

# variable speed drive, Altivar Process ATV900, ATV930, 110kW, 380 to 480V, with braking unit, IP20

ATV930C11N4

# Main

Mairi		
Range of product	Altivar Process ATV900	
Device application	Industrial application	
Product or component type	Variable speed drive	
Product destination	Synchronous motors Asynchronous motors	
Product specific application	Process for industrial	
Variant	Standard version	
	With braking chopper	
Network number of phases	3 phases Single phase	
Mounting mode	Wall mount	
Communication port protocol	Ethernet IP/Modbus TCP Modbus	
[Us] rated supply voltage	380480 V - 1510 %	
Continuous output current	211 A at 4 kHz for normal duty 173 A at 4 kHz for heavy duty	
EMC filter	Integrated With EMC plate option	
	. The state of the	
IP degree of protection	IP21	
Degree of protection	UL type 1	
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Degree of protection option module  Motor power kW  Asynchronous motor control	UL type 1  Slot A: communication module for Profibus DP V1 Slot A: communication module for PROFINET Slot A: communication module for DeviceNet Slot A: communication module for EtherCAT Slot A: communication module for CANopen daisy chain RJ45 Slot A: communication module for CANopen SUB-D 9 Slot A: communication module for CANopen screw terminals Slot A/slot B/slot C: digital and analog I/O extension module Slot A/slot B/slot C: output relay extension module Slot B: 5/12 V digital encoder interface module Slot B: analog encoder interface module Slot B: resolver encoder interface module  110.0 kW for normal duty 90.0 kW for heavy duty  Constant torque standard Variable torque standard	
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Nominal switching frequency	2.5 kHz
Line current	201.0 A at 380 V (normal duty)
	170.0 A at 380 V (heavy duty)
	165.0 A at 480 V (normal duty)
	143.0 A at 480 V (heavy duty)
Apparent power	121.8 kVA at 380480 V (normal duty)
	102.6 kVA at 380480 V (heavy duty)
Maximum transient current	253 A during 60 s (normal duty)
	259.5 A during 60 s (heavy duty)
Network frequency	5060 Hz
Prospective line Isc	50 kA

# Complementary

Complementary		
Discrete input number	10	
Relay output type	Configurable relay logic R1: fault relay NO/NC electrical durability 100000 cycles Configurable relay logic R2: sequence relay NO electrical durability 1000000 cycles Configurable relay logic R3: sequence relay NO electrical durability 1000000 cycles	
Physical interface	Ethernet 2-wire RS 485	
Connector type	2 RJ45 1 RJ45	
Method of access	Slave Modbus TCP	
Transmission rate	10, 100 Mbits 4.8 kbps 9600 bit/s 19200 bit/s	
Transmission frame	RTU	
Number of addresses	1247	
Data format	8 bits, configurable odd, even or no parity	
Type of polarization	No impedance	
4 quadrant operation possible	True	
Acceleration and deceleration ramps	Linear adjustable separately from 0.019999 s S, U or customized	
Motor slip compensation	Adjustable Automatic whatever the load Can be suppressed Not available in permanent magnet motor law	
Braking to standstill	By DC injection	
Brake chopper integrated	True	
Maximum input current	201.0 A	
Maximum output voltage	480.0 V	
Relative symmetric network frequency tolerance	5 %	
Base load current at high overload	173.0 A	
Base load current at low overload	211.0 A	
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 break: motor Thermal protection: drive Safe torque off: 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 phase loss: drive Overspeed: drive Break on the control circuit: drive	
Quantity per set	1	
Width	320 mm	
Height	1205 mm	
Depth	393 mm	
Net weight	104 kg	
Electrical connection	Line side: screw terminal 2 x 503 x 120 mm²/2 x AWG 1/02 x 300 kcmil DC bus: screw terminal 0.51.5 mm²/AWG 20AWG 16 Control: screw terminal 0.51.5 mm²/AWG 20AWG 16	
Transmission rate	10/100 Mbit/s for Ethernet IP/Modbus TCP 4.8, 9.6, 19.2, 38.4 kbit/s for Modbus serial	
Data format	8 bits, configurable odd, even or no parity for Modbus serial	
Type of polarization	No impedance for Modbus serial	
Number of addresses	1247 for Modbus serial	
Local signalling	Local diagnostic: 3 LEDs (mono/dual colour) 5 LEDs (dual colour) 2 LEDs (dual colour) 1 LED (red)	
Isolation	Between power and control terminals	
Environment		
Operating position	Vertical +/- 10 degree	
Product certifications	UL CSA TÜV	
Marking	CE	

