

Product datasheet

Specifications



variable speed drive ATV610 - 11
kW / 15HP - 380...415 V - IP20

ATV610D11N4

Main

Product
specific
application

Device short
name

Variant

Product
destination

Mounting
mode

EMC filter

IP degree of
protection

Type of
cooling

Supply
frequency

Network
number of
phases

[Us] rated
supply
voltage

Motor power
kW

Motor power
hp

Line current

**Prospective
line I_{sc}**

**Apparent
power**

**Continuous
output
current**

**Maximum
transient
current**

**Asynchronous
motor control
profile**

**Output
frequency**

**Nominal
switching
frequency**

Switching frequency 2...12 kHz adjustable

Number of preset speeds 16 preset speeds

Communication port protocol Modbus serial

Option card Slot A: communication card, Profibus DP V1
Slot A: digital or analog I/O extension card
Slot A: relay output card

Complementary

Output voltage <= power supply voltage

Motor slip compensation Automatic whatever the load
Adjustable
Not available in permanent magnet motor law
Can be suppressed

Acceleration and deceleration ramps S, U or customized
Linear adjustable separately from 0.01 to 9000 s

Braking to standstill By DC injection

Protection type Thermal protection: motor
Motor phase break: motor
Thermal protection: drive
Overheating: drive
Overcurrent between output phases and earth: drive
Overload of output voltage: drive
Short-circuit protection: drive
Motor phase break: drive
Overvoltages on the DC bus: drive
Line supply overvoltage: drive
Line supply undervoltage: drive
Line supply phase loss: drive
Overspeed: drive
Break on the control circuit: drive

Frequency resolution Display unit: 0.1 Hz
Analog input: 0.012/50 Hz

Accuracy	+/- 0.6 % AI1, AI2, AI3 for a temperature variation 60 °C analog input +/- 1 % AQ1, AQ2 for a temperature variation 60 °C analog output
Linearity error	AI1, AI2, AI3: +/- 0.15 % of maximum value for analog input AQ1, AQ2: +/- 0.2 % for analog output
Relay output number	3
Relay output type	Configurable relay logic R1: fault relay NO/NC electrical durability 100000 cycles Configurable relay logic R2: sequence relay NO electrical durability 100000 cycles Configurable relay logic R3: sequence relay NO electrical durability 100000 cycles
Refresh time	Relay output (R1, R2, R3): 5 ms (+/- 0.5 ms)
Minimum switching current	Relay output R1, R2, R3: 5 mA at 24 V DC
Maximum switching current	Relay output R1, R2, R3 on resistive load, cos phi = 1: 3 A at 250 V AC Relay output R1, R2, R3 on resistive load, cos phi = 1: 3 A at 30 V DC Relay output R1, R2, R3 on inductive load, cos phi = 0.4 and L/R = 7 ms: 2 A at 250 V AC Relay output R1, R2, R3 on inductive load, cos phi = 0.4 and L/R = 7 ms: 2 A at 30 V DC
Isolation	Between power and control terminals
Insulation resistance	> 1 MOhm 500 V DC for 1 minute to earth
Environment	
Noise level	56 dB conforming to 86/188/EEC
Power dissipat 423 mm with EMC plate ion in W	310 W(forced convection) at 380 V, switching frequency 4 kHz 54 W(natural convection) at 380 V, switching frequency 4 kHz
Operating position	Vertical +/- 10 degree
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
Pollution degree	2 conforming to EN/IEC 61800-5-1
Vibration resistance	1.5 mm peak to peak (f= 2...13 Hz) conforming to IEC 60068-2-6 1 gn (f= 13...200 Hz) conforming to IEC 60068-2-6
Shock resistance	15 gn for 11 ms conforming to IEC 60068-2-27
Relative humidity	5...95 % without condensation conforming to IEC 60068-2-3
Ambient air temperature for operation	-15...45 °C (without derating) 45...60 °C (with derating factor)
Operating altitude	<= 1000 m without derating 1000...4800 m with current derating 1 % per 100 m
Environmental characteristic	Chemical pollution resistance class 3C3 conforming to EN/IEC 60721-3-3 Dust pollution resistance class 3S3 conforming to EN/IEC 60721-3-3
Standards	EN/IEC 61800-3 Environment 2 category C3 EN/IEC 61800-3 EN/IEC 61800-5-1 IEC 60721-3
Marking	CE

Packing Units

Unit Type of Package 1 PCE

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3

Number of Units in Package 1 1

Package 1 Height 21.5 cm

Package 1 Width 34.0 cm

Package 1 Length 58.0 cm

Package 1 Weight 9.48 kg

Unit Type of Package 2 S06

Number of Units in Package 2 3

Package 2 Height 73.0 cm

Package 2 Width 80.0 cm

Package 2 Length 60.0 cm

Package 2 Weight 36.44 kg

Offer Sustainability

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

WEEE The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins

Upgradeability Upgradeable through digital modules and upgraded components

Recommended rep