

**ELECTRONIC POLARITY REVERSING CONTROL UNITS** **SAV 876.12**

with integrated micro processor and holding force regulation

**Application**

For electro-permanent magnetic systems with 210 V or 360 V magnet voltage.  
Also suitable for retrofitting.  
Control via handheld unit SAV 876.02-SE3, control elements for integration in machine console, or machine side PLC signals.

**Function:**

- As a pulse control for the magnetization of Electro-Permanent Magnetic Chucks
- Control of the demagnetizing cycle
- Optimized for all SAV electro-permanent magnetic chucks
- Monitoring of the mains voltage, the own power components and all cables, including magnet winding.
- Internal components partially redundant.
- Machine released through double safety contact
- Clamping and releasing over redundant input signals with feedback after a successful magnetizing and demagnetizing
- Holding force regulation through inverse BCD coding 8 - or 16-stages.

**Features:**

- Small and compact
- Easy integration into any machine
- User-friendly LCD text display English/German
- Easy to navigate through keypad
- Signal inputs and outputs displayed on SMD-LEDs
- Connectors for signal inputs and outputs
- Magnetic connection with potential free contacts
- Safe and reliable
- In box execution with main switch, terminal strip and circuit breaker



**Advantages:**

- Short-circuit proof
- Control and power board fully electronic
- Additional potential free relay contacts for magnetic connection
- Advanced diagnostics
- Ground-fault test
- Very compact design
- Pre-programmed settings
- Individual programmability
- Short demagnetizing time
- High demagnetizing quality for single magnet systems
- Automatic frequency detection
- Functional design and operation

**CE Compliant**

According to Machinery Directive 2006/42/EC  
Low Voltage Directive 2006/95/EC  
EMC Directive 2004/108/EC

**ROH Compliant**

**Heavy duty connector with quick-locking**  
optional at extra cost

**Easy to use**



Control unit in box version

**Optional:**

The controller in box version can be provided with heavy duty plug. Socket with cap on the magnet, 5 m cable with connector to control. The assemblies are 8-pin, suitable for control unit types maximum 60Ax2.

**Product Code: SAV 876.12-SS9**

**Optional:**

When the control and magnet are used for palletizing, an optional parking station prevents the movement of the pallet with plug connected.

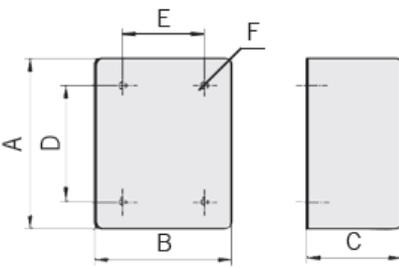
**Product Code: SAV 876.12-PS9**

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**SAV 876.12**

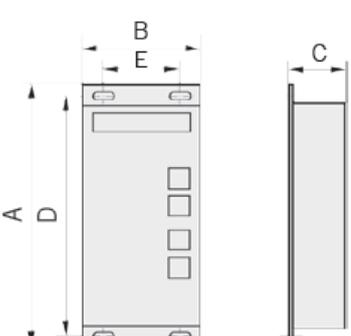
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ELECTRIC DETAILS						
Type	Magnet voltage DC in V	Max. magnet current in A	Input voltage AC in V	Max. magnet power in kW	Fuse in A (slow)	Ø of supply cable in mm
876.12-E-0-210/30/230	210	30	230 / L1 N PE	6,3	16	1,5
876.12-E-0-210/30/400	210	30	400 / L1 L2 PE	6,3	16	1,5
876.12-E-0-360/30/400	360	30	400 / L1 L2 PE	10,8	16	1,5
876.12-E-0-360/30x2/400	360	30x2	400 / L1 L2 PE	10,8x2	16	1,5
876.12-E-0-360/60/400	360	60	400 / L1 L2 PE	21,6	32	2,5
876.12-E-0-360/60x2/400	360	60x2	400 / L1 L2 PE	21,6x2	32	2,5
876.12-E-0-360/60x3/400	360	60x3	400 / L1 L2 PE	21,6x3	32	2,5

GEOMETRIC DETAILS (Dimensions in mm)																		
Box version (S) (Dimensions in mm)									Built-in version (E) (Dimensions in mm)									
Ordering key	Type	A	B	C	D	E	F	Weight in kg	Ordering key	Type	A	B	C	D	E	F	Weight in kg	
876.12-S-0-210/30/230	EP1	600	400	200	558	355	10	15	876.12-E-0-210/30/230	EP1	220	120	95	210	85	5	2,0	
876.12-S-0-210/30/400	-	600	400	200	558	355	10	15	876.12-E-0-210/30/400	EP2	220	120	95	210	85	5	2,0	
876.12-S-0-360/30/400	EP2	600	400	200	558	355	10	15	876.12-E-0-360/30/400	EP2	220	120	95	210	85	5	2,0	
876.12-S-0-360/30x2/400	EP4	600	400	200	558	355	10	16	876.12-E-0-360/30x2/400	EP4	280	120	95	270	85	5	3,5	
876.12-S-0-360/60/400	EP3	600	400	200	558	355	10	16	876.12-E-0-360/60/400	EP3	280	120	95	270	85	5	3,5	
876.12-S-0-360/60x2/400	EP5	600	400	200	558	355	10	19	876.12-E-0-360/60x2/400	EP5	360	120	95	350	85	5	4,5	
876.12-S-0-360/60x3/400	EP6	600	400	200	558	355	10	21	876.12-E-0-360/60x3/400	EP6	440	120	95	430	85	5	5,5	



