



CentriPro

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WHITE PAPER

6TANDEM50/60

6" CP-Series Tandem Rotor Submersible Motor – 50/60HP

For years, the submersible motor marketplace has been seeking 50 & 60HP motors that will meet narrow well diameter requirements, yet are robust enough to withstand the challenges of service and long service life. CentriPro is pleased to introduce its 6" dual rated 50/60HP CP-Series Tandem Rotor Submersible motor to meet these demands.

P6M60T466AHD

6" Submersible Tandem Rotor Design, 3Phase, 50/60HP, 37/45kW, 460V, 3600 RPM

Features and Benefits:

- Rewindable watertight design, easy to inspect and repair.
- Specially designed rubber sand-slinger included as standard to provide protection against sand intrusion in the most challenging applications.
- Upgraded Silicon Carbide/ Silicon Carbide mechanical seal included as standard.
- Kingsbury type bi-directional thrust bearing. Design supports down-thrust up to 6750 lbs.
- Up-thrust ring prevents damage to motor during pump starts and stops.
- Horizontal and vertical installation options.⁽¹⁾
- Maximum water temperature of 95°F (35°C) for 60HP applications; up to 140°F (60°C) for 50HP applications.⁽¹⁾⁽²⁾
- Variable frequency drive capable.⁽¹⁾
- All main motor components are stainless steel construction, other components are cast iron which has been passivated and painted by epoxy water bi-component paint, providing excellent resistance to water and corrosion.
- Shaft extension and coupling dimensions according to NEMA standards.
- Maximized bearing surface for superior rotor stability.



⁽¹⁾ Refer to installation, operation, and maintenance manual for details.

⁽²⁾ Derates apply. See installation, operation and maintenance manual for details.

CP-Series 6" Submersible Motors - 60 Hz, 3 Phase

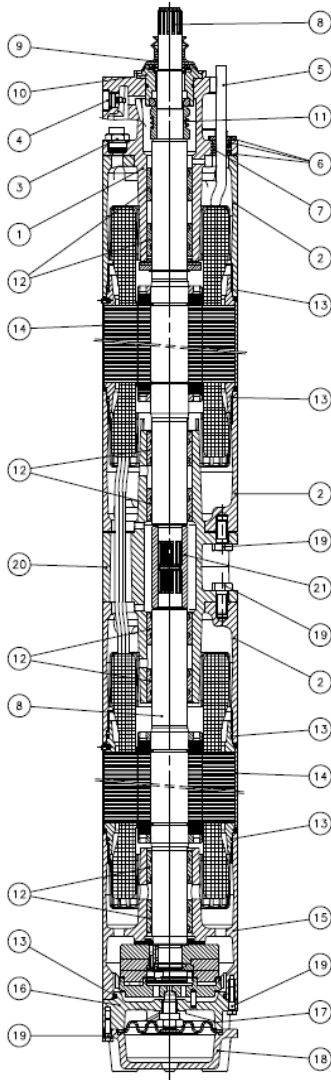
Part No.	HP	kW	Volts	SF	Rated Input					Service Factor	
					Amps	Watts	RPM	Eff.	PF	Amps	Watts
P6M60T466AHD	50	37	460	1.15	68.6	44,300	3490	83.6	0.81	77.1	51,500
	60	45			82.1	54,000	3521	83.4	0.83	92.8	62,800

Motor Data

Part No.	HP	Sh. Weight (lbs)	Length "L" (in.)	Diameter (in.)	Minimum Well Diameter	Line-Line Res. Ω	KVA Code	Minimum NEMA Starter Size	Max. Water Temp. °F (°C) (1)	Max. Water Temp. °F (°C) (2)	Wire AWG.	Cable Length Feet (m)
P6M60T466AHD	50	360	76.4	5.67	6"	0.44	G	3	113°F/45°C	140°F/60°C	4*	13.1 (4)
	60							4	86°F/30°C	95°F/35°C		

(1) Without derate applied. (2) With derate applied. See installation, operation and maintenance manual for details. *Single strand cables.

Table of Materials – Standard Construction



No.	Part	Material	Designation
1	Upper bracket	Cast iron	Class 25 B
2	Spacer	Cast iron	Class 25 B
3	Filling plug + OR	Stainless steel + NBR	AISI 316
4	Vent valve	Stainless steel	AISI 316
5	Cable	PE	
6	Cable gland plate	Stainless steel	AISI 304
7	Cable gland	EPDM	
8	Shaft end	Stainless steel	AISI 420
9	Removable sand guard	EPDM	
10	Mechanical seal cover	Stainless steel	ASTM CF-8 (AISI 304 cast)
11	Mechanical seal	Silicon carbide / Silicon carbide	
12	Bush bearings	Carbon graphite	
13	Elastomers	NBR	
14	Motor sleeve	Stainless steel	AISI 304L
15	Lower bracket	Cast iron	Class 25 B
16	Thrust bearing bracket	Cast iron	Class 25 B
17	Diaphragm	EPDM	
18	Lower cover	Cast iron	Class 25 B
19	Bolts and screws	Stainless steel	AISI 304
20	Intermediate spacer	Cast iron	Class 25 B
21	Intermediate coupling	Stainless steel	AISI 431
	Cooling liquid	Water + antifreeze	