

Oriental motor

ORIENTAL MOTOR U.S.A. Corp.
570 Alaska Avenue
Torrance, CA 90503
1-800-GO-VEXTA (468-3982)

Item # FPW425A2-120U, 25 W (1/30 HP) Washdown Gear Motor (120:1 Gear Ratio) (Single-Phase 110/115 VAC)



The FPW Series washdown gear motors are watertight, dust-resistant geared induction motors which conform to IEC standard IP67.



Web Price

\$378.00

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Specifications

Lead Time¹	Available quantity to ship: 20 pieces by 5/6/26.
Product Line	Oriental Motor®
Motor Type	IP67 Rated Washdown Induction
Frame Size	3.15 in
Output Power	25 W (1/30 HP)
Voltage (VAC)	Single-Phase 110/115 VAC
Frequency (Hz)	60
Current	0.46 A
Gear Ratio (X:1)	120 :1
Output Shaft Diameter	10 mm
Type	Cable
Rated Torque	70 lb-in



Rated Speed (rpm)	15
Permissible Load Inertia	4200 oz-in ²
Permissible Overhung Load	0.39 in. from Shaft End = 45 lb 0.79 in. from Shaft End = 67 lb
Permissible Thrust Load	11.2 lb
RoHS Compliant	Yes
Safety Standards	UL CSA CCC EN CE
CE Marking	Low Voltage Directives
California Proposition 65	⚠ CA WARNING Cancer risk from exposure to Nickel. See www.P65Warnings.ca.gov Risk of reproductive harm from exposure to Di-n-hexyl phthalate (DnHP). See www.P65Warnings.ca.gov Risk of cancer and reproductive harm from exposure to Di(2-ethylhexyl phthalate (DEHP). See www.P65Warnings.ca.gov See "?" or copy/paste www.P65Warnings.ca.gov in your browser.
Insulation Resistance	100 MΩ or more when 500 VDC megger is applied between the windings and the frame after rated motor operation under normal ambient temperature and humidity.
Dielectric Strength	Sufficient to withstand 1.5 kV at 50 Hz or 60 Hz applied between the windings and the frame for 1 minute after rated motor operation under normal ambient temperature and humidity.
Temperature Rise	144°F (80°C) or less measured by the resistance change method after rated motor operation under normal ambient temperature and humidity.
Insulation Class	Class B (266°F [130°C])
Overheat Protection	Built-in thermal protector (Automatic return type). Operating temperature, open: 266°F ± 9°F (130°C ± 5°C) close: 185°F ± 36°F (85°C ± 20°C)
Ambient Temperature Range	14°F ~ 104°F (-10°C ~ 40°C) (nonfreezing)
Degree of Protection	IP67

● 25 W

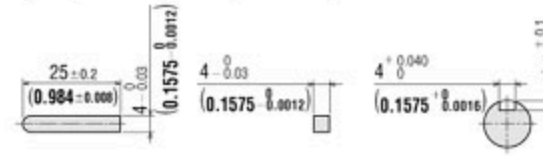
◇ Geared Motors

FPW425A2-□U, FPW425C2-□E, FPW425S2-□

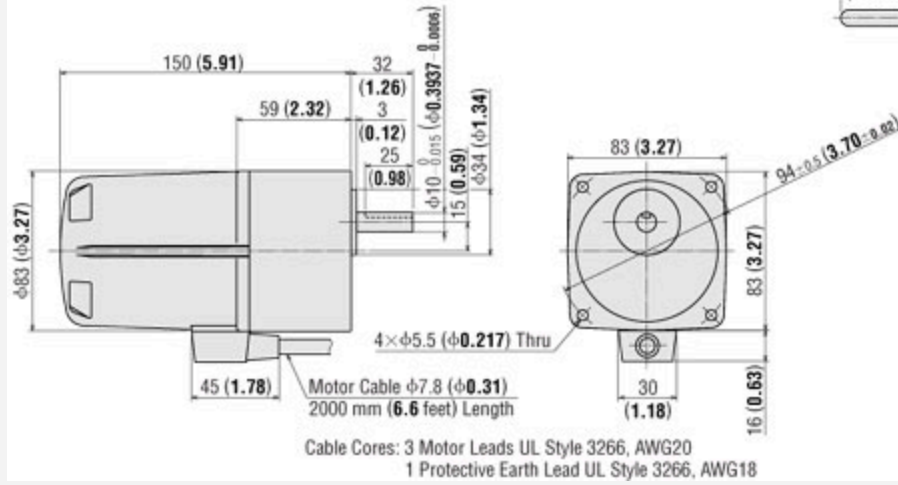
Motor: FPW425A2-□, FPW425C2-□, FPW425S2-□

