

Datasheet

VM622-18W0300 + VP-Inverter

Art. Nr. VM622-18W0300-RH3030-0810



The illustration may contain optional equipment.

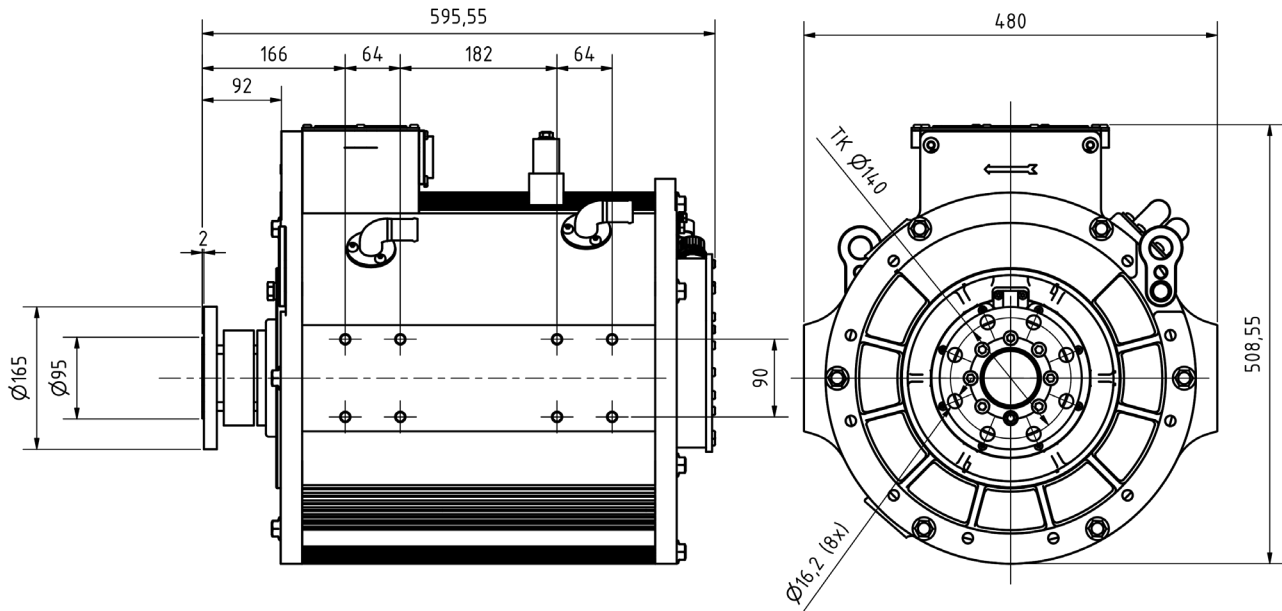
Description

DirectDrive VECTOMOTOR with 3000 Nm peak torque for mobile applications, optimized for direct connection to the cardan shaft, without additional gearbox; winding in star connection.

Application areas

- Direct cardan drives for example for trucks
- Off-highway drivetrains with and without gearbox
- High-power PTO applications

Motor drawing



Motor general data

Motor overview	
Article no.	VM622-18W0300-RH3030-0810
Motor topology	PM reluctance
Size	
Weight	257 kg
Diameter shaft	65 mm + special flange
Length shaft	91 mm
Length	504 mm
Total length including shaft	596 mm
External diameter	480 mm

Technical data	
IP	IP68
Nominal torque	1400 Nm
Peak torque 10 sec	3000 Nm
Peak torque 60 sec	2033 Nm
Overload torque 600 sec	1750 Nm
Max speed	3000 rpm
Rated speed	1230 rpm
Rated current	320 Arms
Rated power	180 kW
Peak current 10 sec	750 Arms
Torque constant	4,37 Nm / Arms
Typical battery voltage	670 VDC
Max. efficiency	95,9%
Temperature sensor	Pt1000
Number of polepairs	6
Resolver	Shanghai Yingshuang
Wiring	star connection
Inertia of rotor	0,69 kg*m*m

Cooling	
Liquid cooling	yes
Cooling medium	water / glycol (50:50)
Cooling water connection (screw thread)	Ø25 mm
Min. coolant throughput	20 l / min, pressure drop: 220 mbar
Max. inlet coolant temperature	60 °C
Max. pressure	1400 mbar

Signal connector data

Plug type		Amphenol RT001619PN03
Pin no.	I/O	Type
A	R1	Female
B	R2	Female
P	R1/R2 shielded	Female
C	S1	Female
D	S3	Female
R	S1/S3 shielded	Female
E	S2	Female
F	S4	Female
S	S2/S4 shielded	Female
G	TH	Female
H	TL	Female
T	TH/TL shielded	Female

Motor-inverter combinations

Combined inverter	VP600-18W360	VP600-28WA77
		
Rated speed at 670 VDC	1230 rpm	1230 rpm
Cont. torque at low speeds	1125 Nm	1192 Nm
Cont. power at nominal point	145 kW	153 kW
Overload torque 600 sec	1750 Nm	1750 Nm
Peak torque 60 sec	2033 Nm	2033 Nm
Peak torque 10 sec	2350 Nm	2700 Nm