

# ATV930D90N4

Variable speed drive, Altivar Process ATV900,  
ATV930, 90 kW, 400/480 V, with braking unit,  
IP21

---



## Main

|                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Range of Product                   | Altivar Process ATV900                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Device Application                 | Industrial Application                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Product or Component Type          | Variable speed drive                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Product destination                | Synchronous motors<br>Asynchronous motors                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Product Specific Application       | Process for industrial                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Variant                            | Standard version<br>With braking chopper                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Phase                              | 3 phase                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Mounting Mode                      | Wall mount                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Communication port protocol        | EtherNet/IP<br>Modbus serial<br>Modbus TCP                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| [Us] rated supply voltage          | 380...480 V - 15...10 %                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Motor power kW                     | 90.0 KW normal duty<br>75.0 kW heavy duty                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Maximum Horse Power Rating         | 125.0 Hp normal duty<br>100.0 hp heavy duty                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Continuous output current          | 173 A 2.5 kHz normal duty<br>145 A 2.5 kHz heavy duty                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| EMC filter                         | Integrated<br>With EMC plate option                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| IP degree of protection            | IP21                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Degree of protection               | UL type 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Option module                      | Slot A communication module Profibus DP V1<br>Slot A communication module PROFINET<br>Slot A communication module DeviceNet<br>Slot A communication module EtherCAT<br>Slot A communication module CANopen daisy chain RJ45<br>Slot A communication module CANopen SUB-D 9<br>Slot A communication module CANopen screw terminals<br>Slot A/slot B/slot C digital and analog I/O extension module<br>Slot A/slot B/slot C output relay extension module<br>Slot B 5/12 V digital encoder interface module<br>Slot B analog encoder interface module<br>Slot B resolver encoder interface module<br>Communication module Ethernet Powerlink |
| Discrete input logic               | 16 preset speeds                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Asynchronous motor control profile | Constant torque standard<br>Optimized torque mode<br>Variable torque standard                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Synchronous motor control profile  | Permanent magnet motor<br>Synchronous reluctance motor                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Maximum output frequency           | 599 Hz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Switching frequency                | 1...8 kHz adjustable<br>2.5...8 kHz with derating factor                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Nominal switching frequency        | 2.5 kHz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Line current                       | 156.2 A 380 V normal duty)<br>134.3 A 380 V heavy duty)<br>135.8 A 480 V normal duty)<br>118.1 A 480 V heavy duty)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Apparent power                     | 112.9 KVA 480 V normal duty)<br>98.2 kVA 480 V heavy duty)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Maximum transient current          | 207.6 A 60 s normal duty)<br>217.5 A 60 s heavy duty)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |

|                      |          |
|----------------------|----------|
| Network Frequency    | 50-60 Hz |
| Prospective line Isc | 50 kA    |

