Product Overview

H-Max Family Introduction

Eaton’s H-Max™ Series VFD is the next generation of drives specifically engineered for HVAC pump and fluid control applications. The H-Max family of products boasts industry leading energy efficiency algorithms for your applications. Not only are the drives ultra-efficient—they contain software that minimizes motor winding energy losses in your applications. Designed for easy installation, simple startup, and long life; the H-Max Series drive family provides exceptional value to our customers.

Product Range

Open Style Drives:
- 0.75–125 hp at 230 Vac
- 1.5–250 hp at 480 Vac

Note: Available in NEMA 1 or NEMA 12 designs.

IntelliPass/IntelliDisconnect Drives:
- 1–30 hp at 208 Vac
- 1–30 hp at 230 Vac
- 1–75 hp at 480 Vac

Note: Available in NEMA 1, NEMA 12, or NEMA 3R enclosures.

Application Description

The H-Max Series drive was designed specifically for HVAC pump and fluid control applications. It is intended to be used on variable torque loads with the intent of moving air or liquids. With this in mind, the H-Max drive has onboard I/O pre-programmed to meet the common needs for these applications. The H-Max drive supports items such as standard speed control, PID functionality, as well as multi-motor applications. The drive easily supports interlock, second motor parameter set, as well as fire mode functionality.

Key Feature

Active Energy Control Algorithm

Eaton’s H-Max Series drives have been designed to provide industry leading energy saving solutions. Not only is the drive ultra-efficient, the drive seeks the most efficient operating point of the motor, minimizing energy loss in the windings per the given load requirements. This is an Eaton protected control algorithm exclusive to H-Max drives.
H-Max Drives

Product Description
Eaton’s H-Max Series VFD has software and hardware designed specifically for the HVAC, pump industry. The ultra-efficient DC capacitor and power structure allows the drive to consume less energy, lowering greenhouse gases.

The I/O configuration is designed with wiring ergonomics in mind by including removable terminal blocks. The main, easily removable, control board used for all drive frames with six digital IN, two analog IN, one analog OUT, three relay OUT accepts two additional I/O or communication board. In addition, the control board has built-in RS-485 and Ethernet communication.

These drives continue the tradition of robust performance, and raise the bar on features and functionality, ensuring the best solution at the right price.

In addition to the Active Energy Control Algorithm to maximize motor efficiency, the drive boasts an ultra-efficient DC capacitor and power structure to allow less energy consumption, lowering greenhouse gases.

Features and Benefits

Hardware
- Thin metal capacitor design—ultra-efficient drive operation and extended self life (up to five years without reforming)
- Integrated 5% DC link choke with input surge protection—protects against voltage spikes and provides a clean wave form to the motor
- EMI/RFI filters standard on all drives—meets EMC Category 2 for commercial applications
- Real-time clock—supports calendaring and PLC functionality
- Graphic LCD display and keypad—supports simple menu navigation as well as on-screen diagnostics and troubleshooting
- HAND-OFF-AUTO and drive-bypass selector on keypad—simplifies control
- Standard I/O: 6DI, 2AI, 1AO, 2 Form C RO (NO/NC), 1 Form A RO (NO)—supports requirements for most installations
- Onboard RS 485: Modbus, N2, BACnet—meets needs of most communication requirements
- Onboard Ethernet: BACnet/IP, Modbus/TCP—meets needs of most communication requirements
- Two expansion slots—intended to support additional I/O or communication protocols as necessary
- Quick disconnect terminals for I/O connections—supports fast easy installation

Software
- Active energy control—minimizes energy losses in your motor resulting in industry leading energy efficiency for your application
- Quick Start Wizard upon initial power up—supports fast easy installation
- Copy/paste functionality on drive keypad—allows for fast setup of multiple drives
- Pre-programmed I/O—supports fast easy installation for most applications

Standards and Certifications

Product
- IEC 61800-5-1
- CE
- cUL

Safety
- UL 508C
- EN 61800-5-1
- CE
- cUL
- C-Tick Mark
Catalog Number Selection

