

variable speed drive, Altivar Machine ATV320, 0.55kW, 200 to 240V, 1 phase, enclosed, IP65

ATV320U06M2WS

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Main	
Range of product	Altivar Machine ATV320
Product or component type	Variable speed drive
Product specific application	Complex machines
Variant	With disconnect switch
Format of the drive	Enclosed
Mounting mode	Wall mount
Communication port protocol	Modbus serial CANopen
Option card	Communication module, CANopen Communication module, EtherCAT Communication module, Profibus DP V1 Communication module, PROFINET Communication module, Ethernet Powerlink Communication module, EtherNet/IP Communication module, DeviceNet
[Us] rated supply voltage	200240 V - 1510 %
Nominal output current	3.7 A
Motor power kW	0.55 kW for heavy duty
EMC filter	Class C2 EMC filter integrated
IP degree of protection	IP65
Complementary	
Discrete input number	7

Complementary	
Discrete input number	7
Discrete input type	STO safe torque off, 24 V DC, impedance: 1.5 kOhm DI1DI6 logic inputs, 24 V DC (30 V) DI5 programmable as pulse input: 030 kHz, 24 V DC (30 V)
Discrete input logic	Positive logic (source) Negative logic (sink)
Discrete output number	3
Discrete output type	Open collector DQ+ 01 kHz 30 V DC 100 mA Open collector DQ- 01 kHz 30 V DC 100 mA
Analogue input number	3
Analogue input type	Al1 voltage: 010 V DC, impedance: 30 kOhm, resolution 10 bits Al2 bipolar differential voltage: +/- 10 V DC, impedance: 30 kOhm, resolution 10 bits Al3 current: 020 mA (or 4-20 mA, x-20 mA, 20-x mA or other patterns by configuration), impedance: 250 Ohm, resolution 10 bits
Analogue output number	1