Mass: 3.0 kg (6.6 lb.)

◇ Key and Key Slot (Included)



Dimensions



Screws

● Screws (Included)
(Material: Stainless Steel)



	l	Screw Size
FPW425 Type	3.15 inch (80 mm)	M5 P0.8
FPW540 Type	3.54 inch (90 mm)	M6 P1.0
FPW560 Type	3.54 inch (90 mm)	M6 P1.0
FPW690 Type	3.94 inch (100 mm)	M8 P1.25

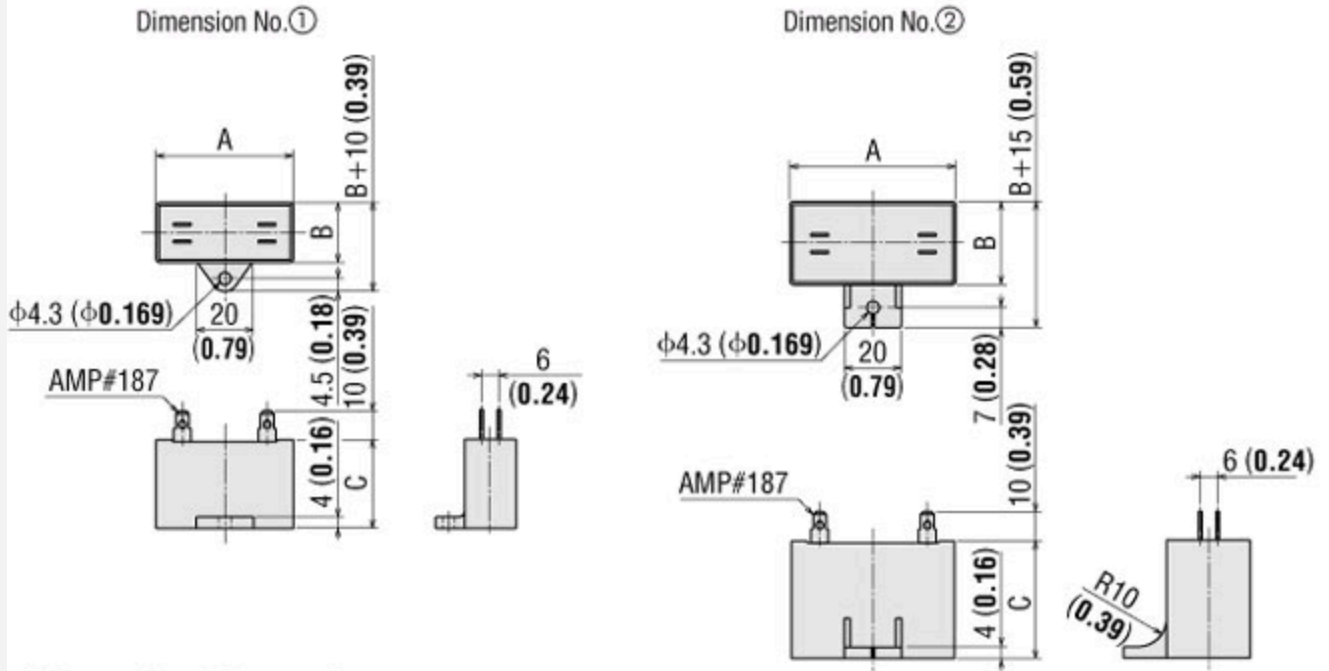
4 washers and 4 hexagonal nuts are provided with the screws.

