

AF-300 F11™ Adjustable Frequency Drives

GE/Fuji offers the AF-300 F11™ adjustable frequency drive to meet the specific requirements of fan and pump duty in HVAC systems while providing energy savings and affordability in a simple and reliable package. The AF-300 F11 is designed for commercial variable torque applications such as VAV (variable air volume) and other air distribution systems, fans, pumps and cooling towers, and effortlessly interfaces with today's common building automation communication systems. The AF-300 F11 is available in a NEMA 1, 4 or 12 packages in the following configurations:

Core Drives

AF-300 F11 core (standard) drives are typically used when the drive is to be used with an existing combination motor starter or will be mounted in a third party panel. AF-300 F11 core drives are available for quick delivery direct from the warehouse.

Enclosed Drives

AF-300 F11 enclosed drives are configured in an enclosure with standard disconnect, line fusing, 3% input impedance, control power transformer, customer terminal strip, and indicating lights. This configuration is used when a complete combination, including drive, branch circuit protection, and motor disconnect is required.

Bypass Drives

AF-300 F11 bypass drives come in three different bypass configurations: 2-contactor bypass, 2-contactor bypass with a drive input service switch, or 3-contactor bypass. Each comes standard with an input disconnect switch, line fuses, fully rated contactors, 3% input impedance, control power transformer, customer terminal strip, panel mounted operators, and indicating lights. All GE bypass configurations meet Type II coordination requirements for bypass starters.

Options/Accessories

A host of options are available, pre-designed to allow custom configurations with short lead times.



