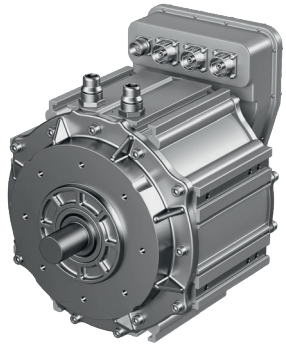
V600M*
Synchronous Motor

LHY Powertrain

Power | Power Distribution | Hydraulic Pumps | Control Valves | Hydraulic Motors | Torque/Speed Transmission | Motion



Motor for traction and functional tasks. Can be used as a direct drive or with gearbox.

Design characteristics

- **PM-RSM with high efficiency (up to 95.6 % depending on operating point)**
- **Perfectly matched to form a drive system with the VP600 inverters**
- **Motor for traction and functional tasks**
- **Use for direct drives or in combination with gearbox**

Product advantages

- **High level of safety thanks to minimal braking torques in the so-called all-phase short circuit, which the VECTOPOWER inverters offer as a safety-relevant function**
- **Compact design**

General technical data

Electrical motor characteristics

Torque constant (1)	1.05 Nm / Arms
Voltage constant	62 Vrms / 1000 rpm
Pole pair number	5
Nominal speed (2)	6000 rpm
Max. speed (2)	6500 rpm
Nominal torque (3)	110 Nm
Peak moment – 10 seconds (4)	400 Nm
Nominal current	104 Arms
Peak current – 10 seconds	410 Arms
Circuit type	Stern / Star
Encoder	Resolver Yingshuang YS J52XU9735A
Temperature sensors	PTC Drilling 1k, PT100

Technical information

(1) The torque constant is only valid up to the corner point.
(2) At 670 VDC, depends on the available DC voltage.
(3) Rated torque at 6000 rpm, 670VDC, 15 l/min cooling water flow at 35 °C and 25 °C ambient temperature.
(4) Maximum torque at < 4800 rpm, 670 VDC, 15 l/min cooling water flow at 35 °C and 25 °C ambient temperature.

Electrical motor data may deviate from the motor nameplate.

Operating conditions

The following ambient conditions apply to operation.

Max. humidity according to EN 61800-5-1, non-condensing	90 %
Min. ambient temperature	-25 °C
Max. ambient temperature	+65 °C
Protection class according to EN 60529	IP65

Cooling

Liquid cooling	yes
Coolant connection	G 3/4"
Coolant flow rate min.	15 l/min
Max. coolant pressure	2 bar
Max. coolant temperature with Derating	+65 °C
Max. coolant temperature without Derating	+35 °C
Coolant	Water and Glycol 50:50 with corrosion inhibitor

*** LHY Partner Product**

V600M*
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Application example

Telehandler

iCon + SYSTEM CONTROL

FULLY ELECTRIC

CLOSED CIRCUIT + OPEN CIRCUIT

8.5 **Machine Weight** [tons]



Power	Power Distribution	Hydraulic Pumps	Control Valves	Hydraulic Motors	Torque/Speed Transmission	Motion
		MPR 60	CCV 16			
VP600+V600M						

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