H-Max Series Drives

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<td>A–Z</td>
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### Notes

- All boards are varnished (conformed coated). Corrosion resistant.
- Battery included in all drives for real-time clock.
- Keypad kit includes HOA bypass.
- Keypad kit includes HOA, back reset for Europe application.
- EMI/RFI filters included.
- DC link choke included.
## Adjustable Frequency Drives
### H-Max Series Drives

#### H-Max Series Drives—230 Vac

**NEMA Type 1/1P21**

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**NEMA Type 12/IP54**

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**Note**

¹ For sizing reference.
## 2.5 Adjustable Frequency Drives

### H-Max Series Drives—480 Vac

#### H-Max Series Drives—480 Vac

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<td>72</td>
<td>50</td>
<td>37</td>
</tr>
<tr>
<td>87</td>
<td>60</td>
<td>45</td>
<td>77</td>
</tr>
<tr>
<td>105</td>
<td>75</td>
<td>55</td>
<td>96</td>
</tr>
<tr>
<td>8</td>
<td>140</td>
<td>100</td>
<td>75</td>
</tr>
<tr>
<td>170</td>
<td>125</td>
<td>90</td>
<td>156</td>
</tr>
<tr>
<td>205</td>
<td>150</td>
<td>110</td>
<td>180</td>
</tr>
<tr>
<td>9</td>
<td>261</td>
<td>200</td>
<td>132</td>
</tr>
<tr>
<td>310</td>
<td>250</td>
<td>160</td>
<td>302</td>
</tr>
</tbody>
</table>

**Note**

① For sizing reference.
Onboard Network Communications

Johnson Controls
Metasys N2

H-Max Series provides communication between the drive and a Johnson Controls Metasys™ N2 network. With this connection, the drive can be controlled, monitored and programmed from the Metasys system. N2 can be selected and programmed by the drive keypad.

BACnet

H-Max Series provides communication to BACnet networks. Data transfer is master-slave/token passing (MS/TP) RS-485.

BACnet IP

100 base T interface.

Modbus TCP

Ethernet based protocol.

H-Max Series Option Board Kits Available for Slot B

The factory issued relay option board can be replaced with the following option boards to customize the drive for your application needs. The standard board provides 2 Form C RO (NO/NC) and 1 Form A RO (NO).

Option Boards Mounted in Slot B

<table>
<thead>
<tr>
<th>Option Kit Description</th>
<th>Option Kit Catalog Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>I/O expander card, 2 RO and thermistor input</td>
<td>Relay Board 2</td>
</tr>
</tbody>
</table>

H-Max Series Option Board Kits Available for Slots D and E

The H-Max Series drives can accommodate a wide selection of expander and adapter option boards to customize the drive for your application needs. The drive’s control unit is designed to accept a total of two option boards. The H-Max Series factory-installed standard board configuration includes an I/O board and a relay output board.

Option Boards Mounted in Slots D and E

<table>
<thead>
<tr>
<th>Option Kit Description</th>
<th>Option Kit Catalog Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>6 x DI /DO, each digital input can be individually programmed as digital output</td>
<td>XMX-IO-B1-A</td>
</tr>
<tr>
<td>1RO Form C (NO/NC), 1RO Form A (NO), 1 thermistor</td>
<td>XMX-IO-B2-A</td>
</tr>
<tr>
<td>1 x AI, 2 x AO (isolated)</td>
<td>XMX-IO-B4-A</td>
</tr>
<tr>
<td>3 x RO Form A (NO)</td>
<td>XMX-IO-B5-A</td>
</tr>
<tr>
<td>1RO Form A (NO), 5DI 42–240 Vac input</td>
<td>XMX-IO-B9-A</td>
</tr>
<tr>
<td>1 x AO, 1 x DO, 1 x RO</td>
<td>XMX-IO-BF-A</td>
</tr>
<tr>
<td>LonWorks®</td>
<td>XMX-COM-C4-A</td>
</tr>
</tbody>
</table>

NEMA Type 1 to NEMA Type 12/IP54 Conversion Kit

The NEMA Type 12/IP54 option kit is used to convert a NEMA Type 1 to a NEMA Type 12 drive. Kit consists of a drive cover, fan kit and plugs.

