ACF Series

Open Chassis Microprocessor-based Variable Frequency AC Drive

PENDING PENDING PENDING

The ACF Series is a microprocessor-based variable frequency drive. These drives look and act like DC drives, meaning quick and easy setup without any programming. These drives are equipped with user adjustable trim pots to set Max. Speed, Min. Speed, Slip Comp, Boost, TQ Limit, Accel and Decel/Injection Braking parameters. ACF700 drives allow a 115 or 230 VAC input with a 115 or 230 VAC out, independent of the input potential. This is because the ACF700 is equipped with a unique voltage doubling capability that allows you to run a 230 VAC motor when only a 115 VAC single phase power is available. While the input is single phase, the output can be single or three phase. The drive's internal carrier frequency can easily be changed from 16kHz to 1.6kHz to minimize switching losses or reduce electrical interference. Stopping methods include coast to stop or DC injection braking. Incorporated into the design is a microprocessor which provides the flexibility of creating custom programs that can include specific user settings for OEM applications. These full featured and compact AC drives are the perfect choice to run any 3 phase, and some single phase motors, rated at 4 amps or below.

Model Number	Enclosure	Max Current (AAC)	Input			Output			Power Range		Reversing	Isolation
			Voltage (VAC)	Freq. (Hz)	Phase	Voltage (VAC)	Freq. (Hz)	Phase	HP	kW		
ACF700-2.4	Chassis	2.4	115/230	50/60	1Φ	115	50/60	1Φ3Φ	1/16 -1/4	.05 - .20	Yes	No
						230			1/8 - 1/2	.10 - .37		
ACF700-4	Chassis	4.0	115/230	50/60	1Φ	115	50/60	1Φ3Φ	1/8 - 1/2	.10 - .37	Yes	No
						230			1/4 - 1	.20 - .75		

SPECIFICATIONS

AC Line Voltage..... 115 / 230 VAC, ± 10%, 50/60 Hz, 1Ø
Overload Capability..... 200% (2X) for 1 minute
Standard Carrier Frequency.....1.6 or 16 kHz
Acceleration Time Range..... 1 - 12 seconds
Deceleration Time Range ..... 1 - 12 seconds
Input Impedance ..... >100K Ω
Isolated Analog Signal Range.....0 - 5 VDC
Ambient Temperature Range..... 0°C - 40°C

TRIM POTS

Acceleration
Boost
Deceleration / DC Injection Braking
Maximum Speed
Minimum Speed
Slip Compensation
Torque Limit

FEATURES

ACE Footprint: Traditional ACE mounting pattern and footprint
Microprocessor-based: Allows custom programming for OEMs (1 analog, 2 digital)
Doubler/Step-Down Mode: Doubles a 115 VAC input to a 230 VAC output. Can also step-down a 230 VAC input to a 115 VAC output at 50/60 Hz
Adjustable Base Frequency: Can be set for a base output frequency of 50 or 60 Hz at rated output voltage, regardless of input frequency
Variety of Motors: Permanent Split Capacitor (PSC), Shaded Pole, Synchronous, and 3Ø Induction
DC Injection Braking: Can be used for quicker braking
Thermally Protects: Drive recognizes when overheated as a result of frequent overload. It first flashes a warning code and will trip if condition persists
Diagnostic LEDs: Power, Status (Undervoltage, Overvoltage, Short Circuit/Current Trip, Overheat Warning, Overheat Trip)

ACCESSORIES

ISO302-1-PWM: Isolation / PWM adder board
KTP-0008: Potentiometer kit