

## RD115x50-IMD

### New dimensions in the field of compact drive motors

With our new concept, we achieve new dimensions in the field of compact direct drive motors. Three independent windings enable a synchronous operation of three integrated compact inverter units. Each winding is powered with up to a maximum of 50 Amps. This motor, with a continuous power of 2.200 W and a peak power of up to 5.200 W and a compact installation space combined with a hollow shaft of 50 mm, means power density and compact design at its best.

The high-performance drive is based on the proven RoboDrive technology. This direct drive is a first choice, when a maximum torque at maximum dynamics and positional accuracy and minimal weight, compact installation space and low power dissipation is required. It delivers a rated torque of 11Nm and a peak torque up to 27 Nm at speeds up to 2.200 rpm.

With the integrated power electronics and the high-resolution absolute encoder, we provide our customers a compact high-performance drive.

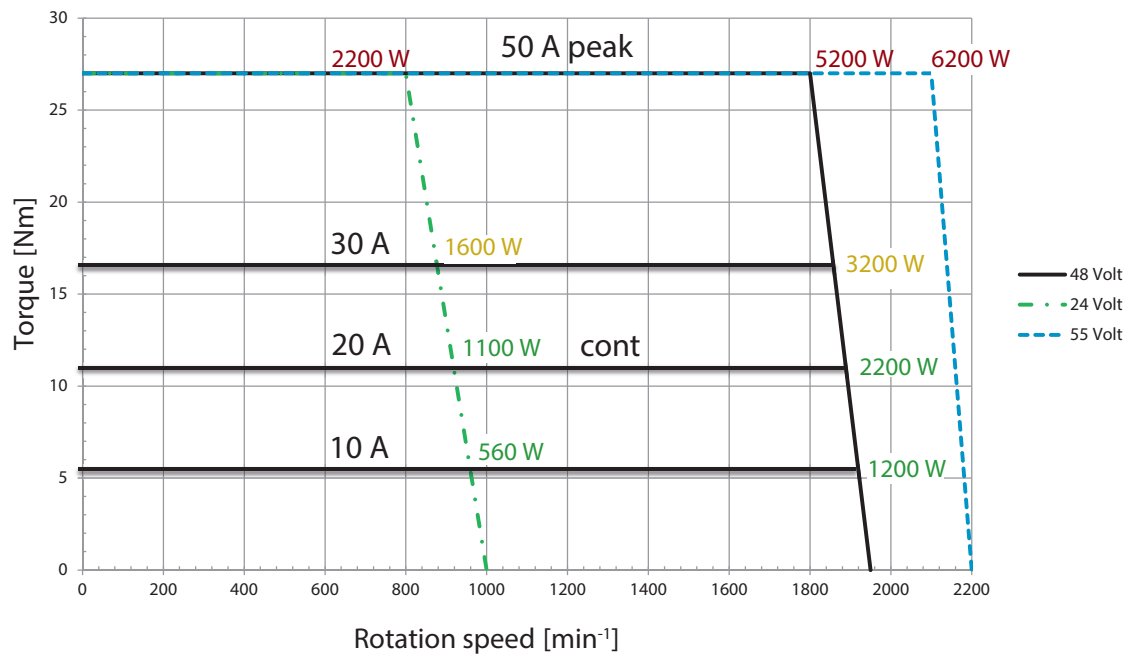
#### Key features:

- Direct drive
- Outstanding dynamics
- Very high positioning accuracy
- Peak performance 5.200 W
- Peak torque 27 Nm
- Compact design 165x165x130 mm
- Integrated motor control
- Low voltage up to 55 VDC
- Hollow shaft 50 mm diameter
- Based on the proven RoboDrive-Technology
- Water cooling optional

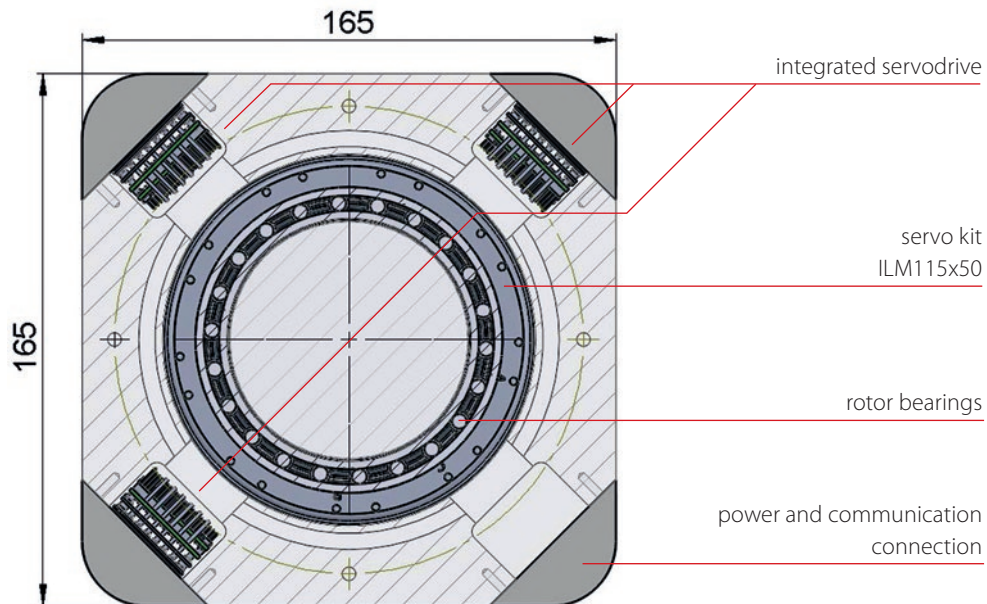
#### Basis data

	RD115x50-IMD
Rated power $P_r$ [W]	2.200
Rated torque $M_r$ [Nm]	11
Peak torque $M_{max}$ [Nm]	27
Rated voltage $U_r$ [V]	48
Rotation speed $n_{max}$ at $U_r$ [ $min^{-1}$ ]	1.900
Rated current $I_r$ Amplitude [A]	20
Thermal losses $P_{vr}$ at $M_r$ [W]	75
Torque constant (line current amplitude) $k_t$ [Nm/A]	0,56
Motor constant $k_m$ at 20°C [Nm/ $\sqrt{W}$ ]	1,41
Rotor inertia $I$ [ $kgcm^2$ ]	73,3
Max. efficiency $\eta$ [%]	92
Tilting torque [Nm]	800
Axial load capacity [N]	3.000
Radial load capacity [N]	12.000

## Operational Range RD115x50-IMD



## Schematic structure



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