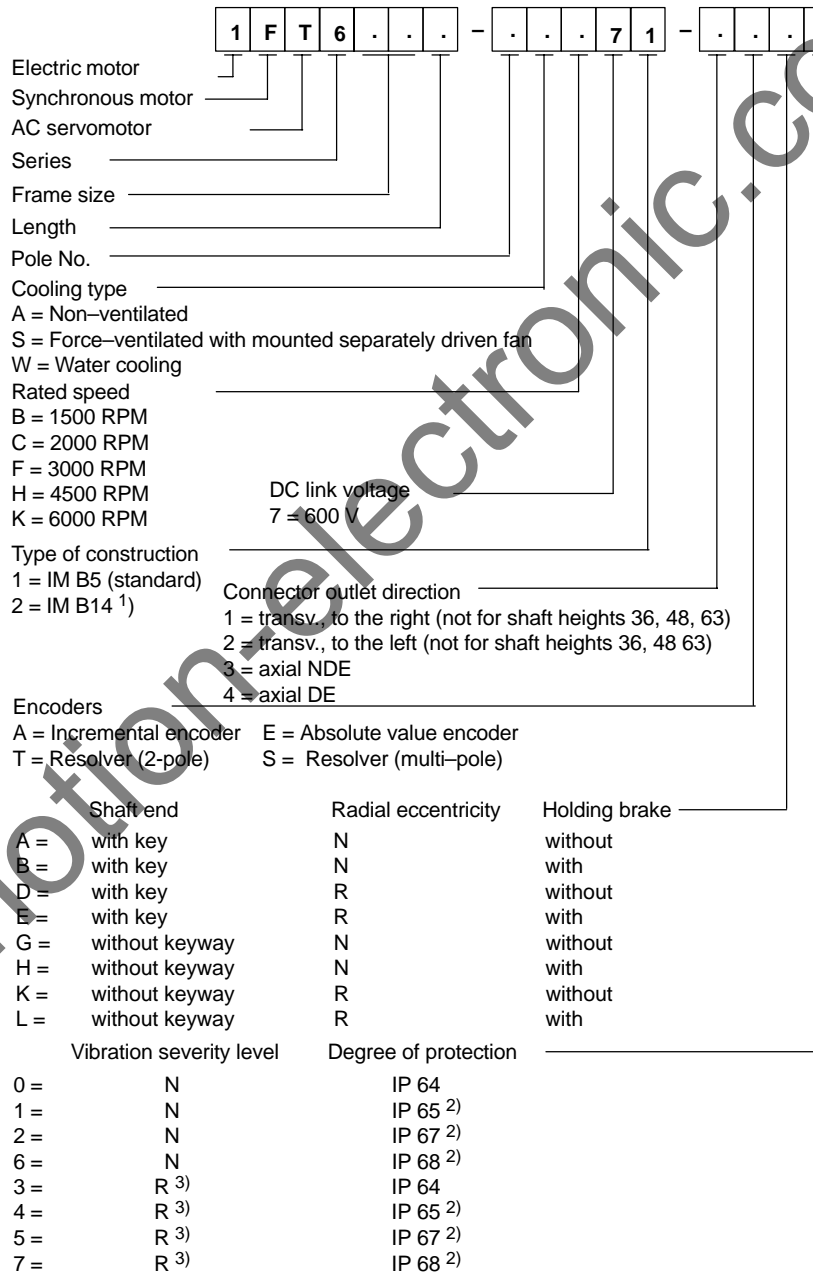


2

Order Designations

Order designation (standard type)

