

# Product data sheet

Specifications



variable speed drive, Altivar Process  
ATV600, ATV630, 22kW, 30hp, 500  
to 690V, IP00

ATV630D22Y6

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

## Main

|                                                |                                                                                                                |
|------------------------------------------------|----------------------------------------------------------------------------------------------------------------|
| Range of Product                               | Altivar Process ATV600                                                                                         |
| Product Specific Application                   | Process and utilities                                                                                          |
| Product or Component Type                      | Variable speed drive                                                                                           |
| Variant                                        | Standard version                                                                                               |
| Device short name                              | ATV630                                                                                                         |
| Mounting Mode                                  | Wall mount                                                                                                     |
| Communication Port Protocol                    | Modbus TCP<br>Ethernet<br>Modbus serial                                                                        |
| [Us] rated supply voltage                      | 500...690 V - 15...10 %                                                                                        |
| [Us] rated supply voltage                      | 500...690 V                                                                                                    |
| Relative symmetric mains voltage tolerance     | 10 %                                                                                                           |
| Relative symmetric network frequency tolerance | 5 %                                                                                                            |
| nominal output current                         | 29.0 A                                                                                                         |
| IP degree of protection                        | IP21                                                                                                           |
| Product destination                            | Asynchronous motors<br>Synchronous motors                                                                      |
| EMC filter                                     | Integrated 82.02 ft (25 m) IEC 61800-3 category C3                                                             |
| IP degree of protection                        | IP00IEC 61800-5-1<br>IP00IEC 60529<br>IP20 with kit VW3A9705)IEC 61800-5-1<br>IP20 with kit VW3A9705)IEC 60529 |
| Type of cooling                                | Forced convection                                                                                              |
| Supply frequency                               | 50...60 Hz - 5...5 %                                                                                           |
| Motor power kW                                 | 18.5 kW 500 V normal duty)<br>15 kW 500 V heavy duty)<br>22 kW 690 V normal duty)<br>18.5 kW 690 V heavy duty) |
| Maximum Horse Power Rating                     | 25 hp 500 V normal duty<br>20 hp 500 V heavy duty<br>30 hp 690 V normal duty<br>25 hp 690 V heavy duty         |
| Line current                                   | 27.6 A 500 V normal duty)<br>26 A 690 V normal duty)<br>23.2 A 500 V heavy duty)<br>23 A 690 V heavy duty)     |
| Continuous output current                      | 29 A 4 kHz normal duty<br>24 A 4 kHz heavy duty                                                                |

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

Disclaimer: This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications

|                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Speed drive output frequency | 0.1...500 Hz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Safety function              | STO (safe torque off) SIL 3                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Option card                  | Slot A communication module, Profibus DP V1<br>Slot A communication module, PROFINET<br>Slot A communication module, DeviceNet<br>Slot A communication module, Modbus TCP/EtherNet/IP<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 digital and analog I/O extension module<br>Slot A/slot B output relay extension module<br>Slot A communication module, Ethernet IP/Modbus TCP/MD-Link<br>communication module, BACnet MS/TP<br>communication module, Ethernet Powerlink |

## Complementary

|                                     |                                                                                                                                                                                                                                                                       |
|-------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Discrete input number               | 8                                                                                                                                                                                                                                                                     |
| Discrete input type                 | DI7, DI8 programmable as pulse input 0...30 kHz, 24 V DC <= 30 V)                                                                                                                                                                                                     |
| Discrete input logic                | 16 preset speeds                                                                                                                                                                                                                                                      |
| Discrete output number              | 0                                                                                                                                                                                                                                                                     |
| Discrete output type                | Relay outputs R1A, R1B, R1C 250 V AC 3000 mA<br>Relay outputs R1A, R1B, R1C 30 V DC 3000 mA<br>Relay outputs R2A, R2C 250 V AC 5000 mA<br>Relay outputs R2A, R2C 30 V DC 5000 mA<br>Relay outputs R3A, R3C 250 V AC 5000 mA<br>Relay outputs R3A, R3C 30 V DC 5000 mA |
| Analogue input number               | 3                                                                                                                                                                                                                                                                     |
| Analogue input type                 | AI1, AI2, AI3 software-configurable voltage 0...10 V DC 31.5 kOhm 12 bits<br>AI1, AI2, AI3 software-configurable current 0...20 mA 250 Ohm 12 bits<br>AI2 voltage analog input - 10...10 V DC 31.5 kOhm 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 10 bits<br>Software-configurable current DQ-, DQ+ 30 V DC<br>Software-configurable current DQ-, DQ+ 100 mA                                     |
| 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 100000 cycles<br>Configurable relay logic R3 sequence relay NO 100000 cycles                                                                             |
| Maximum switching current           | Relay output R1, R2, R3 resistive, cos phi = 1 3 A 250 V AC<br>Relay output R1, R2, R3 resistive, cos phi = 1 3 A 30 V DC<br>Relay output R1, R2, R3 inductive, cos phi = 0.4 7 ms 2 A 250 V AC<br>Relay output R1, 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                                                                                                                                                                                                                                  |
| Phase                               | 3 phase                                                                                                                                                                                                                                                               |
| Physical interface                  | Ethernet<br>2-wire RS 485                                                                                                                                                                                                                                             |
| Method of access                    | Slave Modbus TCP                                                                                                                                                                                                                                                      |
| Transmission Rate                   | 10, 100 Mbits<br>4800 bps, 9600 bps, 19200 bps, 38.4 Kbps                                                                                                                                                                                                             |
| Transmission frame                  | RTU                                                                                                                                                                                                                                                                   |
| Output voltage                      | <= power supply voltage                                                                                                                                                                                                                                               |
| Permissible temporary current boost | 1.1 x In 60 s normal duty)<br>1.5 x In 60 s heavy duty)                                                                                                                                                                                                               |
| Data format                         | 8 bits, configurable odd, even or no parity                                                                                                                                                                                                                           |

