

# TEMA SPM132

Permanent Magnet Motors



*Practicing the advantage of a new  
permanent magnet motor technology*

**16-76 HP**



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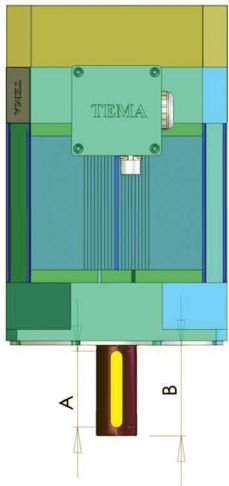
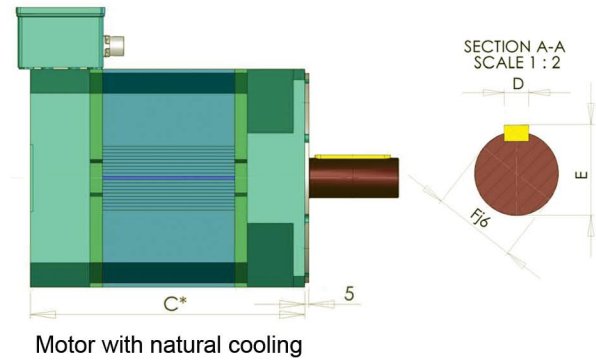
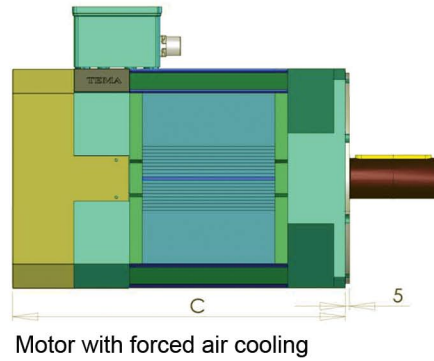
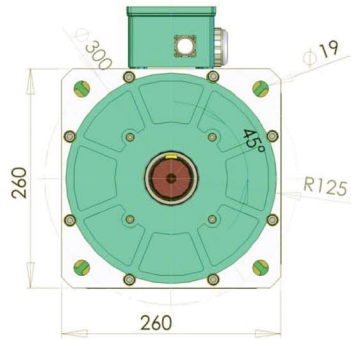
email. [info@tema.hr](mailto:info@tema.hr)

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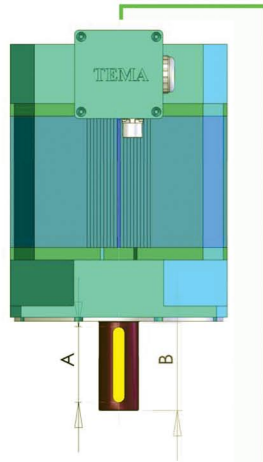
## SPM132

### Your *Permanent* Power

*SPM132 motor and generator family is extremely versatile and endurant. Whether in industrial, working machines, automotive or marine applications these motors will give you the best results.*



Shaft end can be made according to user specification



Connections can be oriented according to user specification

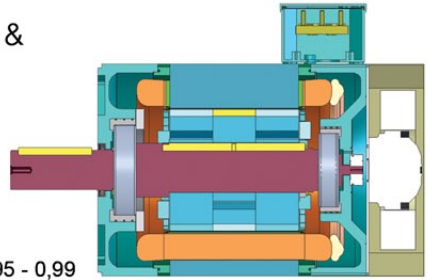
Motor Type	A [mm]	B [mm]	C [mm]	C* [mm]	D [mm]	E [mm]	F [mm]
SPM132-01	80	100	342,5	274,5	12	44,8	42
SPM132-12	90	106	395,0	327,0	14	51,5	48
SPM132-02	90	106	447,5	379,5	14	51,5	48
SPM132-22	90	106	500,0	432,0	14	51,5	48
SPM132-03	90	106	552,5	484,5	14	51,5	48

C\* - Motor with natural cooling

# SPM132 PERMANENT MAGNET MOTOR & GENERATOR FAMILY - TECHNICAL DATA

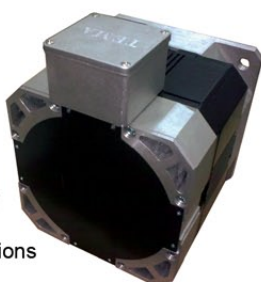
Flange = 260x260mm  
 Nnom = 1800 & 3600 RPM  
 Nmax = 2500/4500 RPM  
 Mch.Prt IP23 & IP54

Isolat.Class = H  
 Thrm.Class = F  
 fnom = 120 & 240 Hz  
 fmax = 166 & 300 Hz     $\cos\phi = 0,95 - 0,99$



	<b>SPM132-1</b>	[73Kg]	[T/T <sub>0</sub> ]
	@1800 RPM	12KW/16HP	63/70Nm
	@3600 RPM	19KW/25HP	52/70Nm
	<b>SPM132-12</b>	[93Kg]	
	@1800 RPM	19KW/25HP	103/111Nm
@3600 RPM	29KW/39HP	77/111Nm	
	<b>SPM132-2</b>	[110Kg]	
@1800 RPM	25KW/33HP	133/145Nm	
@3600 RPM	41KW/55HP	109/145Nm	
	<b>SPM132-22</b>	[130Kg]	
@1800 RPM	30KW/45HP	159/178Nm	
@3600 RPM	50KW/67HP	132/178Nm	
	<b>SPM132-3</b>	[148Kg]	
@1800 RPM	35KW/47HP	185/205Nm	
@3600 RPM	57KW/76HP	152/205Nm	