Analogue output type Schwarz-Configurable current A11 : 2.0 m.A Impedance 800 Chim. seculion 10 bits Charles configurable culpy large 811.0 1 M.O destrian durability 900000 cycles Configurable cells yough 81.0 1 M.O destrian durability 900000 cycles Configurable cells yough 81.0 1 M.O destrian durability 900000 cycles Configurable cells yough 81.0 1 M.O destrian durability 900000 cycles Configurable cells yough 81.0 1 M.O destrian durability 900000 cycles Configurable cells yough 81.0 1 M.O destrian durability 900000 cycles Configurable cells yough 81.0 1 M.O destrian durability 900000 cycles Configurable cells yough 81.0 1 M.O destrian durability 900000 cycles Configurable cells yough 81.0 1 M.O destrian durability 900000 cycles Configurable cells yough 81.0 1 M.O destrian durability 900000 cycles Configurable cells yough 81.0 1 M.O destrian durability 900000 cycles Configurable cells yough 81.0 1 M.O destrian durability 900000 cycles Configurable cells yough 81.0 1 M.O destrian durability 900000 cycles Configurable cells yough 81.0 1 M.O destrian durability 900000 cycles Configurable cells yough 81.0 1 M.O destrian durability 900000 cycles Configurable cells yough 81.0 1 M.O destrian durability 900000 cycles Configurable cells yough 81.0 1 M.O destrian durability 900000 cycles Configurable cells yough 82.0 1 N.O destrian durability 900000 cycles Configurable cells yough 82.0 1 N.O destrian durability 900000 cycles Configurable cells yough 82.0 1 N.O destrian durability 900000 cycles Configurable cells yough 82.0 1 N.O destrian durability 900000 cycles Configurable cells you 92.0 1 S.O destriant 92.0 1 A.O destriant durability 900000 cycles Configurable 11.0 1 S.O destriant 92.0 1 A.O destriant 92.0 A.O destr		
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Configurable relay logic RZA NO electrical durability (100000 cycles Configurable relay logic RZA NO electronal durability (100000 cycles	Relay output type	Configurable relay logic R1B 1 NC electrical durability 100000 cycles
Relay output RIA. RISB. RIC. RA. RC2 on industrical, cop shi = 1: 3 A at 30 V DC Relay output RIA. RISB. RIC. RA. RC2 on industrical, cop shi = 0.4 and LIR = 7 ms: 2 A at 250 V Relay output RIA. RISB. RIC. RA. RC2 on industrical, cop shi = 0.4 and LIR = 7 ms: 2 A at 30 V DC Relay output RIA. RISB. RIC. RA. RC2 on industrical cod. cop shi = 1: 5 A at 250 V AC Relay output RIA. RISB. RIC. RA. RC2 on resistive load, cop shi = 1: 5 A at 250 V AC Relay output RIA. RISB. RIC. RA. RC2 on resistive load, cop shi = 1: 5 A at 250 V AC Relay output RIA. RISB. RIC. RA. RC2: 5 mA at 24 V DC Method of access Sleve CANopon 4 quadrant operation possible True True True Velocate control without sensor standard Flux expert received without sen		Configurable relay logic R2A 1 NO electrical durability 100000 cycles
Relay output RIA, RISB, RIC, R2A, R2C on inabidate load, cost phi = 0.4 and LRT = 7 ms; 2 A at 30 V DC Relay output RIA, RISB, RIC, R2A, R2C on resistive load, cost phi = 1: 5 A at 30 V DC Relay output RIA, RISB, RIC, R2A, R2C: 5 mA at 24 V DC Months of access Slave CANopen 4 quadrant operation possible True Asynchronous motor control profile True Asynchronous motor control Profile Profile Relay output RIA, RISB, RIC, R2A, R2C: 5 mA at 24 V DC Relay output RIA, RISB, RIC, R2A, R2C: 5 mA at 24 V DC Relay output RIA, RISB, RIC, R2A, R2C: 5 mA at 24 V DC Relay output RIA, RISB, RIC, R2A, R2C: 5 mA at 24 V DC Relay output RIA, RISB, RIC, R2A, R2C: 5 mA at 24 V DC Relay output RISB, RISB, RISB, RIC, R2A, R2C: 5 mA at 24 V DC Relay output RISB,	Maximum switching current	Relay output R1A, R1B, R1C on resistive load, cos phi = 1: 3 A at 30 V DC
Relay output R2A. R2C or resistive load, os pi = 1: 5 A at 200 V AC Relay output R1A. R1S. R1C. R2A. R2C: 5 mA at 24 V DC Method of access Slave CANopen 4 quadrant operation possible True Asynchronous motor control profile Voltagefrequency ratio. 5 points Flox vector control without sensor; standard Voltagefrequency ratio. 5 points Flox vector control without sensor; standard Voltagefrequency ratio. 5 points Synchronous motor control Synchronous motor control Profile Vector control without sensor; standard Voltagefrequency ratio. 2 points Synchronous motor control Profile Transient overtorque 170200 % of nominal motor torque Maximum output frequency Acceleration and deceleration Ratio switching Rems switching Results and switching frequency 2 L16 kHz with derating factor Nominal switching frequency 4 Hzz Braking to standstill By DC injection Brake chopper integrated True Line current 7 B A at 200 V (heavy duty) 8 B A at 240 V (heavy duty) Maximum input current 7 B A At 200 V (heavy duty) Not available in vallegefrequency at kHz Prospective line is c 1 KA Base load current at high overload Power dissipation in W Self-cooled: 33 0 W at 200 V, switching frequency 4 kHz With safety function Safety Line United Speed (SLS) With safety function Safety With safety function Safety With safety function Safet		Relay output R1A, R1B, R1C, R2A, R2C on inductive load, cos phi = 0.4 and L/R = 7 ms: 2 A at 30 V