NEMA Type 12/IP54 Cover

<table>
<thead>
<tr>
<th>Option Kit Description</th>
<th>Option Kit Catalog Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>FS4-branded N12/IP54 cover with gasket, plastic plug, Eaton logos</td>
<td>FS4-N12KIT</td>
</tr>
<tr>
<td>FS5-branded N12/IP54 cover with gasket, plastic plug, Eaton logos</td>
<td>FS5-N12KIT</td>
</tr>
<tr>
<td>FS6-branded N12/IP54 cover with gasket, plastic plug, Eaton logos</td>
<td>FS6-N12KIT</td>
</tr>
</tbody>
</table>
2.5 Adjustable Frequency Drives
H-Max Series Drives

Accessories

**Flange Kits**
The flange kit is used when the power section heat sink is mounted through the back panel of an enclosure.

**Flange Kit NEMA Type 1/IP21**
Includes flange, mounting brackets, and screws.

**Flange Kit NEMA Type 12/IP54**
Includes flange, mounting brackets, NEMA Type 12 fan components, air shroud screws and plugs.

**Frames FS4–FS9**

<table>
<thead>
<tr>
<th>Description</th>
<th>Catalog Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>NEMA Type 12/IP54</td>
<td></td>
</tr>
<tr>
<td>FS4 N12/IP54 flange kit (mounting N1 drive into N12 enclosure)</td>
<td>FS4-Flange-N12KIT</td>
</tr>
<tr>
<td>FS5 N12/IP54 flange kit (mounting N1 drive into N12 enclosure)</td>
<td>FS5-Flange-N12KIT</td>
</tr>
<tr>
<td>FS6 N12/IP54 flange kit (mounting N1 drive into N12 enclosure)</td>
<td>FS6-Flange-N12KIT</td>
</tr>
<tr>
<td>FS7 N12/IP54 flange kit (mounting N1 drive into N12 enclosure)</td>
<td>FS7-Flange-N12KIT</td>
</tr>
</tbody>
</table>

**Keypad Accessories**

**Remote Mounting Keypad Kit**

**Frames FS4–FS9**

<table>
<thead>
<tr>
<th>Description</th>
<th>Catalog Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Remote mounting keypad kit—bezel and cable</td>
<td>OPTRMT-BP-HMAX</td>
</tr>
</tbody>
</table>

**Drive Demo**

**H-Max Series Drive Demo**

**Demos and Power Supply**

<table>
<thead>
<tr>
<th>Description</th>
<th>Catalog Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>H-Max Series drive demo</td>
<td>H-MAX-DEMO</td>
</tr>
<tr>
<td>H-Max Series bypass demo</td>
<td>H-MAX-BYPASS-DEMO</td>
</tr>
<tr>
<td>Hand-held 24V auxiliary power supply—used to supply power to the control module in order to perform keypad programming before the drive is connected to line voltage</td>
<td>9000XAUX24V</td>
</tr>
</tbody>
</table>

**Notes**

1. For installation of a NEMA Type 1 drive into a NEMA Type 12 oversized enclosure.
2. Frame size 8 and 9 must be ordered from the factory as a flange mount unit.
## Replacement Parts

### Control Board/Keypad

<table>
<thead>
<tr>
<th>Description</th>
<th>Current Catalog Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>H-Max Series graphic bypass, HOA</td>
<td>KeypadbypassHOA</td>
</tr>
<tr>
<td>H-Max Series graphic back, HOA</td>
<td>KeypadbackHOA</td>
</tr>
</tbody>
</table>

### PC Cable

<table>
<thead>
<tr>
<th>Description</th>
<th>Catalog Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Remote download USB to RJ-45 cable with software driver disk</td>
<td>REM-USB-Down</td>
</tr>
</tbody>
</table>

