

## CL 66 Coreless DC motor

## 25 Watt

### Features

- No Iron loss; smooth speed
- Smooth operation
- Low inertia rotor, for rapid response
- Special shafts
- Encoder
- Other supply voltages
- Spur or planetary gearhead

### Options:

- Connecting wires
- Integrated EMI suppression
- Tacho



### Motor data

Motor order number	9904 120 13601	9904 120 13602	9904 120 13603	9904 120 13604	9904 120 13605	9904 120 13606	
Nominal voltage	12	15	18	24	30	36	V
Nominal torque	100	100	100	100	100	100	mNm
Nominal speed	1800	2090	2200	2170	2280	2540	rpm
Nominal current	2330	2060	1750	1300	1080	980	mA
No load speed	2560	2830	2890	2850	2960	3210	rpm
No load current max.	81	77	66	49	41	40	mA
EMF at 3000 rpm	13.9	15.7	18.5	25.0	30.1	33.3	V
Torque constant	44.2	50.1	59.0	79.6	95.8	106	mNm/A
Terminal resistance	1.6	2.0	2.6	4.6	6.6	8.0	Ω
Starting torque at nominal voltage	335	384	401	418	436	477	mNm
Starting current at nominal voltage	7.6	7.7	6.8	5.3	4.6	4.5	A
Rotor inductance	0.59	0.75	1.04	1.89	2.75	3.37	mH
Rotor moment of inertia	21x10 <sup>-6</sup>	21x10 <sup>-6</sup>	21x10 <sup>-6</sup>	21x10 <sup>-6</sup>	21x10 <sup>-6</sup>	21x10 <sup>-6</sup>	kgm <sup>2</sup>
Mechanical time constant	17	16	15	15	15	15	ms
Thermal resistance winding-housing	2.9	2.9	2.9	2.9	2.9	2.9	°C/W
Thermal resistance housing-ambient	5.0	5.0	5.0	5.0	5.0	5.0	°C/W

### General data

Type of bearings	ball	
Commutation system	graphite/copper	
Number of commutator segments	9	
Maximum radial load	100	N
Maximum axial load (static)	15	N
Ambient temp. range operating	-10/+60	°C
Ambient temp. range storage	-40/+70	°C
Mass of motor	900	G

### CL66 - Performance

