

# Product data sheet

Specifications



variable speed drive, Altivar Process  
ATV900, ATV930, 132kW, 380 to  
480V, with braking unit, IP20

ATV930C13N4

**Product availability: Stock - Normally stocked in distribution facility**

## Main

<b>Range of Product</b>	Altivar Process ATV900
<b>Product Specific Application</b>	Process for industrial
<b>Product or Component Type</b>	Variable speed drive
<b>Variant</b>	Standard version With braking chopper
<b>Device Application</b>	Industrial Application
<b>Product destination</b>	Synchronous motors Asynchronous motors
<b>Phase</b>	3 phase Single phase
<b>Mounting Mode</b>	Wall mount
<b>Continuous output current</b>	250 A 4 kHz normal duty 211 A 4 kHz heavy duty
<b>Communication Port Protocol</b>	Ethernet IP/Modbus TCP Modbus
<b>option module</b>	Slot A communication module Profibus DP V1 Slot A communication module PROFINET Slot A communication module DeviceNet Slot A communication module EtherCAT Slot A communication module CANopen daisy chain RJ45 Slot A communication module CANopen SUB-D 9 Slot A communication module 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
<b>[Us] rated supply voltage</b>	380...480 V - 15...10 %
<b>[Us] rated supply voltage</b>	380...480 V
<b>Relative symmetric mains voltage tolerance</b>	10 %
<b>Relative symmetric network frequency tolerance</b>	5 %
<b>Nominal output current</b>	250.0 A
<b>Motor power kW</b>	132.0 kW normal duty 110.0 kW heavy duty
<b>EMC filter</b>	Integrated With EMC plate option
<b>IP degree of protection</b>	IP21
<b>Degree of protection</b>	UL type 1

## Complementary

Price is "List Price" and may be subject to a trade discount – check with your local distributor or retailer for actual price.

<b>Electrical connection</b>	Line side screw terminal 2 x 70...3 x 120 mm <sup>2</sup> 2 x AWG 2/0...2 x 300 kcmil DC bus screw terminal 0.5...1.5 mm <sup>2</sup> AWG 20...AWG 16 Control screw terminal 0.5...1.5 mm <sup>2</sup> AWG 20...AWG 16
<b>Transmission Rate</b>	10/100 Mbit/s Ethernet IP/Modbus TCP 4.8, 9.6, 19.2, 38.4 kbit/s Modbus serial
<b>Data format</b>	8 bits, configurable odd, even or no parity Modbus serial
<b>Type of polarization</b>	No impedance Modbus serial
<b>Number of addresses</b>	1...247 Modbus serial
<b>Local signalling</b>	Local diagnostic: 3 LEDs (mono/dual colour) 5 LEDs (dual colour) 2 LEDs (dual colour) 1 LED (red)
<b>Isolation</b>	Between power and control terminals
<b>Discrete input number</b>	10
<b>Relay output type</b>	Configurable relay logic R1 fault relay NO/NC 100000 cycles Configurable relay logic R2 sequence relay NO 1000000 cycles Configurable relay logic R3 sequence relay NO 1000000 cycles
<b>Physical interface</b>	Ethernet 2-wire RS 485
<b>Connector Type</b>	2 RJ45 1 RJ45
<b>Method of access</b>	Slave Modbus TCP
<b>Transmission Rate</b>	10, 100 Mbits 4.8 kbps 9600 bit/s 19200 bit/s
<b>Transmission frame</b>	RTU
<b>Number of addresses</b>	1...247
<b>Data format</b>	8 bits, configurable odd, even or no parity
<b>Type of polarization</b>	No impedance
<b>4 quadrant operation possible</b>	True
<b>Asynchronous motor control profile</b>	Constant torque standard Variable torque standard Optimized torque mode
<b>Synchronous motor control profile</b>	Permanent magnet motor Synchronous reluctance motor
<b>Maximum output frequency</b>	599 Hz
<b>Acceleration and deceleration ramps</b>	Linear adjustable separately from 0.01...9999 s S, U or customized
<b>Motor slip compensation</b>	Adjustable Automatic whatever the load Can be suppressed Not available in permanent magnet motor law
<b>Switching frequency</b>	1...8 kHz adjustable 2.5...8 kHz with derating factor
<b>Nominal switching frequency</b>	2.5 kHz
<b>Braking to standstill</b>	By DC injection
<b>Brake chopper integrated</b>	True
<b>Line current</b>	237.0 A 380 V normal duty) 201.0 A 380 V heavy duty) 213.0 A 480 V normal duty) 165.0 A 480 V heavy duty)