Method of access Slave CANopen 4 quadrant operation possible True Asynchronous motor control profile Synchronous motor control profile Wetageffrequency ratio 5 points Hive vector control vibrous tensors, standard Voltageffrequency ratio 6 points Flux vector control vibrous tensors Voltageffrequency ratio 7 points Plux vector control vibrous tensors Voltageffrequency ratio 7 points Plux vector control vibrous tensors Voltageffrequency ratio 7 points Plux vector control vibrous tensors Voltageffrequency ratio 7 points Plux vector control vibrous tensors Voltageffrequency 170200 % of nominal motor torque Maximum output frequency 0.599 kHz Acceleration and deceleration ramps Clus SUS SUS SUS SUS SUS SUS SUS SUS SUS SU		Relay output R2A, R2C on resistive load, cos phi = 1: 5 A at 250 V AC
4 quadrant operation possible Asynchronous motor control profile Asynchronous motor control profile Synchronous motor control profile Synchronous motor control profile Yestor control without sensor - Energy Saving, quadratic U/F Flux vector control without sensor - Energy Saving Voltagelifeequency ratio. 2 points Synchronous motor control profile Transient overtorque 170200 % of nominal motor torque Maximum output frequency 0.599 H+z Acceleration and deceleration Linear U	Minimum switching current	Relay output R1A, R1B, R1C, R2A, R2C: 5 mA at 24 V DC
Asynchronous motor control profile Voltagefrequency ratio, 5 points Flux vector control without sensor, standard Voltagefrequency ratio. Florety Saving, quadratic Unificative vector control without sensor - Energy Saving Voltagefrequency ratio. 2 percent profile Transient overtorque 170200 % of nominal motor torque Maximum output frequency 0.599 kHz Acceleration and deceleration ramps Linear U U S CUS Ramp switching Ramp switch	Method of access	Slave CANopen
Flux vector control without sensor, standard voltage/frequency ratio. Florery Saving, quadratic Uf Flux vector control without sensor - Energy Saving voltage/frequency ratio, 2 padratic Uf Flux vector control without sensor - Energy Saving voltage/frequency ratio, 2 padratic Uf Flux vector control without sensor profile Transient overtorque 170200 % of nominal motor torque Maximum output frequency 2.599 kHz Acceleration and deceleration and deceleration ramps Linear US CUS Ramp switching Acceleration/deceleration ramp adaptation Acceleration/deceleration automatic step with DC injection Motor slip compensation Automatic whatever the load Adjustable 0, 300 % Not available in voltage/frequency ratio (2 or 5 points) Switching frequency 2.16 kHz adjustable 4.16 kHz with derating factor Nominal switching frequency 4 kHz Braking to standstill By DC injection Brake chopper integrated True Line current 7.8 A at 200 V (heavy duty) 65 A at 240 V (heavy duty) Maximum input current 7.8 A at 240 V (heavy duty) Maximum input voltage 240 V Apparent power 1.6 kVA at 240 V (heavy duty) Relative symmetric network frequency False symmetric network frequency Prospective line Isc 1 kA Base load current at high overload Power dissipation in W Self-cooled: 33.0 W at 200 V, switching frequency 4 kHz With safety function Safe brake management (SBC/SBT) With safety function Safe brake management (SBC/SBT) With safety function Safe False False	4 quadrant operation possible	True
Voltagefrequency ratio - Energy Saving Flux vector control without sensor Profile Transient overtorque 170200 % of nominal motor torque Maximum output frequency 0.599 kHz Acceleration and deceleration ramps CUS CUS Ramp switching Acceleration ramp adaptation Acceleration/deceleration acceleration ramp adaptation Acceleration/deceleration acceleration acceleration/deceleration automatic stop with DC injection Motor slip compensation Automatic whatever the load Adjustable 0300 % Not available in voltagefrequency ratio (2 or 5 points) Switching frequency 216 kHz adjustable 410 kHz with derating factor Nominal switching frequency 4 kHz Braking to standstill By DC injection Brake chopper integrated True Line current 7.8 A at 200 V (neavy duty) 6.8 A at 240 V (heavy duty) Maximum input current 7.8 A at 240 V (heavy duty) Maximum output voltage 240 V Apparent power 1.6 kVA at 240 V (heavy duty) Network frequency 5060 Hz Relative symmetric network frequency For poetive line Isc 1 kA Base load current at high overrious Prospective line Isc 1 kA Base load current at high overrious Safely Limited Speed (SLS) With safety function Safe brake management (SBC/SBT) With safety function Safe Pake False False False	=	