|                                     |                                                                                                                                                                                                                                                                                                                                                     |
|-------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Type of polarization                | No impedance                                                                                                                                                                                                                                                                                                                                        |
| Frequency resolution                | Display unit 0.1 Hz<br>Analog input 0.012/50 Hz                                                                                                                                                                                                                                                                                                     |
| Electrical connection               | Control removable screw terminals 0.5...1.5 mm² AWG 20...AWG 16<br>Motor screw terminal 10 mm² AWG 8<br>Line side screw terminal 10 mm² AWG 8                                                                                                                                                                                                       |
| Connector type                      | RJ45 on the remote graphic terminal)Ethernet/Modbus TCP<br>RJ45 on the remote graphic terminal)Modbus serial                                                                                                                                                                                                                                        |
| Exchange mode                       | Half duplex, full duplex, autonegotiation Ethernet/Modbus TCP                                                                                                                                                                                                                                                                                       |
| 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                    | 3 LEDs for local diagnostic<br>3 LEDs (dual colour) for embedded communication status<br>4 LEDs (dual colour) for communication module status<br>1 LED (red) for presence of voltage                                                                                                                                                                |
| Input compatibility                 | DI1...DI6 discrete input level 1 PLC IEC 61131-2<br>DI5, DI6 discrete input level 1 PLC IEC 65A-68<br>STOA, STOB discrete input level 1 PLC 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                                                                                                                                                                                                                                               |
| Sampling duration                   | 2 ms +/- 0.5 ms DI1...DI4) - discrete input<br>5 ms +/- 1 ms DI5, DI6) - discrete input<br>5 ms +/- 0.1 ms AI1, AI2, AI3) - analog input<br>10 ms +/- 1 ms AO1) - analog output                                                                                                                                                                     |
| Accuracy                            | +/- 0.6 % AI1, AI2, AI3 for a temperature variation 60 °C analog input<br>+/- 1 % AO1, AO2 for a temperature variation 60 °C analog output                                                                                                                                                                                                          |
| Linearity error                     | AI1, AI2, AI3 +/- 0.15 % of maximum value analog input<br>AO1, AO2 +/- 0.2 % analog output                                                                                                                                                                                                                                                          |
| Refresh time                        | Relay output R1, R2, R3)5 ms +/- 0.5 ms)                                                                                                                                                                                                                                                                                                            |
| Isolation                           | Between power and control terminals                                                                                                                                                                                                                                                                                                                 |
| Enclosure mounting                  | Wall mounted                                                                                                                                                                                                                                                                                                                                        |
| 4 quadrant operation possible       | False                                                                                                                                                                                                                                                                                                                                               |
| 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            | 500 kHz                                                                                                                                                                                                                                                                                                                                             |
| Acceleration and deceleration ramps | S, U or customized<br>Linear adjustable separately from 0.01...9999 s                                                                                                                                                                                                                                                                               |
| Motor slip compensation             | Adjustable<br>Can be suppressed<br>Not available in permanent magnet motor law<br>Automatic whatever the load                                                                                                                                                                                                                                       |
| Switching frequency                 | 2...8 kHz adjustable<br>4...8 kHz with derating factor                                                                                                                                                                                                                                                                                              |
| Nominal switching frequency         | 4 kHz                                                                                                                                                                                                                                                                                                                                               |
| Braking to standstill               | By DC injection                                                                                                                                                                                                                                                                                                                                     |
| Brake chopper integrated            | False                                                                                                                                                                                                                                                                                                                                               |