Screws

Capacitor

◇ Capacitor (Included with single-phase motors)

Capacitor



◇ Capacitor Dimensions

Unit = mm (inc)

Model	Capacitor Model	A	B	C	Mass g (oz.)	Dimension No.
FPW425A2-□U	CH65CFAUL2	48 (1.89)	19 (0.75)	29 (1.14)	40 (1.41)	①
FPW425C2-□E	CH15BFAUL	38 (1.50)	21 (0.83)	31 (1.22)	35 (1.24)	
FPW540A2-□U	CH90CFAUL2	48 (1.89)	22.5 (0.89)	31.5 (1.24)	45 (1.59)	①
FPW540C2-□E	CH23BFAUL	48 (1.89)	21 (0.83)	31 (1.22)	40 (1.41)	
FPW560A2-□U	CH120CFAUL2	58 (2.28)	22 (0.87)	35 (1.38)	60 (2.1)	①
FPW560C2-□E	CH30BFAUL	58 (2.28)	21 (0.83)	31 (1.22)	50 (1.77)	
FPW690A2-□U	CH180CFAUL2	58 (2.28)	29 (1.14)	41 (1.61)	95 (3.4)	②
FPW690C2-□E	CH45BFAUL	58 (2.28)	23.5 (0.93)	37 (1.46)	73 (2.6)	

- A capacitor cap is included with a capacitor.
- Enter the gear ratio in the box (□) within the model name.

Connection

Connection and Operation

- The direction of motor rotation is as viewed from the shaft end of the motor. CW represents the clockwise direction, while CCW represents counterclockwise direction.
- The connection method varies with the output power or the gear ratio.
- For added safety, it is advisable to use a ground fault interrupt circuit in situations where the motor is likely to get wet during operation.

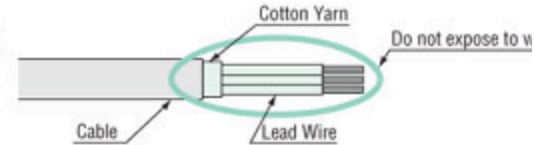
	Single-Phase 110/115 VAC, Single-Phase 220/230 VAC		Three-Phase 200/220/230 VAC	
25 W (1/30 HP) 40 W (1/19 HP)	Gear Ratio 3~18 50~180	Gear Ratio 25~36	Gear Ratio 3~18 50~180	Gear Ratio 25~36
60 W (1/12 HP)	Gear Ratio 3~9 25~60	Gear Ratio 12.5~18 75~180	Gear Ratio 3~9 25~60	Gear Ratio 12.5~18 75~180
90 W (1/8 HP)	Gear Ratio 3~9 50~180	Gear Ratio 12.5~36	Gear Ratio 3~9 50~180	Gear Ratio 12.5~36
Connection	Clockwise 	Clockwise 	Clockwise 	Clockwise
	Counterclockwise 	Counterclockwise 	Counterclockwise To rotate the motor in a counterclockwise direction, change any two connections between R, S and T.	Counterclockwise To rotate the motor in a counterclockwise direction, change any two connections between R, S and T.

Note:

- Change the direction of single-phase motor rotation only after bringing the motor to a stop. If an attempt is made to change the direction of rotation while the motor is rotating, the motor may ignore reversing command or change its direction of rotation after some delay.