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AF-300 F11 Specifications

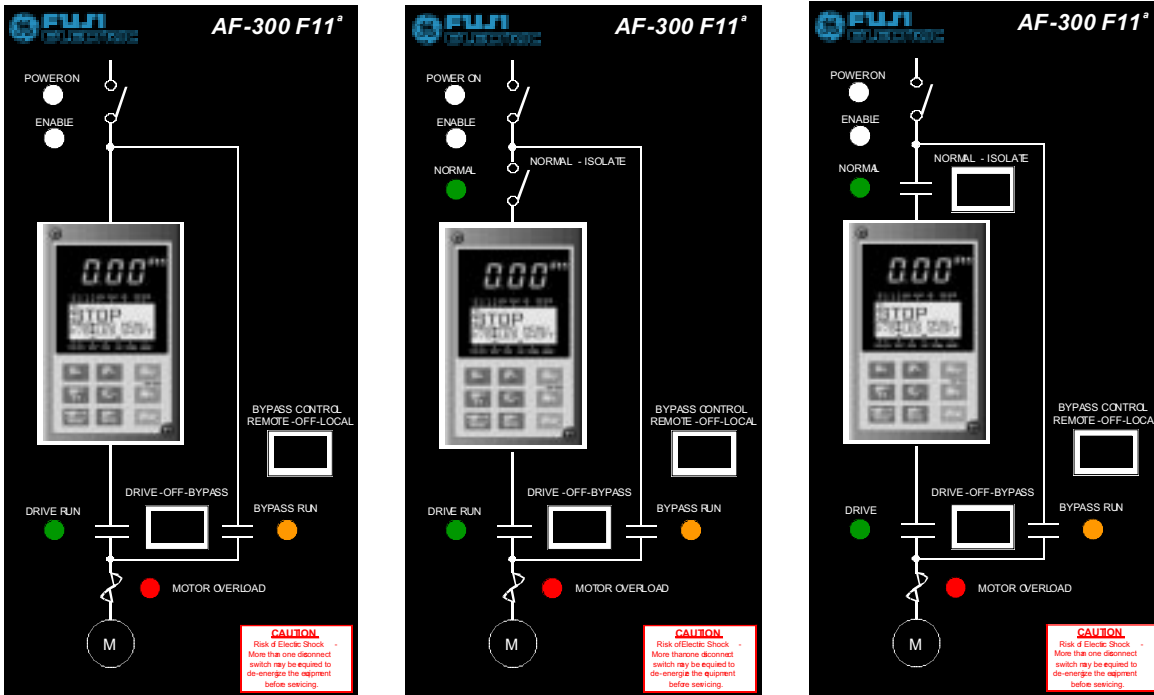
	AF-300 F11	AF-300 F11 Enclosed	AF-300 F11 Bypass
hp Ratings			
208/230 Vac	1/4-150 hp	3-150 hp	3-150 hp
460 Vac	1/2-800 hp	3-800 hp	3-800 hp
Amp Ratings			
Max rated current exceeds NEC 430-150 hp	All	All	All
Codes & Standards			
NEC	Standard	Standard	Standard
UL & cUL (UL508A & C, where applicable)	Standard	Standard	Standard
Plenum rated	Standard	Standard	Standard
Environmental Standards			
Ambient temperature range	-10°C to +50°C	-10°C to +40°C	-10°C to +40°C
Humidity	5% to 95% RH non-condensing	5% to 95% RH non-condensing	5% to 95% RH non-condensing
Elevation	0-3300 ft	0-3300 ft	0-3300 ft
Enclosure Type			
1	Standard	Standard	Standard
12	Optional (20 to 30 hp)	N/A	N/A
12 Ventilated (available soon)	N/A	Optional	Optional
3R (available soon)	N/A	Optional	Optional
4	Optional (1/4 to 15 hp)	N/A	N/A
Enclosure Style			
Wall-mount	All core drives	3-30 hp @ 208/230 Vac & 3-75 hp @ 460 Vac	3-30 hp @ 208/230 Vac & 3-75 hp @ 460 Vac
Floor-mount		40-100 hp @ 208/230 Vac & 100-400 hp @ 460 Vac	40-100 hp @ 208/230 Vac & 100-400 hp @ 460 Vac
Power Circuit Features			
Non-fused disconnect (UL-98)	N/A	Standard	Standard
Separate mounted input fuses	N/A	Standard	Standard
Circuit breaker (MCP)	N/A	Optional	Optional
Isolation contactor	N/A	N/A	Optional
3% Impedence	N/A	Standard	Standard
5% Impedence	N/A	Optional	Optional
Bypass starter	N/A	N/A	Standard
Output contactor	N/A	N/A	Standard
Mechanical interlock (output & bypass)	N/A	N/A	Standard
Isolation disconnect (UL-508)	N/A	N/A	Optional
Control Circuit Features			
Control power transformer w/ primary fusing	N/A	Standard	Standard
Remote-Off-Local switch for bypass	N/A	N/A	Standard
Customer safety interlock (enable) - Input	Standard	Standard	Standard
Drive-Off-Bypass switch	N/A	N/A	Standard
Customer I/O terminal strip	Standard	Standard	Standard
Power on light	Standard	Standard	Standard
Bypass run light	N/A	N/A	Standard
Motor overload light	N/A	N/A	Standard
Drive run light	Standard	Standard	Standard
Enable light	N/A	Standard	Standard
Normal operation light	N/A	N/A	Optional
Automatic bypass	N/A	N/A	Optional
N.O. drive running contact - output	Standard	Standard	Standard
Form C drive fault contacts - output	Standard	Standard	Standard
Remote run - input	Standard	Standard	Standard
0-10 Vdc & 4-20mA inputs	Standard	Standard	Standard
Smoke purge	Standard	Optional	Optional
Normal-isolate switch	N/A	N/A	Optional
N.O. bypass running contact - output	N/A	N/A	Standard
0-10 Vac output	Standard	Standard	Standard
4-20mA output	Optional	Optional	Optional
Modbus RTU	Standard	Standard	Standard
Drive Option Cards			
4-20mA output w/ 2 relay outputs	Optional	Optional	Optional
LONWORKS	Optional	Optional	Optional
Johnson Metasys - N2	Optional	Optional	Optional
Siemens Apogee FLN P1 (pending)	Optional	Optional	Optional
Others available, consult factory	Optional	Optional	Optional

AF-300 F11 Drives with Bypass

Description

AF-300 F11 bypass drives come in three different bypass configurations: 2-contactor bypass, 2-contactor bypass with a drive input service switch, or 3-contactor bypass. Each comes standard with an input disconnect switch, line fuses, fully rated contactors, 3% input impedance, control power transformer, customer terminal strip, panel mounted operators, and indicating lights. All GE bypass configurations meet Type II coordination requirements for bypass starters.

Configurations



Features

- Standard, padlockable disconnect switch
- Class 'J' fuses provide branch circuit protection
- Easy-access terminal strip
- Through-the-door keypad for quick status indication and full access to programmable functions and readouts
- Standard power, drive enable, drive run, bypass run, motor overload, and normal lights
- 5% impedance achieved by the addition of ac line reactor or dc link reactor as required. 3% ac line reactors are standard on all panels 75 hp and below, 3% dc link reactors standard on all panels 100 hp and larger
- Side-by-side drive/component design eliminates the need to ever replace a separate bypass section

AF-300 F11™ Bypass Drives Model Numbering System Diagram

