

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 °C Power supply: 230/400 V DC Frequency: 50/60 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** — DC in V — ☐ ☐ max. in A ☐ ☐ AC in V ☐ DC in kW -<u>г</u> А – г Туре ¬ Control Order number Power supply Mains transformer required Magnet current Fuse 876.10 -\_- T-24 / 7 / 230 E 1 24 230 168 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 24 25 230 600 E 3 6.3 yes (T) 110 876.10 -\_- O-110 / 6 / 230 F 4 230 660 4 6 no (O) 1760 876.10 -\_- O-110 / 16 / 230 E 5 110 16 230 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 / 400 400 E 8 16 1760 16 yes (T) 876.10 -\_- T-110 / 30 / 400 110 30 400 3300 25 yes (T)





### **GEOMETRIC DATA**

# Control cabinet version (S) protection rating IP 54

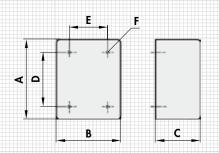
	1.750							1
Order number	Contr.	Α	В	С	D	E	F	Weight
876.10-S-T-24/7/230	E 1	250	400	150	205	355	ø 10	14.0
876.10-S-T-24/15/230	E 2	250	500	150	205	455	ø 10	20.0
876.10-S-T-24/25/230	E 3	500	400	250	455	355	ø 10	32.0

876.10-S-O-110/6/230 E 4 300 250 155 260 210 ø8 10.0 876.10-S-O-110/16/230 E 5 250 400 150 205 355 ø10 14.0 876.10-S-O-110/30/230 E 6 250 400 150 205 355 ø10 16.0

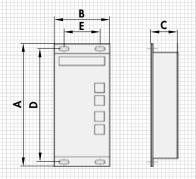
876.10-S-T-110/6/400 E 7 500 400 250 455 355 ø10 28.0 876.10-S-T-110/16/400 E 8 500 400 250 455 355 ø10 38.0 876.10-S-T-110/30/400 E 9 600 400 250 555 355 ø10 54.0

# Installation version (E) protection rating IP 00

Type   mm rkg										
Order number	Contr.	Α	В	С	D	E	F	Weight		
876.10-E-T-24/7/230	E 10	220	120	95	210	85	ø5	2.0		
876.10-E-T-24/15/230	E 11	260	120	95	250	85	ø5	3.0		
876.10-E-T-24/25/230	E 12	320	120	95	310	85	ø5	6.0		
876.10-E-O-110/6/230	E 13	220	160	95	210	85	ø5	2.0		
876.10-E-O-110/16/230	E 14	260	160	95	250	85	ø5	3.0		
876.10-E-O-110/30/230	E 15	350	160	100	325	225	ø8	8.0		
876.10-E-T-110/6/400	E 16	220	160	95	210	85	ø5	2.0		
876.10-E-T-110/16/400	E 17	260	160	95	250	85	ø5	3.0		
876.10-E-T-110/30/400	E 18	350	160	100	325	225	ø8	6.0		



Dimensional drawing for control cabinet version (S)



Dimensional drawing for installation version (E)

### ORDERING EXAMPLE

Designation

SAV no. - version - mains transformer - rated magnet voltage/max. magnet current/power supply

Electronic polarity-reversing control unit SAV 876.10 - E - O - 110/6/230