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profile Transient overtorque 170200 % of nominal motor torque Maximum output frequency 0.599 kHz Acceleration and deceleration ramps Linear U S CUS Ramp switching Acceleration/deceleration ramp adaptation Acceleration/deceleration/deceleration automatic stop with DC injection Motor slip compensation Automatic whatever the load Adjustable 0300 % Not available in voltage/frequency ratio (2 or 5 points) Switching frequency 4 kHz Braking to standstill By DC injection Brake chopper integrated True Line current 7.8 A at 200 V (heavy duty) 6.6 A at 240 V (heavy duty) Maximum input current 7.8 A Maximum output voltage 240 V Apparent power 1.6 kVA at 240 V (heavy duty) Network frequency 5060 Hz Relative symmetric network frequency 1 kA Base load current at high 0.3 A overload Power dissipation in W Self-cooled: 33.0 W at 200 V, switching frequency 4 kHz With safety function Safe brake management (SBC/SBT) With safety function Safe brake management (SBC/SBT) With safety function Safe False		Voltage/frequency ratio, 2 points
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ramps US Ramp switching Acceleration/deceleration ramp adaptation Acceleration/deceleration automatic stop with DC injection Motor slip compensation Automatic whatever the load Adjustable 0300 % Not available in voltage/frequency ratio (2 or 5 points) Switching frequency 216 kHz adjustable 416 kHz with derating factor Nominal switching frequency 4 kHz Braking to standstill By DC injection Brake chopper integrated True Line current 7.8 A at 200 V (heavy duty) 6.6 A at 240 V (heavy duty) Maximum input current 7.8 A Maximum output voltage 240 V Apparent power 1.6 kVA at 240 V (heavy duty) Network frequency 5060 Hz Relative symmetric network frequency 15 % Relative symmetric network frequency 1 kA Base load current at high overload Power dissipation in W Self-cooled: 33.0 W at 200 V, switching frequency 4 kHz With safety function Safe brake management (SBC/SBT) With safety function Safe False	Maximum output frequency	0.599 kHz
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Adjustable 0300 % Not available in voltage/frequency ratio (2 or 5 points) Switching frequency 216 kHz adjustable 416 kHz with derating factor Nominal switching frequency 4 kHz Braking to standstill By DC injection Brake chopper integrated True Line current 7.8 A at 200 V (heavy duty) 6.6 A at 240 V (heavy duty) Maximum input current 7.8 A Maximum output voltage 240 V Apparent power 1.6 kVA at 240 V (heavy duty) Network frequency 5060 Hz Relative symmetric network frequency tolerance Prospective line Isc 1 kA Base load current at high overload Power dissipation in W Self-cooled: 33.0 W at 200 V, switching frequency 4 kHz With safety function Safe brake management (SBC/SBT) With safety function Safe False		·
416 kHz with derating factor Nominal switching frequency 4 kHz Braking to standstill By DC injection Brake chopper integrated True Line current 7.8 A at 200 V (heavy duty) 6.6 A at 240 V (heavy duty) Maximum input current 7.8 A Maximum output voltage 240 V Apparent power 1.6 kVA at 240 V (heavy duty) Network frequency 5060 Hz Relative symmetric network frequency tolerance Prospective line lsc 1 kA Base load current at high overload Power dissipation in W Self-cooled: 33.0 W at 200 V, switching frequency 4 kHz With safety function Safely Limited Speed (SLS) With safety function Safe brake management (SBC/SBT) With safety function Safe False	Motor slip compensation	Adjustable 0300 %
Braking to standstill By DC injection True Line current 7.8 A at 200 V (heavy duty) 6.6 A at 240 V (heavy duty) Maximum input current 7.8 A Maximum output voltage 240 V Apparent power 1.6 kVA at 240 V (heavy duty) Network frequency 5060 Hz Relative symmetric network frequency tolerance Prospective line Isc 1 kA Base load current at high overload Power dissipation in W Self-cooled: 33.0 W at 200 V, switching frequency 4 kHz With safety function Safely Limited Speed (SLS) With safety function Safe brake management (SBC/SBT) With safety function Safe Felse	Switching frequency	,