|                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Maximum Input Current per Phase                      | 27.6 A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Maximum output voltage                               | 690.0 V                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Apparent power                                       | 31.1 kVA 690 V normal duty)<br>27.5 kVA 690 V heavy duty)                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Maximum transient current                            | 31.9 A 60 s normal duty)<br>36 A 60 s heavy duty)                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Network Frequency                                    | 50-60 Hz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Prospective line Isc                                 | 70 kA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Base load current at high overload                   | 24.0 A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Base load current at low overload                    | 29.0 A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Power dissipation in W                               | Natural convection 138 W 500 V 4 kHz<br>Forced convection 463 W 500 V 4 kHz                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| With safety function Safely Limited Speed (SLS)      | False                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| With safety function Safe brake management (SBC/SBT) | False                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| 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)               | False                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| 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                                                | 9.7 in (246 mm)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Height                                               | 16.5 in (420 mm)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Depth                                                | 9.5 in (242 mm)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Net Weight                                           | 48.5 lb(US) (22 kg)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |

## Environment

|                       |                                         |
|-----------------------|-----------------------------------------|
| Insulation resistance | > 1 MOhm 500 V DC for 1 minute to earth |
| Noise level           | 52 dB 86/188/EEC                        |

|                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Pollution degree                                                 | 2 IEC 61800-5-1                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Vibration resistance                                             | 1.5 mm peak to peak (f= 2...13 Hz) conforming to IEC 60068-2-6<br>1 gn (f= 13...200 Hz) conforming to IEC 60068-2-6                                                                                                                                                                                                                                                                                                              |
| Shock resistance                                                 | 15 gn 11 ms IEC 60068-2-27                                                                                                                                                                                                                                                                                                                                                                                                       |
| 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)                                                                                                                                                                                                                                                                                                                                  |
| 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>IEC 61800-3<br>EN/IEC 61800-3 environment 2 category C3<br>IEC 61800-5-1<br>IEC 61000-3-12<br>IEC 60721-3<br>IEC 61508<br>IEC 13849-1                                                                                                                                                                                                                                                                                 |
| Maximum THDI                                                     | <48 % with external line choke IEC 61000-3-12                                                                                                                                                                                                                                                                                                                                                                                    |
| Electromagnetic compatibility                                    | Electrostatic discharge immunity test level 3 conforming to IEC 61000-4-2<br>Radiated radio-frequency electromagnetic field immunity test level 3 conforming to IEC 61000-4-3<br>Electrical fast transient/burst immunity test level 4 conforming to IEC 61000-4-4<br>1.2/50 µs - 8/20 µs surge immunity test level 3 conforming to IEC 61000-4-5<br>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<br>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 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                                            | 87178.3 Gal/hr(US) (330 m3/h)                                                                                                                                                                                                                                                                                                                                                                                                    |
| Overvoltage category                                             | III                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Regulation loop                                                  | Adjustable PID regulator                                                                                                                                                                                                                                                                                                                                                                                                         |
| Noise level                                                      | 58 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          | US1CP4E22276  |
| Discount Schedule | CP4E          |
| GTIN              | 3606481325174 |
| Returnability     | Yes           |

|                   |    |
|-------------------|----|
| Country of origin | IN |
|-------------------|----|

Packing Units

|                        |                           |
|------------------------|---------------------------|
| Unit Type of Package 1 | PCE                       |
| Nbr. of units in pkg.  | 1                         |
| Package 1 Height       | 19.094 in (48.500 cm)     |
| Package 1 Width        | 15.551 in (39.500 cm)     |
| Package 1 Length       | 31.496 in (80.000 cm)     |
| Package weight(Lbs)    | 68.343 lb(US) (31.000 kg) |

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) | 9186                                          |
| 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                            | 075941f9-bf60-4e63-ae5c-6fe3c8035357                                                                                                                                                                                                                                                        |
| 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