<b>Maximum Input Current per Phase</b>	237.0 A
<b>Maximum output voltage</b>	480.0 V
<b>Apparent power</b>	161.4 kVA 380...480 V normal duty) 121.8 kVA 380...480 V heavy duty)
<b>Maximum transient current</b>	300 A 60 s normal duty) 317 A 60 s heavy duty)
<b>Network Frequency</b>	50-60 Hz
<b>Prospective line Isc</b>	50 kA
<b>Base load current at high overload</b>	211.0 A
<b>Base load current at low overload</b>	250.0 A
<b>With safety function Safely Limited Speed (SLS)</b>	True
<b>With safety function Safe brake management (SBC/SBT)</b>	True
<b>With safety function Safe Operating Stop (SOS)</b>	False
<b>With safety function Safe Position (SP)</b>	False
<b>With safety function Safe programmable logic</b>	False
<b>With safety function Safe Speed Monitor (SSM)</b>	False
<b>With safety function Safe Stop 1 (SS1)</b>	True
<b>With sft fct Safe Stop 2 (SS2)</b>	False
<b>With safety function Safe torque off (STO)</b>	True
<b>With safety function Safely Limited Position (SLP)</b>	False
<b>With safety function Safe Direction (SDI)</b>	False
<b>Protection type</b>	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 undervoltage drive Line supply phase loss drive Overspeed drive Break on the control circuit drive
<b>Quantity per Set</b>	1
<b>Width</b>	12.6 in (320 mm)
<b>Height</b>	47.4 in (1205 mm)
<b>Depth</b>	15.5 in (393 mm)
<b>Net Weight</b>	229.3 lb(US) (104 kg)

## Environment

<b>Insulation resistance</b>	> 1 MOhm 500 V DC for 1 minute to earth
<b>Noise level</b>	69.9 dB 86/188/EEC
<b>Vibration resistance</b>	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

<b>Shock resistance</b>	6 gn 11 ms IEC 60068-2-27
<b>Environmental characteristic</b>	Chemical pollution resistance class 3C3 IEC 60721-3-3 Dust pollution resistance class 3S3 IEC 60721-3-3
<b>Relative humidity</b>	5...95 % without condensation IEC 60068-2-3
<b>Ambient air temperature for operation</b>	5...122 °F (-15...50 °C) (without derating) 122...140 °F (50...60 °C) (with derating factor)
<b>Operating position</b>	Vertical +/- 10 degree
<b>Product Certifications</b>	UL CSA TÜV
<b>Marking</b>	CE
<b>Standards</b>	UL 508C IEC 61800-3 IEC 61800-5-1 IEC 61000-3-12 IEC 60721-3 IEC 61508 IEC 13849-1
<b>Maximum THDI</b>	<48 % full load IEC 61000-3-12
<b>Assembly style</b>	Enclosed
<b>Electromagnetic compatibility</b>	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
<b>Environmental class (during operation)</b>	Class 3C3 according to IEC 60721-3-3 Class 3S3 according to IEC 60721-3-3
<b>Maximum acceleration under shock impact (during operation)</b>	150 m/s <sup>2</sup> at 11 ms
<b>Maximum acceleration under vibrational stress (during operation)</b>	10 m/s <sup>2</sup> at 13...200 Hz
<b>Maximum deflection under vibratory load (during operation)</b>	1.5 mm at 2...13 Hz
<b>Permitted relative humidity (during operation)</b>	Class 3K5 according to EN 60721-3
<b>Overvoltage category</b>	III
<b>Regulation loop</b>	Adjustable PID regulator
<b>Noise level</b>	69.9 dB
<b>Pollution degree</b>	2
<b>Ambient air transport temperature</b>	-13...158 °F (-25...70 °C)
<b>Ambient Air Temperature for Storage</b>	-13...158 °F (-25...70 °C)

## Ordering and shipping details

<b>Category</b>	US1CP4E22277
<b>Discount Schedule</b>	CP4E
<b>GTIN</b>	3606481490391
<b>Returnability</b>	Yes
<b>Country of origin</b>	CN