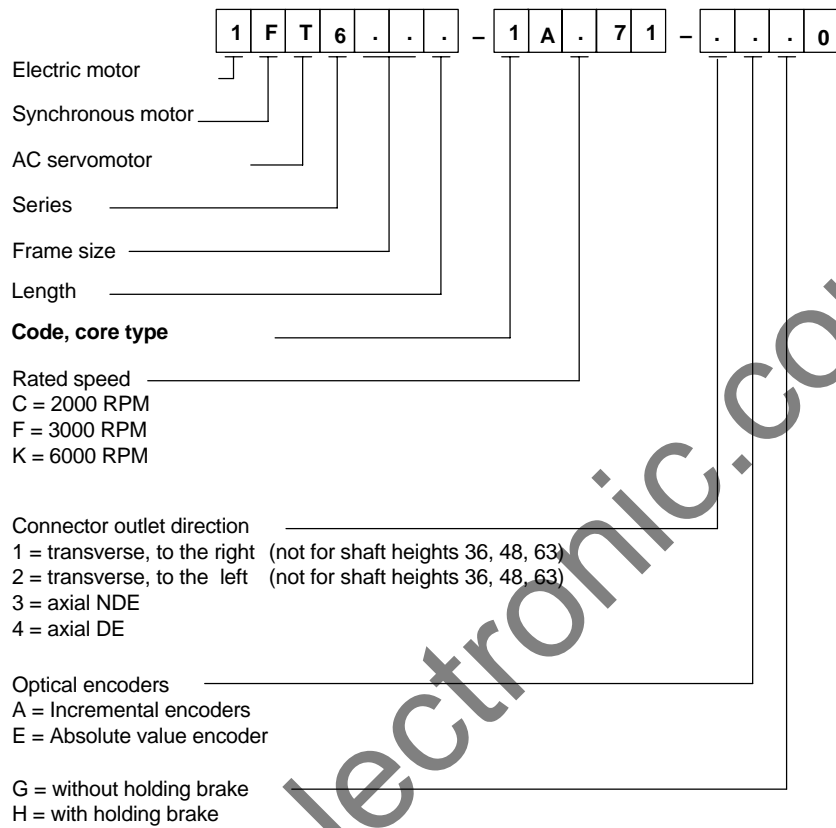


1FT6

1) only for shaft heights 63, 80, 100
2) not for motors with forced ventilation
3) not 1FT6 108-8WF7

2 Order Designations

Order designations, core types



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3.1 Speed-torque diagrams

Table 3-8 Standard motor 1FT6064

1FT6064						
Technical data	Code	Units	-□AC7	-□AF7	-□AH7	-□AK7
Engineering data						
Rated speed	n_{rated}	RPM	2000	3000	4500	6000
Rated torque	M_{rated} (100 K)	Nm	8.00	7.00	4.80	2.10
Rated current	I_{rated} (100 K)	A	3.8	4.9	5.5	3.5
Stall torque	M_0 (60 K)	Nm	7.90	7.90	7.90	7.90
Stall torque	M_0 (100 K)	Nm	9.50	9.50	9.50	9.50
Stall current	I_0 (60 K)	A	3.50	5.00	7.50	10.0
Stall current	I_0 (100 K)	A	4.20	6.1	9.10	12.1
Moment of inertia (with brake)	J_{mot}	10^{-4} kgm ²	16.2	16.2	16.2	16.2
Moment of inertia (without brake)	J_{mot}	10^{-4} kgm ²	13.0	13.0	13.0	13.0
Limit data						
Max. speed	n_{max}	RPM	3150	4550	6800	9100
Max. torque	M_{max}	Nm	38	38	38	38
Peak current	I_{max}	A	23.0	33.0	49.0	66.0
Limiting torque (600 V)	M_{limit}	Nm	21.5	21.7	22.9	23.4
Limiting current (600 V)	I_{limit}	A	9.9	14.5	23.2	31.8
Physical constants						
Torque constant	k_T	Nm/A	2.26	1.56	1.04	0.79
Voltage constant (phase-to-phase)	k_E	V/1000 RPM	140	97	65	49
Winding resistance	$R_{ph.}$	Ohm	2.95	1.42	0.63	0.35
Three-phase inductance	L_D	mH	28.0	13.5	6.0	3.4
Electrical time constant	T_{el}	ms	9.5	9.5	9.5	9.5
Mechanical time constant	T_{mech}	ms	2.2	2.2	2.2	2.2
Thermal time constant	T_{th}	min	35	35	35	35
Thermal resistance	R_{th}	W/K	0.11	0.11	0.11	0.11
Weight with brake	m	kg	13.0	13.0	13.0	13.0
Weight without brake	m	kg	12.5	12.5	12.5 </td <td>12.5</td>	12.5

