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E820-0050-5-60

VSD/VFD - Mitsubishi - FR-E800 series - 3-phase input - 5A / 7500W / 0.75kW / 1HP

Variable Speed/Frequency Drive (VSD/VFD) / Inverter with conformal coating - AM term. - SIL2 / PLd - Mitsubishi Electric (FREQROL FR-E800 series) - input 200Vac-240Vac (3-phase/3P) - 750W / 0.75kW / 1HP - 5A (ND Normal Duty) - frequency (output) 0.2-590Hz - with RS-485 communication capability - IP20 - input voltage nominal values 220Vac / 230Vac - Chemical resistance (circuit board coating - IEC60721-3-3 3S2 3C2) - equivalent to FR-E820-0050-5-60 / FRE8200050560



Brand

Mitsubishi Electric

Online Price

\$491.00

IN STOCK

- 1 +

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E820-0050-5-60

MITSUBISHI ELECTRIC - FREQROL FR-E800 SERIES

Specifications

Primary brand

Mitsubishi Electric

Main function

Variable Speed/Frequency Drive (VSD/VFD) / Inverter

Functions

Variable Speed/Frequency Drive (VSD/VFD) / Inverter

Soft-PWM control

High carrier frequency PWM control

Selectable among V/F control

Advanced magnetic flux vector control

Real sensorless vector control

PM motor control

Maximum and minimum frequency settings

Multi-speed operation

Acceleration/deceleration pattern

Thermal protection

DC injection brake

Starting frequency

JOG operation

Output stop (MRS)

Stall prevention

Regeneration avoidance

Frequency jump

Rotation display

Automatic restart after instantaneous power failure

Remote setting

Automatic acceleration/deceleration

Retry function

Carrier frequency selection

Fast-response current limit

Forward/reverse rotation prevention

Operation mode selection

Slip compensation

Droop control

Speed smoothing control

Traverse

Auto tuning

Applied motor selection

PID control

Easy dancer control

Cooling fan operation selection

Stop selection (deceleration stop/coasting)

Power-failure deceleration stop function

Stop-on-contact control

PLC function

Life diagnosis

Maintenance timer

Safety stop function

Design

conformal coating

AM term.

200V class (3-phase)

Natural cooling

Supply voltage (AC)

200Vac-240Vac

(220Vac / 230Vac)

Type of network

3-phase/3P

Rated current

5A (ND Normal Duty)

6A (LD Light duty)

150% In for 60s / 200% In for 3s overload current rating (inverse-time characteristics; normal duty)

120% In for 60s / 150% In for 3s overload current rating (inverse-time characteristics; Light duty)

Rated active power (kW)

750W / 0.75kW (ND Normal Duty)

1.1kW (LD Light duty)

Rated power (HP)

1HP (ND Normal Duty)

1.5HP / 1-1/2HP (LD Light duty)

Protection functions

Overcurrent trip during acceleration

Overcurrent trip during constant speed

Overcurrent trip during deceleration or stop

Regenerative overvoltage trip during acceleration

Regenerative overvoltage trip during constant speed

Regenerative overvoltage trip during deceleration or stop

Inverter overload trip

Motor overload trip

Heatsink overheat

Undervoltage

Input phase loss

Stall prevention stop

Loss of synchronism detection

Output phase loss

External thermal relay operation

Option fault

Communication Option fault

Parameter storage device fault

PU disconnection

Retry count excess

CPU fault

Abnormal output current detection

Inrush current limit circuit fault

USB communication fault

Analog input error

Safety circuit fault

Overspeed occurrence

Speed deviation excess detection

Brake sequence fault

PID signal fault

Ethernet communication fault

Opposite rotation deceleration fault

Internal circuit fault

User definition error by the PLC function

Board combination mismatch

Fan alarm

Stall prevention (overcurrent)

Stall prevention (overvoltage)

Regenerative brake pre-alarm

Electronic thermal relay function pre-alarm

PU stop

Maintenance timer warning

Parameter write error

Operation panel lock

Password locked

Speed limit indication

Safety stop

Ethernet communication fault

Duplicate IP address

IP address fault

Incorrect parameter setting

Communication protocol

RS-485

Digital inputs

Digital inputs (sink / source)

- 1 x digital input (sink) (MRS)
- 1 x digital input (sink) (RES)
- 1 x digital input (SS1 safe stop channel 1)
- 1 x digital input (SS1 safe stop channel 2)

Digital outputs

- 1 x digital output (SPDT (Single Pole Double Throw contact A/B/C) (programmable)
- 1 x digital output (sink/source open collector transistor) (RUN; programmable)
- 1 x digital output (sink/source open collector transistor) (FU; programmable)
- 1 x digital output (programmable) (SO - Safety Monitor Output)
- 1 x digital output (PTO Pulse Train Output)

Analog inputs

- 1 x analog input (0-5Vdc / 0-10Vdc / 0-20mA)
- 1 x analog input (0-5Vdc / 0-10Vdc / 4-20mA)

Analog outputs

- 1 x analog output (-10...+10Vdc; 12-bit)

Degree of protection

IP20

Ambient air temperature for operation

-20...+60 °C

Chemical resistance

Chemical resistance (circuit board coating - IEC60721-3-3 3S2 3C2)

Rated apparent power (S)

- 2kVA (ND Normal Duty)**
- 2.4kVA (LD Light duty)**

Application type

- Smart factory**
- Fans**
- Transfer systems**
- Food processing lines**
- Food Packaging**
- Cutting machines**
- Sprinklers**
- Automotive production lines**
- Pumps**

Order code / Manufacturer SKU

Equivalent to

FR-E820-0050-5-60

FRE8200050560

Compliant with standard(s)

cULus

CE

TUV

IEC60721-3-3 (3S2; 3C2)

Class

SIL2

PLd

Benefits

Compact design

Dual overload rating

Auto-tune to Induction Motors (IM) and Permanent Magnet (PM) motors

Energy saving

Downtime reduction

SHOW LESS

Related Documents

Name	Last Update	Language
Mitsubishi Electric - Factory Automation (FA) - FREQROL - FR-E800 Series - Catalog.pdf	13 Jan 2023	English (US)
Mitsubishi Electric - FR-E800 Inverters Brochure.pdf	03 Aug 2022	English (US)



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