Brake chopper integrated True 7.8 A at 200 V (heavy duty) 6.6 A at 240 V (heavy duty) Maximum input current 7.8 A Maximum output voltage 240 V Apparent power 1.6 kVA at 240 V (heavy duty) Network frequency 5060 Hz Relative symmetric network frequency tolerance Prospective line Isc 1 kA Base load current at high overload Power dissipation in W Self-cooled: 33.0 W at 200 V, switching frequency 4 kHz With safety function Safely Limited Speed (SLS) With safety function Safe brake management (SBC/SBT) With safety function Safe False With safety function Safe False	Nominal switching frequency	4 kHz
Line current 7.8 A at 200 V (heavy duty) 6.6 A at 240 V (heavy duty) Maximum input current 7.8 A Maximum output voltage 240 V Apparent power 1.6 kVA at 240 V (heavy duty) Network frequency 5060 Hz Relative symmetric network frequency tolerance Prospective line Isc 1 kA Base load current at high overload Power dissipation in W Self-cooled: 33.0 W at 200 V, switching frequency 4 kHz With safety function Safely Limited Speed (SLS) With safety function Safe brake management (SBC/SBT) With safety function Safe False With safety function Safe False	Braking to standstill	By DC injection
Maximum input current 7.8 A Maximum output voltage 240 V Apparent power 1.6 kVA at 240 V (heavy duty) Network frequency 5060 Hz Relative symmetric network frequency tolerance Prospective line Isc 1 kA Base load current at high overload Power dissipation in W Self-cooled: 33.0 W at 200 V, switching frequency 4 kHz With safety function Safely Limited Speed (SLS) With safety function Safe brake management (SBC/SBT) With safety function Safe False	Brake chopper integrated	True
Maximum output voltage 240 V Apparent power 1.6 kVA at 240 V (heavy duty) Network frequency 5060 Hz Relative symmetric network frequency tolerance Prospective line Isc 1 kA Base load current at high overload Power dissipation in W Self-cooled: 33.0 W at 200 V, switching frequency 4 kHz With safety function Safely Limited Speed (SLS) With safety function Safe brake management (SBC/SBT) With safety function Safe False	Line current	
Apparent power 1.6 kVA at 240 V (heavy duty) Network frequency 5060 Hz Relative symmetric network frequency tolerance Prospective line Isc 1 kA Base load current at high overload Power dissipation in W Self-cooled: 33.0 W at 200 V, switching frequency 4 kHz With safety function Safely Limited Speed (SLS) With safety function Safe brake management (SBC/SBT) With safety function Safe False False	Maximum input current	7.8 A
Network frequency 5060 Hz Relative symmetric network frequency tolerance Prospective line Isc 1 kA Base load current at high overload Power dissipation in W Self-cooled: 33.0 W at 200 V, switching frequency 4 kHz With safety function Safely Limited Speed (SLS) With safety function Safe brake management (SBC/SBT) With safety function Safe False	Maximum output voltage	240 V
Relative symmetric network frequency tolerance Prospective line Isc 1 kA Base load current at high overload Power dissipation in W Self-cooled: 33.0 W at 200 V, switching frequency 4 kHz With safety function Safely Limited Speed (SLS) With safety function Safe brake management (SBC/SBT) With safety function Safe False	Apparent power	1.6 kVA at 240 V (heavy duty)
Prospective line Isc 1 kA Base load current at high overload Power dissipation in W Self-cooled: 33.0 W at 200 V, switching frequency 4 kHz With safety function Safely Limited Speed (SLS) With safety function Safe brake management (SBC/SBT) With safety function Safe False	Network frequency	5060 Hz
Base load current at high overload Power dissipation in W Self-cooled: 33.0 W at 200 V, switching frequency 4 kHz With safety function Safely Limited Speed (SLS) With safety function Safe brake management (SBC/SBT) With safety function Safe False		5 %
Power dissipation in W Self-cooled: 33.0 W at 200 V, switching frequency 4 kHz With safety function Safely Limited Speed (SLS) With safety function Safe brake management (SBC/SBT) With safety function Safe False	Prospective line Isc	1 kA
With safety function Safely Limited Speed (SLS) With safety function Safe brake management (SBC/SBT) With safety function Safe False	<u>-</u>	2.3 A
Limited Speed (SLS) With safety function Safe brake management (SBC/SBT) With safety function Safe False	Power dissipation in W	Self-cooled: 33.0 W at 200 V, switching frequency 4 kHz
management (SBC/SBT) With safety function Safe False		True
		False
		False