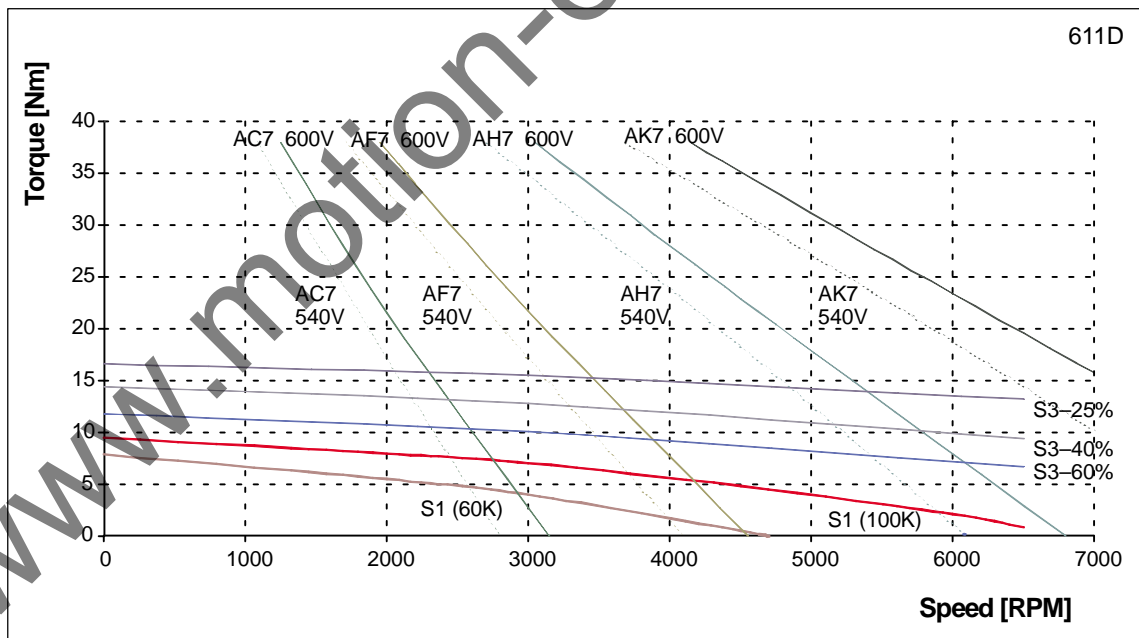


Fig. 3-9 Speed-torque diagram 1FT6064

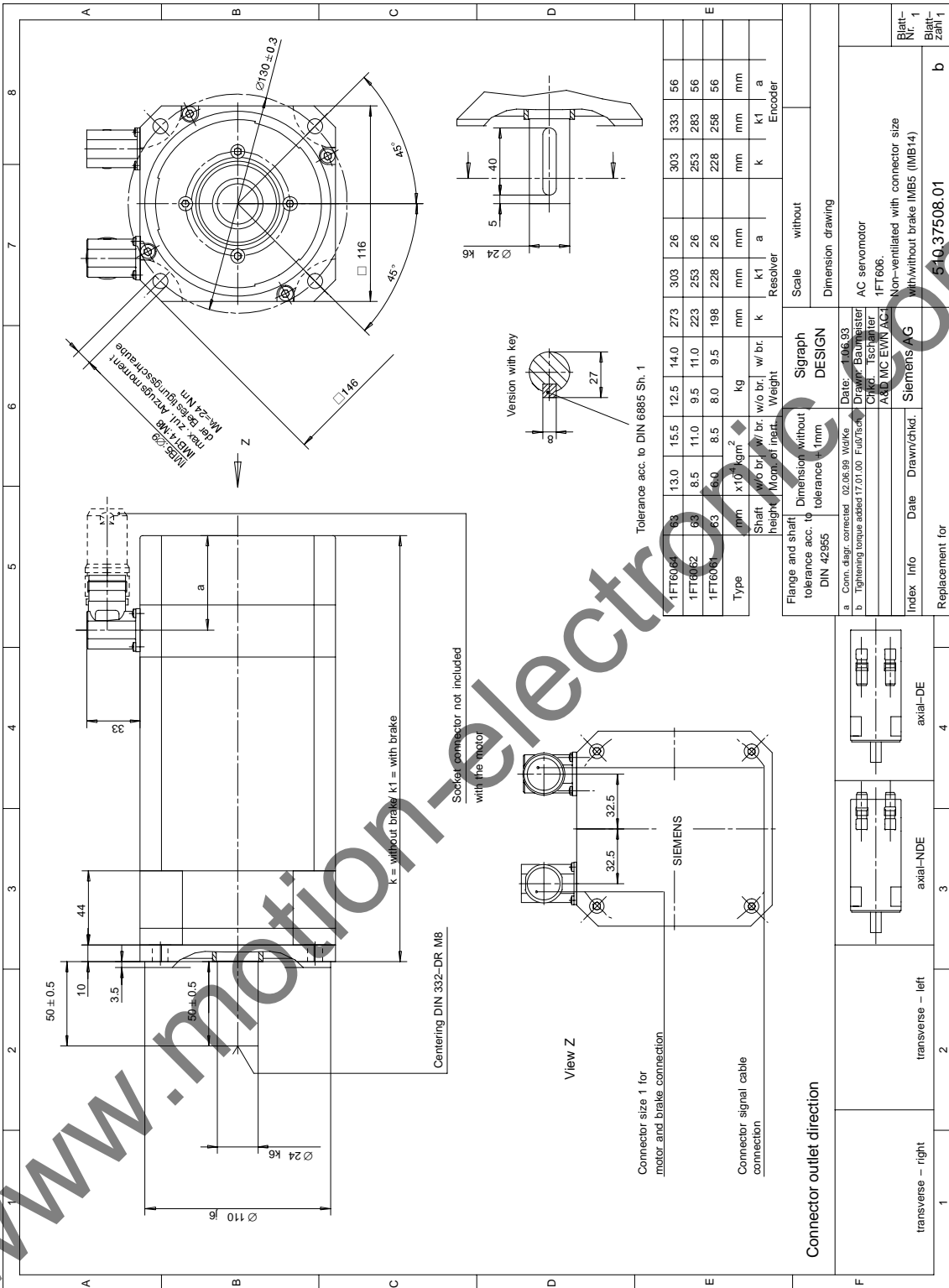


Fig. 4-4 1FT6060 non-ventilated with connector size 1

1FT6