

SAV 876.10

ELECTRONIC POLARITY-REVERSING CONTROL UNITS

With integrated microcontroller and holding force control

DESIGN

The device complies with the standards:

- 2014/35/EU Low Voltage Directive
- 2014/30/EU Electromagnetic Compatibility Directive
- 2011/65/EU RoHS

A safety contact in the control unit can be used to prevent machining of the workpiece if the voltage unit is not switched on.

Manually actuated with illuminated push-buttons. The optional connection to a CNC control uses a 24 V signal voltage.

A stepped holding force control is integrated as a standard. It can be controlled with a coding switch.

When using the lower levels of the holding force control, it must be noted that safety as per the accident prevention regulations is no longer ensured. The enabling level can be adjusted, however, and must be adapted to the workpiece.

Ambient temperature max.: $45 \, ^{\circ}\text{C}$ Power supply: $230/400 \, \text{V DC}$ Frequency: $50/60 \, \text{Hz}$

Duty cycle for electromagnets: 100 %



For electromagnetic workholding devices. Also suitable for retrofitting.

FUNCTION

Electronic polarity reversal control units supply electromagnetic workholding devices with direct current. In addition, the integrated polarity reversal device and microcontroller reduce the residual holding force between the magnetically held workpieces and the workholding device caused by remanence. This makes it easier to remove the workpieces from the magnetic chuck and to remove any swarf generated. At the same time, the residual field strength in the workpiece is dissipated almost completely.

For parts which are particularly difficult to magnetise, the controller offers a number of advanced polarity reversal programs. When ordering a magnetic chuck and polarity reversal control unit together, you will of course receive optimised settings for time and magnetic action.

For your safety, the device permanently monitors the power source, its own power components and all connecting cables including the magnetic coil. An LCD display acts as a signal generator.



PERFORMANCE CHARACTERISTICS

- Small and compact
- Can be integrated into any machine control cabinet
- User-friendly with LCD plain text display and film keypad
- Universal for all magnet types and voltages
- Reliable and safe operation





ELECTRICAL DATA

| | г Туре ¬ | C DC in V | г max. in A ¬ | ┌─ AC in V ¬ | C DC in kW | A | |
|-------------------------|----------|----------------|----------------|--------------|---------------------|------|----------------------------|
| Order number | Control | Magnet voltage | Magnet current | Power supply | max. magnetic power | Fuse | Mains transformer required |
| 876.10 T-24 / 7 / 230 | E 1 | 24 | 7 | 230 | 168 | 4 | yes (T) |
| 876.10 T-24 / 15 / 230 | E 2 | 24 | 15 | 230 | 360 | 6.3 | yes (T) |
| 876.10 T-24 / 25 / 230 | E 3 | 24 | 25 | 230 | 600 | 6.3 | yes (T) |
| | | | | | | | |
| 876.10 O-110 / 6 / 230 | E 4 | 110 | 6 | 230 | 660 | 4 | no (O) |
| 876.10 O-110 / 16 / 230 | E 5 | 110 | 16 | 230 | 1760 | 16 | no (O) |
| 876.10 O-110 / 30 / 230 | E 6 | 110 | 30 | 230 | 3300 | 25 | no (O) |
| | | | | | | | |
| 876.10 T-110 / 6 / 400 | E 7 | 110 | 6 | 400 | 660 | 4 | yes (T) |
| 876.10 T-110 / 16 / 400 | E 8 | 110 | 16 | 400 | 1760 | 16 | yes (T) |
| 876.10 T-110 / 30 / 400 | E 9 | 110 | 30 | 400 | 3300 | 25 | yes (T) |