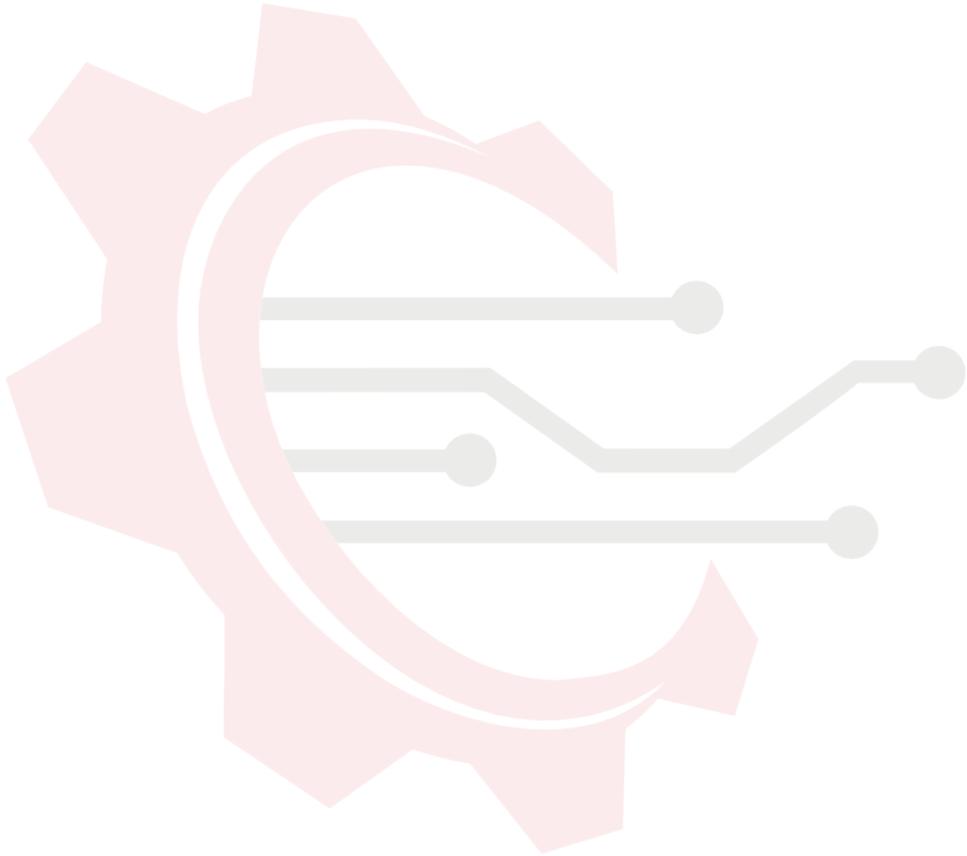
## Packing Units

<b>Unit Type of Package 1</b>	PCE
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<b>Nbr. of units in pkg.</b>	1
<b>Package 1 Height</b>	27.559 in (70.000 cm)
<b>Package 1 Width</b>	18.898 in (48.000 cm)
<b>Package 1 Length</b>	57.087 in (145.000 cm)
<b>Package weight(Lbs)</b>	282.192 lb(US) (128.000 kg)

## **Contractual warranty**

<b>Warranty (in months)</b>	18
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## Environmental Data

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 CO2 eq, Total Life cycle)	90833
Environmental Disclosure	<a href="#">Product Environmental Profile</a>

### Use Better

 Materials and Substances	
Packaging made with recycled cardboard	Yes
Packaging without single use plastic	No
<a href="#">EU RoHS Directive</a>	Pro-active compliance (Product out of EU RoHS legal scope)
SCIP Number	2a36d170-61d5-4546-b212-5be0d10219ac
REACH Regulation	<a href="#">REACH Declaration</a>
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 <a href="http://www.P65Warnings.ca.gov">www.P65Warnings.ca.gov</a>

