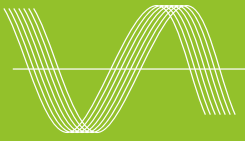
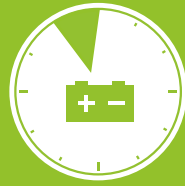


DATA SHEET

SPECLINE AVR Pro 700

700 VA

AVR
INCREASINGCLEAR DIGITAL
SINUS SYSTEM
(CDS)LONG BACKUP
TIMESYSTEM
Cool Battery Charging

SPECLINE AVR Pro 700 is the newest series of technologically advanced power supply units, which are intended primarily for ensuring the uninterrupted operation of central heating boilers, solar systems, fireplaces with water jackets, pumps, control and automatic systems.

SPECLINE AVR Pro 700 UPS units with a battery module protect the connected equipment against voltage decays and drops, and eliminate the possibility of damage arising from overvoltage in the mains.

The series of UPS units has a built-in system for regulating (increasing) the mains voltage that adjusts incorrect input voltage to a level that is acceptable to the receivers, without the use of battery power.

FEATURES

- **CDS System (Clear Digital Sinus) - generates a clear sine wave in the unit's output (in battery mode).**
- **AVR** is a system that regulates (increases) the mains voltage automatically, by adapting incorrect input voltage to a level that is acceptable to the receivers, without the use of the battery.
- **Cold start** - for starting the device in battery mode, without connection to the mains.
- Possibility to connect up to **three battery modules** (each rated at 42 Ah) - for extended back-up operation.
- Synchronization with the mains.
- Microchip control of all parameters.
- Sound indication of discharged battery.
- The UPS automatically reverts to mains operation once voltage with proper parameters is detected.
- Resistance to overload.
- Short circuit protection.
- Convenient and universal method of connecting cables.

SERVICE

- Door-to-door support
- 2-year warranty for the UPS
- 1-year warranty for the batteries
- Execution in 14 working days



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TECHNICAL DATA

PARAMETERS \ TYPE	SPECLINE AVR PRO 700
Part number	W/SPPATO-000K70/00
Rated output power (Apparent / Active) ¹⁾	350 VA / 200 W
The maximum output power of 30 s (Apparent / Active)	700 VA / 400 W
GENERAL DATA AND ENVIRONMENTAL	
Topology	VI (line interactive)
Number of phases (in/out)	1 / 1
Housing Type	Tower
Operating temperature ²⁾	0 ÷ + 40 °C
Storage temperature	0 ÷ + 40 °C
Relative humidity during operation	20 ÷ 80 % (non-condensing)
Relative humidity during storage	20 ÷ 95 % (non-condensing)
Operating elevation ³⁾	< 1000 m
Protection level	IP20
Environment of installation	Technical rooms / industrial rooms with low level of pollution
Cooling	Gravity
INPUT	
Rated input voltage	230 V AC
Input voltage range and tolerance	178 ÷ 253 V AC ± 2 %
Input voltage rated frequency	50 Hz
Input voltage frequency range and tolerance	45 ÷ 55 Hz ± 1 Hz
Transfer thresholds: Mains – UPS	178 ÷ 253 V AC ± 2 %
OUTPUT	
Rated output voltage	230 V AC
Output voltage range and tolerance - normal mode	195 ÷ 253 V AC ± 2 %
Output voltage range and tolerance - battery mode	230 V AC ± 5 %
Automatic Voltage Regulation (AVR)	+ 10 %
Shape of output voltage (battery mode / normal mode)	Sine wave / same as input
Output voltage rated frequency	50 Hz
Output frequency range and tolerance - mains operation mode	Synchronously
Output frequency range and tolerance - battery mode	50 Hz ± 1Hz
Output voltage filtering	RFI/EMI filter, varistor TVSS
Transfer thresholds: UPS– Mains	183 ÷ 248 V AC ± 2 %
Transfer time to battery mode	< 3 ms
Transfer time to normal mode	0 ms
BATTERIES AND TYPICAL RUNTIME	
Internal Batteries	12 V / 7 Ah VRLA
Number of internal batteries	2
Maximum overall internal batteries capacity	14 Ah
External Batteries	6 x 12 V / 7 Ah VRLA
Maximum number of EBMs 42 Ah	3
Backup time - internal batteries (100 % / 50 % Pzn)	20 / 50 min
Backup time - internal batteries + 1 EBM (100 % / 50 % Pzn)	120 / 290 min
Backup time - internal batteries + 2 EBM (100 % / 50 % Pzn)	250 / 560 min
Backup time - internal batteries + 3 EBM (100 % / 50 % Pzn)	370 / 800 min
Rated voltage DC circuit	12 V DC
EBM (42 Ah) Maximum charging time - after discharging at 80 % Pmax	10 h

