

# Permanent Magnet DC - Fractional HP Motors

## WPMDC Series

Simple DC Motor with C-Face and optional variable speed controller

WorldWide Electric's Permanent Magnet DC, Fractional hp Motors feature a C-Face with removable feet, 20:1 speed range at constant torque, and high starting torque.

**Low Voltage DC Applications** — The 12 Volt and 24 Volt models are intended for applications where low voltage DC power is supplied by batteries or generators.

**Brushes** — The included brushes are rated for 2500 hours, and the 180 Volt and 90 Volt motors include one set of replacement brushes and brush springs.

**Variable Speed DC Controls** — Convert an AC voltage source to create an all - around affordable PMDC solution for your unique application needs.



### Quick Specs & Features

- Output:
  - Totally Enclosed Non-ventilated (TENV): ¼ – ½ hp
  - Totally Enclosed Fan Cooled (TEFC): ¾ – 2 hp
- Speed: 20:1 range at 1800 rpm
- Voltage: 90, 180, 12, and 24 Volt
- Service Factor: 1.0 SF



**Responsive**  
Service & Technical Support



**Quality Products**  
Competitive Pricing



**In Stock Availability**  
Warehouses Nationwide



**Fast Shipping**  
Same-Day Available

## DC Motor Product Features

- Totally Enclosed Non-ventilated (TENV): 1/4 – 1/2 hp
- Totally Enclosed Fan Cooled (TEFC): 3/4 – 2 hp
- C-Face with removable base
- 20:1 speed range at constant torque
- High starting torque
- IP54 protection
- Class F insulation
- 12 Volt and 24 Volt models used in applications where low Voltage DC power is supplied by batteries or generators

## DC Motor Model Number Selection

### Sample Part Number: WPMDC34-18-90V-56CB

Each model number contains the product family, horsepower, rpm, voltage, and frame size. Ratings for hp with a decimal will carry a decimal to the model number, i.e. 1.5 hp becomes **WMPDC1.5-19-90V-56CB**. Ratings for hp with fractions remove the slash, i.e. 1/4 hp becomes **WPMDC14-18-90V-56CB**.

‡ Not all combinations indicated by this table are possible. Please contact us or visit [shop.worldwideelectric.com](http://shop.worldwideelectric.com) for more information on availability.

Product Family	HP	RPM	Voltage	Frame Size	Frame Suffix
WPMDC (TEFC)	1/4	1800	12V	56	CB
	1/3		24V	145	TCB
WPMDC (TENV)	1/2		90V		
	3/4		180V		
	1				
	1.5				
	2				

## Stearns Double C-Face Coupler Brakes

Designed to fit between a standard NEMA C-Frame: 56C motor and quill input C-Flange, the two standard stock parts eliminate the need for special designed brake motors for many applications.



## Variable Speed Controller Features

- Dual Voltage – 120/240 Vac, 50/60 Hz
- Adjustable horsepower settings
- Barrier terminal strip
- Packaged bridge supply (Fullwave)
- 1% Speed regulation with armature Voltage feedback; ± 1/2% with Tach feedback
- Adjustable minimum speed (0 - 30% of max.)
- Adjustable maximum speed (66 - 110% of base)
- Adjustable IR compensation
- Adjustable linear acceleration (0.5 - 8 sec.)
- Adjustable current limit to 15 Amps
- Line Voltage compensation
- 5K Ohm speed potentiometer with leads, knob and dial included
- Power On/Off switch
- 50:1 speed range
- Overload capacity: 150% for one minute
- Transient Voltage protection
- Voltage following mode or DC tachometer follower by supplying underground analog input signal (0 - 12 Vdc)
- DC tachometer feedback (6 V at base speed)
- Inhibit circuit – permits start and stop without breaking AC lines
- Remote Start/Stop via pot circuit or inhibit circuit
- Shunt field supply provided (1 Amp max.; 100 V for 120 Vac; 200 V for 240 VAC input)
- AC line fuse
- Rated NEMA 4/12 with threaded conduit holes

## Variable Speed Controller Order Codes

For a Reversing Unit use: **WDCCONTREV**  
 For a Non - Reversing Unit use: **WDCCONT**

## Additional Fractional HP Motors

WorldWide has a full line of fractional motors to satisfy any application. Call us or visit [worldwideelectric.com](http://worldwideelectric.com) to find a motor that meets your needs.

 <p><b>Jet Pump Motors</b> 1/3 – 5 hp, 3600 rpm. ODP/TEFC Enclosures</p>	 <p><b>General Purpose Motors</b> 1/3 – 3 hp, 3600, 1800 rpm. TEFC Enclosure</p>	 <p><b>Farm Duty Motors</b> 1/3 – 2 hp, 1800 rpm. TEFC Enclosure</p>	 <p><b>Open Drip Proof Motors</b> 1/3 – 3/4 hp, 3600 &amp; 1800 rpm. ODP Enclosure</p>
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WorldWide Electric Corporation is a leading manufacturer of electric motors, motor controls, gear reducers, and generators. Offering fast, often same-day, shipping from seven regional US warehouses, WorldWide Electric takes pride in providing a competitive edge to our customers by responding to their requirements with urgency, technical expertise, and professionalism.

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