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With safety function Safe Position (SP)	False
With safety function Safe programmable logic	False
With safety function Safe Speed Monitor (SSM)	False
With safety function Safe Stop 1 (SS1)	True
With sft fct Safe Stop 2 (SS2)	False
With safety function Safe torque off (STO)	True
With safety function Safely Limited Position (SLP)	False
With safety function Safe Direction (SDI)	False
Protection type	Input phase breaks: drive Overcurrent between output phases and earth: drive Overheating protection: drive Short-circuit between motor phases: drive Thermal protection: drive
Width	250 mm
Height	340 mm
Depth	182.0 mm
Product weight	5.5 kg
Environment	
Operating position	Vertical +/- 10 degree
Product certifications	CE ATEX NOM GOST EAC RCM KC
Marking	CE ATEX UL CSA EAC RCM
Standards	EN/IEC 61800-5-1
Electromagnetic compatibility	Electrostatic discharge immunity test level 3 conforming to IEC 61000-4-2 Radiated radio-frequency electromagnetic field immunity test level 3 conforming to IEC 61000-4-3 Electrical fast transient/burst immunity test level 4 conforming to IEC 61000-4-4 1.2/50 µs - 8/20 µs surge immunity test level 3 conforming to IEC 61000-4-5 Conducted radio-frequency immunity test level 3 conforming to IEC 61000-4-6 Voltage dips and interruptions immunity test conforming to IEC 61000-4-11
Environmental class (during	Radiated radio-frequency electromagnetic field immunity test level 3 conforming to IEC 61000-4-3 Electrical fast transient/burst immunity test level 4 conforming to IEC 61000-4-4 1.2/50 µs - 8/20 µs surge immunity test level 3 conforming to IEC 61000-4-5 Conducted radio-frequency immunity test level 3 conforming to IEC 61000-4-6
Environmental class (during operation) Maximum acceleration under	Radiated radio-frequency electromagnetic field immunity test level 3 conforming to IEC 61000-4-3 Electrical fast transient/burst immunity test level 4 conforming to IEC 61000-4-4 1.2/50 µs - 8/20 µs surge immunity test level 3 conforming to IEC 61000-4-5 Conducted radio-frequency immunity test level 3 conforming to IEC 61000-4-6 Voltage dips and interruptions immunity test conforming to IEC 61000-4-11 Class 3C3 according to IEC 60721-3-3
Environmental class (during operation) Maximum acceleration under shock impact (during operation) Maximum acceleration under vibrational stress (during	Radiated radio-frequency electromagnetic field immunity test level 3 conforming to IEC 61000-4-3 Electrical fast transient/burst immunity test level 4 conforming to IEC 61000-4-4 1.2/50 µs - 8/20 µs surge immunity test level 3 conforming to IEC 61000-4-5 Conducted radio-frequency immunity test level 3 conforming to IEC 61000-4-6 Voltage dips and interruptions immunity test conforming to IEC 61000-4-11 Class 3C3 according to IEC 60721-3-3 Class 3S2 according to IEC 60721-3-3
Environmental class (during operation) Maximum acceleration under shock impact (during operation) Maximum acceleration under vibrational stress (during operation) Maximum deflection under vibratory load (during	Radiated radio-frequency electromagnetic field immunity test level 3 conforming to IEC 61000-4-3 Electrical fast transient/burst immunity test level 4 conforming to IEC 61000-4-4 1.2/50 µs - 8/20 µs surge immunity test level 3 conforming to IEC 61000-4-5 Conducted radio-frequency immunity test level 3 conforming to IEC 61000-4-6 Voltage dips and interruptions immunity test conforming to IEC 61000-4-11 Class 3C3 according to IEC 60721-3-3 Class 3S2 according to IEC 60721-3-3
Environmental class (during operation) Maximum acceleration under shock impact (during operation) Maximum acceleration under vibrational stress (during operation) Maximum deflection under vibratory load (during operation) Permitted relative humidity (during operation)	Radiated radio-frequency electromagnetic field immunity test level 3 conforming to IEC 61000-4-3 Electrical fast transient/burst immunity test level 4 conforming to IEC 61000-4-4 1.2/50 µs - 8/20 µs surge immunity test level 3 conforming to IEC 61000-4-5 Conducted radio-frequency immunity test level 3 conforming to IEC 61000-4-6 Voltage dips and interruptions immunity test conforming to IEC 61000-4-11 Class 3C3 according to IEC 60721-3-3 Class 3S2 according to IEC 60721-3-3 150 m/s² at 11 ms
Environmental class (during operation) Maximum acceleration under shock impact (during operation) Maximum acceleration under vibrational stress (during operation) Maximum deflection under vibratory load (during operation) Permitted relative humidity	Radiated radio-frequency electromagnetic field immunity test level 3 conforming to IEC 61000-4-3 Electrical fast transient/burst immunity test level 4 conforming to IEC 61000-4-4 1.2/50 µs - 8/20 µs surge immunity test level 3 conforming to IEC 61000-4-5 Conducted radio-frequency immunity test level 3 conforming to IEC 61000-4-6 Voltage dips and interruptions immunity test conforming to IEC 61000-4-11 Class 3C3 according to IEC 60721-3-3 Class 3S2 according to IEC 60721-3-3 150 m/s² at 11 ms 10 m/s² at 13200 Hz

