

# Brushless DC motor

with integrated CANopen interface

**Properties:**

- Control: Integrated commutation electronics  
Rotor position sensing using 3 hall sensors.  
Analog nominal value or CAN bus (CANopen, Drive Profile DSP-402)
- Rotor: 4-pole neodymium magnet, slight detent torque due to continual angular magnetization (no grades)
- Service life: until 20,000 h, S1 duty
- Insulation mat. class: B, optional F
- System of protection: IP 44, optional up to IP 65.
- Special model: upon request
- Options: Thermal protection, special shafts, special flanges, brake, rotary encoder, custom designed



Type	Name	U	Volt DC	MCN 963		
	Nominal voltage			230V/50Hz		
<b>Rate</b>	Nominal power	P <sub>2</sub>	W	200		
	Nominal speed	n <sub>nom</sub>	rpm	3000		
	Nominal torque	T <sub>nom</sub>	Ncm	64		
	Starting torque	T <sub>S</sub>	Ncm	100		
	Nominal current	I <sub>nom</sub>	A	1.9		
<b>Characteristics</b>						
<b>Connection</b>	Rated input power	P <sub>1</sub>	W	250		
<b>Dynamics</b>	Weight	m	kg	3.6		
	Moment of inertia	J	gcm <sup>2</sup>	760		
<b>Thermal</b>	Adm. ambient temperature	T <sub>a</sub>	°C	-20 to +40		
	max. adm. stator temperature	T <sub>max</sub>	°C	+120		
<b>Coupling</b>	Shaft diameter	d	mm	10		
	max. axial force	F <sub>a</sub>	N	40		
	max. radial force	F <sub>r</sub>	N	400		

**Dimensions**

Type	L / mm	□
MCN 963	193	90

<b>System technology</b>			
<b>Recommended combinations</b> other gears and extensions upon request	Worm gear	S 769	
	Spur gear	M 10	
	Planetary gear	PM 80	
	Rotary encoder	RV 30	RI 30
	Brake	B 77	