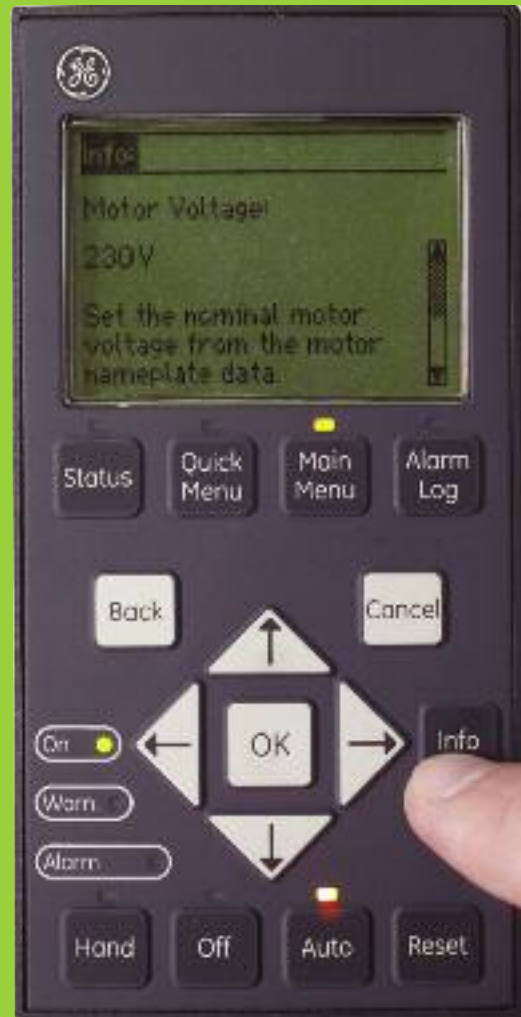


# Built-in features Built-in simplicity

## AF-6 Series Drives

Extra features, support and simplicity are all standard



a product of  
**ecomagination**<sup>SM</sup>



imagination at work



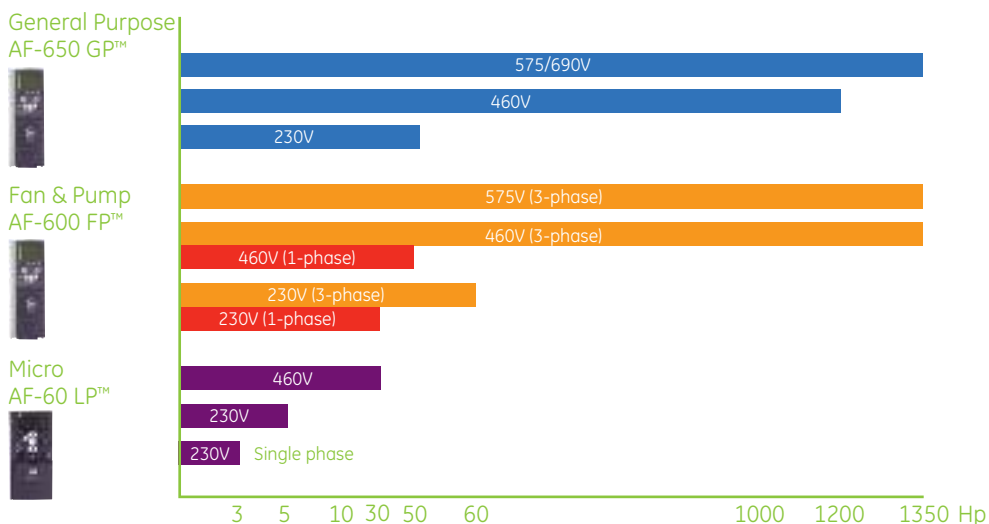
# Everything you need is built in

AF-6 Series drives range from 1/3 to 1350HP, each in a compact package, each with a host of built-in features that heighten performance, reduce energy consumption, simplify installation and eliminate the need for many costly add-ons. With the AF-6 Series, you get a drive already in tune with your application, in the most cost-efficient and space-efficient manner possible.



Introducing the AF-6 Series:

- AF-60 LP™ Micro Drive – up to 30HP
- AF-600 FP™ Fan & Pump Drive – up to 1350HP
- AF-650 GP™ General Purpose Drive – up to 1350HP



# Built-in features lower your total cost



So much is already built in to AF-6 Series drives, you'll need fewer add-ons. Discover how fast installation can be and realize a lower total cost.

