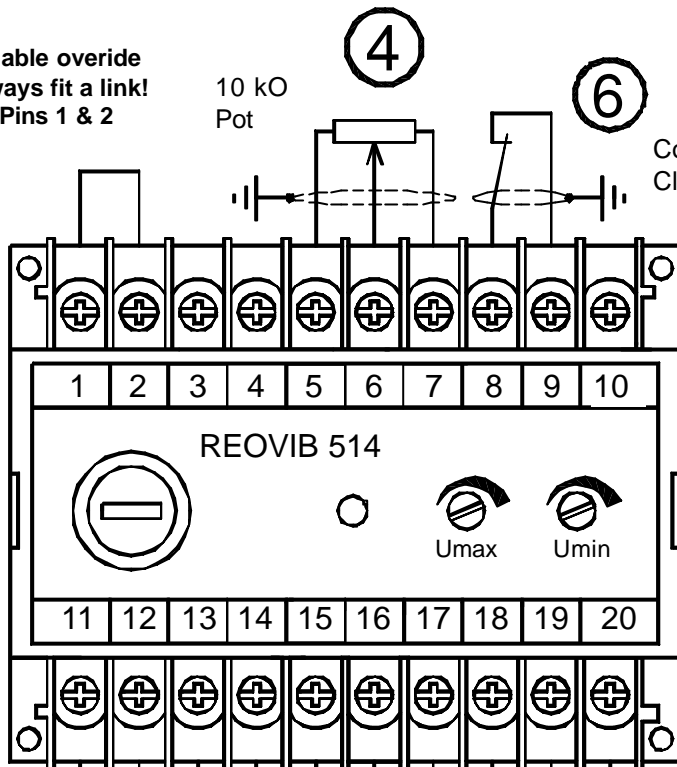
0 - 20 mA

Inhibit

12-24 VDC

0 - 10 V DC

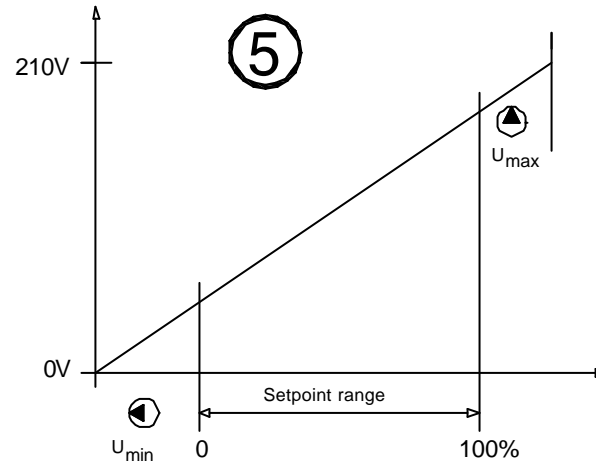
12-24 VDC



Frequency  
Full/Half Wave  
Link for Full Wave

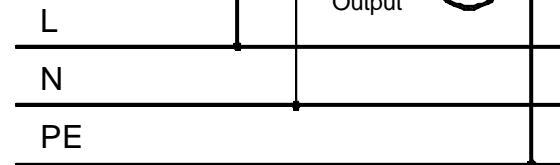
Link for 0-20 mA

Effects of min & max trimmers



Speed Control Methods:

- 10 kΩ Potentiometer
- 0-10 VDC control voltage
- 0-20 mA signal current



Mains Connection  
230 V, 50/60 Hz