



Main

Range of product	Altivar Machine ATV340
Product or component type	Variable speed drive
Product specific application	Machine
Variant	Standard version
Mounting mode	Cabinet mount
Communication port protocol	Modbus serial
Option card	Communication module, Profibus DP V1 Communication module, Profinet Communication module, DeviceNet Communication module, CANopen Communication module, EtherCAT
Network number of phases	3 phases
Supply frequency	50...60 Hz +/- 5 %
[Us] rated supply voltage	380...480 V - 15...10 %
Nominal output current	12,7 A
Motor power kW	7.5 kW for normal duty 5.5 kW for heavy duty
Motor power hp	10 hp for normal duty 7 hp heavy duty
EMC filter	Class C3 EMC filter integrated
IP degree of protection	IP20

Complementary

Discrete input number	5
Discrete input type	PTI programmable as pulse input 0...30 kHz, 24 V DC 30 V) DI1...DI5 safe torque off, 24 V DC 30 V)3.5 kOhm programmable
Number of preset speeds	16 preset speeds
Discrete output number	2,0

Discrete output type	Programmable output DQ1, DQ2 30 V DC 100 mA
Analogue input number	2
Analogue input type	AI1 software-configurable current 0...20 mA 250 Ohm 12 bits AI1 software-configurable temperature probe or water level sensor AI1 software-configurable voltage 0...10 V DC 31.5 kOhm 12 bits AI2 software-configurable voltage - 10...10 V DC 31.5 kOhm 12 bits
Analogue output number	2
Analogue output type	Software-configurable voltage AQ1: 0...10 V DC impedance 470 Ohm, resolution 10 bits Software-configurable current AQ1 0...20 mA 500 Ohm 10 bits
Relay output number	2
Output voltage	<= power supply voltage
Relay output type	Relay outputs R1A Relay outputs R1C 100000 cycles Relay outputs R2A Relay outputs R2C 100000 cycles
Maximum switching current	Relay output R1C resistive, cos phi = 1 3 A 250 V AC Relay output R1C resistive, cos phi = 1 3 A 30 V DC Relay output R1C inductive, cos phi = 0,4 7 ms 2 A 250 V AC Relay output R1C inductive, cos phi = 0,4 7 ms 2 A 30 V DC Relay output R2C resistive, cos phi = 1 5 A 250 V AC Relay output R2C resistive, cos phi = 1 5 A 30 V DC Relay output R2C inductive, cos phi = 0,4 7 ms 2 A 250 V AC Relay output R2C inductive, cos phi = 0,4 7 ms 2 A 30 V DC
Minimum switching current	Relay output R1B 5 mA 24 V DC Relay output R2C 5 mA 24 V DC
Physical interface	2-wire RS 485
Connector type	1 RJ45
Method of access	Slave Modbus RTU
Transmission rate	4.8 kbit/s 9.6 kbit/s 19.2 kbit/s 38.4 kbit/s
Transmission frame	RTU
Number of addresses	1...247
Data format	8 bits, configurable odd, even or no parity
Type of polarization	No impedance
4 quadrant operation possible	True
Asynchronous motor control profile	Variable torque standard Optimized torque mode Constant torque standard
Synchronous motor control profile	Permanent magnet motor Reluctance motor
Pollution degree	2 conforming to EN/IEC 61800-5-1
Maximum output frequency	0,599 kHz
Acceleration and deceleration ramps	Linear adjustable separately from 0.01...9999 s S, U or customized
Motor slip compensation	Adjustable Automatic whatever the load Can be suppressed Not available in permanent magnet motor law
Switching frequency	2...16 kHz adjustable 7...16 kHz with derating factor
Nominal switching frequency	4 kHz
Braking to standstill	By DC injection
Brake chopper integrated	True
Line current	15,3 A 380 V normal duty) 12,2 A 480 V normal duty) 20,0 A 380 V heavy duty) 16,0 A 480 V heavy duty)
Line current	20 A 380 V without line choke heavy duty) 16 A 480 V without line choke heavy duty) 15,3 A 380 V with external line choke normal duty) 12,2 A 480 V with external line choke normal duty)