- Built-in process PID controller optimizes operation
- Built-in Communication Networks for Modbus RTU, Metasys N2 and Apogee FLN P1 for the AF-600 FP drive
- Built-in logic controller eliminates the need for and cost of many additional controls
- Built-in Fan & Pump Macros for the AF-600 FP drive
- Built-in DC Link Reactors ensure very low harmonic disturbance of the power supply\*
- Built-in Brake Chopper option eliminates separately mounted dynamic brake unit
- Built-in Class RFI eliminates the cost of additional components
- Automatic energy savings delivers better system efficiency
- Auto-tuning optimizes motor performance and reduces set-up time



\*Excluding AF-60 LP

# Built-in simplicity speeds set-up

The removable keypad, common to all AF-6 Series drives, is your window into all programming and information elements.

The keypad INFO key\* provides full-text, context-sensitive information to make programming easier and can eliminate the need for printed manuals. In most cases, start-up can be completed in less than 5 minutes – saving you valuable time.

You can set up one drive and then copy settings to other drives using the hot pluggable feature, eliminating the need for duplicate programming.

The Quick Menu provides easy access to all the basic settings and the controller.

- Hot pluggable
- Illuminated LCD display
- Parameters & their values
- Unit indications
- Rotation direction indication
- Set-up indication
- Custom user displays
- Trended charts display speed, torque, current\*
- Full alarm messages & descriptions\*



\*Excluding AF-60 LP

Actual size

# AF-60 LP™ Micro Drive

## Built for small motor control



The AF-60 LP is built right for all those variable frequency applications requiring macro performance from a micro drive.

### Ready to go, right from the start

- Self protecting features
- 150% current overload up to 1 minute
- Flying start (catch a spinning motor)
- Precise stop function
- Electronic thermal overload
- Easy to use PC software
- Potentiometer on each keypad

### Built-in durability

- Robust housing (IP20) protects the drive and allows side-by-side mounting with no de-rating
- Conformal coated circuit boards and high quality capacitors maximize uptime
- Intelligent heat management leads to long life
- RoHS compliance makes for environmental responsibility
- Standards: CE, UL, cUL, C-Tick

### Utter simplicity in installation and set-up

Right out of the box – which features the wiring diagram and template right on the lid, and which holds the Quick Guide – the AF-60 LP makes installation and set-up a snap. An optional DIN rail mounting kit is available up to and including 3HP drives.



# AF-600 FP™ Fan & Pump Drive

## Built for HVAC and pump motor control



The AF-600 FP drive has been optimized for the range of variable torque applications, including fans, compressors and pumps. Its size makes it easy to mount in a control panel, and its dedicated features include sophisticated controls that make it a perfect match for HVAC solutions.

### All the features HVAC needs

- Built-in Communication Networks for ModBus RTU, Metasys N2 and Apogee FLN P1
- Field Installed Network Options: BACnet, LonWorks, Profibus DP, Profinet, Modbus TCP/IP, EtherNet/IP and DeviceNet
- Self protecting features
- 110% current overload for 1 minute
- Flying start (catch a spinning motor)
- Precise stop function
- Electronic thermal overload
- Easy to use PC software
- Energy monitoring feature
- Flow compensation
- Pump cascade controller
- Sleep mode
- Automated resonance monitoring
- Fan belt monitoring
- Stairwell pressurization
- Fire override mode
- Standards: CE, UL, cUL, C-Tick

### Stand-alone drive types

*For drives rated up to and including 125HP*

- IP20/chassis
- IP21/NEMA 1 Field Installed Kit

*For drives rated 150HP or more*

- IP00/chassis
- IP21/NEMA 1

*For all drives*

- IP54 /55/NEMA 12



NEMA 1/IP21 shown with optional field-installed kit

# AF-650 GP™ General Purpose Drive

## Built for constant torque



The AF-650 GP drive is designed for control of mixers and material handling applications. It also provides vector modes (advanced, sensorless and closed loop) for those demanding torque applications. And the rock-solid aluminum base delivers the mechanical stability needed to maintain reliability in harsh environments.

### Fully functional, fully ready

- Self protecting features
- Field Installed Network Options: Profibus DP, Profinet, Modbus TCP/IP, EtherNet/IP and DeviceNet
- 150% current overload up to 1 minute
- Flying start (catch a spinning motor)
- Precise stop function
- Electronic thermal overload
- Easy to use PC software
- Energy monitoring feature
- Modbus RTU
- Speed and process PID controls
- Advanced brake control
- Encoder feedback
- Standards: CE, UL, cUL, C-Tick

### Stand-alone drive types

#### *For drives rated up to and including 100HP*

- IP20/chassis
- IP21/NEMA 1 Field Installed Kit
- IP66/NEMA 4X

#### *For drives rated 125HP or more*

- IP00/chassis
- IP21/NEMA 1

#### *For all drives*

- IP54 /55/NEMA 12



NEMA 12/IP55 shown



# Ratings and stand-alone drive types

## AF-60 LP Ratings

HP	230V, 1Ph	230V, 3Ph	460V, 3 Ph	HP
0.25				0.25
0.33				0.33
0.5				0.5
1				1
2				2
3				3
5				5
7.5				7.5
10				10
15				15
20				20
25				25
30				30