### Replacement Relay Board in Slot B

<table>
<thead>
<tr>
<th>Description</th>
<th>Catalog Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Replacement relay board</td>
<td>Relay board 1</td>
</tr>
<tr>
<td>qty 2 Form C relay, qty 1 Form A relay</td>
<td></td>
</tr>
</tbody>
</table>

### Main Fan

<table>
<thead>
<tr>
<th>Description</th>
<th>Catalog Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>FS4 main fan</td>
<td>FS4-Main Fan</td>
</tr>
<tr>
<td>FS5 main fan</td>
<td>FS5-Main Fan</td>
</tr>
<tr>
<td>FS6 main fan</td>
<td>FS6-Main Fan</td>
</tr>
<tr>
<td>FS7 main fan</td>
<td>FS7-Main Fan</td>
</tr>
</tbody>
</table>

### Internal Fan

<table>
<thead>
<tr>
<th>Description</th>
<th>Catalog Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>FS4 internal fan (IP54/NEMA 12)</td>
<td>FS4-Internal Fan</td>
</tr>
<tr>
<td>FS5 internal fan (IP54/NEMA 12)</td>
<td>FS5-Internal Fan</td>
</tr>
<tr>
<td>FS6 internal fan (IP54/NEMA 12)</td>
<td>FS6-Internal Fan</td>
</tr>
<tr>
<td>FS7 internal fan (IP54/NEMA 12)</td>
<td>FS7-Internal Fan</td>
</tr>
</tbody>
</table>
## 2.5 Adjustable Frequency Drives

### H-Max Series Drives

#### Technical Data and Specifications

<table>
<thead>
<tr>
<th>Description</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Input Ratings</strong></td>
<td></td>
</tr>
<tr>
<td>Input voltage ($V_{in}$)</td>
<td>200–240 Vac, 380–480 Vac, –10%/+10%</td>
</tr>
<tr>
<td>Input frequency ($f_{in}$)</td>
<td>50/60 Hz (variation up to 47–68 Hz)</td>
</tr>
<tr>
<td>Connection to power</td>
<td>Once per minute or less (typical operation)</td>
</tr>
<tr>
<td>Short circuit withstand rating</td>
<td>100 kAIC</td>
</tr>
<tr>
<td><strong>Output Ratings</strong></td>
<td></td>
</tr>
<tr>
<td>Output voltage</td>
<td>0 to $V_{in}/U_{in}$ line voltage in</td>
</tr>
<tr>
<td>Continuous output current ($I_{c}$)</td>
<td>Ambient temperature max. 104°F (40°C)</td>
</tr>
<tr>
<td>Overload current ($I_{o}$)</td>
<td>110% (1 min./10 min.)</td>
</tr>
<tr>
<td>Initial output current</td>
<td>150% for two seconds</td>
</tr>
<tr>
<td>Output frequency</td>
<td>0 to 320 Hz</td>
</tr>
<tr>
<td>Frequency resolution</td>
<td>0.01 Hz</td>
</tr>
<tr>
<td><strong>Control Characteristics</strong></td>
<td></td>
</tr>
<tr>
<td>Control method</td>
<td>Frequency control (V/f) open loop sensorless vector control</td>
</tr>
<tr>
<td>Switching frequency</td>
<td>1–310 amps</td>
</tr>
<tr>
<td>Frequency reference</td>
<td>Analog input: Resolution 0.1% (10-bit), accuracy ±1%</td>
</tr>
<tr>
<td>Field weakening point</td>
<td>8 to 320 Hz</td>
</tr>
<tr>
<td>Acceleration time</td>
<td>0.1 to 3000 seconds</td>
</tr>
<tr>
<td>Deceleration time</td>
<td>0.1 to 3000 seconds</td>
</tr>
<tr>
<td>Braking torque</td>
<td>DC brake: 30% x $T_n$</td>
</tr>
<tr>
<td><strong>Ambient Conditions</strong></td>
<td></td>
</tr>
<tr>
<td>Ambient operating temperature</td>
<td>FS4–FS9: 14°F (–10°C), no frost to 104°F (40°C)</td>
</tr>
<tr>
<td>(Drives can operate at 122°F (50°C), see Pages V6-T2-141 and V6-T2-142)</td>
<td></td>
</tr>
<tr>
<td>Storage temperature</td>
<td>−40” to 158°F (−40” to 70°C)</td>
</tr>
<tr>
<td>Relative humidity</td>
<td>0 to 95% RH, noncondensing, non-corrosive, no dripping water</td>
</tr>
<tr>
<td>Air quality</td>
<td>Chemical vapors: IEC 60721-3-3, unit in operation, Class 3C2; Mechanical particles: IEC 60721-3-3, unit in operation, Class 3S2</td>
</tr>
<tr>
<td>Altitude</td>
<td>100% load capacity (no derating) up to 3280 ft (1000m); 1% derating for each 328 ft (100m) above 3280 ft (1000m); max. 9842 ft (3000m); 380–480V</td>
</tr>
<tr>
<td>Vibration</td>
<td>FS4–FS9: EN 61800-5-1, EN 60068-2-6-2; 5 to 150 Hz, displacement amplitude 1 mm (peak) at 5 to 15.8 Hz, max. acceleration amplitude 1G at 15.8 to 150 Hz</td>
</tr>
<tr>
<td>Shock</td>
<td>EN 61800-5-1, EN 60068-2-27 UPS Drop test (for applicable UPS weights); Storage and shipping: max. 15G, 11 ms (in package)</td>
</tr>
<tr>
<td>Enclosure class</td>
<td>NEMA Type 1/IP21 or NEMA Type 12/IP54 (keypad required for IP54/Type 12)</td>
</tr>
<tr>
<td><strong>Standards</strong></td>
<td></td>
</tr>
<tr>
<td>EMC</td>
<td>Immunity: Fulfills all EMC immunity requirements; Emissions: EN 61800-3, LEVEL H (EMC C2)</td>
</tr>
</tbody>
</table>
| Emissions | EMC level dependent—