 Energy efficiency	
Product contributes to saved and avoided emissions	Yes

### Use Again

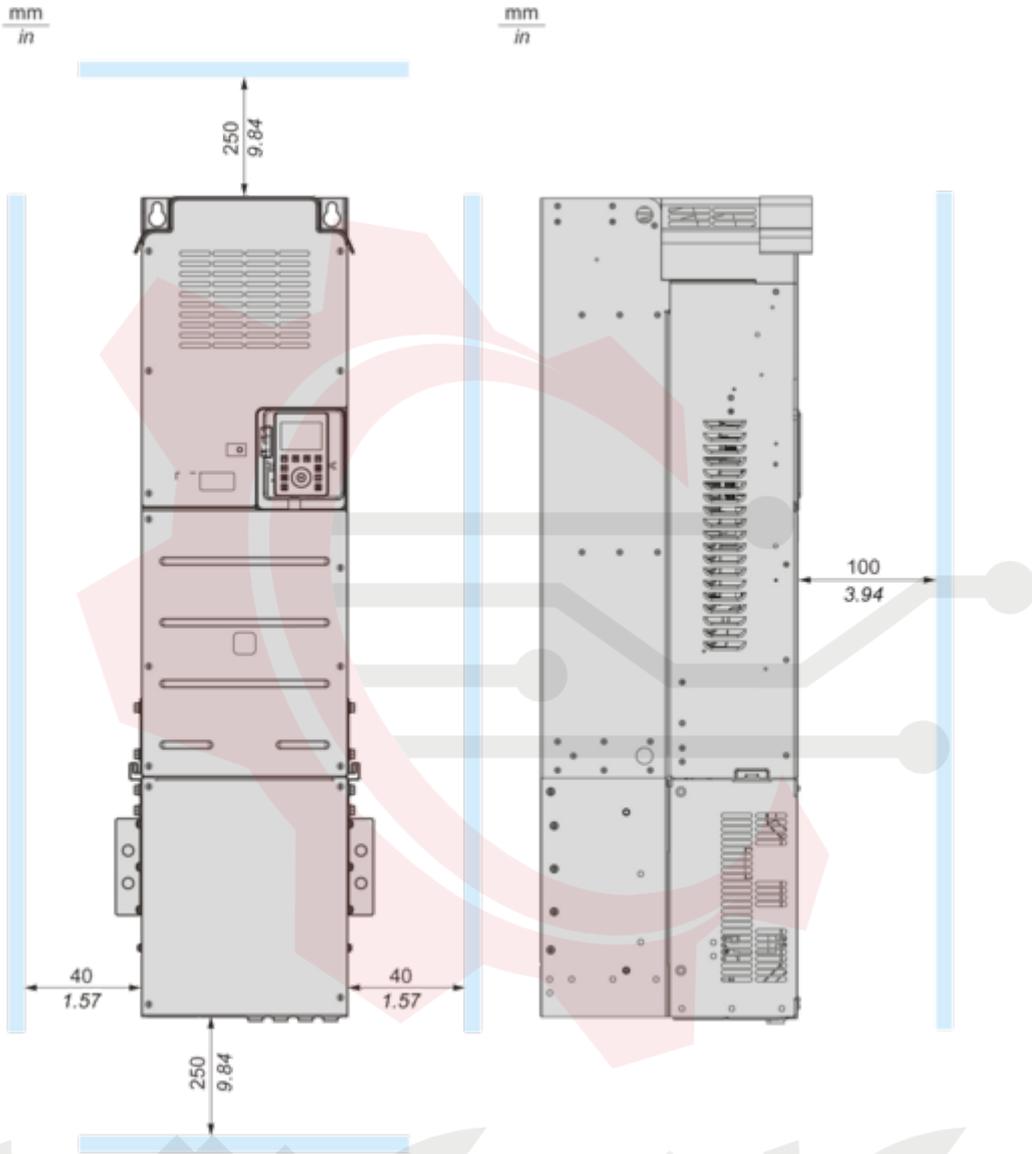
 Repack and remanufacture	
Circularity Profile	<a href="#">End of Life Information</a>
Take-back	No
WEEE Label	 The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins.