## AF-600 FP Ratings

HP	208/230V, 1Ph	208/230V, 3Ph	460V, 1Ph	460V, 3Ph	575V, 3Ph	HP
1						1
2						2
3						3
4						4
5	IP21 / NEMA 1 or IP55 / NEMA 12	IP20, IP21 / NEMA 1 Kits, IP 55 / NEMA 12	IP21 / NEMA 1 or IP55 / NEMA 12	IP20, IP21 / NEMA 1 Kits, IP 55 / NEMA 12	IP20, IP21 / NEMA 1 Kits, IP 55 / NEMA 12	5
7.5						7.5
10						10
15						15
20						20
25						25
30						30
40						40
50						50
60						60
75						75
100						100
125						125
150						150
200						200
250				IP00, IP21 / NEMA 1, IP54 / NEMA 12	IP00, IP21 / NEMA 1, IP54 / NEMA 12	250
300						300
450						450
500						500
550						550
600						600
650				IP21 / NEMA 1, IP54 / NEMA 12		650
750						750
900					IP21 / NEMA 1, IP54 / NEMA 12	900
1000						1000
1200						1200
1350						1350

## AF-650 GP Ratings

HP	208/230V	460V	575V	575-690V	HP
0.33					0.33
0.5					0.5
1					1
2					2
3					3
4					4
5					5
7.5					7.5
10					10
15					15
20					20
25					25
30					30
40					40
50					50
60					60
75					75
100					100
125					125
150					150
200		IP00, IP21 / NEMA 1, IP54 / NEMA 12			200
250					250
300					300
450					450
500					500
550					550
600					600
650					650
750					750
900					900
1000					1000
1200					1200
1350					1350

# Real-time information Real-people support

Whether it's on the web, on your own computer or on the phone, getting transactional answers, product information and technical support from GE is easy and sure.



## 1-800-GE1-STOP

Based in Richmond, Virginia, our customer service team gives you easy access to specific technical support. Just call 1-800-GE1-STOP.

A dedicated support team stands ready to answer your transactional questions and support your business. We target an ASA (average speed of answer) of 30 seconds or less, a time-to-solution target of less than one business day, and a consistently high rate of first call resolution.

Another team of technical support people answer your questions regarding new products, replacements for obsolete components, renewal parts and documentation.

## [www.geindustrial.com/drives](http://www.geindustrial.com/drives)

A new, specialized web site gives you publications, links and tools specific drives. Use it for instant access to:

- Application guides
- Installation and maintenance instructions
- Technical brochures
- Drawings and dimensions
- Software downloads

## GE Smart Catalogs™

In these two catalogs are comprehensive data on drives and all the products available from the Industrial Solutions business of GE Energy. Features and benefits, ratings and catalog numbers, dimensions and weights, operational characteristics, list prices and more. They're available:

- as Smart Catalogs™ that let you learn about and download updates as they become available
- on the web and easily navigable via the Publications Library at [www.geindustrial.com](http://www.geindustrial.com)
- as printed catalogs to keep at your fingertips



# What you want When you want it

GE knows that you often can't wait – not for products, responses or order information. GE helps you get down to business, now!

## Ready-to-go inventory

- Most drives under 500HP are in stock and ready to ship
- Consistently high stock fill rate can exceed 94%
- Same-day shipments for stock items and as few as 5 business days for non-stock products
- The master warehouse in Tennessee serves customers promptly and with precision

## Order management the way you like it

- EliteNet®, GE's easy-to-use web-based application, allows you to price, order, track and process returns
- Paperless Electronic Data Interchange is available to process purchase orders and invoices
- A dedicated Customer Service team in Richmond, Virginia, delivers in-depth knowledge of your unique needs, proactive order management and reporting

## Nationwide distributor locations

When local contact is the answer, GE's authorized distributors meet your needs. With a national network, there's a local distributor near you, and specialist distributors address the needs of your target market segment. Find your nearest distributor easily at [www.geindustrial.com](http://www.geindustrial.com).



# Answers to your needs are built in

Your need	The AF-6 Answer
High quality, reliable products that meet local and global standards.	A full range of GE Drives up to 1350 HP that deliver built-in functionality, a compact size, long life and all relevant global standards.
Quick, easy installation to make you more efficient.	The Quick Menu allows you to set up a drive in less than 5 minutes. Full documentation is shipped with every drive.
Easy access to product information and knowledgeable technical support.	Innovative electronic tools like Smart Catalogs™ provide easy access to accurate technical data. Our technical support team in Richmond, Virginia answers your questions.
Accurate, on-time deliveries and an easy to use ordering system.	With most drives less than 500HP in stock ready for shipment, and 24/7 post-sales support, we make sure that your service needs are met.



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