

ATV32HU75N4

variable speed drive ATV32 - 7.5 kw - 400 V - 3
phase - with heat sink

Product availability: Stock - Normally stocked in distribution facility

Price*: 1445.00 USD



Main

Commercial Status	Commercialised
Range of product	Altivar 32
Product or component type	Variable speed drive
Product specific application	Complex machines
Assembly style	With heat sink
Component name	ATV32
EMC filter	Class C2 EMC filter integrated
Network number of phases	3 phases
[Us] rated supply voltage	380...500 V (- 15...10 %)
Motor power kW	7.5 kW at 380...500 V 3 phases
Motor power hp	10 hp at 380...500 V 3 phases
Line current	26.5 A for 380 V 3 phases 7.5 kW / 10 hp 18.7 A for 500 V 3 phases 7.5 kW / 10 hp
Apparent power	22.9 kVA at 500 V 3 phases 7.5 kW / 15 hp
Prospective line Isc	<= 22 kA, 3 phases
Nominal output current	17 A at 4 kHz 500 V 3 phases 7.5 kW / 10 hp
Maximum transient current	25.5 A for 60 s 3 phases 7.5 kW / 10 hp
Speed drive output frequency	0.5...599 Hz
Nominal switching frequency	4 kHz
Switching frequency	2...16 kHz adjustable
Asynchronous motor control profile	Voltage/Frequency ratio, 2 points Voltage/Frequency ratio, 5 points Flux vector control without sensor - Energy Saving, NoLoad law Flux vector control without sensor, standard Voltage/Frequency ratio - Energy Saving, quadratic U/f
Type of polarization	No impedance for Modbus

Complementary

Product destination	Asynchronous motors Synchronous motors
Supply voltage limits	323...550 V
Supply frequency	50...60 Hz (- 5...5 %)
Network frequency limits	47.5...63 Hz
Speed range	1...100 for asynchronous motor in open-loop mode
Speed accuracy	+/- 10 % of nominal slip for 0.2 Tn to Tn torque variation
Torque accuracy	+/- 15 %
Transient overtorque	170...200 % of nominal motor torque
Braking torque	< 170 % with braking resistor
Synchronous motor control profile	Vector control without sensor

Regulation loop	Adjustable PID regulator
Motor slip compensation	Automatic whatever the load Not available in voltage/frequency ratio (2 or 5 points) Adjustable 0...300 %
Local signalling	1 LED red presence of drive fault 1 LED red presence of CANopen error 1 LED green presence of CANopen run 1 LED blue presence of bluetooth 1 LED red presence of drive voltage
Output voltage	$\leq$ power supply voltage
Insulation	Electrical between power and control
Electrical connection	Power supply screw terminal 6...16 mm ² / AWG8...AWG6 Motor/Braking resistor removable screw terminals 2.5...16 mm ² / AWG12...AWG6 Control screw terminal 0.5...1.5 mm ² / AWG18...AWG14
Tightening torque	Power supply 10.62 lbf.in (1.2 N.m) / 10.6 lb/ft Motor/Braking resistor 10.62 lbf.in (1.2 N.m) / 10.6 lb/ft Control 4.42 lbf.in (0.5 N.m) / 4.4 lb/ft
Supply	Internal supply for reference potentiometer (1 to 10 kOhm), 10.5 V DC +/- 5 %, $\leq$ 10 mA for overload and short-circuit protection
Analogue input number	3
Analogue input type	AI3 current 0...20 mA (or 4-20 mA, x-20 mA, 20-x mA or other patterns by configuration), impedance 250 Ohm, resolution 10 bits AI2 bipolar differential voltage +/- 10 V DC, impedance 30000 Ohm, resolution 10 bits AI1 voltage 0...10 V DC, impedance 30000 Ohm, resolution 10 bits
Sampling duration	AO1 2 ms for analog input(s) AI1, AI2, AI3 2 ms for analog input(s)
Response time	R2A, R2C 2 ms for relay output(s) R1A, R1B, R1C 2 ms for relay output(s) LI1...LI6 8 ms, tolerance +/- 0.7 ms for logic output(s)
Accuracy	AO1 +/- 2 % for a temperature of -10...60 °C AO1 +/- 1 % for a temperature of 25 °C AI1, AI2, AI3 +/- 0.5 % for a temperature of 25 °C AI1, AI2, AI3 +/- 0.2 % for a temperature of -10...60 °C
Linearity error	AO1 +/- 0.3 % AI1, AI2, AI3 +/- 0.2...0.5 % of maximum value
Analogue output number	1
Analogue output type	AO1 software-configurable voltage 0...10 V, impedance 470 Ohm, resolution 10 bits AO1 software-configurable current 0...20 mA, impedance 800 Ohm, resolution 10 bits
Discrete output number	3
Discrete output type	LO logic R2A, R2B configurable relay logic NO, electrical durability 100000 cycles R1A, R1B, R1C configurable relay logic NO/NC, electrical durability 100000 cycles
Minimum switching current	Configurable relay logic 5 mA at 24 V DC
Maximum switching current	R2 on resistive load, 5 A at 30 V DC, cos phi = 1, R2 on resistive load, 5 A at 250 V AC, cos phi = 1, R1, R2 on inductive load, 2 A at 30 V DC, cos phi = 0.4, R1, R2 on inductive load, 2 A at 250 V AC, cos phi = 0.4, R1 on resistive load, 4 A at 30 V DC, cos phi = 1, R1 on resistive load, 3 A at 250 V AC, cos phi = 1,
Discrete input number	7
Discrete input type	STO safe torque off 24...30 V DC, impedance 1500 Ohm LI6 switch-configurable PTC probe 24...30 V DC LI5 programmable as pulse input 20 kpps 24...30 V DC, with level 1 PLC LI1...LI4 programmable (sink/source) 24...30 V DC, with level 1 PLC
Discrete input logic	LI1...LI6 positive logic (source), < 5 V (state 0), > 11 V (state 0) LI1...LI6 negative logic (sink), > 19 V (state 0), < 13 V (state 0)
Acceleration and deceleration ramps	S U CUS Deceleration ramp automatic stop DC injection Deceleration ramp adaptation Linear Ramp switching
Braking to standstill	By DC injection