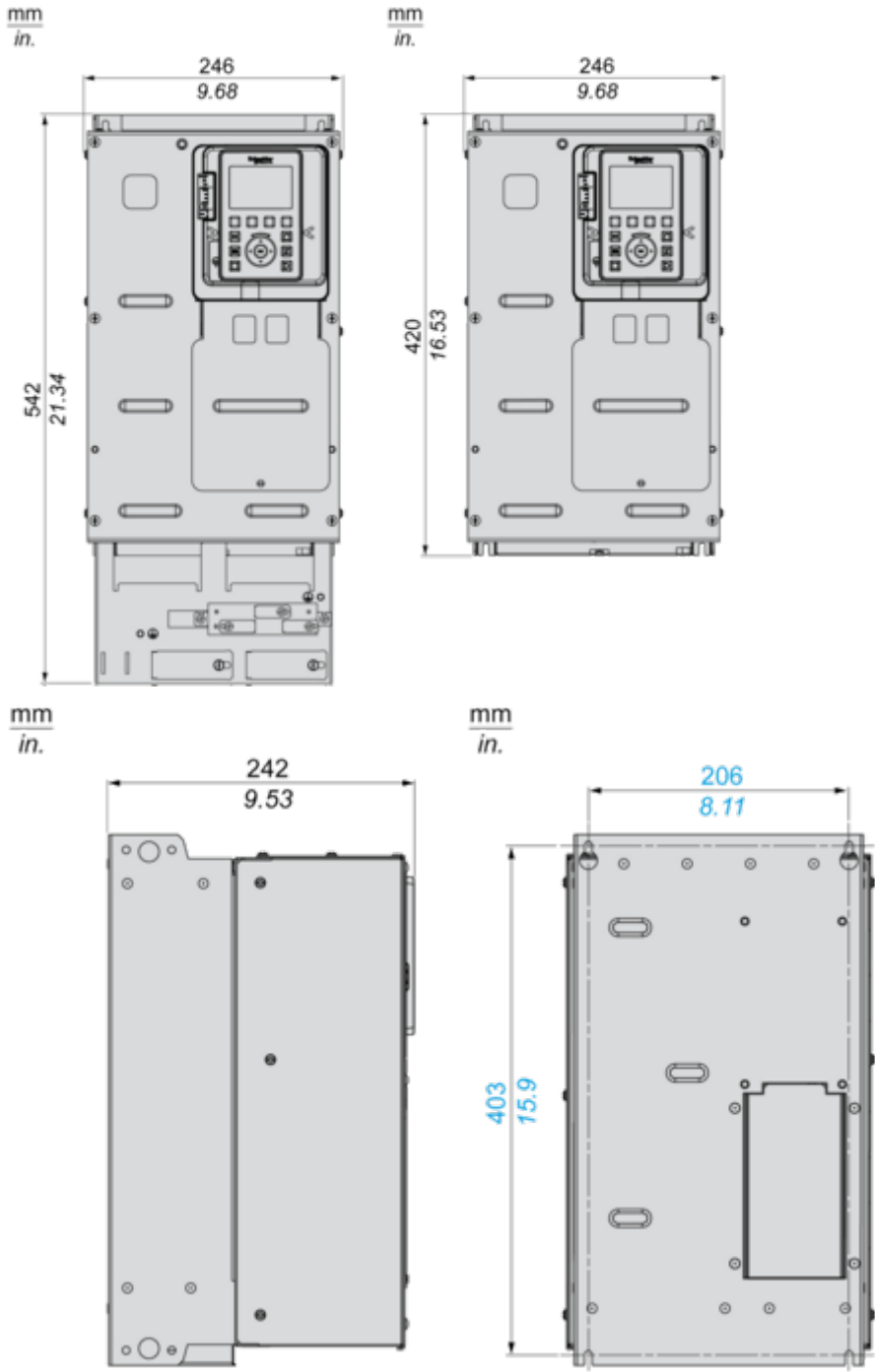
| Repack and remanufacture |                                                                                                                                                                                                                  |
|--------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 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. |

Dimensions Drawings

Dimensions

Drives without Top Cover

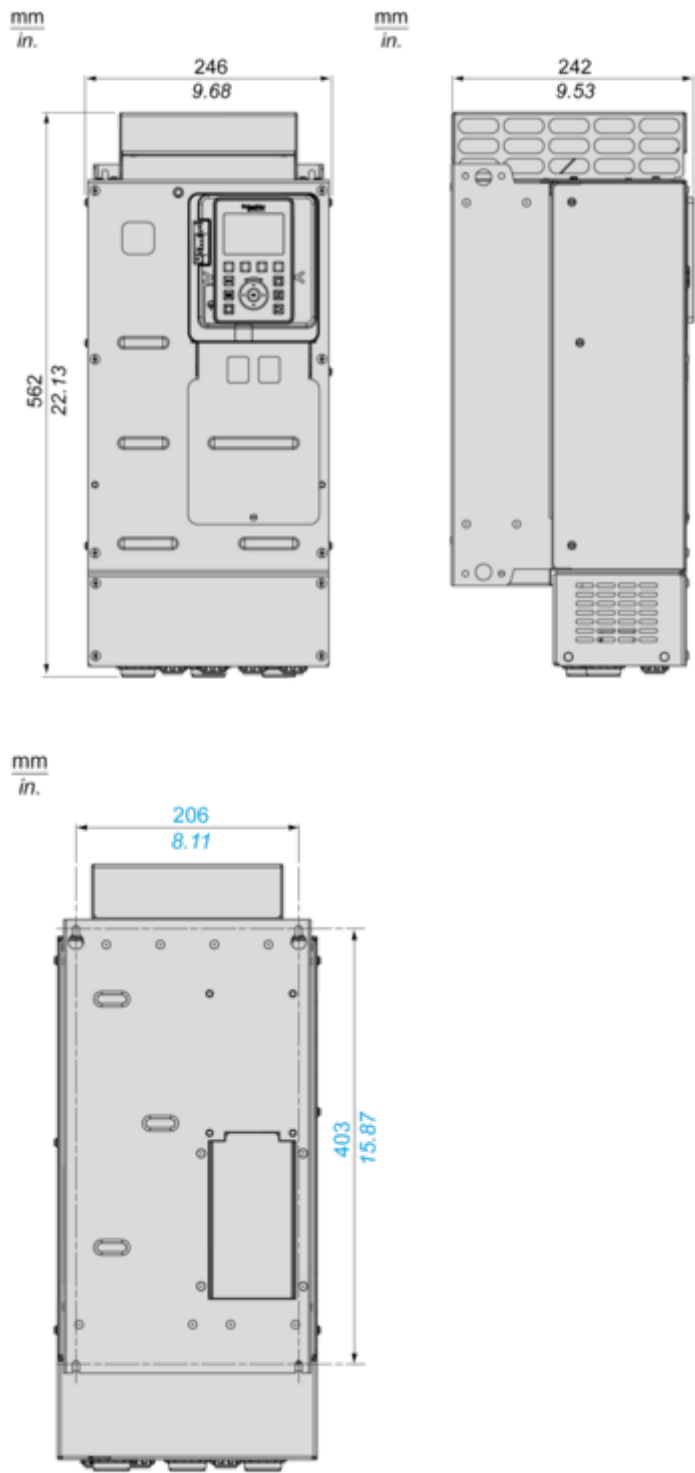
Front View with EMC Plate, Front, Left and Rear Views without EMC Plate