## Complementary

|                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|-------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Discrete input number                                 | 10                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Discrete input type                                   | DI1...DI8 programmable, 24 V DC $\leq$ 30 V)3.5 kOhm<br>DI7, DI8 programmable as pulse input 0...30 kHz, 24 V DC $\leq$ 30 V)<br>STOA, STOB safe torque off, 24 V DC $\leq$ 30 V)> 2.2 kOhm                                                                                                                                                                                                                                                                                                                                  |
| Discrete output number                                | 2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Discrete output type                                  | Logic output DQ+ 0...1 kHz $\leq$ 30 V DC 100 mA<br>Programmable as pulse output DQ+ 0...30 kHz $\leq$ 30 V DC 20 mA<br>Logic output DQ- 0...1 kHz $\leq$ 30 V DC 100 mA                                                                                                                                                                                                                                                                                                                                                     |
| Analogue input number                                 | 3                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Analogue input type                                   | AI1, AI2, AI3 software-configurable voltage 0...10 V DC 30 kOhm 12 bits<br>AI1, AI2, AI3 software-configurable current 0...20 mA/4...20 mA 250 Ohm 12 bits                                                                                                                                                                                                                                                                                                                                                                   |
| Analogue output number                                | 2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Analogue output type                                  | Software-configurable voltage AQ1, AQ2 0...10 V DC 470 Ohm 10 bits<br>Software-configurable current AQ1, AQ2 0...20 mA 500 Ohm 10 bits                                                                                                                                                                                                                                                                                                                                                                                       |
| Relay output number                                   | 3                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Relay output type                                     | Configurable relay logic R1 fault relay NO/NC 100000 cycles<br>Configurable relay logic R2 sequence relay NO 1000000 cycles<br>Configurable relay logic R3 sequence relay NO 1000000 cycles                                                                                                                                                                                                                                                                                                                                  |
| Maximum switching current                             | Relay output R1 resistive, $\cos \phi = 1$ 3 A 250 V AC<br>Relay output R1 resistive, $\cos \phi = 1$ 3 A 30 V DC<br>Relay output R1 inductive, $\cos \phi = 0.4$ 7 ms 2 A 250 V AC<br>Relay output R1 inductive, $\cos \phi = 0.4$ 7 ms 2 A 30 V DC<br>Relay output R2, R3 resistive, $\cos \phi = 1$ 5 A 250 V AC<br>Relay output R2, R3 resistive, $\cos \phi = 1$ 5 A 30 V DC<br>Relay output R2, R3 inductive, $\cos \phi = 0.4$ 7 ms 2 A 250 V AC<br>Relay output R2, R3 inductive, $\cos \phi = 0.4$ 7 ms 2 A 30 V DC |
| Minimum switching current                             | Relay output R1, R2, R3 5 mA 24 V DC                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Physical interface                                    | Ethernet<br>2-wire RS 485                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Connector Type                                        | 2 RJ45<br>1 RJ45                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Method of access                                      | Slave Modbus TCP                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Transmission Rate                                     | 10, 100 Mbits<br>4.8 kbps<br>9600 bit/s<br>19200 bit/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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Acceleration and deceleration ramps                   | Linear adjustable separately from 0.01...9999 s                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Motor slip compensation                               | Adjustable<br>Not available in permanent magnet motor law<br>Can be suppressed<br>Automatic whatever the load                                                                                                                                                                                                                                                                                                                                                                                                                |
| Braking to standstill                                 | By DC injection                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Brake chopper integrated                              | True                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Maximum Input Current per Phase                       | 156.2 A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Maximum output voltage                                | 480.0 V                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Relative symmetric network frequency tolerance        | 5 %                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Base load current at high overload                    | 145.0 A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Base load current at low overload                     | 173.0 A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Power dissipation in W                                | Natural convection 196 W 380 V 2.5 kHz<br>Forced convection 1585 W 380 V 2.5 kHz                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| 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<br>Safe torque off motor<br>Motor phase break motor<br>Thermal protection drive<br>Safe torque off drive<br>Overheating drive<br>Overcurrent between output phases and earth drive<br>Overload of output voltage drive<br>Short-circuit protection drive<br>Motor phase break drive<br>Overvoltages on the DC bus drive<br>Line supply overvoltage drive<br>Line supply undervoltage drive<br>Line supply phase loss drive<br>Overspeed drive<br>Break on the control circuit drive |