### Control Connections

<table>
<thead>
<tr>
<th>Description</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Analog input voltage</td>
<td>0 to 10V, $R_i = 200$ kohms differential</td>
</tr>
<tr>
<td>Resolution</td>
<td>0.1%, Accuracy ±1%</td>
</tr>
<tr>
<td>Dip switch selection (voltage/current)</td>
<td></td>
</tr>
<tr>
<td>Analog input current</td>
<td>(0A) to 20 mA; $R_{i} = –250$ ohms differential</td>
</tr>
<tr>
<td>Digital inputs (6)</td>
<td>Positive or negative logic; 18 to 30 Vdc</td>
</tr>
<tr>
<td>Auxiliary voltage</td>
<td>+24V ±10%, max. 250 mA</td>
</tr>
<tr>
<td>Output reference voltage</td>
<td>+10V ±3%, max. load 10 mA</td>
</tr>
<tr>
<td>Analog output</td>
<td>0–10V, (0A) to 20 mA; $R_{i} = 500$ ohms; Resolution 10 bit; Accuracy ±2%</td>
</tr>
<tr>
<td>Dip switch selection (voltage/current)</td>
<td></td>
</tr>
<tr>
<td>Relay outputs</td>
<td>3 programmable, 2 Form C, 1 Form A relay outputs</td>
</tr>
<tr>
<td>Switching capacity: 24 Vdc/8A, 250 Vac/8A, 125 Vdc/0.4A</td>
<td></td>
</tr>
<tr>
<td>Hard wire jumper</td>
<td>Between terminal 6 and 10 factory default</td>
</tr>
<tr>
<td>Dip switch setting default</td>
<td>RS485 = off</td>
</tr>
<tr>
<td>A01 = current</td>
<td></td>
</tr>
<tr>
<td>A12 = current</td>
<td></td>
</tr>
<tr>
<td>A11 = voltage</td>
<td></td>
</tr>
</tbody>
</table>