Drives with IP20 Top Cover

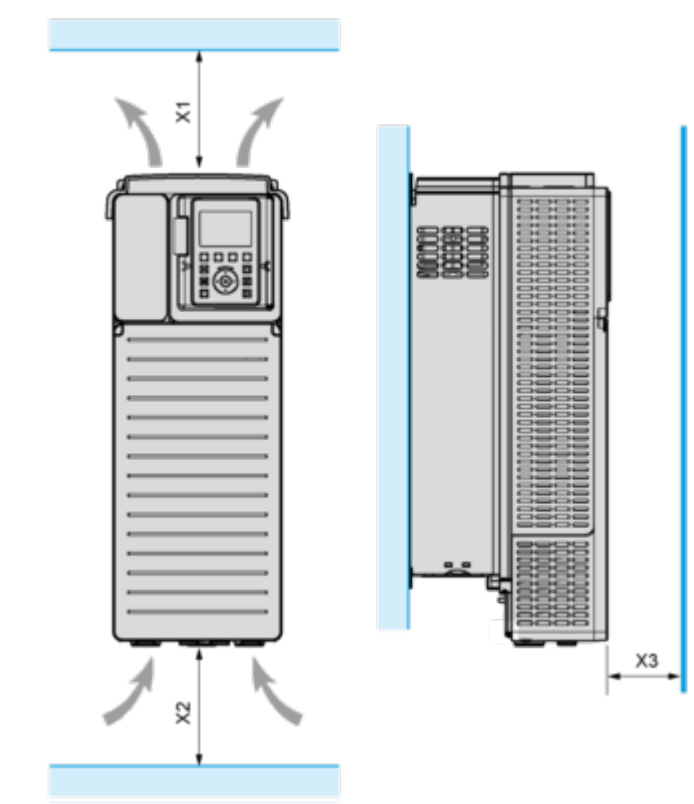
Front, Left and Rear Views





Mounting and Clearance

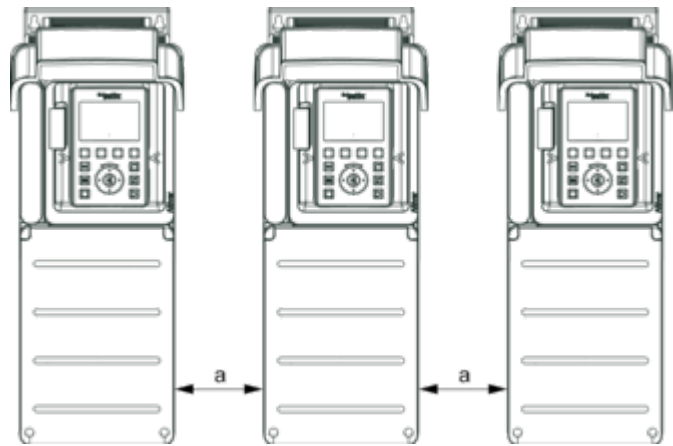
Clearances



| X1                  | X2                  | X3                 |
|---------------------|---------------------|--------------------|
| ≥ 100 mm (3.94 in.) | ≥ 100 mm (3.94 in.) | ≥ 10 mm (0.39 in.) |