| Quantity per Set                                   | 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Width                                              | 11.42 in (290 mm)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Height                                             | 36.30 in (922 mm)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Depth                                              | 12.81 in (325.5 mm)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Net Weight                                         | 131.18 lb(US) (59.5 kg)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Electrical connection                              | Control screw terminal 0.5...1.5 mm² AWG 20...AWG 16<br>Line side screw terminal 120 mm² AWG 4/0...250 kcmil<br>Motor screw terminal 120 mm² 250 kcmil<br>DC bus screw terminal 95...120 mm² AWG 3/0...250 kcmil                                                                                                                                                                                                                                                                                             |
| Transmission Rate                                  | 10/100 Mbit/s Ethernet IP/Modbus TCP<br>4.8, 9.6, 19.2, 38.4 kbit/s Modbus serial                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Exchange mode                                      | Half duplex, full duplex, autonegotiation Ethernet IP/Modbus TCP                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Data format                                        | 8 bits, configurable odd, even or no parity Modbus serial                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Type of polarization                               | No impedance Modbus serial                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Number of addresses                                | 1...247 Modbus serial                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Supply                                             | External supply for digital inputs 24 V DC 19...30 V), <1.25 mA overload and short-circuit protection<br>Internal supply for reference potentiometer (1 to 10 kOhm) 10.5 V DC +/- 5 %, <10 mA overload and short-circuit protection<br>Internal supply for digital inputs and STO 24 V DC 21...27 V), <200 mA overload and short-circuit protection                                                                                                                                                          |
| Local signalling                                   | Local diagnostic 3 LED mono/dual colour)<br>Embedded communication status 5 LED dual colour)<br>Communication module status 2 LED dual colour)<br>Presence of voltage 1 LED red)                                                                                                                                                                                                                                                                                                                             |
| Input compatibility                                | DI1...DI8 discrete input level 1 PLC EN/IEC 61131-2<br>DI7, DI8 pulse input level 1 PLC IEC 65A-68<br>STOA, STOB discrete input level 1 PLC EN/IEC 61131-2                                                                                                                                                                                                                                                                                                                                                   |
| Discrete input logic                               | Positive logic (source) DI1...DI8), < 5 V, > 11 V<br>Negative logic (sink) DI1...DI8), > 16 V, < 10 V<br>Positive logic (source) DI7, DI8), < 0.6 V, > 2.5 V<br>Positive logic (source) STOA, STOB), < 5 V, > 11 V                                                                                                                                                                                                                                                                                           |
| Sampling duration                                  | 2 Ms +/- 0.5 ms DI1...DI8) - discrete input<br>5 Ms +/- 1 ms DI7, DI8) - pulse input<br>1 Ms +/- 1 ms AI1, AI2, AI3) - analog input<br>5 ms +/- 1 ms AQ1, AQ2) - analog output                                                                                                                                                                                                                                                                                                                               |
| Accuracy                                           | +/- 0.6 % AI1, AI2, AI3 for a temperature variation 60 °C analog input<br>+/- 1 % AQ1, AQ2 for a temperature variation 60 °C analog output                                                                                                                                                                                                                                                                                                                                                                   |
| Linearity error                                    | AI1, AI2, AI3 +/- 0.15 % of maximum value analog input<br>AQ1, AQ2 +/- 0.2 % analog output                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Refresh time                                       | Relay output R1, R2, R3)5 ms +/- 0.5 ms)                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Isolation                                          | Between power and control terminals                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |

## Environment

|                                                                  |                                                                                                                                                                                                                                                                                                                                                            |
|------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Operating altitude                                               | <= 3280.84 ft (1000 m) without derating<br>1000...4800 m with current derating 1 % per 100 m                                                                                                                                                                                                                                                               |
| Operating position                                               | Vertical +/- 10 degree                                                                                                                                                                                                                                                                                                                                     |
| Product Certifications                                           | UL<br>CSA<br>TÜV                                                                                                                                                                                                                                                                                                                                           |
| Marking                                                          | CE                                                                                                                                                                                                                                                                                                                                                         |
| Standards                                                        | UL 508C<br>EN/IEC 61800-3<br>EN/IEC 61800-5-1<br>IEC 61000-3-12<br>IEC 60721-3<br>IEC 61508<br>IEC 13849-1                                                                                                                                                                                                                                                 |
| Maximum THDI                                                     | <48 % from 80...100 % of load IEC 61000-3-12                                                                                                                                                                                                                                                                                                               |
| Assembly style                                                   | Enclosed                                                                                                                                                                                                                                                                                                                                                   |
| Electromagnetic compatibility                                    | Electrostatic discharge immunity test level 3 IEC 61000-4-2<br>Radiated radio-frequency electromagnetic field immunity test level 3 IEC 61000-4-3<br>Electrical fast transient/burst immunity test level 4 IEC 61000-4-4<br>1.2/50 µs - 8/20 µs surge immunity test level 3 IEC 61000-4-5<br>Conducted radio-frequency immunity test level 3 IEC 61000-4-6 |
| Environmental class (during operation)                           | Class 3C3 according to IEC 60721-3-3<br>Class 3S3 according to IEC 60721-3-3                                                                                                                                                                                                                                                                               |
| Maximum acceleration under shock impact (during operation)       | 150 m/s <sup>2</sup> at 11 ms                                                                                                                                                                                                                                                                                                                              |
| Maximum acceleration under vibrational stress (during operation) | 10 m/s <sup>2</sup> at 13...200 Hz                                                                                                                                                                                                                                                                                                                         |
| Maximum deflection under vibratory load (during operation)       | 1.5 mm at 2...13 Hz                                                                                                                                                                                                                                                                                                                                        |
| Permitted relative humidity (during operation)                   | Class 3K5 according to EN 60721-3                                                                                                                                                                                                                                                                                                                          |
| Volume of cooling air                                            | 77932.15 Gal/hr(US) (295 m <sup>3</sup> /h)                                                                                                                                                                                                                                                                                                                |
| Overvoltage category                                             | III                                                                                                                                                                                                                                                                                                                                                        |
| Regulation loop                                                  | Adjustable PID regulator                                                                                                                                                                                                                                                                                                                                   |
| Insulation resistance                                            | > 1 MOhm 500 V DC for 1 minute to earth                                                                                                                                                                                                                                                                                                                    |
| Noise level                                                      | 68.3 dB 86/188/EEC                                                                                                                                                                                                                                                                                                                                         |
| Vibration resistance                                             | 1.5 mm peak to peak 2...13 Hz)IEC 60068-2-6<br>1 gn 13...200 Hz)IEC 60068-2-6                                                                                                                                                                                                                                                                              |
| Shock resistance                                                 | 15 gn 11 ms IEC 60068-2-27                                                                                                                                                                                                                                                                                                                                 |
| Environmental characteristic                                     | Chemical pollution resistance class 3C3 EN/IEC 60721-3-3<br>Dust pollution resistance class 3S3 EN/IEC 60721-3-3                                                                                                                                                                                                                                           |
| Relative humidity                                                | 5...95 % without condensation IEC 60068-2-3                                                                                                                                                                                                                                                                                                                |
| Ambient air temperature for operation                            | 5...122 °F (-15...50 °C) without derating)<br>122...140 °F (50...60 °C) with derating factor)                                                                                                                                                                                                                                                              |
| Noise level                                                      | 68.3 dB                                                                                                                                                                                                                                                                                                                                                    |
| Pollution degree                                                 | 2                                                                                                                                                                                                                                                                                                                                                          |
| Ambient air transport temperature                                | -40...158 °F (-40...70 °C)                                                                                                                                                                                                                                                                                                                                 |
| Ambient Air Temperature for Storage                              | -40...158 °F (-40...70 °C)                                                                                                                                                                                                                                                                                                                                 |

## Ordering and shipping details

|                       |                           |
|-----------------------|---------------------------|
| Category              | 22277-ATV930 FRAMES 3 & 4 |
| Discount Schedule     | CP4E                      |
| GTIN                  | 3606480883415             |
| Nbr. of units in pkg. | 1                         |
| Package weight(Lbs)   | 155.43 lb(US) (70.5 kg)   |
| Returnability         | Yes                       |
| Country of origin     | IN                        |

