Specifications

Electrical Specifications

Input voltage	208 Vac ±10%, 230 Vac ±10%, 460 Vac ±10%
Displacement power factor	Approximately 0.96
Input frequency	60 Hz ±5%
Output voltage	Three-phase output, maximum voltage equal to input voltage
Galvanic isolation	Galvanic isolation between power and control (inputs, outputs and power supplies)
Frequency range of the power converter	0.1 Hz to 500 Hz (factory setting of 60 Hz maximum)
Current limit	150% of nominal drive full load amperage (FLA) for 60 s
Switching frequency	Selectable from 2 kHz to 16 kHz (1)
Speed reference	AI1: 0 V to +10 V, Impedance = 30 kOhms, AI3: 4 mA to 20 mA, Impedance = 250 kOhms 0 mA to 20 mA (reassignable, X–Y range with keypad display) Manual speed control via keypad
Frequency resolution in analog reference	0.1 Hz to 100 Hz (10 bits)
Speed regulation	V/f: determined by motor slip, typically 3% SLFV (sensorless flux vector): 1%
Efficiency	Typically greater than 95%
Inputs and outputs	3 Multi-function programmable Logic Inputs 2 Analog inputs; VIA (4 mA to 20 mA or 0 V to 10 V), VIB (0 V to 10 V) 1 Analog output; X mA to Y mA or 0 V to 10 V, software selectable 2 Assignable output relays; 1 fault relay, 1 assignable relay 1 RJ45 RS485 Modbus port
Acceleration and deceleration ramps	0.1 s to 999.9 s (adjustable in 0.1 s increments)
Motor protection	Class 10 and Class 20 overload protection with bypass in addition to controller internal electronic thermal protection
Keypad display	Self-diagnostics with fault messages in three languages. Also refer to instruction manual, 30072-451-61.

Environmental Specifications

Storage temperature	-13° F to +158° F (-25° C to +70° C) with vent cover removed and without derating
Operating temperature	+14° F to +122° F (-10° C to +40° C)
Humidity	95% with no condensation or dripping water, conforming to IEC 60068-2-3
Altitude	3300 ft (100 m) maximum without derating; derate the current by 1% for each additional 330 ft (100 m)
Enclosure	Type 1
Pollution degree	Pollution degree 2 per NEMA® ICS-1 and IEC 60664-1
Resistance to vibrations (power converter only)	According to IEC 60068-2-6: 1.5 mm zero to peak from 3 Hz to 13 Hz 1 g from 13 Hz to 150 Hz
Resistance to shocks (power converter only)	According to IEC 60068-2 15 g, 11 ms
Transit test to shock	Conforming to National Safe Transit Association and International Safe Transit Association test for packaging weighing 100 lbs or less
Codes and standards	UL listed per UL 508C as incorporating Class 10 and Class 20 electronic and electromechanical overload protection. Conforms to applicable NEMA ICS, NFPA, IEC and ISO 9001 standards

Accessories Catalog Numbers

Modbus cable for PCSoft	VW3A8106
EZ-M mounting channel, 72 in. length	EZM72MC
LonWorks communication card for field mounting	VW3A21312

Scan this code to check out the S-Flex price guide.

http://bit.ly/sflexpriceguide

Features

1 Keypad display for configuration and monitoring
- Optional LCD keypad

2 Through-the-door disconnect
- Electrical disconnect circuit breaker handle with electrical lock-out/tag-out

3 Front access selector and lights
- Adjustable Frequency Controller (AFC) – off – bypass selector switch
- Power-on mode red LED indicator
- Bypass mode green LED indicator

4 EZ-M channel mounting
- EZ-M mounting feature interface built into the enclosure makes parallel alignment of multiple drives quick and easy with an EZ-M mounting channel

5 Hinged NEMA 1 rated enclosure
- Hinged door for quick and easy interior access
- Run status LED

6 Conduit knockouts
- Conduit knockouts on bottom of enclosure for quick and easy wiring to line and load terminals and control wiring terminations

7 Short-circuit protection
- Square D circuit breaker offers electrical disconnect and over current protection
- 100,000 A interrupt current (AIC) fully coordinated current rating to UL 508C and NEMA ICS7.1

8 Bypass contactor or optional non-bypass contactor
- Full voltage bypass contactors with electrical interlocks allow for emergency full speed operation

9 Terminal block
- Easy customer control wiring interface with terminal block connections

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