

# AMS90/1

## AC/DC converter monophase semi-controlled, 1 function dials, analogue

### Technical features:

- **Power supply:** from mains single phase 230/400 VAC with voltage change (415/440 VAC upon request).
- **Armature output voltage:** 0...280 VDC (for 380 VAC mains).
- **Ventilation:** natural.
- **Independent activation supply:** single phase bridge rectifier with varistor.
- **Protection:** from mains overvoltage, overload.
- **External speed reference:** from potentiometer 2.5 kW, or from adjustable voltage  $0 \div 10$  VDC (internal impedance 10 kW), or from current signal  $4 \div 20$  mA.
- **Current limitations:** rated by means of an internal trimmer or by means of external voltage 0...10 VDC.
- **Auxiliary functions (inside converter):**
  - Gradual acceleration and deceleration, with automatic release of ramp circuit upon start command.
  - Analog control made entirely in SMT technology.
  - Minimum speed setting.
  - High impedance armature retroaction, with armature fall compensation Rx1.
- **2 output analog signals 0 + 10V:** voltage signal V OUT proportional to the rotation speed of the motor; current signal I OUT proportional to the armature current output.
- **1 digital input:** RUN/STAND-BY active with high or low selected voltage level.
- **1 digital output:** relay, zero speed intervention.
- **Operating temperature:** from 0 to 40° C environmental.
- **Relative humidity:** 20 ÷ 90% (without condensation).
- **Max. operating altitude:** 1000 m (above sea level).
- **Protection grade:** IP20
- **Adjustments:**
  - Max. and Min. speed.
  - Stability.
  - Internal/external current limits.
  - Armature compensation.
  - Acceleration/deceleration ramps.
  - Zero speed offset.
- **Lighting signals using LEDs:**
  - Continuous supply voltage presence 15 VDC.
  - Current limitation reached.
  - Zero speed.
  - Converter in start mode.
- **Dimensions:** 202 x 167 x 111



	Max. nominal current (A)	Input voltage (Vca)	Output voltage (Vcc) (Vin = 220 Vca)	Motor power (kW) (rim = 0.8 - Vin = 170 Vca)	HP	Output voltage (Vcc) (Vin = 380 Vca)	Motor power (kW) (rim = 0.8 - Vin = 280 Vca)	HP	Field current Vmax excit. 360 Vcc	Fuse-tracing fuses Commutation reactor A.C. side	Reactor motor side	
AMS90/1.10	10	220 ÷ 440 SINGLEPHASE	170	1.4	1.8	2.2	3	25	35	15		
AMS90/1.20	20			2.7	3.7	280	4.5	6.1	2	25	35	25
AMS90/1.30	30			4.1	5.5	6.7	9.1	35	35	35		