## Packing Units

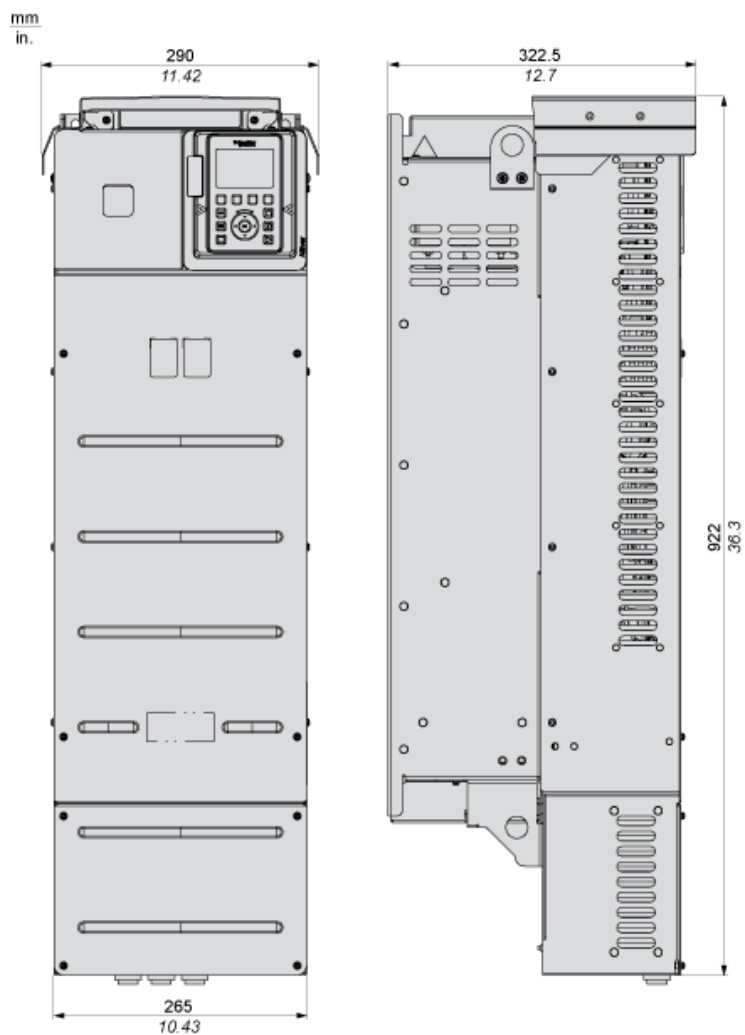
|                              |                         |
|------------------------------|-------------------------|
| Unit Type of Package 1       | PCE                     |
| Package 1 Height             | 23.62 in (60 cm)        |
| Package 1 width              | 16.93 in (43 cm)        |
| Package 1 Length             | 43.70 in (111 cm)       |
| Unit Type of Package 2       | PAL                     |
| Number of Units in Package 2 | 1                       |
| Package 2 Weight             | 157.41 lb(US) (71.4 kg) |
| Package 2 Height             | 30.31 in (77 cm)        |
| Package 2 width              | 16.54 in (42 cm)        |
| Package 2 Length             | 41.34 in (105 cm)       |

## Offer Sustainability

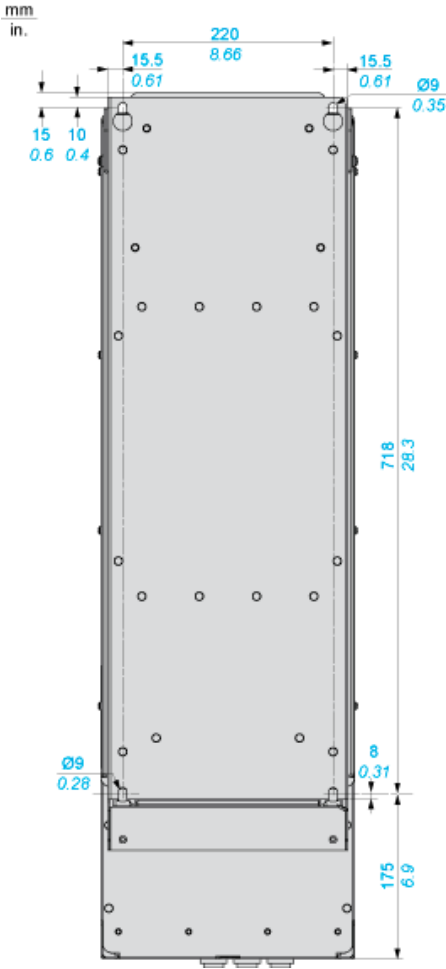
|                            |                                                                                                                                                                                                                                                                                             |
|----------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Sustainable offer status   | Green Premium product                                                                                                                                                                                                                                                                       |
| 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> |
| REACH Regulation           | <a href="#">REACH Declaration</a>                                                                                                                                                                                                                                                           |
| EU RoHS Directive          | Pro-active compliance (Product out of EU RoHS legal scope) <a href="#">EU RoHS Declaration</a>                                                                                                                                                                                              |
| Mercury free               | Yes                                                                                                                                                                                                                                                                                         |
| RoHS exemption information | <a href="#">Yes</a>                                                                                                                                                                                                                                                                         |
| China RoHS Regulation      | <a href="#">China RoHS Declaration</a>                                                                                                                                                                                                                                                      |
| Environmental Disclosure   | <a href="#">Product Environmental Profile</a>                                                                                                                                                                                                                                               |
| Circularity Profile        | <a href="#">End Of Life Information</a>                                                                                                                                                                                                                                                     |
| WEEE                       | The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins.                                                                                                                                                                |
| Upgradeability             | <a href="#">Upgraded Components Available</a>                                                                                                                                                                                                                                               |

