

Where does the A1000 fit into Yaskawa's family of drives, and what does it offer beyond the F7?

The A1000 is Yaskawa's new general purpose, high performance industrial drive. Over time, it will take the place of the F7, but brings higher performance, flexibility, and extended life. For more detailed features and specifications of the A1000, visit www.yaskawa.com.

Is the A1000 ready for shipment?

Yes, the A1000 is in stock and ready to ship.

What are the ratings of the A1000?

200-240V	3/4 to 175HP (3.2 to 415A)
380-480V	3/4 to 1000HP (1.8 to 1200A)
500-600V	1 to 250HP (1.7 to 242A)

What are the details regarding A1000 12 Pulse?

A1000 12 Pulse capability is available only in 480V ratings from 58 to 1200 amps. For 58 through 675 amps, specific 12 pulse models provide this capability, and are only meant to be used for 12 pulse applications (different from previous generations). The 930 amp and 1200 amp models are field configurable for either 6 or 12 pulse applications.

Is the A1000 dual rated?

Yes, it has both a Normal Duty rating with an overload capacity of 120% for 60 seconds, and a Heavy Duty rating with an overload capacity of 150% for 60 seconds.

When will single phase input capacities be available for A1000 and what kind of derating is expected?

Single phase input capacities are provided in supplement TOEPYEASUP03 (available online), and will be included in a future revision of the A1000 technical manual.

What training is available for A1000?

A1000 Installation / Startup and Application Programming classes are available. Visit www.yaskawa.com to see the most up-to-date training schedule.

When should we begin converting existing F7 business to A1000?

This can take place any time on or after the official launch date of January 4, 2011.

Are F7 options compatible with A1000? Can A1000 options be used with F7?

No, the options are not interchangeable.

What will happen to the F7?

It will continue to be fully supported for at least one year after the A1000 launch date.

What tools are available to help customers convert from G5 (600V) and F7 to A1000?

This information is contained in Transition Guides, document numbers PL.A1000.01 and PL.A1000.02, respectively.

Where is the A1000 manufactured?

In Yaskawa's Buffalo Grove, IL and Oak Creek, WI facilities, depending on frame size.

What A1000 enclosure types are available?

NEMA 1 is the standard offering up to 200-240V 75HP ND, 380-480V 150HP ND, and 500-600V 100HP ND; IP00 protected chassis versions are available above those ratings. The standard product can be mounted conventionally, or with its heatsink external (with addition of NEMA 1 external heatsink kit for small drives); however, for installations requiring both NEMA 12 and heatsink external, the A1000 is offered in a special "Flange" model that provides NEMA 12 integrity on its backside.

Are end caps (NEMA 1 kits) available for the protected chassis versions?

Remember that NEMA 1 is now standard through ND ratings of 75HP @ 240V, 125HP @ 480V, and 100HP @ 600V. For drives larger than this, separate NEMA 1 kits are available.

Are adapter plates available for mechanical mount retrofitting of F7?

Yes, information is in the A1000 price book.

Is the A1000 the same physical size as F7?

On average, A1000 is 30% smaller than F7 with minimal difference on small ratings and significant differences on larger ratings. Your specific ratings of interest must be compared. A1000 can also be mounted side-by-side, further reducing panel space.

Will the A1000 drive be part of the configured drive program?

Yes, A1000C industrial UL Type 12 configured packages are scheduled to launch near the end of July, 2012.

What are the differences between the A1000 600V and A1000 240/480V models?

The following items are the only differences:

- The 600V models do not have CE certification (LVD and EMC)
- Although the 600V models have Hardware Safety Disable inputs, because they do not have CE they cannot be certified by TUV as meeting EN61800-5-1, EN954-1/ ISO13849 Cat. 3, IEC/EN61508 SIL CL2
- The 600V models do not contain Permanent Magnet (PM) motor control methods. We may offer PM motor control in the 600V models in the future.

Can the 600V models be used with a 690VAC input voltage?

No, the 600V models have an input voltage range of 500-600VAC, +10% / -15%. We do not plan to offer a 690V lower horsepower drive. The A1000 HHP drive, which is planned as the replacement for the G5 HHP, will have 480VAC and 690VAC modules.

How can the design life of the A1000 be twice that of the F7?

The F7 has demonstrated exceptional quality and longevity. The A1000 takes reliability to the next level with longer life power modules, cooling fans, improved thermal design, and reduced interconnects.

What is EN61800-5-1 and TUV?

EN61800-5-1 is a functional safety standard that can be addressed by the Safe-Torque-Off function which is standard on the A1000. TUV is a well known 3rd party used for certifying products for functional safety.

What is RoHS?

RoHS stands for Reduction of Hazardous Substances, and specifies maximum levels of materials such as lead, mercury, and cadmium. The A1000 is made of materials that comply with RoHS.

What control methods does the A1000 offer?

Current Vector Control (both closed and open loop), as well as V/f (both closed and open loop), and PM Motor Control (both closed and open loop).

Can we replace simple servo applications using existing PM servo motors?

Perhaps, with an accurate and complete motor profile and application assistance. Contact Yaskawa's application engineering group for help.

Will there be a remote keypad option?

Yes, Both LCD and LED versions are available, and are NEMA 1 rated. There is also a version with a reflective back that is more readable in the sunlight.

Will DriveWizard[®] Industrial be backward compatible?

The new DriveWizard[®] Industrial will support all 1000 series drives as well as P7, F7, G7, and G5 drives. It will not support the 7 series of microdrives (they are obsolete), and it will not support the commercial drive products.

Does the A1000 have a USB cable interface (instead of serial) for direct connection to a computer, and do I need anything else?

Yes, the A1000 has a USB port on the front of the drive.

Are the A1000 network communications full function Modbus or Yaskawa standard?

Standard network communications are configured for MEMOBUS.

What documentation ships with the product?

The A1000 carton includes a paper copy of the Quick Start Guide (Manual No. TOEPC71061641) which has everything required for installation through maintenance. The carton also includes a CD-ROM (CD-ROM No. TOECC71061615) which contains the A1000 Quick Start Guide, A1000 Technical Manual (SIEPC71061641), and documentation for most 1000 Series products and options.

In Normal Duty mode, is the default carrier frequency higher than 2 kHz?

In normal duty, the default is set to "Swing PWM", which uses a low carrier frequency, but uses an algorithm to reduce audible motor noise.

What is the scan rate of the A1000?

A blazing 1 ms. Along with the A1000s dual CPUs, this makes for impressive torque and speed loop response times.