

# DCmind: DC direct-drive brush motors

→ Ø 42 mm - 36 W

- Silent motor
- 12 V and 24 V built in EMC filter class B
- Excellent efficiency
- Long life
- IP65
- In accordance with UL - CE - ROHS regulations



## Part numbers

	12 V	24 V	48 V
Type	89800	89800	89800
Voltage	12 V $\overline{DC}$	24 V $\overline{DC}$	48 V $\overline{DC}$
<b>References</b>			
Option: IP65 level	<b>89800007</b>	<b>89800008</b>	<b>89800003</b>
Option: holding brake 0.25 Nm, 24 V $\overline{DC}$	<b>89800507</b>	<b>89800508</b>	<b>89800503</b>
Option: 2 channels encoder 1000 pulses/revolution, 5 V $\overline{DC}$	<b>89800907</b>	<b>89800908</b>	<b>89800903</b>
<b>No-load characteristics</b>			
Speed (rpm)	4200	4000	3930
Absorbed current (A)	0.26	0.115	0.07
<b>Nominal characteristics</b>			
Speed (rpm)	3050	3100	3150
Torque (mNm)	75	75	75
Output power (W)	24	24	25
Absorbed current (A)	3	1.43	0.72
Efficiency (%)	67	71	72
<b>Maximum efficiency characteristics</b>			
Speed (rpm)	3620	3500	3450
Torque (mNm)	38	41	48
Output power (W)	14	15	17
Absorbed current (A)	1.6	0.84	0.49
Efficiency (%)	73	75	74
<b>General characteristics</b>			
Insulation conforming to IEC60085	Class E	Class E	Class E
Noise level (dBA)	35	35	35
Max. output power (W)	30	36	39
Starting torque (mNm)	276	344	377
Starting current (A)	10.3	6.1	3.3
Resistance ( $\Omega$ )	1.2	3.9	14.5
Inductance (mH)	0.8	3	13
Torque constant (mNm/A)	27	57	115
Electrical time constant (ms)	0.7	0.8	0.9
Mechanical time constant (ms)	17	13	12
Inertia (g.cm <sup>2</sup> )	110	110	110
Weight (g)	450	450	450
Commutator segments	8	8	8
Service life (h)	4000	4000	4000
Wires length (mm)	200	200	200
Ball bearing	✓	✓	✓
<b>Comments</b>			
IP65 level except for the output shaft. Encoder and brake options are IP20.			

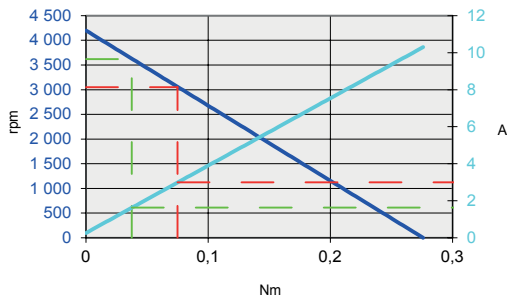
## Product adaptations, contact us

- Special output shaft
- Shaft with pinion, pulley, worm gear
- Special supply voltage
- Other wire length
- Optical or Hall effect encoder - 1 or 2 channels
- Specific motor mounting flange
- Special motor connectors
- IP67, IP69K

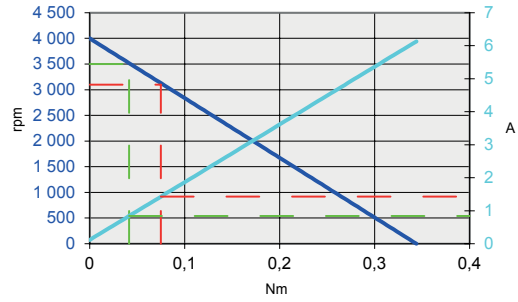


## Curves

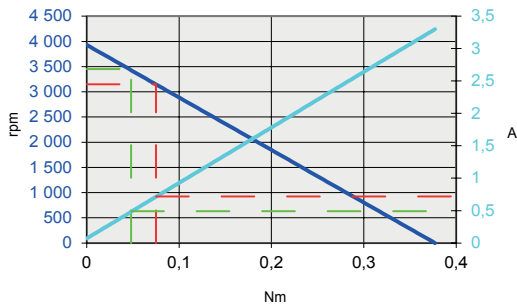
89800007 - 89800507 - 89800907



89800008 - 89800508 - 89800908

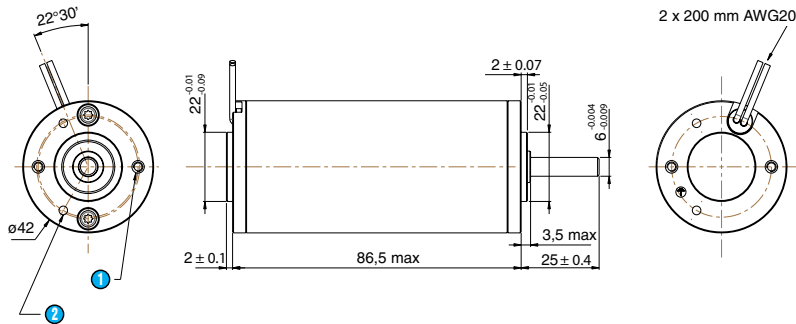


89800003 - 89800503 - 89800903



— Speed (rpm)  
 — Current (A)  
 — Torque at nominal  
 — Torque at maximum efficiency

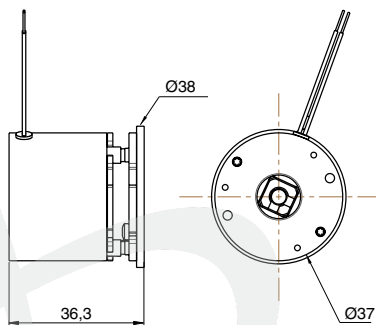
## Dimensions (mm)



- ① 2 x M3 at 180° depth 5 over Ø 32
- ② 2 x Ø 2.75 at 120° depth 5 over Ø 32

## Options

Holding brake 0.25 Nm



Encoder