Protection type	Thermal protection drive Short-circuit between motor phases drive Overheating protection drive Overcurrent between output phases and earth drive Input phase breaks drive
Communication port protocol	CANopen Modbus
Type of connector	1 RJ45 for Modbus/CANopen on front face
Physical interface	2-wire RS 485 for Modbus
Transmission frame	RTU for Modbus
Number of addresses	1...247 for Modbus 1...127 for CANopen
Method of access	Slave for CANopen
Marking	CE
Operating position	Vertical +/- 10 degree
Width	5.91 in (150 mm)
Height	12.13 in (308 mm)
Depth	9.13 in (232 mm)
Product weight	16.53 lb(US) (7.5 kg)
Option card	Communication card Profibus DP V1 Communication card Ethernet/IP Communication card DeviceNet Communication card CANopen open style Communication card CANopen daisy chain

Environment

Noise level	43 dB conforming to 86/188/EEC
Electromagnetic compatibility	Voltage dips and interruptions immunity test conforming to IEC 61000-4-11 Radiated radio-frequency electromagnetic field immunity test conforming to IEC 61000-4-3 level 3 Electrostatic discharge immunity test conforming to IEC 61000-4-2 level 3 Electrical fast transient/burst immunity test conforming to IEC 61000-4-4 level 4 Conducted radio-frequency immunity test conforming to IEC 61000-4-6 level 3 1.2/50 µs - 8/20 µs surge immunity test conforming to IEC 61000-4-5 level 3
Standards	EN 55011 class A group 1 EN 61800-3 environments 1 category C2 EN 61800-3 environments 2 category C2 EN/IEC 61800-3 EN/IEC 61800-5-1
Product certifications	CSA C-Tick GOST NOM 117 UL
Pollution degree	2 conforming to EN/IEC 61800-5-1
IP degree of protection	IP20 conforming to EN/IEC 61800-5-1
Vibration resistance	1.5 mm peak to peak (f = 3...13 Hz) conforming to EN/IEC 60068-2-6 1 gn (f = 13...200 Hz) conforming to EN/IEC 60068-2-6
Shock resistance	15 gn for 11 ms conforming to EN/IEC 60068-2-27
Relative humidity	5...95 % without dripping water conforming to IEC 60068-2-3 5...95 % without condensation conforming to IEC 60068-2-3
Ambient air temperature for operation	122...140 °F (50...60 °C) with derating factor 14...122 °F (-10...50 °C) without derating
Ambient air temperature for storage	-13...158 °F (-25...70 °C)
Operating altitude	3280.84...9842.52 ft (1000...3000 m) with current derating 1 % per 100 m ≤ 3280.84 ft (1000 m) without derating

Ordering and shipping details

Category	22153 - ATV312 / ATV32 (10 THRU 30 HP)
Discount Schedule	CP4B
GTIN	00785901632627
Nbr. of units in pkg.	1
Package weight(Lbs)	12.32
Product availability	Stock - Normally stocked in distribution facility
Returnability	Y
Country of origin	ID

Offer Sustainability

Sustainable offer status	Not Green Premium product
RoHS	Compliant - since 1012 - Schneider Electric declaration of conformity

Contractual warranty

Period	18 months
--------	-----------