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# Datasheet VM600M-18Z0012

Art.-No: VM600M-18Z0012-PM10040-0210

Discontinued

## VM600M - Expert eMotors

Synchronous electric motors and generators for mobile applications perfectly matched to the VP600 inverter product line.

### VM600M Features

- maximum lifetime
- high efficiency especially at partial load
- scalable performance and easy implementation of redundancy

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Product overview	
Article no.	VM600M-18Z0012-PM10040-0210
Finishing	black
Description	AuxiliaryDrive VECTOMOTOR for mobile applications. Use for auxiliary and functional drives.
Motor topology	Permanent magnet synchronous

Size	
External dimensions	190
Weight	35 kg
Diameter shaft	32 mm
Length shaft	58 mm
Total length	403 mm
Length	345 mm

Technical data	
Noiminal torque <sup>1)</sup>	32 Nm
Rated speed	3000 1/min
Max. speed $n_{max}$ <sup>4)</sup>	4000 1/min
Nominal current UVW, per phase	23 $A_{rms}$
Rated power <sup>3)</sup>	10 kW
Terminal voltage (AC)	360 V
Torque constant	1.47 Nm/ $A_{rms}$
Peak current UVW, per phase	115 $A_{rms}$
Max. overload for 10 sec <sup>2)</sup>	158 Nm
Voltage constant	102 V/1000 rpm
Number of pole pairs	3
Rotor moment of inertia	96.4 kgm <sup>2</sup>
Electrical wiring	Star connection
Heating	155°C, class of insulation F according to DIN57530
Rotary encoder	<ul style="list-style-type: none"> <li>Resolver</li> </ul>
Shaft design	cylindrical with shaft key
Temperature sensors	PTC, PT100
Technical notes	<sup>1)</sup> at 3000 1/min, 560Vdc and 40°C ambient temperature <sup>2)</sup> at 2000 1/min, 560Vdc and 40°C ambient temperature <sup>3)</sup> at 3000 1/min, 560Vdc and 40°C ambient temperature

Cooling	
General information about cooling	natural cooling

## Environment

Max. ambient temperature in operation	65 °C
Min. ambient temperature in operation	-25 °C
Protection class according to EN 60529	IP64* *with gearbox IP65

## Pin settings

## Sign

### Properties

Plug type	A DF A 015
Plug design	17 pol, Typ"E"

pin-no.	operation	type	I/O
1	Resolver P+	male	
2	Resolver P-	male	
3	Resolver A+	male	
4	Resolver A-	male	
5	Resolver B+	male	
6	Resolver B-	male	
7	NC		
8	NC		
9	NC		
10	NC		
11	NC		
12	NC		
13	NC		
14	PT100	male	
15	PT100 GND	male	
16	PTC	male	
17	PTC GND	male	

