

# TECO

# EM50



- ▲ Micro AC Inverter
- ▲ Low Cost
- ▲ Space Saving Design
- ▲ NEMA 4 Option for Harsh Environments
- ▲ UL/cUL/CE Approved



**TECO**—Westinghouse

MOTORS (CANADA) INC.



# PRODUCT SPECIFICATION

Voltage		115V			230V					460V		
Model # FM50-XXX-C		1P2	1P5	101	2P2	2P5	201	202	203	401	402	403
<b>Output Characteristics</b>	Nominal Motor Output HP (KW)	.25 (0.2)	.50 (0.4)	1 (0.75)	.25 (0.2)	.50 (0.4)	1 (0.75)	2 (1.5)	3 (2.2)	1 (0.75)	2 (1.5)	3 (2.2)
	Inverter Capacity (KVA)	.53	.88	1.6	.53	.88	1.6	2.9	4	1.7	2.9	4
	Rated Output Current (A)	1.4	2.3	4.2	1.4	2.3	4.2	7.5	10.5	2.3	3.8	5.2
	Maximum Voltage	3-Phase, 200-230V								3-Phase, 380-460V		
	Rated Output Frequency	Up To 200Hz Available										
<b>Power Supply</b>	Rated Input Voltage and Frequency	1-Phase 100-120V, 50 / 60Hz			1-Phase 200-230V, 50 / 60Hz			1/3-Phase 200-230V, 50 / 60Hz		3-Phase 380-460V, 50 / 60Hz		
	Voltage Fluctuation	+10% ~ -15%										
	Frequency Fluctuation	±5%										
<b>Control Characteristics</b>	Digital Operator	Setup by ▲▼ Buttons										
	Input Signal Type	PNP Type (Source) Input (External 24VDC Input is Allowed)										
	Carrier Frequency	Adjustable from 4KHz - 16KHz										
	Frequency Control Range	0.10Hz up to 100Hz; 1.0Hz from 100Hz-200Hz (Sine Wave PWM)										
	Frequency Setting Resolution	Digital Operator Reference: 0.1Hz (0-99.9Hz); 1Hz (100-200Hz) Analog Reference: 0.06Hz / 60Hz										
	Frequency Setting Signal	0~10VDC, 4~20mA, 0~20mA										
	Accel / Decel Time	0.1-999 Seconds										
	Braking Torque	Approximately 20% (No additional braking allowed)										
	Number of V / F Patterns	6 Preset V / F Patterns										
<b>Protective Functions</b>	Instantaneous Overcurrent	Approximately 200% of Rated Output Current (based on standard 4 pole motor)										
	Overload Capacity	150% Rated Output Current for One Minute										
	Overvoltage (460V Series)	When DC Bus Voltage Exceeds 800VDC										
	Overvoltage (115 and 230V Series)	When DC Bus Voltage Exceeds 410VDC										
	Undervoltage (460V Series)	When DC Bus Voltage Drops to 400VDC or Below										
	Undervoltage (115 and 230V Series)	When DC Bus Voltage Drops to 200VDC or Below										
	Momentary Power Loss	0-2 Seconds (Inverter can be Restarted with Speed Search)										
	Fin Overheat	Thermostat										
	Stall Prevention	Stall Prevention at Acceleration / Deceleration and Constant Speed Operation										
	Ground Fault	Provided by Electronic Circuit										
<b>Environmental Conditions</b>	Ambient Temperature	+14 to 104°F (-10 to 40°C) (Not Frozen)										
	Humidity	0-90% RH (Non-Condensing)										
	Vibration	Under 1G (9.8m/s <sup>2</sup> )										
Enclosure Type	IP20 (Standard), NEMA 4 (Option)											
UL Standard	UL508C											
CE Standard	EN50081-1, EN50082-2, EN50178 (with Optional Filter)											
Installation	Mounting Screw or DIN Rail (Option)											

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