

Life Is On

Schneider
Electric

Altivar AC Drives

Advanced energy management
and performance in motor control



schneider-electric.us/drives



Schneider Electric

Segment focused. Customer centric.

Schneider Electric can help you meet the challenges of the trends impacting our world. With a long history of industry-leading motor control solutions and a global footprint, we offer the right choices for motor controls from simple local applications to large global enterprise solutions.

5 Key trends shaping our world

1 **Urbanization**
Greater demand for water and wastewater solutions

2 **Industrialization**
Greater need for connectivity and automation

3 **Digitization**
Big data capability provides new avenues for efficiencies

4 **Scarcity of resources**
Demand for efficient use of resources

5 **Climate change**
Demand for sustainable development

INNOVATIVE

359

active patents

SUPPORTIVE

1,000+

drives application specialists annually

EXPERIENCED

1.5M

drives sold annually

The Altivar™ Drives family: The most advanced and user-friendly variable-speed AC Drives and Drive Systems offering on the market.

Featuring proprietary motor control algorithms to achieve optimal motor performance and complete scalability to match your application speed, size, and protection requirements, the complete line of Altivar products and solutions delivers the flexibility and performance to:

- Optimize a broad range of utility and industrial applications including pumps, fans, compressors, material handling, hoisting, packaging, and material working.
- Reduce your energy costs by using proprietary energy-saving technologies available only from Schneider Electric.
- Improve your uptime by simplifying installation, commissioning, and maintenance by providing advanced diagnostics, industry-leading voltage ride-through capability, and seismic-qualified products and solutions.

Improve your business operations with Altivar AC Drives

Schneider Electric offers a portfolio of AC Drives designed to provide value in your business operations.



Machine builders

- Space savings
- Certified safety connectivity
- Complementary product offers
- Automation network integration
- Process performance improvement



Building managers

- Energy savings
- Energy management
- Green building compliance
- Building network integration
- Ready-to-install



Industrial process owners

- Energy management
- Process optimization
- Predictive maintenance
- Remote network access
- Packaged drive systems



Utility site operators

- Process monitoring
- Energy management
- Sitewide network control
- Coordinated drive systems
- Chemical and air particle pollution resistance

For more than 30 years, Schneider Electric has supplied AC Drives to energy-intensive industries across the world. We are a global-leading supplier of reliable, high-performance AC Drives, built for a wide range of applications across diverse and demanding segments.

Altivar AC Drives for machines

Designed to assist OEMs, panel builders, and system integrators build tailored, high-performance equipment.

- Material handling
- Material working equipment
- Material forming and embossing
- Gappers, palletizing
- Packaging machinery
- Metal process machinery
- Hoisting
- Extruding
- pM motor control



	Altivar 12	Altivar 320 Compact	Altivar 320 Book	Altivar 340
Voltage	115 208/230	208/230 480 600	208/230 480	480
HP	0.25 – 1 0.25 – 5	0.25 - 20 0.5 - 5 1 - 20	0.25 - 20 0.5 - 20	1 - 100
kW	0.18 – 0.75 kW 0.18 – 4 kW	0.18 – 15 kW 0.37 – 4 kW 0.75 – 15 kW	0.18 – 15 kW 0.37 – 15 kW	0.75 – 75 kW
Enclosure	IP20	IP20, UL Type 1 w/ Conduit Kit	IP20	IP20
Communication	Integrated Modbus	Integrated Modbus & CANopen Optional: Ethernet IP, Modbus TCP, CANopen Daisy Chain, Sub-D, & screw terminals, PROFINET, Profibus DP V1, EtherCat, DeviceNet, POWERLINK	Integrated Modbus & CANopen Optional: Ethernet IP, Modbus TCP, CANopen Daisy Chain, Sub-D, & screw terminals, PROFINET, Profibus DP V1, EtherCat, DeviceNet, POWERLINK	Integrated Modbus Integrated Ethernet IP/Modbus TCP on ATV340***N4E Optional: CANopen Daisy Chain, Sub-D, & screw ter- minals, PROFINET, Profibus DP V1, EtherCat, Devicenet
Performance	Simple Machines	Simple & Advanced Machines	Simple & Advanced Machines	High-Performance Machines

Altivar AC Drives for buildings

Providing economical choices for OEMs and energy-management capabilities for building managers.