Mounting and Clearance

Dimensions

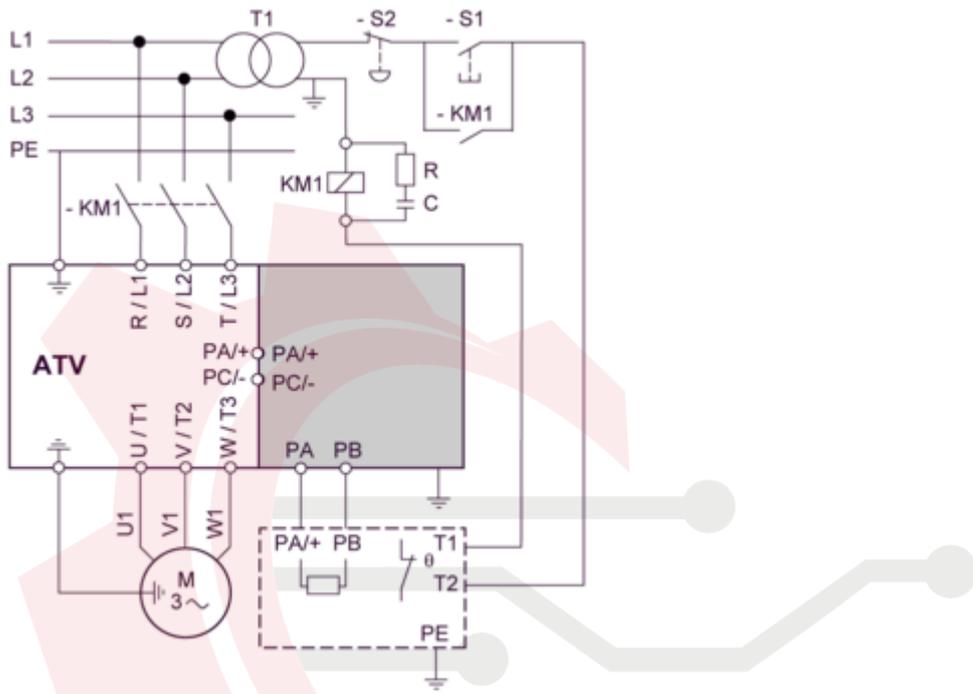
Front and Side Views



Connections and Schema

Standard Connection Diagram

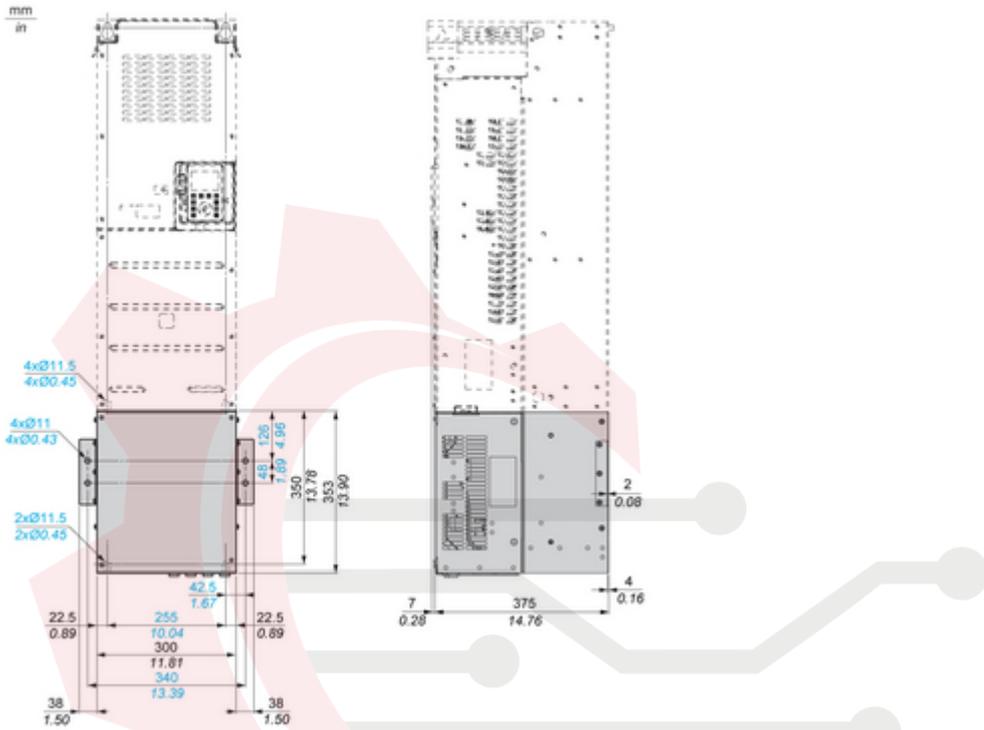
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Technical Illustration

Dimensions



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