AF-300M$II
ADJUSTABLE
FREQUENCY
DRIVE

FUJI ELECTRIC
The Drive That Powers

AF-300 Micro-$aver II™

Adjustable Frequency Drive

The AF-300 Micro-$aver II is the adjustable frequency drive of choice when functionality, compact-size and value are key to your application. Its small footprint is perfectly suited for OEM designs where space is a premium. Utilizing the latest in IGBT technology, the drive reduces motor noise while it improves torque characteristics.

Not to be mistaken with other manufacturer's micro drive products, the AF-300M$ II has the functionality you would expect in larger standard drives. Torque Vector Control, automatic tuning, auto-restart after momentary power failure, and extensive diagnostics are just a few of the seventy-nine standard features available in the AF-300M$ II. The AF-300M$ II is available in NEMA 1 or NEMA 4 housings and meets UL, CSA, and CE standards.

AF-300 Micro-$aver II shown in NEMA 4 housing.

The Micro-$aver II possesses a large overload capacity with the capability to support shifts in operating torque demand of 150% to 200%. With a starting torque of 200% or more at 3 Hz, the AF-300M$ II is the right solution for applications where load changes are a factor.

Designed to meet the needs of OEMs and users alike, the AF-300 Micro $aver II is the drive that powers value, convenience, and durability in your application.

***GE and Fuji Electric** have joined forces to bring a new standard of excellence and quality to the packaged drives market.*

GE Fuji Electric packaged drives products are rugged, full-featured, and easily adaptable to a variety of applications. They're available when you need them and backed by our highest standards of engineering support and service.

At GE Fuji Electric, our goal is to produce quality drive products at competitive prices that maximize our customers' efficiency and satisfaction.

AF-300 Micro-$aver II Specifications

Environmental Conditions:

Enclosure:	NEMA 1 and NEMA 4
Installation Location: NEMA 1	Suitable for indoor mounting only, less than 1000 meters (3281 feet) elevation, above 1000 meters, derate output current. Not to be in contact with corrosive gas, oil mist, dust
NEMA 4	Suitable for use indoors or outdoors to protect the enclosed equipment against splashing water, seepage of water, falling or hose directed water and severe external condensation. Installation should be less than 1000 meters (3281 feet) elevation, above 1000 meters, derate output current. Not to be in contact with corrosive gas or oil mist
Stored Temperature:	-20° to 65° C (-4° to 149° F)
Ambient Temperature:	-10° to 50° C (14° to 122° F). Remove ventilation cover if temperature is over +40° C or +104° F
Humidity:	20% to 95% relative humidity (non-condensing)
Vibration:	0.6G or less
Cooling Method:	1/4 to 1 HP - Convection 2 HP or greater - Forced air (Integral fan)

Dimensions:

Minimum Overall (DxWxH):	3.2" x 4.3" x 6.2"
Maximum Overall (DxWxH):	5.9" x 8.0" x 6.2"

Hp and Rated Output Amps:

240 Volt, Single-phase:	1/4 (1.5), 1/2 (3.0), 1 (5.0), 2 (8.0), 3 (11.0)
230 Volt, Three-phase:	1/4 (1.5), 1/2 (3.0), 1 (5.0), 2 (8.0), 3 (11.0), 5 (17.0)
460 Volt, Three-phase:	1/2 (1.6), 1 (2.5), 2 (3.7), 3 (5.5), 5 (9.0)

Input:

Rated Input AC Voltage:	200 to 240 VAC 50/60 Hz, 1 phase (1/4 to 3 HP) 200 to 230 VAC 50/60 Hz, 3 phase (1/4 to 5 HP) [1] 380 to 480 VAC 50/60 Hz, 3 phase (1/2 to 5 HP)
Voltage:	-15% to +10%
Frequency:	±5%
Unbalance:	3% or less

1) CE Rating does not apply
2) NEMA 1 drives are shipped from the factory without a keypad. If keypad is required, it must be ordered separately.
3) NEMA 4 drives include a keypad from the factory.

Output:

Rated Output Voltage:	3-phase, 80-230 VAC or 160-480 VAC (adjustable)
Frequency Range:	0-400 Hz (0.2 to 15 Hz Start Frequency; 15 to 400 Hz Base Frequency)
Overload Current Rating:	150% for 1 minute duration 200% for 0.5 seconds
Base Frequency:	15 to 400 Hz (in increments of 1 Hz)
Starting Frequency:	0.2 to 15 Hz (in increments of 1 Hz)

Control:

Frequency Setting Resolution:	Analog 0-10 VDC or 4-20 mA: 0.02 Hz step at max. frequency of 60 Hz Digital Keypad: 0.01 Hz max. frequency up to 99.99 Hz; 0.1 Hz (100 Hz or more)
Accuracy (Stability):	Analog Setting: ±0.2% of max. frequency (59° to 95° F) Digital Keypad Setting: ±0.01 % of max. frequency (14° to 122° F)
Control System:	Sinusoidal PWM control with Torque Vector Control
Starting Torque:	200% or more (in case of Torque Vector Control at 3 Hz output)
Acceleration and Deceleration:	0.01 to 3600s (independently adjustable acceleration and deceleration)

Operation:

Standard functions:	Frequency limiter, Bias frequency, Gain for frequency setting, Frequency jump control, Auto-restart after momentary power failure, Slip compensation, 2nd V/F setting, Carrier frequency setting, Data initialization, Automatic tuning, Timer for automatic stopping, Multistep frequency setting (fifteen steps), Dynamic Braking control, Two or three wire control, Torque Vector control
Protection:	Stall protection, Surge input, Drive overheating, External faults, CPU malfunction, Motor overload (electronic thermal), Memory error, Undervoltage, Overcurrent, Overvoltage, Short circuit for output terminals, Communication error, Ground fault, Output wiring not connected (during auto-tuning only)

Options:

Standard:	NEMA 1 keypad [2], NEMA 4 keypad [3], Extension cable for keypad panel, Braking resistor, Parameter copy unit, Foot mount type EMI filter (G1-Class B)

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For more information call us at 1-800-543-6196

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