



## Generation 7 AC Drives 1/8 to 500 HP

**Yaskawa's Industrial AC Drives** incorporate the latest technological advancements in AC induction motor speed control, made possible by experience (100 years of AC motor design, 50 years of AC drive design) and dedication to quality in design and manufacturing (Yaskawa is the only drives manufacturer in the world to receive the Deming Quality award). These adjustable frequency AC drives are designed for industrial automation applications. Typically, they are capable of the popular network communications, supported by software tools for parameter management, able to accept customer-specific or application-specific software and are supported globally by Yaskawa's network of service and sales centers.

### F7 (1/2 to 500 HP)

The F7 Drive is the Industrial Workhorse that can handle every conventional application found within the typical industrial plant, from the simple conveyor to sophisticated networked packaging. All of this is possible with the smart and flexible design platform of the F7, providing both Normal and Heavy Duty ratings, three modes of control, network communication options, application-specific drive software, and an array of standard and optional input/output devices.

### G7 (1/2 to 500 HP)

The G7 drive is the total solution for the unconventional, extreme performance applications. With high-end response for speed and torque loops, the G7 provides servo-like performance for superior motor control. The drive has the latest in auto-tuning methods featuring both static and rotational methods for easy commissioning of any motor. The G7 drive has the world's first 480V 3-level power section architecture offering total system protection. The 3-level control eliminates peripheral components typically required to solve installation problems such as long motor cable leads, motor bearing life, audible noise, and

common mode noise. The G7 has an optional programming feature called DriveWorksEZ™, a PC-based, object-oriented, graphical icon, programming tool.

### P7 (5 to 500 HP)

The P7 Drive is the choice for industrial variable torque applications such as centrifugal fans and pumps. The drive has Normal Duty ratings with nominal 110% for 60 seconds overload capability. Network communication options and an array of input/output devices are available for installation flexibility. The P7 drive is available with optional bypass control and other fan/pump options.

### V7 (1/8 to 10 HP)

The V7 is a general purpose microdrive combining compact size with exceptional flexibility and performance. The V7 provides two control methods: V/f and open loop vector control. Open loop vector control provides precise speed regulation and higher torque at lower speeds.

The V7 has multiple network communication options and custom application software available.

## V7N (1/8 to 10 HP)

The V7N is a V7 drive with embedded DeviceNet communications. This drive provides significant cost benefit compared to drives that use optional plug-in interface cards. Network status LEDs are visible through the cover and a detachable connector simplifies wiring.

## J7 (1/8 to 5 HP)

The J7 drive is a general purpose drive for simple OEM applications. The current overload rating is 150% for 60 seconds. The J7 is feature-packed, low cost, and compact. The digital operator includes a 3-digit LED status display and an analog speed potentiometer.

## V74X (1/8 to 15 HP)

The V74X drive is a version of the standard V7 in an integral NEMA 4X/12 enclosure that meets UL 4X/12 standards for indoor use, and IEC 529 IP66 ratings. Suitable for tough wash-down or dust-tight environments common in Food and Beverage Processing, Packaging, Metal Machining, Woodworking, Pumping, Refrigeration, and Printing. The cast enclosure is powder-coated to protect against the harmful effects of sanitizing chemicals commonly used in food industries. Performance and features are identical to the standard V7.

[efesotomasyon.com](http://efesotomasyon.com)

Suggested Use	Drive Type	Ratings		Control Type	Network Communications Options
All Conventional Industrial Applications	F7	208 to 240 VAC	1/2 to 150 HP	CLV OLV V/f	Ethernet/IP, Modbus TCP/IP DeviceNet, Profibus DP Modbus Plus, Modbus RTU LonWorks
		480 VAC	3/4 to 500 HP		
High-end Applications, Servo-like Response, Open Loop Torque Control, 3-Level Control for Motor/Installation Protection	G7	208 to 240 VAC	1/2 to 150 HP	CLV OLV V/f	Ethernet/IP, Modbus TCP/IP DeviceNet, Profibus DP Modbus Plus, Modbus RTU LonWorks
		480 VAC	3/4 to 500 HP		
Industrial Fan and Pump and Other Variable Torque Applications	P7	208 to 240 VAC	5 to 150 HP	V/f	Ethernet/IP, Modbus TCP/IP DeviceNet, Profibus DP Modbus Plus, Modbus RTU LonWorks
		480 VAC	5 to 500 HP		
General Purpose	V7	230 VAC	1/8 to 10 HP	OLV V/f	Ethernet/IP, Modbus TCP/IP DeviceNet, Profibus DP Modbus RTU
		460 VAC	1/2 to 10 HP		
General Purpose DeviceNet Network	V7N	230 VAC	1/8 to 10 HP	OLV V/f	Embedded DeviceNet
		460 VAC	1/2 to 10 HP		
General Purpose NEMA 4X/12	V74X	230 VAC	1/8 to 10 HP	OLV V/f	DeviceNet, Profibus DP Modbus RTU
		460 VAC	1/2 to 15 HP		
Simple OEM Machines	J7	230 VAC	1/8 to 5 HP	V/f	Modbus RTU
		460 VAC	1/2 to 5 HP		

CLV = Closed Loop Vector, OLV = Open Loop Vector, V/f = Volts per Hertz

**For other drive needs, call for assistance or visit [www.yaskawa.com](http://www.yaskawa.com)**

- G5HHP - Drives ranging 350HP to 1500HP
- G5 and P5 - Drives for use in 600V service areas
- RC5 and DC5 - Regenerative Converters
- CDBR - Dynamic Braking Control
- VS mini 115V - Single Phase Drives ranging 1/8HP to 1HP



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