Speed accuracy	+/- 10 % of nominal slip 0.2 Tn to Tn
Pollution degree	3
Ambient air transport temperature	-2570 °C
Ambient air temperature for operation	-10…40 °C without derating 40…60 °C with derating factor
Ambient air temperature for storage	-2570 °C
Packing Units	
Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	24.0 cm
Package 1 Width	30.5 cm
Package 1 Length	45.0 cm
Package 1 Weight	7.5 kg
Offer Sustainability	
Sustainable offer status	Green Premium product
REACh Regulation	REACh Declaration
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope) EU RoHS Declaration
Mercury free	Yes
China RoHS Regulation	China RoHS declaration
RoHS exemption information	Yes
Environmental Disclosure	Product Environmental Profile
Circularity Profile	End of Life Information
WEEE	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins
California proposition 65	WARNING: This product can expose you to chemicals including: Lead and lead compounds, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov

Upgraded components available

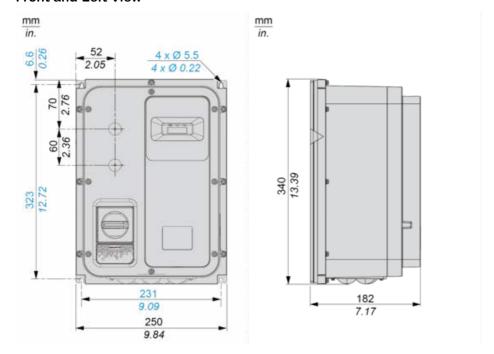
Upgradeability

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Dimensions Drawings

Dimensions

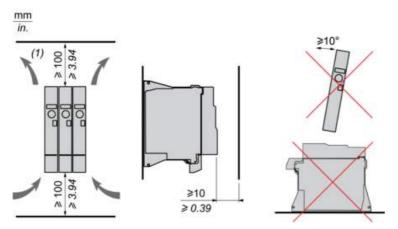
Front and Left View



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Mounting and Clearance

Mounting and Clearance



(1) Minimum value corresponding to thermal constraints.