	11,6 A 380 V with external line choke heavy duty) 9,4 A 480 V with external line choke heavy duty)
Maximum input current	20,0 A
Maximum output voltage	480 V
Apparent power	12,1 kVA 480 V normal duty) 13,3 kVA 480 V heavy duty)
Maximum transient current	18,2 A 60 s normal duty) 19,1 A 60 s heavy duty) 22,3 A 2 s normal duty) 22,9 A 2 s heavy duty)
Electrical connection	Screw terminal 4...6 mm ² DC bus Screw terminal 0.2...2.5 mm ² control Screw terminal 1.5...6 mm ² line side Screw terminal 1.5...6 mm ² motor
Prospective line I _{sc}	22 kA
Base load current at high overload	12,7 A
Base load current at low overload	16,5 A
Power dissipation in W	Natural convection 134 W 380 V 4 kHz heavy duty) Forced convection 134 W 380 V 4 kHz heavy duty) Natural convection 164 W 380 V 4 kHz normal duty) Forced convection 164 W 380 V 4 kHz normal duty)
Electrical connection	DC bus screw terminal 4...6 mm ² AWG 12...AWG 10 Control screw terminal 0.2...2.5 mm ² AWG 24...AWG 12 Line side screw terminal 1.5...6 mm ² AWG 14...AWG 10 Motor screw terminal 1.5...6 mm ² AWG 14...AWG 10
With safety function Safely Limited Speed (SLS)	True
With safety function Safe brake management (SBC/SBT)	True
With safety function Safe Operating Stop (SOS)	False
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	Thermal protection: motor Safe torque off: motor Motor phase loss motor Thermal protection: drive Safe torque off: drive Overheating: drive Overcurrent drive Output overcurrent between motor phase and earth drive Output overcurrent between motor phases drive Short-circuit between motor phase and earth drive Short-circuit between motor phases: drive Motor phase loss drive DC Bus overvoltage drive Line supply overvoltage: drive Line supply undervoltage: drive Input supply loss drive Exceeding limit speed drive Break on the control circuit: drive
Width	110,0 mm
Height	270,0 mm
Depth	234,0 mm

Net weight	2,9 kg
Continuous output current	16,5 A 4 kHz normal duty 12.7 A at 4 kHz for heavy duty

Environment

Operating altitude	<= 3000 m with current derating above 1000m
Operating position	Vertical +/- 10 degree
Product certifications	UL CSA TÜV EAC CTick
Marking	CE
Standards	EN/IEC 61800-3 EN/IEC 61800-5-1 IEC 60721-3 IEC 61508 IEC 13849-1 UL 618000-5-1 UL 508C
Assembly style	With heat sink
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
Environmental class (during operation)	Class 3C3 according to IEC 60721-3-3 Class 3S3 according to IEC 60721-3-3
Maximum acceleration under shock impact (during operation)	70 m/s ² at 22 ms
Maximum acceleration under vibrational stress (during operation)	5 m/s ² at 9...200 Hz
Maximum deflection under vibratory load (during operation)	1.5 mm at 2...9 Hz
Permitted relative humidity (during operation)	Class 3K5 according to EN 60721-3
Volume of cooling air	76,0 m ³ /h
Type of cooling	Forced convection
Overvoltage category	Class III
Regulation loop	Adjustable PID regulator
Noise level	46,6 dB
Pollution degree	2
Ambient air transport temperature	-40...70 °C
Ambient air temperature for operation	-15...50 °C without derating vertical position) 50...60 °C with derating factor vertical position)
Ambient air temperature for storage	-40...70 °C
Isolation	Between power and control terminals

Packing Units

Osa tüüp pakil 1	PCE
Osade arv pakis 1	1
Pakk 1 kaal	3,72 kg
Pakk 1 kõrgus	13 cm
Pakk 1 laius	37 cm
Pakk 1 pikkus	31,5 cm
Osa tüüp pakil 2	S04
Osade arv pakis 2	2
Pakk 2 kaal	8,14 kg

Pakk 2 kõrgus	30 cm
Pakk 2 laius	40 cm
Pakk 2 pikkus	60 cm
Osa tüüp pakil 3	P06
Osade arv pakis 3	10
Pakk 3 kaal	50,2 kg
Pakk 3 kõrgus	80 cm
Pakk 3 laius	80 cm
Pakk 3 pikkus	60 cm

Offer Sustainability

Jätkusuutliku pakkumise olek	Green Premium toode
REACH-määrus	REACH-deklaratsioon
ELi RoHS direktiiv	Ennetav vastavus (toode ei jää EL-i RoHS seadustega määratud piiridesse) ELi RoHS deklaratsioon
Elavhõbedavaba	Jah
RoHS eranditeave	Jah
Hiina EoHS regulatsioon	Hiina RoHS deklaratsioon
Keskkonnaalane avaldus	Toote keskkonnaprofiil
Ringlusprofiil	Kasutuselt kõrvaldamise teave
WEEE	Tootest tuleb Euroopa Liidu turgudel vabaneda vastavuses erijäätmeseadustele ning see ei tohi sattuda olmeprügi sekka.
Uuendatav	Saadaval on uuendatud komponendid 