

## “Traceability and proof of quality of Simulation Tasks”

### Example: Engineering Task DC-motor

Part	DC-Motor	* additional measurement conditions see appendix cdefg		
Part Number	XY12346			
Organisation	KKKK			
Date	05 Dec 2015			
Parameter	Value	Unit	Tolerances	measurement conditions*
R (Resistance)	0,2	Ohm	-5 up +10%	20 degree, after 20 min operation
R (Resistance)	0,22	Ohm	-5 up +10%	70 degree, after 20 min operation
R (Resistance)	0,24	Ohm	-10 up +20%	20 degree, new, 0 min operation
L (Inductance)	1,0	mH	-5 up +10%	20 degree
cm (motor constant)	0,03	Nm/A	-5 up +10%	20 degree
J (Inertia)	0,002	Kgm2	-2 up +2%	20 degree
d (Damping)	0,001	Nm/rad	-10 up +20%	20 degree
Mfr-Br (Friction Brushes)	0,007	Nm	-10 up +20%	20 degree, after 20 min operation
Mfr-Br (Friction Brushes)	0,005	Nm	-10 up +20%	20 degree, new, 0 min operation
Mfr-Be (Friction Bearing)	0,003	Nm	-10 up +20%	20 degree
Length motor	0,1	m	-2 up +2%	20 degree
Diameter motor	4	cm	-2 up +2%	20 degree
Weight motor	0,3	kg	-2 up +2%	20 degree
Length rotor	7	cm	-2 up +2%	20 degree
Diameter rotor	2,5	cm	-2 up +2%	20 degree
Weight rotor	150	g	-2 up +2%	20 degree
Temperature Range	-30 up +90	Degree		
max continuous current	50	A		20 degree
max peak current	100	A		20 degree, duration 5 s, repeat rate 5 min
xxx	xxx	aaa		
yyy	yyy	bbb		
zzz	zzz	ccc		

Artificial values, not corresponding to a real DC-motor