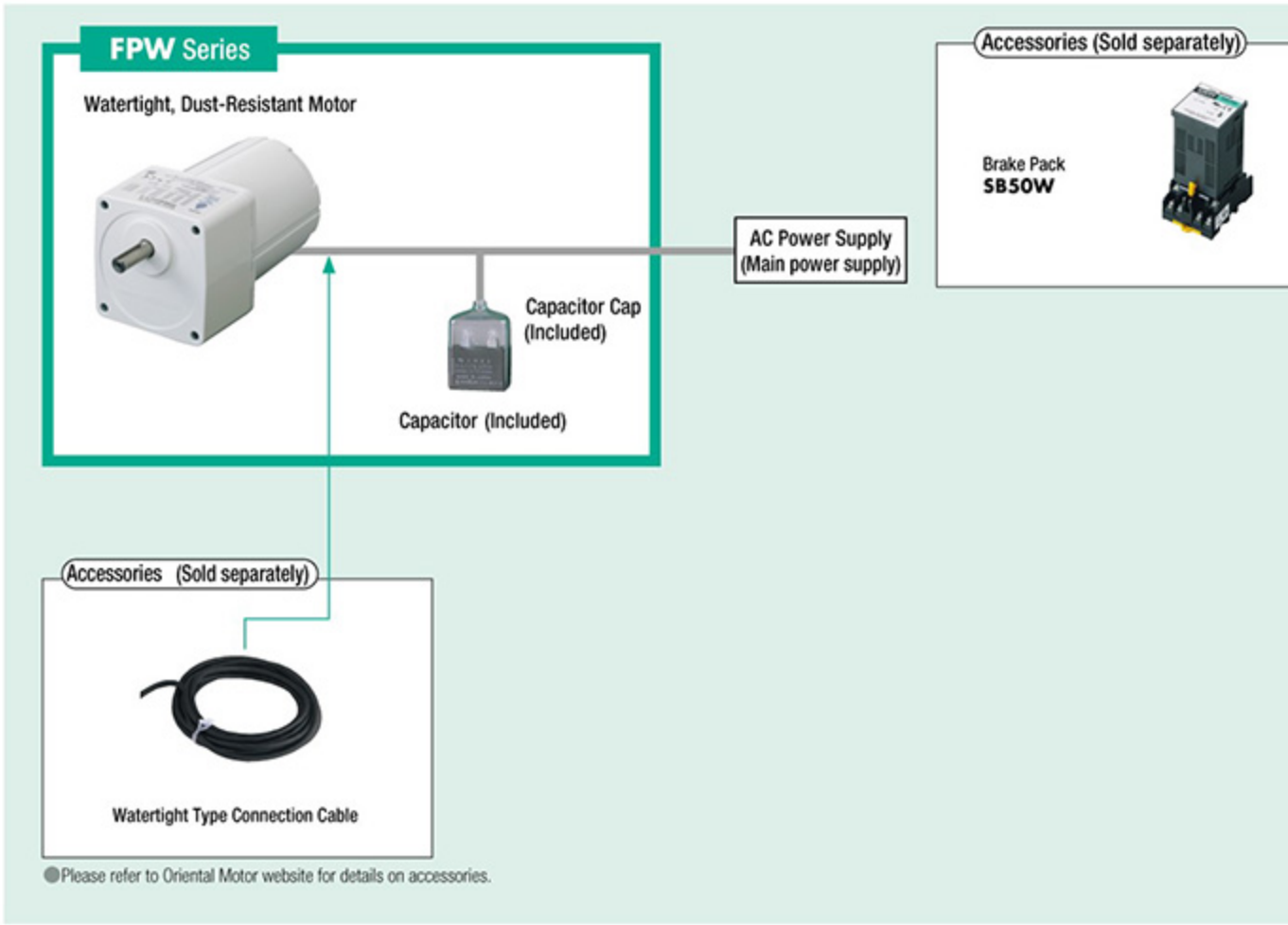
Wiring precautions:

The terminals of the cable are not waterproofed. Be sure not to splash water on the cable terminal, otherwise water could seep inside the motor through the lead wire or the fabric covering, resulting in damage to the motor.



System

System



¹ Quoted Ship Date for orders placed before 12:00 pm PST. Quantities may affect Shipping Date.