

Close-Coupled Pump Motors

Horizontal A.C. Motors, Open Drip-Proof



Horsepower: 1 – 60 HP

Speeds: 3600 and 1800 RPM

Phase: Three Phase

Design Voltages: 200, 208 – 230/460 and 575 Volts

Shaft Types: JM, JP, JPV or Westcoast Shaft

Service Factor: 1.15

Bearings: Oversized ball bearings with locked drive-end bearings

Mounting: Footed and Vertical JPV

Efficiency Levels: Energy and NEMA Premium^{®†} Efficient

Nameplate: Energy Efficient Product includes full 50- and 60 Hz operating data on nameplate



Product Overview and Options

U.S. MOTORS[®] brand Open Drip-Proof Close-Coupled Pump motors are designed for centrifugal pump applications. These motors have a 1.15 service factor and meet NEMA standard requirements including 40°C ambient conditions, Class F insulation, NEMA Design B, and are usable up to 3,300 feet above sea level. Stocked Open Drip-Proof Close-Coupled Pump motors are available from 1–60 HP in 3600 and 1800 RPM.

The Open Drip-Proof Close-Coupled Pump motor is offered in NEMA Premium^{®†} efficient types FD-1, FD-4, DE-1 and DE-4 to meet and exceed federally legislated efficiency levels. All copper windings and low-loss stator laminations provide maximum efficiency.

Open Drip-Proof Close-Coupled Pump motors are designed for two specific shaft types:

- **JM shaft:** a mechanical seal using molded or preformed seals held in place by springs or other constant pressure devices (coded as 4)
- **JP shaft:** uses packing glands or sealing devices, manually packed and adjusted, and braided cotton or other substances for the sealing material or medium (coded as 1)

The 140–250 use rolled steel frames and have die-cast aluminum brackets with steel bearing inserts to ensure reliable performance under severe load applications. 280–320 frames are heavy gauge steel with cast iron brackets and steel welded bases.

360–400 frames have cast iron frames and brackets. Double-shielded bearings with re-greasing provisions are standard on 180 frame and larger. All Close-Coupled Pump motors are designed with oversized locked ball bearing construction.

Energy efficient products contain full 50–60 Hz operating data on their nameplates. Motors marked 208–230/460 Volts may not meet all NEMA (MG-1) performance standards when operated at 208 Volts. The 40 HP (4 pole), 50 HP (2 and 4 pole) and 60 HP (2 and 4 pole) 230/460 Volt motors have 12 leads out and are suitable for WYE-Delta start on either voltage.



Close-Coupled Pump Motor,
Open Drip-Proof



Product Overview and Options *continued*

Footless Open Drip-Proof Close-Coupled Pump motors are available as stock products from 1–60 HP in JP shaft design. Canopy caps and drip covers come standard on the footless units to protect the motor when mounted vertically. Conversion drip cover kits also available.

In addition to the stock product offerings, the product range has been extended to include features such as 1200 RPM and 50 Hz. Special application Single Phase Close-Coupled Pump motors are available from 1–10 HP, in footed JM and JP shaft configurations.

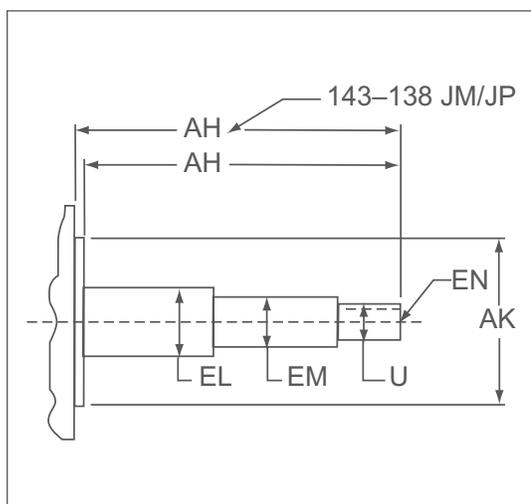
For more comprehensive information on close-coupled pump motors, please refer to the U.S. MOTORS brand Full Line product catalog.

Available Stock Configuration

Types	HP	Pole	Frame	Voltages
Energy Efficient JM, FD-4	1–60	2 & 4	140–320	200, 208–230/460, 575
Energy Efficient JP, FD-1	1–60	2 & 4	140–320	200, 208–230/460, 575
Premium Efficient JM, DE-4	1–30	2 & 4	140–320	200, 208–230/460, 575
Energy Efficient JP, DE-1	1–30	2 & 4	140–320	200, 208–230/460, 575

Custom Products may be ordered in the same types and voltages: 140–400 frame, 100 HP and 2–8 pole designs.

Shaft Dimensions



CCP Type	AH	U	EM	EL	EN	AK
FD-1, DE-1						
143–145JP	7-5/16"	7/8"	1"	1-5/32"	3/8–16 x 3/4"	4-1/2"
182–184JP	7-5/16"	7/8"	1"	1-1/4"	3/8–16 x 3/4"	4-1/2"
213–215JP	8-1/8"	1-1/4"	1-3/8"	1-3/4"	1/2–13 x 1"	8-1/2"
254–256JP	8-1/8"	1-1/4"	1-3/8"	1-3/4"	1/2–13 x 1"	8-1/2"
284–286JP	8-1/8"	1-1/4"	1-3/8"	1-3/4"	1/2–13 x 1"	12-1/2"
324–326JP	8-1/8"	1-1/4"	1-3/8"	1-3/4"	1/2–13 x 1"	12-1/2"
FD-4, DE-4						
143–145JM	4-1/4"	7/8"	1"	1-5/32"	3/8–16 x 3/4"	4-1/2"
182–184JM	7-5/16"	7/8"	1-3/8"	1-1/4"	3/8–16 x 3/4"	4-1/2"
213–215JM	8-1/8"	1-1/4"	1-3/8"	1-1/4"	3/8–16 x 3/4"	8-1/2"
254–256JM	8-1/8"	1-1/4"	1-3/8"	1-3/4"	1/2–13 x 1"	8-1/2"
284–286JM	5-1/4"	1-1/4"	1-3/8"	1-3/4"	1/2–13 x 1"	12-1/2"
324–326JM	5-1/4"	1-1/4"	1-3/8"	1-3/4"	1/2–13 x 1"	12-1/2"

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