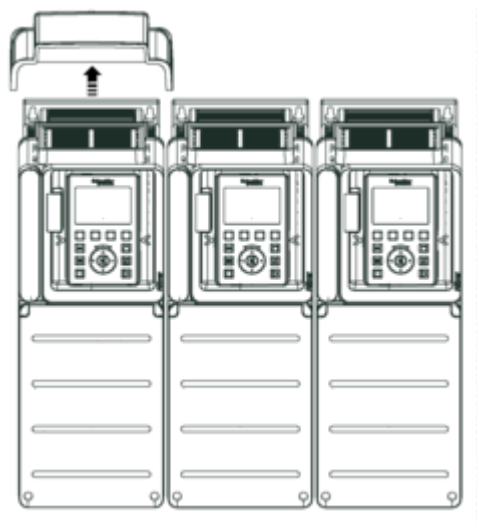
Mounting Types

Mounting Type A: Individual IP21

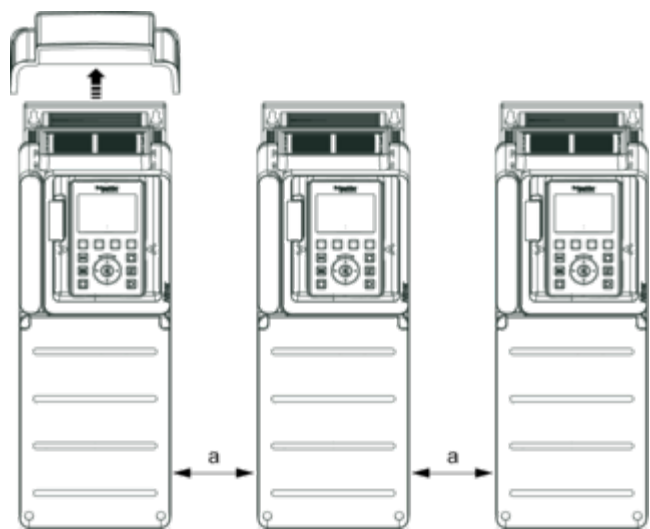


$a \geq 0$

Mounting Type B: Side by Side IP20



Mounting Type C: Individual IP20

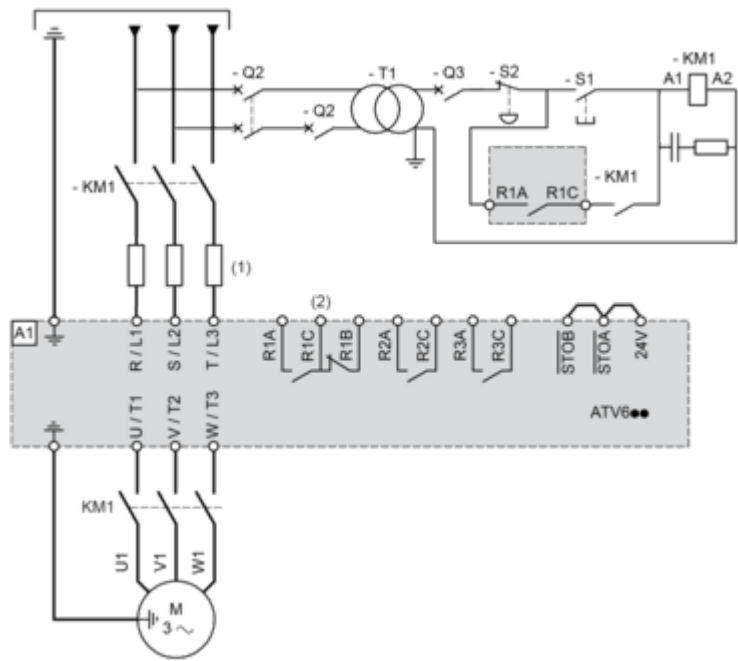


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Connections and Schema

Three-Phase Power Supply with Upstream Breaking via Line Contactor

Connection diagrams conforming to standards EN 954-1 category 1 and IEC/EN 61508 capacity SIL1, stopping category 0 in accordance with standard IEC/EN 60204-1



(1) Line choke if used

(2) Use relay R1 set to operating state Fault to switch Off the product once an error is detected.