Standards	UL 508C IEC 61800-3 IEC 61800-5-1 IEC 61000-3-12 IEC 60721-3 IEC 61508 IEC 13849-1	
Maximum THDI	<48 % full load conforming to IEC 61000-3-12	
Assembly style	Enclosed	
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)	150 m/s² at 11 ms	
Maximum acceleration under vibrational stress (during operation)	10 m/s² at 13200 Hz	
Maximum deflection under vibratory load (during operation)	1.5 mm at 213 Hz	
Permitted relative humidity (during operation)	Class 3K5 according to EN 60721-3	
Overvoltage category	III	
Regulation loop	Adjustable PID regulator	
Insulation resistance	> 1 MOhm 500 V DC for 1 minute to earth	
Noise level	69.9 dB conforming to 86/188/EEC	
Vibration resistance	1.5 mm peak to peak (f= 213 Hz) conforming to IEC 60068-2-6 1 gn (f= 13200 Hz) conforming to IEC 60068-2-6	
Shock resistance	6 gn for 11 ms conforming to IEC 60068-2-27	
Environmental characteristic	Chemical pollution resistance class 3C3 conforming to IEC 60721-3-3  Dust pollution resistance class 3S3 conforming to IEC 60721-3-3	
Relative humidity	595 % without condensation conforming to IEC 60068-2-3	
Ambient air temperature for operation	-1550 °C (without derating) 5060 °C (with derating factor)	
Noise level	69.9 dB	
pollution degree	2	
Ambient air transport temperature	-2570 °C	
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	71.000 cm	
Package 1 Width	50.000 cm	
Package 1 Length	141.000 cm	

128.000 kg

Package 1 Weight



Schneider Electric aims to achieve Net Zero status by 2050 through supply chain partnerships, lower impact materials, and circularity via our ongoing "Use Better, Use Longer, Use Again" campaign to extend product lifetimes and recyclability.

#### Environmental Data explained >

How we assess product sustainability >

☑ Environmental footprint	
Carbon footprint (kg.eq.CO2 per CR, Total Life cycle)	81091
Environmental Disclosure	Product Environmental Profile

#### **Use Better**

EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope)
REACh Regulation	REACh Declaration
China RoHS Regulation	China RoHS declaration
<sup>☼</sup> Energy efficiency	
Product contributes to saved and avoided emissions	Yes

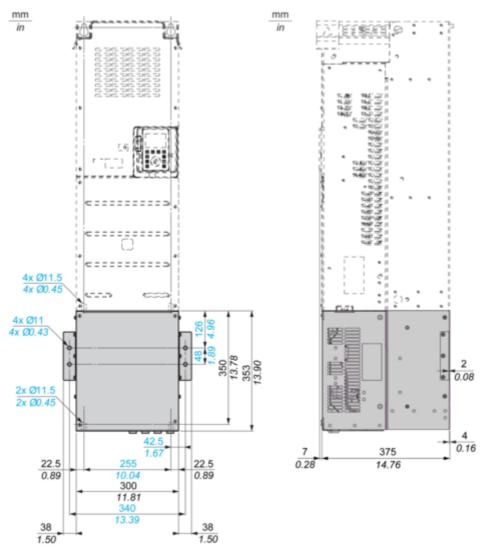
#### **Use Again**

○ Repack and remanufacture	
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
Take-back	No

# **Dimensions Drawings**

#### **Dimensions**

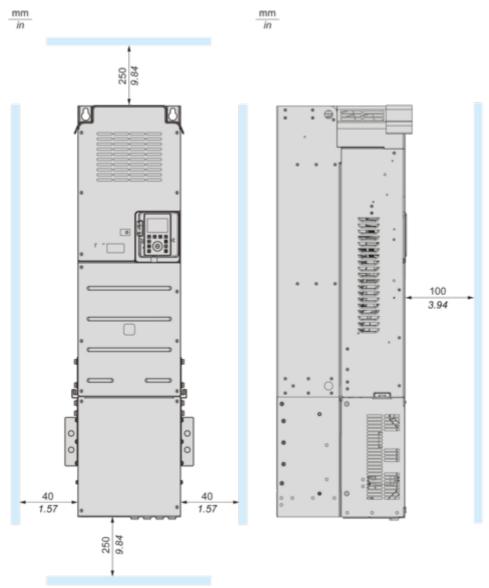
#### Front and Side Views



# Mounting and Clearance

# **Dimensions**

# Front and Side Views



# Connections and Schema

# **Standard Connection Diagram**