- Ventilation fans
- Air conditioning fans
- Recovery wheel control
- Heating and cooling pumps
- Cooling tower pumps and fans
- Building water pressure pumps



	Altivar 212*	S-Flex*	ATV660
Voltage	208/230 480	208/230 480	208/230 480
HP	1 – 40 1 – 100	1 – 40 1 – 100	1 – 900
kW	0.75 – 30 kW 0.75 – 75 kW	0.75 – 700 kW	0.75 – 700 kW
Enclosure	IP 20, UL Type 1 with kit, UL Type 12	UL Type 1, 12, 3R	UL Type 1,12, 3R (1 – 125hp)
Communication	Built in: modbus, N2 BACnet™ & P1, Lonworks option	Built in: modbus, N2BACnet & P1, Lonworks option	Built in: Ethernet

* AHRI Certified Products

Altivar Process Drives for industrial utility applications

Altivar process drives deliver added-value services to enable business and process optimization through improved life cycle asset management and optimized energy consumption. Designed to assist OEMs, system integrators, and industrial process owners, Altivar process drives improve process performance by enabling full information and operational technology convergence.

Embedded EcoStruxure Plant™ and Foxboro™ Evo architectures simplify system integration.



Water applications

- Booster pumps
- Lift station pumps
- Desalination pumps
- Water supply pumps
- Water suction pumps
- Progressing cavity pumps
- Influent and effluent pumps
- Secondary clean water pumps



Oil & Gas applications

- Rod pumps
- Feed pumps
- Pipeline, booster, and unloading pumps
- Water injection pumps
- Reciprocating and centrifugal compressors
- Progressing cavity pumps
- Electric submersible pumps



Mining & Metals applications

- Hoisting
- Crushers
- Extruding
- Conveyors
- Slurry pumps
- Induced draft fans
- Quenching pumps
- Dust collection fans
- Mine ventilation fans
- Hydro-transport pumps



	Altivar 630	Altivar 650	Altivar 930	Altivar 950
Voltage	208/230 480	480	208/230 480	480
HP	1 – 125 1 – 500	1 – 125	1 – 125 1 – 500	1 – 125
kW	0.75 – 90 kW 0.75 – 315 kW	0.75 – 90 kW	0.75 – 90 kW 0.75 – 315 kW	0.75 – 90 kW
Enclosure	UL Type 1 Heatsink kit option: 125 – 250 hp	UL Type 12	UL Type 1 Heatsink kit option: 125 – 250 hp	UL Type 12
Application functions	Multi-pump control, > 30 pump functions, fans, and simple material handling	Multi-pump control, > 30 pump functions, fans, and simple material handling	Load share, master slave, safety inputs, dynamic braking	Master slave, safety inputs, dynamic braking
Performance	Normal or heavy duty	Normal or heavy duty	High-torque capacity encoder options, dual Ethernet ports	High-torque capacity encoder options, dual Ethernet ports

Altivar Drive Systems for industrial process utility

Schneider Electric configurable packages and systems that deliver high performance across multiple segments.



Water

It is estimated that 15% of worldwide water use is industrial. All industries rely on the unlimited availability of water required for processes that control flow and pressure through large pumps.



Power

Market pressure and rising costs require producers to convert a larger share of fuel into sustainable kilowatt hours. Operating optimization is key to cost-effective production.



Oil & Gas

Complex operations and harsh environments put high demand on most chemical and oil and gas process equipment. Achieving high efficiency and availability is critical to increased output and improved product quality.



Mining, Minerals & Metals

Sustainable growth is a major challenge as demand exceeds supply and new deposits are in increasingly remote regions. Processes need to improve efficiency and safety while reducing environmental impact.

Benefits



- Energy savings
- Improved process reliability
- Accurate flow and pressure control
- Soft starting & stopping
- Reduced lifecycle costs
- Extended equipment life



- Increased process efficiency
- Reduce emissions
- Improved heat rate
- Higher plant availability
- Improved process control
- Less energy consumption



- Helps keep costs under control
- Lower maintenance costs
- Simple and effective process control
- Operate equipment at optimum set point



- Better cost-control of energy intensive applications
- Improved heat rate
- Efficient control of large fans and pumps
- Replace older hydraulic and mechanical controls

Features

- Access to real-time data
- QR codes to access support
- Innovative tools and diagnostics
- Powerful user interfaces
- Flexible communications
- Easy-to-maintain designs
- Full array of support services
- Built-in pump protection functions
- Multiple configurations and options

Altivar Drive Systems for industrial process and utility

AC drive platform packages configured, optimized, and engineered to order for your business.