A1 : Drive

KM1 : Line Contactor

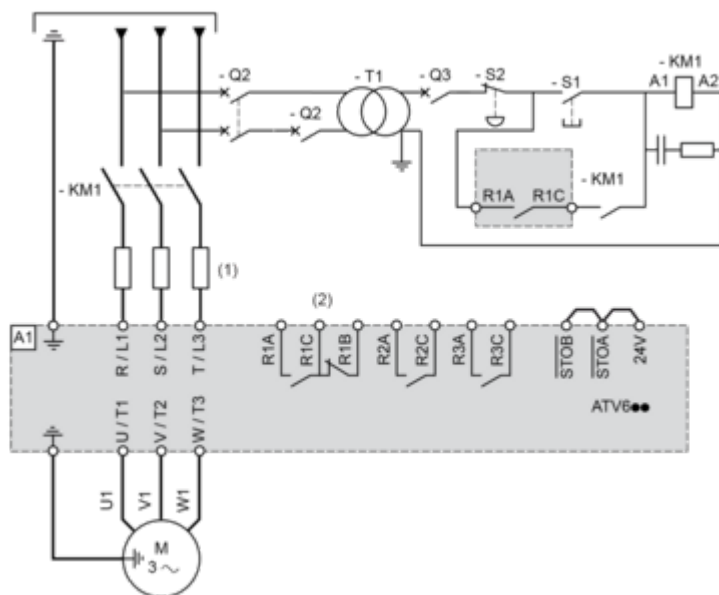
Q2, Q3 : Circuit breakers

S1, S2 : Pushbuttons

T1 : Transformer for control part

### Three-Phase Power Supply with Downstream Breaking via Contactor

Connection diagrams conforming to standards EN 954-1 category 1 and IEC/EN 61508 capacity SIL1, stopping category 0 in accordance with standard IEC/EN 60204-1



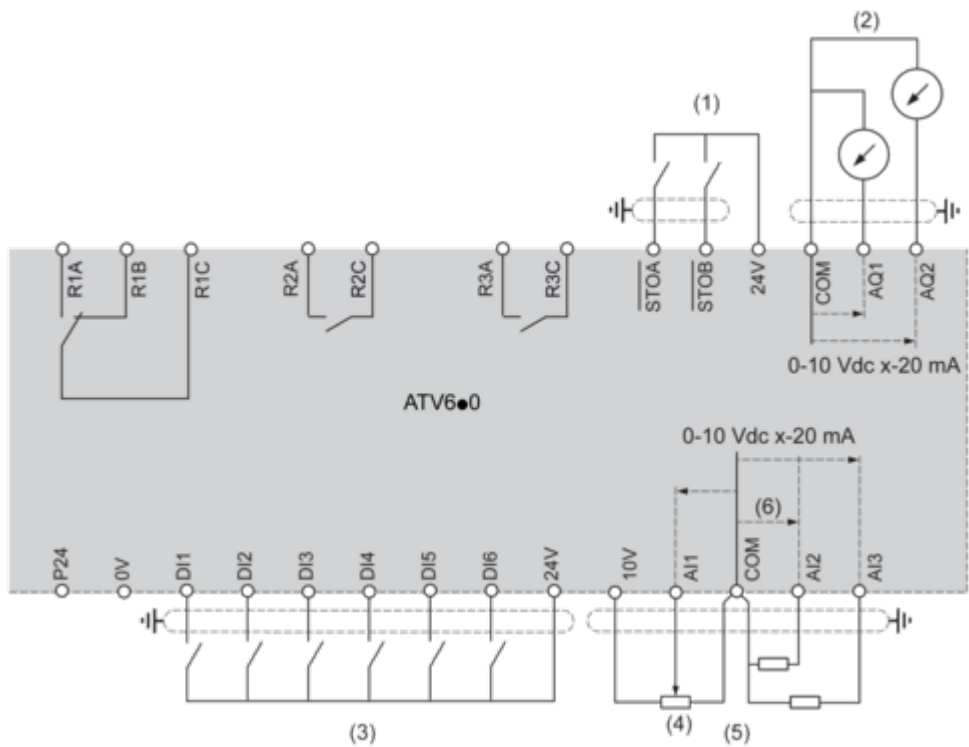
(1) Line choke if used

(2) Use relay R1 set to operating state Fault to switch Off the product once an error is detected.

**A1 : Drive**

**KM1** : Contactor

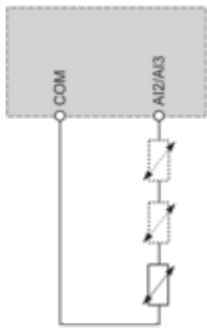
Control Block Wiring Diagram



- (1) Safe Torque Off
  - (2) Analog Output
  - (3) Digital Input
  - (4) Reference potentiometer
  - (5) Analog Input
  - (6) 0-10 Vdc x-20 mA
- R1A, R1B, R1C** : Fault relay  
**R2A, R2C** : Sequence relay  
**R3A, R3C** : Sequence relay

Sensor Connection

It is possible to connect either 1 or 3 sensors on terminals AI2 or AI3.

