MITSUBISHI ELECTRIC

Changes for the Better

for a greener tomorrow

INVERTER/FR-A770

Pre-launch announcement for distributors only

A770 690V

Innovative Functions and Reliable Technology

Expand your sales opportunities with the 690V series !

Top-class Drive Perfromance in Harsh Environments

Motor with Encoder Provides Superior Accuracy (Vector Cotrol)

·Vector control can be performed using a motor with an encoder*1. The inverter enables more precise torque control and position control*2, as well as fast response and highly accurate speed control (zero speed control and servo lock).

*1. Requires an optional plug-in for encoder feedback control (FR-A7AP).

*2. Only with a pulse train+code system

PLC function

· Inverter control such as inverter operations triggered by input signals, signal output based on inverter operation status, and monitor output can be freely customized based on the machine specifications.

Autotuning Function

· All necessary specifications can be obtained from the motor in less than a minute, even when the motor is not running.

Network Capability

· Comes with both a USB port and a connection for Modbus-RTU as standard equipment.

· Support for major networks such as Profibus, CC-Link and DeviceNET.

Trouble-free and User Friendly Operation

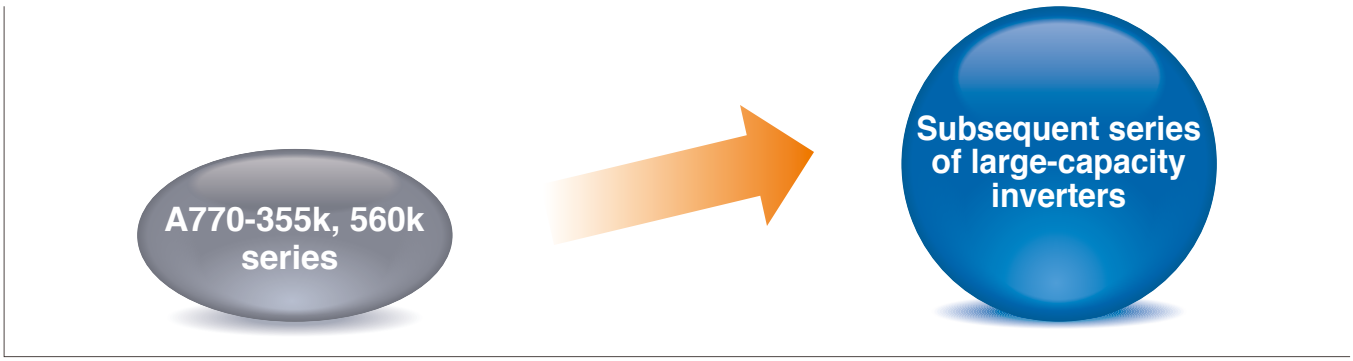
· Key components are designed for a life of over 10 years.

· Self-diagnostics prevent downtime

· Simple configuration and operation with the FR Configurator program and oscilloscope and machine analysis functions

· One-touch digital dial and 7 segment LED display

Mitsubishi will continue to deliver high-end large capacity inverters, expanding its lineup from the low-voltage to the medium-voltage range.



Mitsubishi Electric will start pilot sales from July 2013.
If you have any target customers, please provide us with your name, the name of the target customer, and the projected sales volume.

■ Specifications

Model	FR-A770-□K-79	355K	560K
Applicable motor	Capacity (kw) *	355	560
Output	Rated current	401 (344)*1	611 (545)*1
	Overload current rating	150% 60s (inverse-time characteristics)	
	Output frequency range	0.2 - 400 Hz	
	Carrier frequency PPM control	2 kHz	
Power Supply	Rated input AC voltage	Three-phase 600V - 690V	
	Permissible AC voltage fluctuation	±10%	
	Rated input AC frequency	50Hz / 60Hz	
	Permissible AC frequency fluctuation	±5%	
	Power supply capacity (kVA)	463	730
Power supply voltage for control circuit		AC 380 - 480V 50/60Hz	
Protective structure(JEM 1030)		Open type (IP00)	
Cooling System		Forced air cooling	
Ambient air temperature		−10°C to +50°C (non-freezing)	
UL, cUL standard		Not UL listed	
CE compliance		LVD / EMC	
Font cover design		"MITSUBISHI A700"	
Front cover language		English only	
Control circuit terminal		M3.5 screw terminal	
Default control logic		Sink	
FM/CA output		CA (current output)	
Base frequency		60Hz	
PLC function		Enable	
Dimensions	Main unit (same for both 355K and 560K) Included DC reactor (for 560K) Included DC reactor (for 355K)	995 x 1580 x 440 mm 500 x 320 x 380 mm 420 x 265 x 360 mm	

• The R1/S1 applied voltage for power supply by control circuit is 380 to 480 V AC, 50/60 Hz. A 690 V power supply cannot be used.
• Not applicable for a power outage decelerated stop function or a direct power supply mode.
• The following functions are not supported.
• Power failure-time deceleration-to-stop function • DC feeding • Regenerative function • Real sensorless vector control • FR configurator (option) • Soft-PWM operation selection
* Motor capacity derating is required when input voltage is below 660V.
•1. When operating the vector control using a motor with encoder and a plug-in option FR-A7AP/FR-A7AL, the related output current is the value in parentheses and maximum surrounding air temperature reduces to 40°C.

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