Note: The manufacturer reserves the right to modify the above parameters without prior notification.

* Charging time to 90% battery capacity.

Notes:

- 1) For standard operation, the load applied to the output must not exceed 80% of the value in the table. The power margin is necessary to ensure continuous work of the connected devices in the case of instantaneous surges of the load
- 2) For UPS with internal batteries 5 ÷ 35 °C. Constant exposure of the battery module to temperatures of +25°C reduces the battery life.
- 3) The permitted maximum load of the power supply unit decreases with the height above the sea level above the limit specified above.

SPECLINE AVR Pro 700

700 VA



TECHNICAL DATA

Note: The manufacturer reserves the right to modify the above parameters without prior notification.

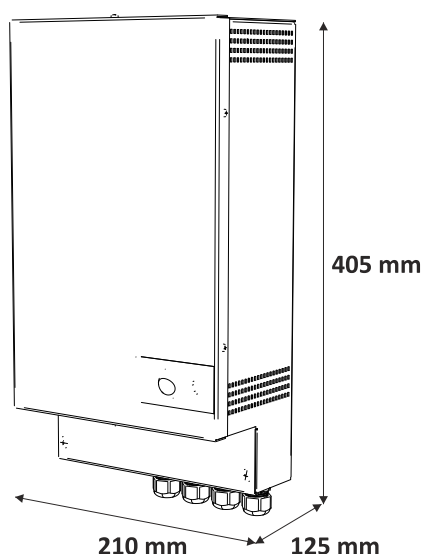
PARAMETERS \ TYPE	SPECLINE AVR PRO 700
Part number	W/SPPATO-000K70/00
Rated output power (Apparent / Active) ¹⁾	350 VA / 200 W
The maximum output power of 30 s (Apparent / Active)	700 VA / 400 W
MECHANICAL SPECIFICATIONS	
Dimensions (H x W x D)	405 x 210 x 125 mm
Net Weight	11,00 kg
Gross Weight	11,40 kg
Transport Dimensions (H x W x D)	150 x 220 x 390 mm
Operating position	Vertical
Position in which devices transported	Horizontal
PROTECT	
Input over current protection	Short circuit protection - Fuse 5 x 20 mm 5 A / 250 V AC Surge Protection
Output over current protection	Electronic short-circuit and overload protection
DC over current (external battery input)	Overvoltage Protection and against reverse battery module connection Battery overcurrent - Automotive Fuse type UNIVAL 19 mm 40 A
ACCESSORY AND EXTRA FUNCTIONS	
Power supply connection	screw terminals; max. 4 mm ² (cable)
Output connection (number and type of sockets)	screw terminals; max. 4 mm ² (cable)
DC connection	screw terminals M4 max. 10 mm ² (cable)
Signalling	Acoustic and optical
CERTIFICATION	
Declarations	CE
Standards	PN-EN 62040-1:2009, PN-EN 62040-2:2008

* Charging time to 90% battery capacity, following a prior discharge with a load of 80% Pmax (to shut down the UPS).