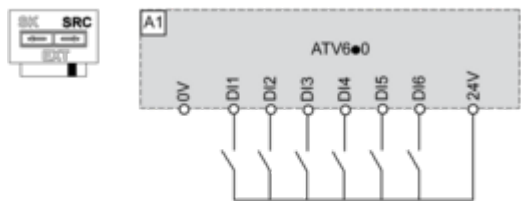


Sink / Source Switch Configuration

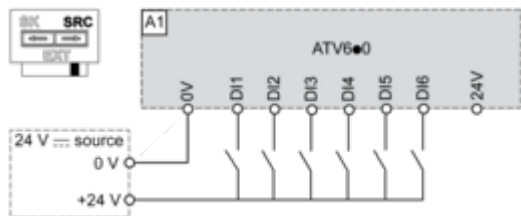
The switch is used to adapt the operation of the logic inputs to the technology of the programmable controller outputs.

- Set the switch to Source (factory setting) if using PLC outputs with PNP transistors.
- Set the switch to Ext if using PLC outputs with NPN transistors.

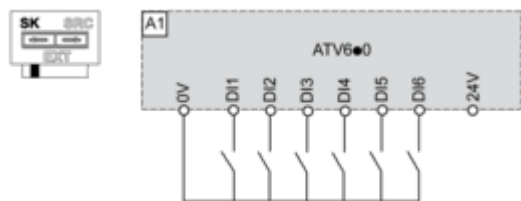
Switch Set to SRC (Source) Position Using the Output Power Supply for the Digital Inputs



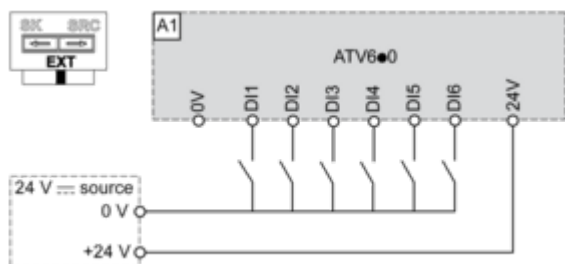
Switch Set to SRC (Source) Position and Use of an External Power Supply for the DIs



Switch Set to SK (Sink) Position Using the Output Power Supply for the Digital Inputs



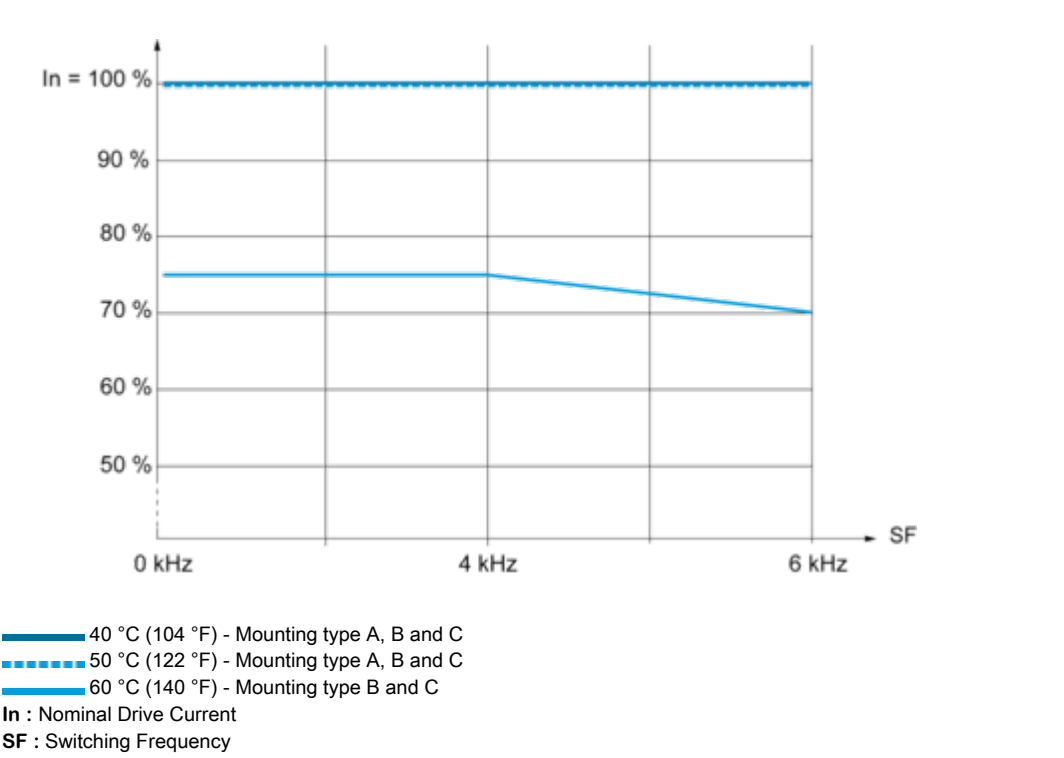
Switch Set to EXT Position Using an External Power Supply for the DIs





Performance Curves

Derating Curves



Technical Illustration

Dimensions

