

Selection tables

Type TDP . . 1.2

Excitation:	permanent:
Rated voltage tolerance:	+ 5%
Direction of rotation:	reversible
Polarity, terminal connections:	dependent on rotation
No. of poles:	2
No. of slots:	39
No. of segments:	39
Brushes per machine:	2 pairs, quality AG 35 Dimensions: 4 x 6,4 x 18

Harmonic voltage $\Sigma U \sim \text{eff}$ (RMS) $\leq 0,4\%$ (20 – 100 rpm) $\leq 0,2\%$ (100 – 3000 rpm)	
Linearity error ¹⁾ :	+/- 0,02% from 100 – 3000 rpm
Temperature coefficient ²⁾ :	+/- 0,02% per 10K compensated, magnet system +/- 0,1% per 10K uncompensated magnet system
Reversing error:	+/- 0,1%
Insulation:	Class B
Winding test:	2 U _{max} + 500 V by manufacturer
Repeat test:	max. 1000 V

¹⁾ at max permissible currents, the error can increase due to the disturbances described on page 5.

²⁾ Up to a power rating of approx. 0,6 W
At higher loads see page 5.

	TDPS 1.2	TDP 1.2	TDPL 1.2
Rated power at 1000 rpm	15 W	25 W	50 W
Moment of inertia approx.	7 kgcm ²	8 kgcm ²	14 kgcm ²
Weight approx.	8 kg	10 kg	15 kg

Preferred voltages

Type	Rated voltage at 1000 rpm [V]	Max. speed [rpm]	Max. permissible current [mA]	Optimum load resistance [k Ω]	Armature resistance at 20 °C approx. [Ω]	No-load voltage at 1000 rpm [V]
TDPS 1,2- 1	200	2000	75	175	320	226
TDPS 1,2- 3	140	2800	107	83	178	158
TDPS 1,2- 5	100	4000	150	43	82	113
TDPS 1,2- 8	65	6000	230	17	30	73
TDPS 1,2-12	30	6000	500	3.7	6.3	34

Type	Rated voltage at 1000 rpm [V]	Max. speed [rpm]	Max. permissible current [mA]	Optimum load resistance [k Ω]	Armature resistance at 20 °C approx. [Ω]	No-load voltage at 1000 rpm [V]
TDP 1,2- 1	200	2000	125	96	255	220
TDP 1,2- 3	140	2800	180	42	114	154
TDP 1,2- 5	100	4000	250	24	52	110
TDP 1,2- 8	65	6000	385	9,5	21	72
TDP 1,2-12	30	6000	830	1.8	5.1	33

Type	Rated voltage at 1000 rpm [V]	Max. speed [rpm]	Max. permissible current [mA]	Optimum load resistance [k Ω]	Armature resistance at 20 °C approx. [Ω]	No-load voltage at 1000 rpm [V]
TDPL 1,2- 0,6	400	1000	125	105	274	428
TDPL 1,2- 0,8	280	1400	180	61	151	299
TDPL 1,2- 1	200	2000	250	26.5	69	214
TDPL 1,2- 3	140	2800	355	15	38	150
TDPL 1,2- 5	100	4000	500	6.5	17	107

Special voltages on request (type TDP 1,2 up to 280 V/1000 rpm)