Drawing for execution in steel box (S)



Drawing for built-in version (E)

To comply with the European standards in line filter must be provided with the power supply:

Type	Magnet voltage DC in V	Max. magnet current in A	Input voltage AC in V	Approx. Dimensions in mm		
				Length	Width	Height
876.12-EPF-210/30/230	210	30	230 / L1 N PE	250	300	150
876.12-EPF-210/30/400	210	30	400 / L1 L2 PE	250	300	150
876.12-EPF-360/30/400	360	30	400 / L1 L2 PE	250	300	150
876.12-EPF-360/60/400	360	60	400 / L1 L2 PE	250	300	150

Ordering example

 Electronic polarity reversing control unit  
 Name

: SAV 876.12-SO-360/60x2/400

No SAV - execution - Transformer - magnet voltage - max. magnet current – input voltage

Ordering example

 In line filter unit  
 Name

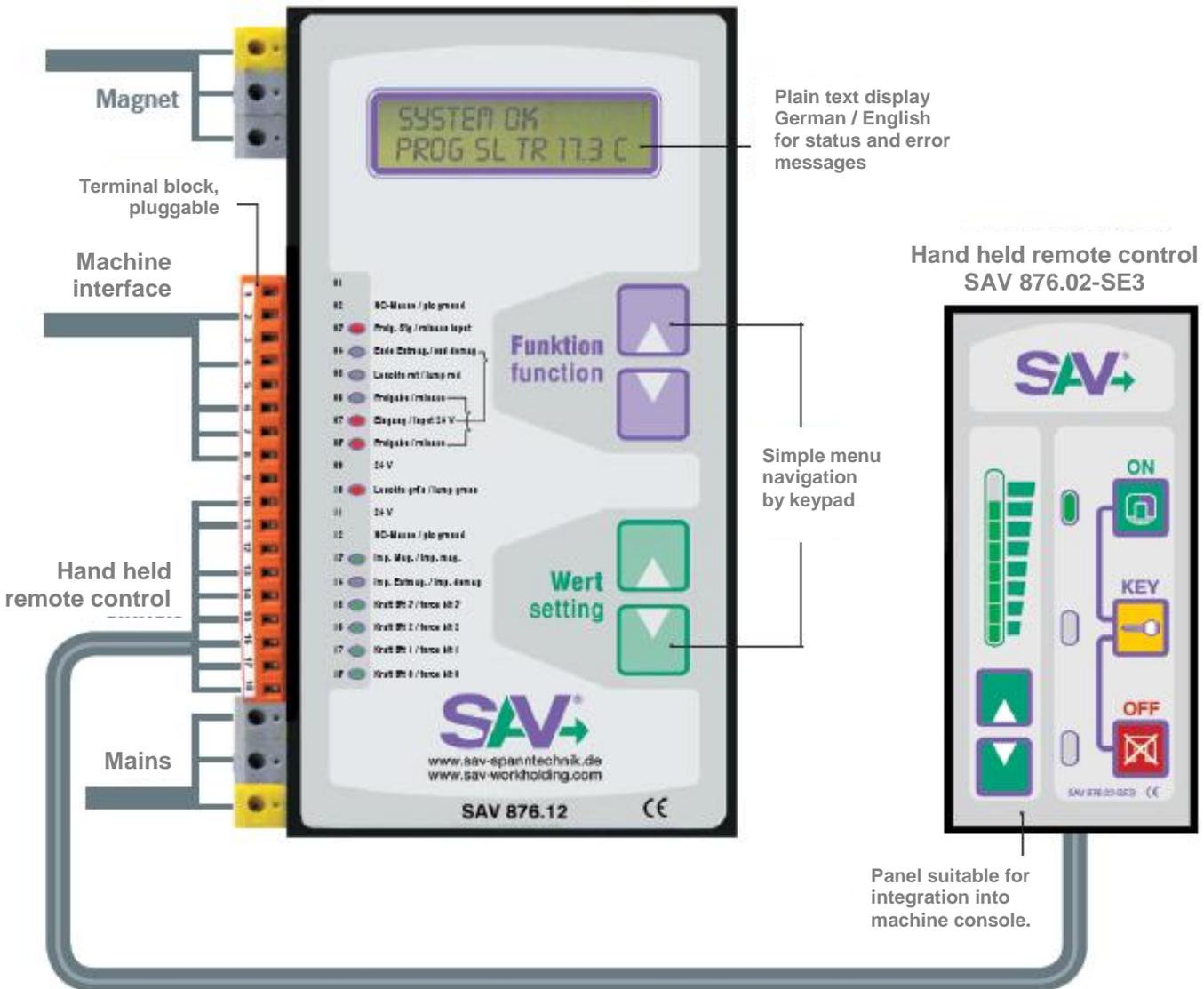
: SAV 876.12-EPF-360/60x2/400

No SAV - execution - magnet voltage - max. magnet current – input voltage

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**CE Compliant**

According to Machinery Directive 2006/42/EC  
Low Voltage Directive 2006/95/EC  
EMC Directive 2004/108/EC

**ROH Compliant**

- Short circuit proof
- Short to ground test