

Product data sheet

Specifications



ATV08 0,18 kW base plate without EMC - single phase

ATV08PU05M2X

⚠ Discontinued on: Dec 31, 2002

⚠ End-of-service on: Dec 31, 2004

⚠ Discontinued

Main

Range Of Product	Altivar
Product Or Component Type	Variable speed drive
Product Specific Application	Simple machine
Component Name	ATV08
Assembly Style	On base plate
Emc Filter	Without EMC filter
Network Number Of Phases	Single phase
[Us] Rated Supply Voltage	200...240 V +/- 10 %
Supply Frequency	50...60 Hz - 5...5 %
Motor Power Kw	0.18 kW
Motor Power Hp	0.25 hp
Line Current	6 A at 230 V, I _{sc} = 1 kA
Nominal Output Current	1.6 A 4 kHz 230 V motor
Maximum Transient Current	2.4 A for 60 s
Power Dissipation In W	14.5 W at nominal load
Asynchronous Motor Control Profile	Sensorless flux vector control with PWM type motor control signal
Analogue Input Number	1

Complementary

Product Destination	Asynchronous motors
Built-In Fan	Without
Supply Voltage Limits	180...264 V
Network Frequency Limits	47.5...63 Hz
Speed Drive Output Frequency	0.5...200 Hz
Nominal Switching Frequency	4 kHz
Switching Frequency	2...16 kHz adjustable 4...16 kHz with derating factor
Speed Range	1...10
Transient Overtorque	150...170 % of nominal motor torque

Disclaimer: This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications

Regulation Loop	Factory-set with the speed loop stability and gain Possible correction for machines with high resistive torque/inertia/fast cycles Adjustable frequency
Motor Slip Compensation	Adjustable Preset in factory
Prospective Line Isc	1 kA
Output Voltage	$\leq 2 \times$ power supply voltage
Electrical Connection	Control terminal 1.5 mm ² Power supply terminal 1.5 mm ²
Insulation	Galvanic insulation between power and control terminals
Supply	Internal supply for logic inputs: 15 V 100 mA, protection type: overload and short-circuit protection Internal supply for reference potentiometer (1 to 10 kOhm): 5 VDC 10 mA, protection type: overload and short-circuit protection
Analogue Input Type	Configurable current AI1 4...20 mA 500 Ohm with load in parallel Configurable voltage AI1 0...5 V 50000 Ohm Configurable current AI1 0...20 mA 500 Ohm Configurable voltage AI1 0...10 V 50000 Ohm
Sampling Duration	LI1...LI4: 20 ms discrete AI1: 20 ms analog
Linearity Error	: +/- 1 % for output
Discrete Input Number	4
Discrete Input Type	Assignable LI1 forward 3500 Ohm 15 V 24 V Assignable LI2 reverse 3500 Ohm 15 V 24 V Assignable LI3/LI4 4 preset speeds 3500 Ohm 15 V 24 V
Discrete Input Logic	Positive logic (source) (LI1...LI4), < 5 V (state 0), > 11 V (state 1) Negative (LI1...LI4), > 11 V (state 0), < 5 V (state 1)
Discrete Output Number	2
Discrete Output Type	Relay normally open R1 1 NO
Minimum Switching Current	R1A, R1C 10 mA at 24 V DC
Maximum Switching Current	1.5 A 250 V AC inductive cos phi = 0.4 7 ms R1A, R1C 1.5 A 30 V DC inductive cos phi = 0.4 7 ms R1A, R1C 1.5 A 250 V AC resistive cos phi = 1 0 ms R1A, R1C 1.5 A 30 V DC resistive cos phi = 1 0 ms R1A, R1C
Acceleration And Deceleration Ramps	Linear from 0 to 99.9 s
Braking To Standstill	By DC injection
Protection Type	Line supply overvoltage: drive Line supply undervoltage: drive Overheating protection: drive Short-circuit between motor phases: drive Thermal protection: motor Overcurrent between output phases and earth: drive
Insulation Resistance	≥ 500 mOhm
Operating Position	Vertical +/- 10 degree
Cad Overall Width	72 mm
Cad Overall Height	130 mm
Cad Overall Depth	87 mm

Environment

Electromagnetic Compatibility	1.2/50 µs - 8/20 µs surge immunity test level 3 conforming to EN/IEC 61000-4-5 Electrical fast transient/burst immunity test level 4 conforming to EN/IEC 61000-4-4 Electrostatic discharge immunity test level 3 conforming to EN/IEC 61000-4-2 Radiated radio-frequency electromagnetic field immunity test level 3 conforming to EN/IEC 61000-4-3 Conducted and radiated emissions conforming to EN 55011 class B Conducted and radiated emissions conforming to IEC/EN 61800-3 environments 1 and 2
Standards	EN/IEC 61800-3
Product Certifications	CSA UL
Marking	CE
Ip Degree Of Protection	IP20
Relative Humidity	5...93 % without condensation conforming to IEC 60068-2-3 5...93 % without dripping water conforming to IEC 60068-2-3
Ambient Air Temperature For Storage	-25...65 °C
Ambient Air Temperature For Operation	0...40 °C without derating 40...60 °C with current derating 2.2 % per °C
Operating Altitude	<= 1000 m without derating > 1000 m with current derating 1 % per 100 m