Notes:

1) For standard operation, the load applied to the output must not exceed 80% of the value in the table. The power margin is necessary to ensure continuous work of the connected devices in the case of instantaneous surges of the load

DIMENSIONS



AUDIO & VISUAL SIGNALS INDICATING THE UPS UNIT'S VARIOUS OPERATING MODES

Event	Sound signal	Visual signal
MAINS (normal) mode	No sound signal.	Green LED on.
BACK-UP (battery) mode	Intermittent signal; frequency increases proportionally to the level of discharging of the batteries, until it turns into a continuous sound.	Amber LED on.
Battery charging	No sound signal.	Green LED is pulsating (2250 ms ON / 250 ms OFF).
Overload *	Continuous sound signal.	The LED corresponding to the current operating mode (mains or back-up) is on.
Short circuit in the UPS output	Quick intermittent signal.	Red LED on.

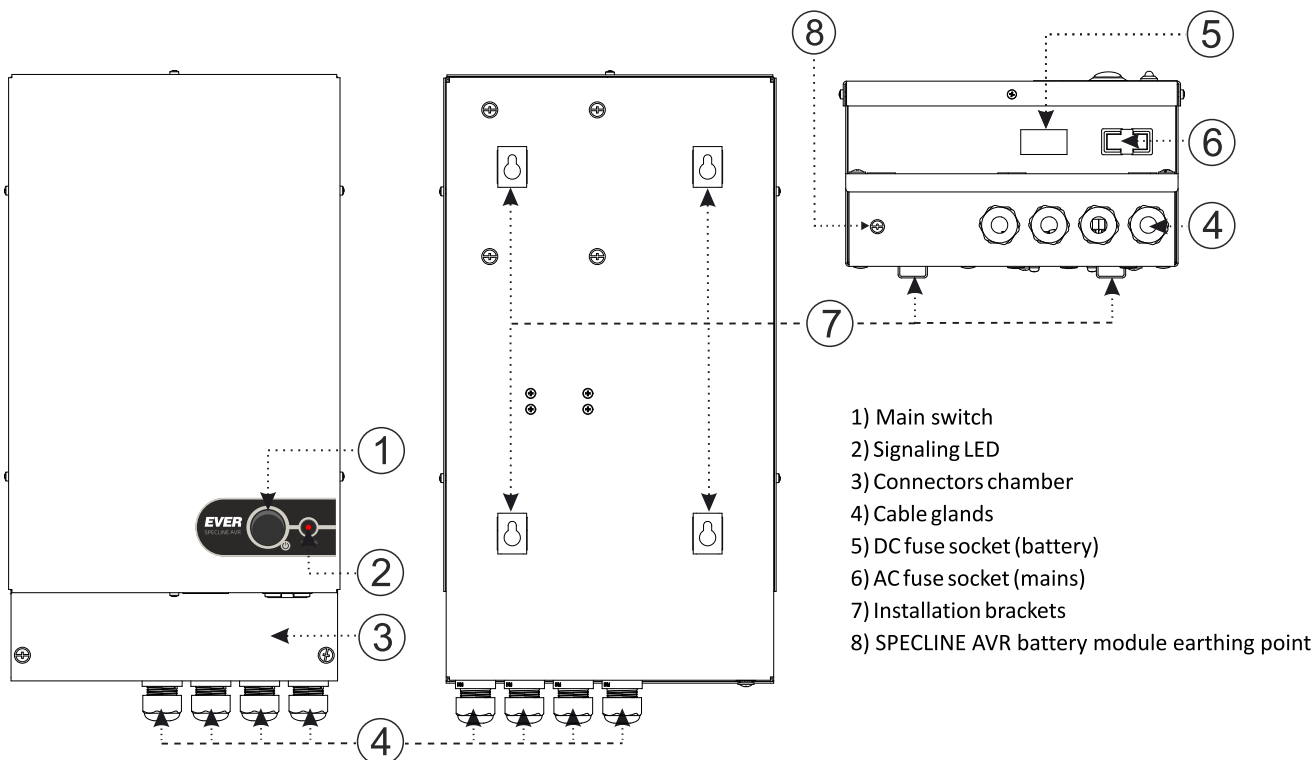
*The overload signaling time in back-up mode is 30 seconds. Afterwards, the UPS switches to emergency mode and signals it with a continuous sound signal and the red LED on.

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ELEMENTS OF THE UPS



CONNECTING THE BATTERY MODULES

