



## Ex9VF7 Variable Frequency Drives



Noark's Variable Frequency Drives are designed to control the speed and torque of an electric motor by varying the frequency and voltage of its power supply. It helps improve energy efficiency and provides precise control in applications like pumps, fans, and conveyors. Ex9VF7's operational voltage ranges from Single phase 110V to Three phase 600V.



### Features

- Available from 0.4kW-185kW (0.25HP-250HP)
- High-tech motor control concept, based on advanced DSP-technology
- Compact and advanced VFD design for Panel/MCC integration
- Flexible inverter control, high resolution analogue inputs, free mapping for all I/O channels
- Automated carrier wave oscillation for audible noise reduction
- Automated torque profiling for high-torque at low-speed applications.
- NEMA 1 Enclosure (IP20 protection level)
- EMC filter (C3 class) integrated up to 150hp at  $\leq 480V$  and 25hp at 600V
- BACnet, Ethernet IP, Ethernet CANopen and Modbus communication options available
- Wide range of accessories: keypad, mounting kit and more.

### Standards and certifications

- UL 61800-5-1
- Certified for US and Canada.



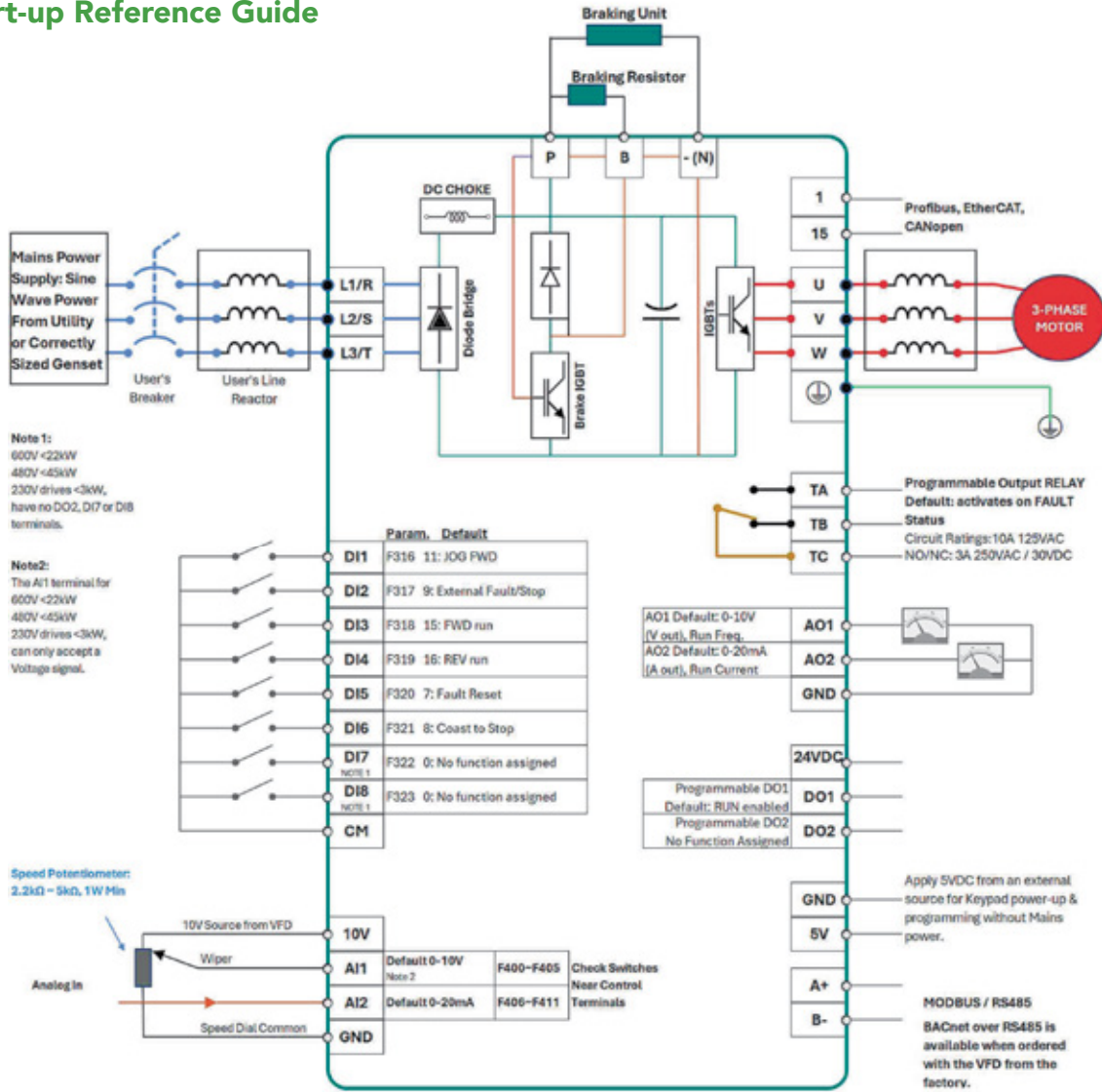
Parameter		Ex9VF7
Input	Rated Voltage Range	1-Phase 110~120V $\pm 15\%$
		1-Phase 220~240V $\pm 15\%$
		3-Phase 380-480V (+10%, -15%)
		3-Phase 220V~240V $\pm 15\%$
	Rated Frequency	50/60Hz
Output	Rated Voltage Range	3-Phase 0-INPUT (V)
	Frequency Range	0.50~590.0Hz (In SVC Control Mode, The Max Frequency Should Be Lower Than 500Hz.)
Control Mode	Carrier Frequency	800~16000Hz; Fixed Carrier-Wave & Random Carrier-Wave Can Be Selected by F159
	Input Frequency Resolution	Digital Setting: 0.01Hz, Analog Setting: Max Frequency X 0.1%
	Control Mode	For induction motor: SVC (open-loop vector control) control, V/F control, VC (Closed-loop vector control) control For PMSM: SVC (open-loop vector control) control
Overload Capacity		150% Rated Current, 60 Seconds. Adjustable

Parameter		Ex9VF7
Protection Function		Input phase loss, Output phase loss, input under-voltage, DC over-voltage, over-current, inverter over-load, motor over-load, current stall, over-heat, external disturbance, under-load, pressure control, analog line disconnected, PG line disconnection, Input phase loss, Output phase loss, input under-voltage, DC over-voltage, over-current, inverter over-load, motor over-load, keypad disconnection, oPEn protection, STO and STO1
Applicable Motor		0.2 ~ 400kW 0.4kW-185kW (UL CoC)
Environmental Conditions	Working Temperature	-10deg C to 50deg C
	Height above sea level	1000m or below
	Vibration Strength	Below 0.5g (acceleration)
	Environment Humidity	Below 90% (no water-bead coagulation)



# Ex9VF7 Variable Frequency Drives

## Quick Start-up Reference Guide



## Accessories



LED keypad



LCD keypad



Copy stick



Encoder plus I/O card



Conduit box



Encoder card



I/O card



Ethernet IP card