### Protections

<table>
<thead>
<tr>
<th>Description</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overcurrent protection</td>
<td>Yes</td>
</tr>
<tr>
<td>Overvoltage protection</td>
<td>Yes</td>
</tr>
<tr>
<td>DC bus regulation anti-trip</td>
<td>Yes (accelerates or decelerates the load)</td>
</tr>
<tr>
<td>Undervoltage protection</td>
<td>Yes</td>
</tr>
<tr>
<td>Earth fault protection</td>
<td>Yes (in case of earth fault in motor or motor cable, only the frequency converter is protected)</td>
</tr>
<tr>
<td>Input phase supervision</td>
<td>Yes (trips if any of the input phases are missing)</td>
</tr>
<tr>
<td>Motor phase supervision</td>
<td>Yes (trips if any of the output phases are missing)</td>
</tr>
<tr>
<td>Overtemperature protection</td>
<td>Yes</td>
</tr>
<tr>
<td>Motor overload protection</td>
<td>Yes</td>
</tr>
<tr>
<td>Motor stall protection</td>
<td>Yes</td>
</tr>
<tr>
<td>Motor underload protection</td>
<td>Yes</td>
</tr>
<tr>
<td>Short circuit protection</td>
<td>Yes</td>
</tr>
<tr>
<td>Surge protection</td>
<td>Yes (varistor input)</td>
</tr>
<tr>
<td>Conformed coated (varnished) boards</td>
<td>Yes (prevents corrosion)</td>
</tr>
</tbody>
</table>
### Wiring Diagram

#### Control Input/Output, PID Application

**Standards**
- Digital inputs D1–D6, relay out, analog in/out are freely programmed
- The user can assign a single input to multiple functions

**Includes**
- Six digital input
- Two analog input
- One analog output
- Three relay output
- RS-485
- Ethernet (BACnet and Modbus)

**Reliability**
- Pretested components
- Conformal coated (varnished) boards
- 40°C rated
- 110% overload for one minute
- Eaton Electrical Services & Systems national network of AF drive specialists

---

### Terminal Block Layout

- **Slot A**
  - Terminal Factory Default Signal
  - Factory Jumper

- **Slot B**
  - Terminal Factory Default Signal
  - Factory Jumper

- **Slot D**
  - Terminal Factory Default Signal
  - Factory Jumper

- **Slot E**
  - Terminal Factory Default Signal
  - Factory Jumper

---

**Overview**

- **RJ-45**: BACnet/IP Ethernet Industrial Protocol, Modbus/TCP Transmission Control Protocol (Ethernet Based)
- **Chopper**: Programmable BACnet, Modbus, FLN, N2
- **DB**: 5% DC Link Reactor
- **Motor**: 24 Vac/8A
- **Motor**: 125 Vac/0.4A
- **Motor**: Bypass Run
- **Motor**: Drive Run
- **Motor**: Fault
- **Motor**: 24 Vac/8A
- **Motor**: 125 Vac/0.4A
- **Motor**: RO1 Bypass Run
- **Motor**: RO2 Drive Run
- **Motor**: RO3 Fault

---

**Connections**

- **DI**: Digital Input
- **AO**: Analog Output
- **AI**: Analog Input
- **24V**: 24 Vdc
- **COM**: Common
- **NO**: Normally Open
- **NC**: Normally Closed
- **R**: Relay
- **DB**: Chopper
- **RS-485**: Data–, Data+, RX, TX

---

**Additional Information**

- **Factory Jumper**: External Interlock
- **Circuit Breaker**: Optional
- **Motor**: Three-Phase Input (Single-Phase not available)
- **Motor**: Three-Phase Output
- **Motor**: Optional Chopper
- **Motor**: Optional Resistor
## Dimensions