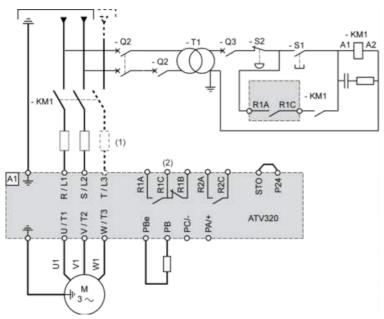
ATV320U06M2WS

Connections and Schema

Connection Diagrams

Diagram with Line Contactor

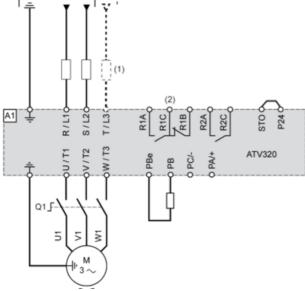
Connection diagrams conforming to standards ISO13849 category 1 and IEC/EN 61508 capacity SIL1, stopping category 0 in accordance with standard IEC/EN 60204-1.



- (1) Line choke (if used)
- (2) Fault relay contacts, for remote signaling of drive status

Diagram with Switch Disconnect

Connection diagrams conforming to standards EN 954-1 category 1 and IEC/EN 61508 capacity SIL1, stopping category 0 in accordance with standard IEC/EN 60204-1.

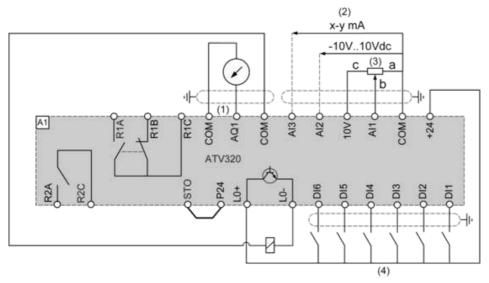


- (1) Line choke (if used)
- (2) Fault relay contacts, for remote signaling of drive status

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Connections and Schema

Control Connection Diagram in Source Mode



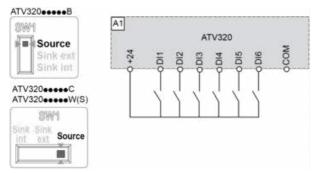
- (1) Analog output
- (2) Analog inputs
- (3) Reference potentiometer (10 kOhm maxi)
- (4) Digital inputs

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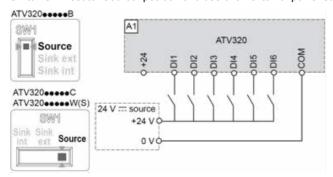
Connections and Schema

Digital Inputs Wiring

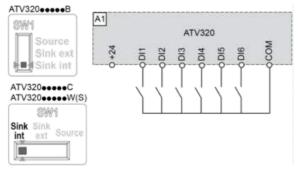
The logic input switch (SW1) is used to adapt the operation of the logic inputs to the technology of the programmable controller outputs. Switch SW1 set to "Source" position and use of the output power supply for the DIs.



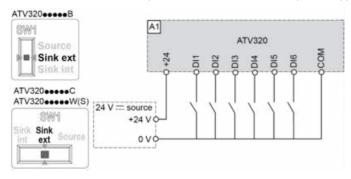
Switch SW1 set to "Source" position and use of an external power supply for the DIs.



Switch SW1 set to "Sink Int" position and use of the output power supply for the DIs.



Switch SW1 set to "Sink Ext" position and use of an external power supply for the DIs.



Recommended replacement(s)