Water applications

- Influent and effluent pumps
- Booster pumps
- Secondary clean water pumps
- Desalination pumps
- High-service pumps
- Water supply pumps
- Water suction pumps



Oil & Gas applications

- Rod pumps
- Feed pumps
- Electric submersible pumps
- Pipeline, booster, and unloading pumps
- Reciprocating and centrifugal compressors
- Water injection pumps
- Progressing cavity pumps



Mining & Metals

- Conveyors
- Furnace fans
- Slurry pumps
- Induced draft fans
- Quenching pumps
- Dust collection fans
- Mine ventilation fans
- Hydro-transport pumps



Power Generation applications

- Dust collection fans
- Induced and forced-draft boiler fans
- Feed water, cooling, circulation, and condensate pumps
- Reactor recirculation pumps



	Altivar Outdoor Drive System	Altivar 660 Compact Drive System	Altivar 960 Compact Drive System	Altivar 680 Low Harmonic Drive System	Altivar 980 Low Harmonic Regenerative Drive System	Altivar 1260 Medium Voltage Drive System	Altivar 1260C Compact Medium Voltage Drive System
Voltage	460	230/460	230/460	460	460	4,160	4,160
HP	460 V (VT) 20 – 350 hp 460 V (CT) 20 – 250 hp	1 – 900HP (ND) 1 – 700HP (HD)	1 – 900HP (ND) 1 – 700HP (HD)	150HP – 900HP (ND) 125HP – 700HP (HD)	150HP – 900HP (ND) 125HP – 700HP (HD)	700 – 6,500	500 – 1,650
Enclosure	NEMA 3R	UL Type 1,12, 3R (1 – 125 hp 460V)	UL Type 1,12, 3R (1 – 125 hp 460V)	UL Type 1, 12	UL Type 1, 12	UL Type 1	UL Type 1
Performance	Normal Duty or Heavy Duty (-10 to 50°C)	Normal Duty or Heavy Duty	Normal Duty or Heavy Duty	Low harmonic drive system with active mains rectifier to reduce current harmonics THDi < 5% Stable performance with	Low harmonic drive system with active mains rectifier to reduce current harmonics THDi < 5% Stable performance with	Synchronous or induction	Synchronous or induction
Features	Outdoor rating to withstand blowing dust, driving rain, and heat	Modular concept with functionality of the Altivar Process 630	Modular concept with functionality of the Altivar Process 930	System approach to managing harmonics. ATV680 is the low harmonic solution for pumping and general purpose applications.	System approach to managing harmonics. ATV980 is design for low harmonic and regenerative applications.	3-Level NPC, 24 pulse DFE, sine wave filter, HMI, Web App, UPS, PLC, MC-IGBTs	3-Level NPC, 24 pulse DFE, sine wave filter, HMI, Web App, UPS, MC-IGBTs, integral fused switch and compact form factor.

Solutions for every stage of your equipment's life cycle

Life Is On



At Schneider Electric, we take a long-term, holistic approach to determine your facility and operational needs, then develop strategies to improve the performance of your people, systems, and processes.

Our expertise enables you to cut costs, reduce energy consumption, and keep your systems up and running through routine maintenance, process enhancements, and migrations to new, state-of-the-art functionality.



Start-up and commissioning

- Expert installation support service, comprehensive power-up, and diagnostic check on system components

Industrial repair services

- Repair capabilities for more than 400,000 part numbers from more than 2,500 manufacturers at our Greensboro, NC facility

Technical training

- Training offered on-site, off-site, and online for Schneider Electric drives products taught by professional instructors

Spare parts management

- On-site assessment to determine parts/inventory needs to ensure proper system operation and reduce downtime/costs

Remote technical support

- Comprehensive online and phone support from experts trained on Schneider Electric drives products

Migration and modernization

- Process optimization through the identification/replacement of legacy products for new, innovative technology while maximizing existing hardware for cost-effective solutions

On-site technical support

- Regular maintenance, upgrades, and conversion assistance, small application/programming assistance, troubleshooting, and repair — even in emergencies

Software renewals

- Access to the latest software available to ensure optional functionality for your system

Preventive maintenance

- Programs to proactively detect potential system issues to help avoid costly unscheduled downtime and reduced equipment life

Extended warranty

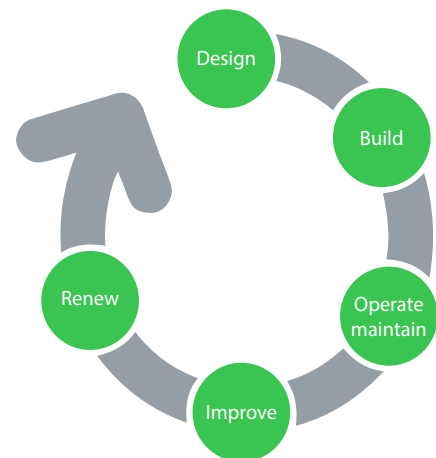
- Protection plans tailored to your needs to reduce costs and out-of-service time

More information

For more detailed information, including product specifications, please visit altivardrives.com.

When it comes to your process equipment, we can help at each point

- Personalized assessment, system design, and consulting
- Expert installation and new system start-up assistance
- Regular maintenance, repair, support, and troubleshooting
- Cost-effective modernization of legacy equipment
- Timely upgrades and conversion assistance to new equipment



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