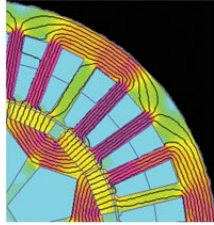
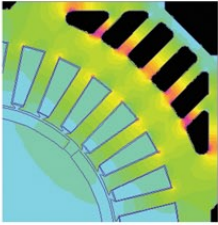
SPM132 version  
 without fan  
 - smaller dimensions



SPM132 version  
 with fan - more  
 power



- Rotor position feedback resolver sensor built in
  - All motors forced ventilation cooled or natural cooled on request
  - All motors can operate in 40°C ambient temperature with different tech specification
  - Motors can be supplied in a frameless OEM version
- We retain the right to change any data without prior notice.



SPM132 is a surface permanent magnet motor and generator family in a standard 132 motor frame. Advanced design of these machines offers higher power concentration (W/cm<sup>3</sup>), high dynamic and lower torque ripple.

#### FEATURES ■

- Surface Permanent Magnet segments
- Mechanical and chemical PM protection
- Constant torque & constant power control features
- Very low torque ripple
- Low vibration
- High efficiency
- High W/Kg ratio
- Ambient friendly machine
- Efficient air cooling system
- Low thermal dissipation
- Long life
- Closed mechanical design

#### BENEFITS ■

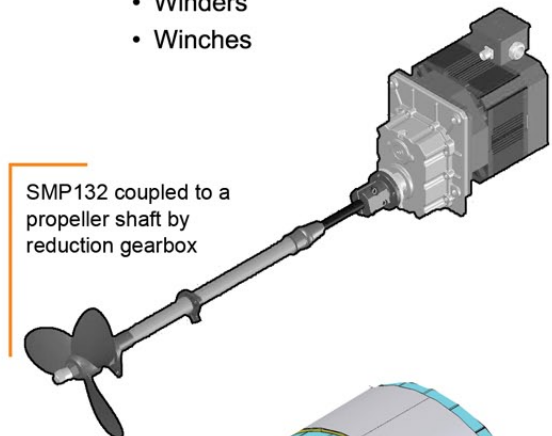
- Smaller dimensions
- Lower weight
- Lower cost
- Smoother running
- Constant torque across RPM's
- Mechanically protected PM segments
- Chemically protected PM segments
- Robust bearing support
- Higher efficiency under various conditions
- Robust mechanical construction
- Fits submersed applications
- No maintenance required

#### APPLICATIONS ■

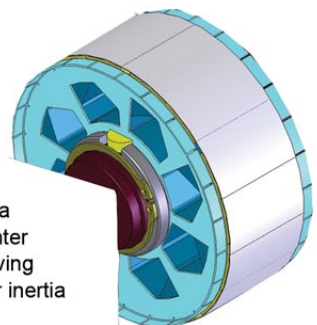
- Industrial applications
- Marine applications
- Electric vehicles
- Power generation
- Oil industry
- Machine tool industry
- Mining
- Pumps
- Compressors
- Cranes & Hoists
- Elevators
- Paper machines
- Air conditioning equipment
- Winders
- Winches



The connection box can be arranged according to user needs and specification



SMP132 coupled to a propeller shaft by reduction gearbox



The rotor has a perforated center core for achieving minimum rotor inertia

Advance technical features make these electric machines perfect for highly demanding purposes and long life reliance while offering an ambient friendly solution.

All applications where precise speed and/or torque control are required the SPM132 permanent magnet motor family is the best solution.



Cooling system integrated in to the stator structure

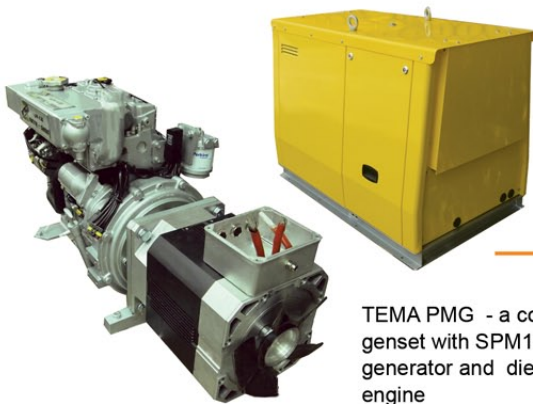


Precise and high quality winding



Robust industrial strength shaft

The SPM132 is a highly efficient generator and can work with all types of prime movers, resulting in a very compact generator set.



TEMA PMG - a compact genset with SPM132 generator and diesel engine

**TEMA**  
SPM132



SPM132 is optimal for electro propulsion solutions. Whether in marine applications or electric vehicles, the benefits are numerous. Smaller dimensions, less vibration and lower noise will make your driving experience more comfortable, while leaving no carbon footprint.