Attachments

**Motor characteristic S1**

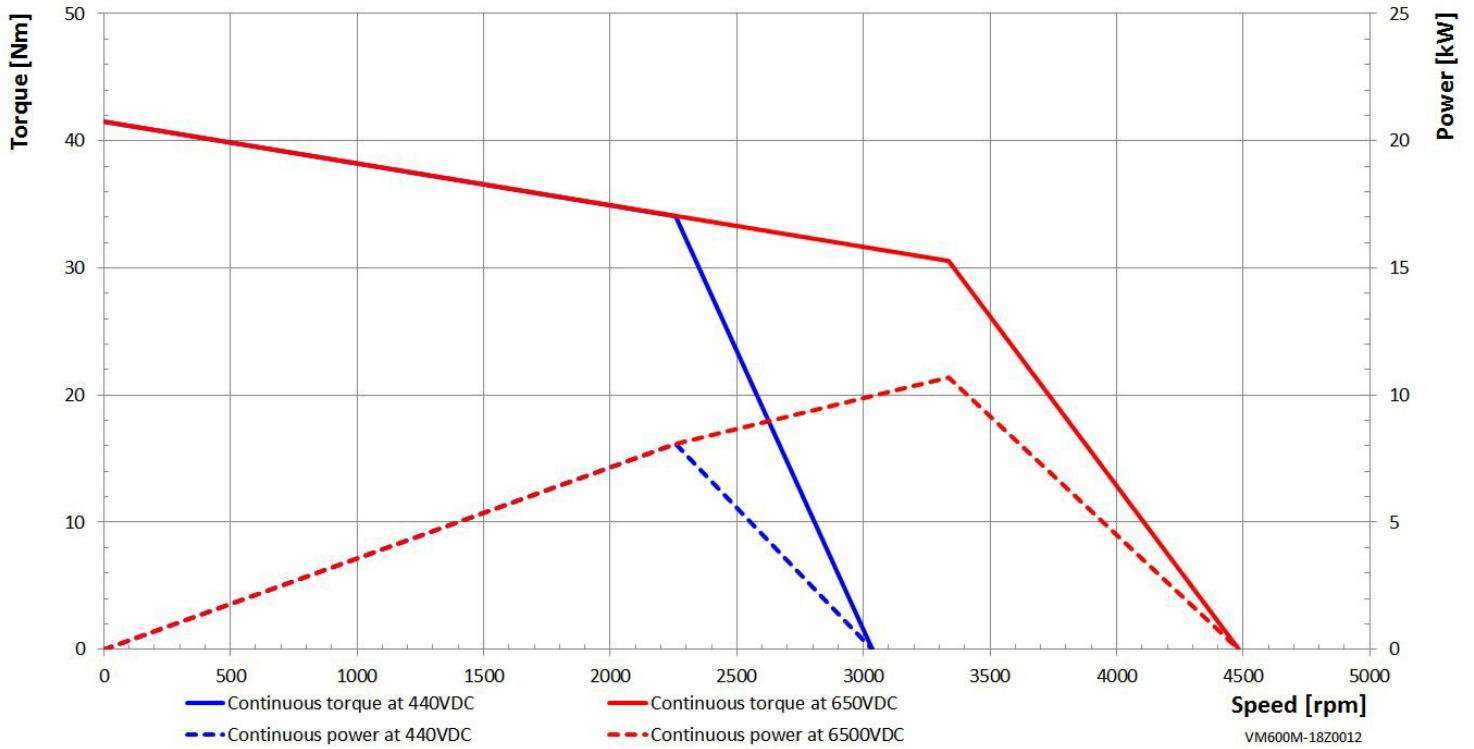


Illustration: S1 torque and power curve

**Motor characteristic S2**

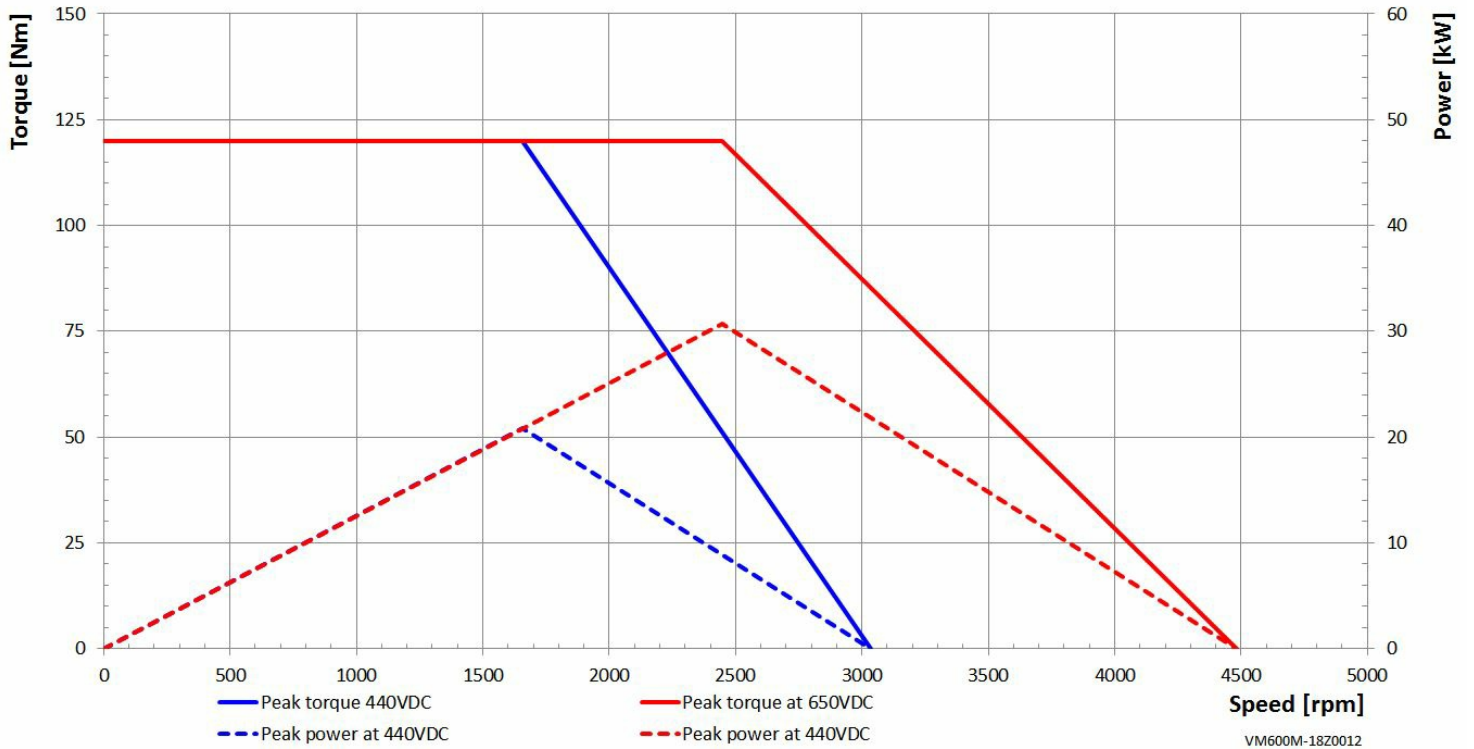


Illustration: S2 torque and power curve