

Datasheet

VM622-18W0300 + VP-Inverter

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



The illustration may contain optional equipment.

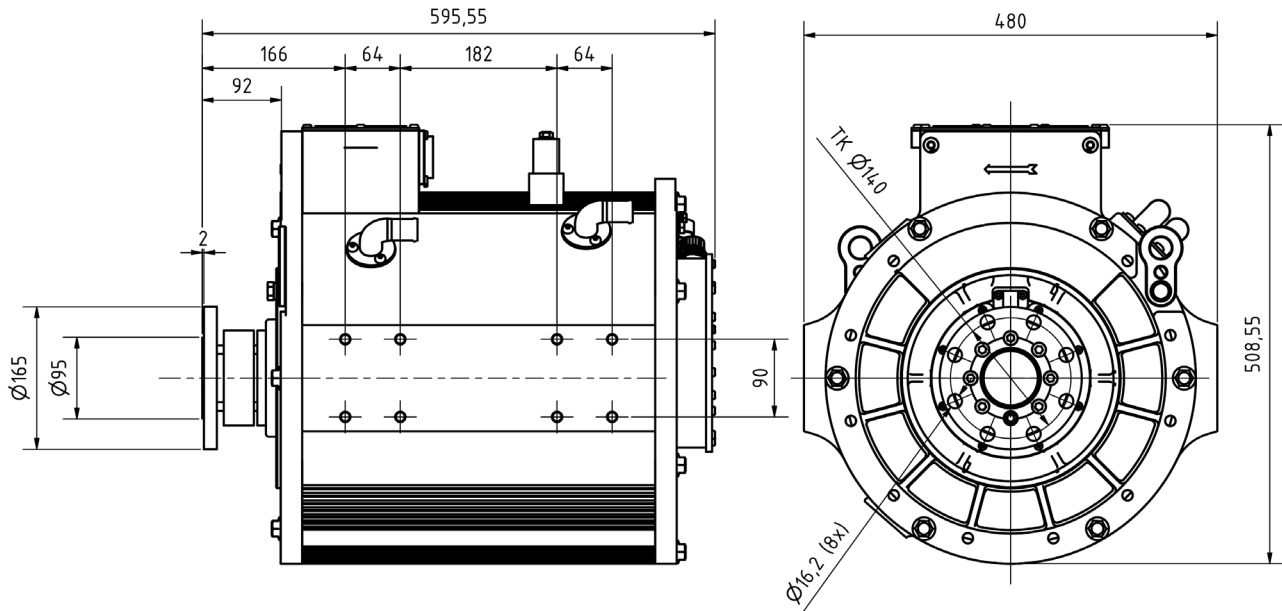
Description

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 | 2190 Nm | 2470 Nm |
| Peak torque 10 sec | 2350 Nm | 2700 Nm |