## Dimensions

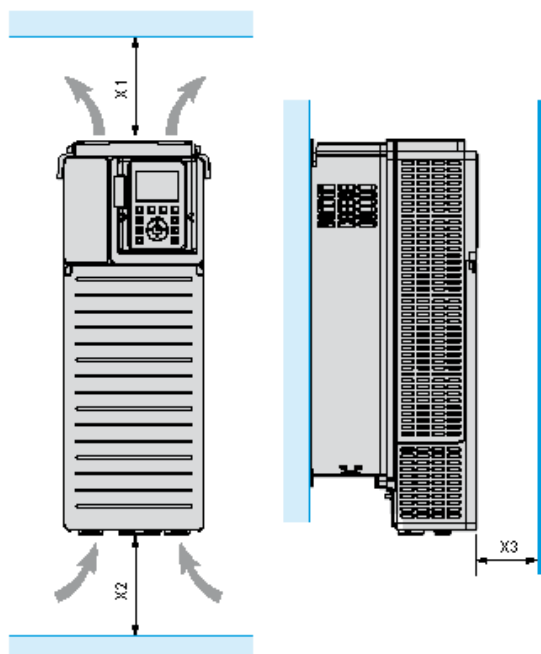
### IP21 / UL Type 1 Drives - Front and Left Side View



Drives without IP21 Top Cover - Rear View



## Clearances

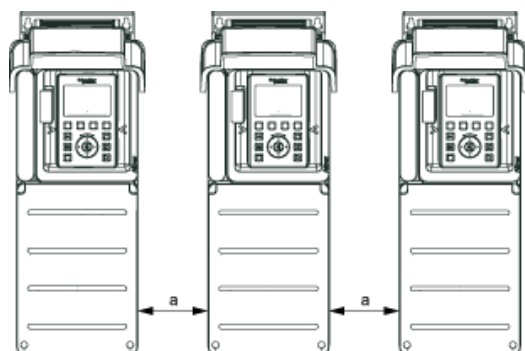


| X1                               | X2                               | X3                              |
|----------------------------------|----------------------------------|---------------------------------|
| $\geq 100 \text{ mm (3.94 in.)}$ | $\geq 100 \text{ mm (3.94 in.)}$ | $\geq 10 \text{ mm (0.39 in.)}$ |

- Mount the device in a vertical position ( $\pm 10^\circ$ ). This is required for cooling the device.
- Do not mount the device close to heat sources.
- Leave sufficient free space so that the air required for cooling purposes can circulate from the bottom to the top of the drive.

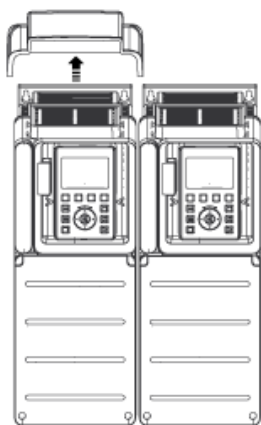
## Mounting Types

### Mounting Type A: Individual IP21

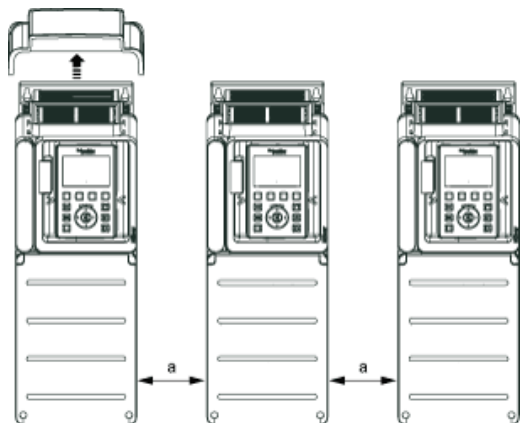


$a \geq 110 \text{ mm (4.33 in.)}$

### Mounting Type B: Side by Side IP20 (Possible, 2 Drives Only)



### Mounting Type C: Individual IP20



$a \geq 110 \text{ mm (4.33 in.)}$

# Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

[Schneider Electric:](#)

[ATV930D90N4](#)