**Approximate Dimensions in Inches (mm)**

### H-Max Series Frames FS4–FS7

<table>
<thead>
<tr>
<th>Voltage</th>
<th>hp</th>
<th>kW</th>
<th>Amps</th>
<th>D</th>
<th>H1</th>
<th>H2</th>
<th>H3</th>
<th>W1</th>
<th>W2</th>
<th>W3</th>
<th>Weight in Lbs (kg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>230 Vac</td>
<td>0.75–4</td>
<td>0.55–3.0</td>
<td>3.7–12.5</td>
<td>7.77</td>
<td>12.89</td>
<td>12.32</td>
<td>11.22</td>
<td>5.04</td>
<td>3.94</td>
<td>3.94</td>
<td>13.2</td>
</tr>
<tr>
<td>480 Vac</td>
<td>1.5–7.5</td>
<td>1.1–5.5</td>
<td>3.4–12</td>
<td>12.89</td>
<td>(327.5)</td>
<td>(313.0)</td>
<td>(265.0)</td>
<td>(129.0)</td>
<td>(100.0)</td>
<td>(100.0)</td>
<td>20</td>
</tr>
<tr>
<td>230 Vac</td>
<td>4–7.5</td>
<td>3–4.5</td>
<td>11–16</td>
<td>12.32</td>
<td>11.22</td>
<td>8.73</td>
<td>16.50</td>
<td>15.98</td>
<td>15.04</td>
<td>5.67</td>
<td>4.53</td>
</tr>
<tr>
<td>480 Vac</td>
<td>7.5–15</td>
<td>6–10</td>
<td>7–13</td>
<td>15.98</td>
<td>(419.0)</td>
<td>(406.0)</td>
<td>(382.0)</td>
<td>(144.0)</td>
<td>(115.0)</td>
<td>(100.0)</td>
<td>(100.0)</td>
</tr>
<tr>
<td>480 Vac</td>
<td>15–30</td>
<td>10–20</td>
<td>25–40</td>
<td>20.24</td>
<td>(514.0)</td>
<td>(540.5)</td>
<td>(514.0)</td>
<td>(156.0)</td>
<td>(148.0)</td>
<td>(148.0)</td>
<td>(148.0)</td>
</tr>
<tr>
<td>230 Vac</td>
<td>18.5–30</td>
<td>11–15</td>
<td>15–20</td>
<td>10.49</td>
<td>9.29</td>
<td>9.06</td>
<td>25.98</td>
<td>25.39</td>
<td>24.29</td>
<td>7.48</td>
<td>7.48</td>
</tr>
<tr>
<td>480 Vac</td>
<td>18.5–30</td>
<td>10–20</td>
<td>25–40</td>
<td>25.98</td>
<td>(660.0)</td>
<td>(645.0)</td>
<td>(617.0)</td>
<td>(230.0)</td>
<td>(190.0)</td>
<td>(190.0)</td>
<td>(190.0)</td>
</tr>
</tbody>
</table>

### H-Max Series Frames FS8 and FS9

<table>
<thead>
<tr>
<th>Voltage</th>
<th>hp</th>
<th>kW</th>
<th>Amps</th>
<th>D</th>
<th>H1</th>
<th>H2</th>
<th>H3</th>
<th>W1</th>
<th>W2</th>
<th>W3</th>
<th>Weight in Lbs (kg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>480 Vac</td>
<td>100–150</td>
<td>75–110</td>
<td>140–205</td>
<td>(349.6)</td>
<td>(946.4)</td>
<td>(946.4)</td>
<td>(290.1)</td>
<td>(236.0)</td>
<td>(36.0)</td>
<td>(70)</td>
<td></td>
</tr>
<tr>
<td>230 Vac</td>
<td>75–140</td>
<td>55–100</td>
<td>140–205</td>
<td>14.63</td>
<td>31.89</td>
<td>31.89</td>
<td>18.90</td>
<td>15.75</td>
<td>1.57</td>
<td>238.1</td>
<td></td>
</tr>
<tr>
<td>480 Vac</td>
<td>132–160</td>
<td>100–250</td>
<td>140–205</td>
<td>(371.6)</td>
<td>(810.0)</td>
<td>(810.0)</td>
<td>(480.0)</td>
<td>(400.0)</td>
<td>(40.0)</td>
<td>(108)</td>
<td></td>
</tr>
</tbody>
</table>

**Note:** For flange dimension, please reference User Manual.