

CM-25-280

Permanent-magnet machine for direct drive of applications with highest speed demands.

- Special mechanical rotor construction for highest stresses
- Stator winding and core configuration for optimal efficiency despite highest rotational speeds
- Low heat generation in stator and rotor
- High-speed ball bearings
- Compatible with converter CC-100-1000 and CC-230-3500
- Customized adaptations available

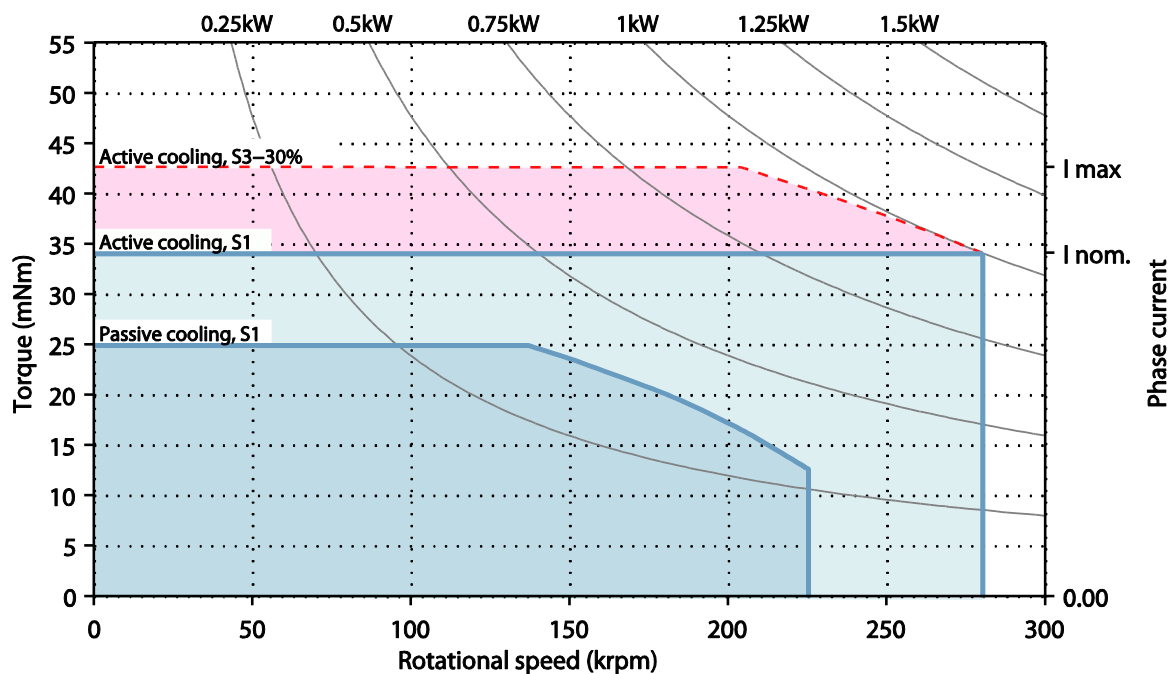


Specifications motor

Pole-pair number	1
Rated speed	280,000 rpm
Rated power	1,000 W
Rated torque	34 mNm
Weight	380 g
Temperature measurement	PT100
Axial moment of inertia (rotor)	$4.0 \cdot 10^{-7} \text{ kg m}^2$

Operating range¹

Mechanical torque/phase current versus rotational speed an

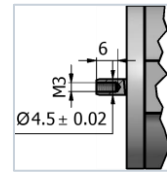


¹ For winding option W04

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Order codes: CM-25-280.Rxxx.Bxx.Fxx.Cxx.Wxx

Rotor type Rxxx	
RM00	Without boring/thread (standard)
RM03	With M3 thread (right hand)
RC99	Other bore diameter/threads on request



Bearing type Bxx	
B00	Standard ball bearing, up to 280,000 rpm (standard)
B01	Vacuum ball bearing, up to 100,000 rpm (higher speeds on request)
B99	Custom ball bearings

Front flange Fxx	
F00	Standard flange, rotor dismountable only without front load attached (standard)
F01	Half-shell flanges, rotor dismountable with front load attached
F99	Custom related flange

Cooling flange Cxx (liquid cooling)	
C00	Cooling flange with radial G1/8" inlet/outlet, flexible orientation (standard)
C99	Other cooling flanges

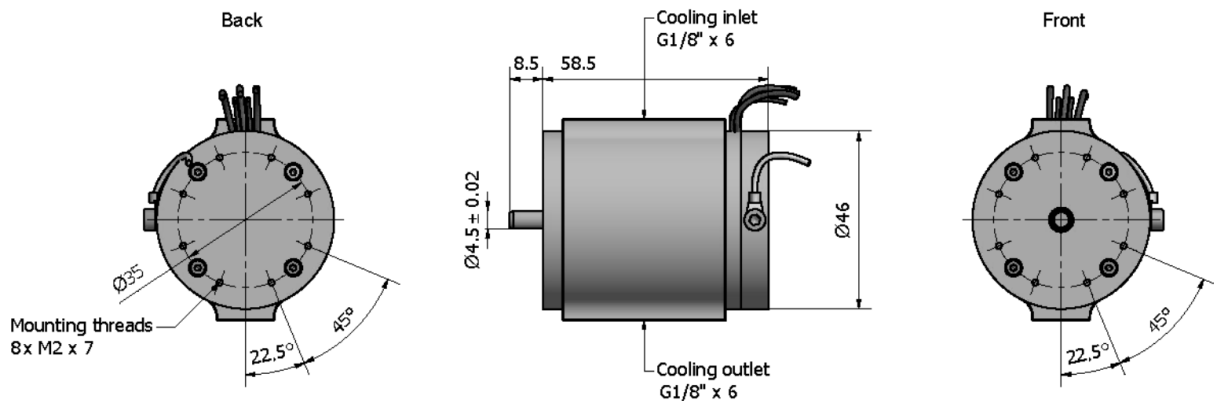
Winding options Wxx	
W01	Compatible with converter CC-230-3500
W04	Compatible with converter CC-100-1000

Optional services for customized adaptations	
<ul style="list-style-type: none"> ▪ Thermal design ▪ Balancing 	<ul style="list-style-type: none"> ▪ Rotordynamic design ▪ Mechanical design

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Ordering information	Article number
CM-25-280.RM00.B00.F00.C00.W01	4020049
CM-25-280.RM00.B00.F00.C00.W04	4020050
CM-25-280.RM03.B00.F00.C00.W01	4020051
CM-25-280.RM03.B00.F00.C00.W04	4020052
CM-25-280.RM00.B01.F00.C00.W01	4020055
CM-25-280.RM00.B01.F00.C00.W04	4020056
CM-25-280.RM03.B01.F00.C00.W01	4020057
CM-25-280.RM03.B01.F00.C00.W04	4020058
CM-25-280.RM00.B00.F01.C00.W01	4020061
CM-25-280.RM00.B00.F01.C00.W04	4020062
CM-25-280.RM03.B00.F01.C00.W01	4020063
CM-25-280.RM03.B00.F01.C00.W04	4020064
CM-25-280.RM00.B01.F01.C00.W01	4020067
CM-25-280.RM00.B01.F01.C00.W04	4020068
CM-25-280.RM03.B01.F01.C00.W01	4020069
CM-25-280.RM03.B01.F01.C00.W04	4020070

Drawing in mm



Depending on custom specific operation conditions and the corresponding Celeroton converter the operating range shown in this document may be different or may have additional limitations. For technical details and further information, please refer to the user manual or contact Celeroton directly.