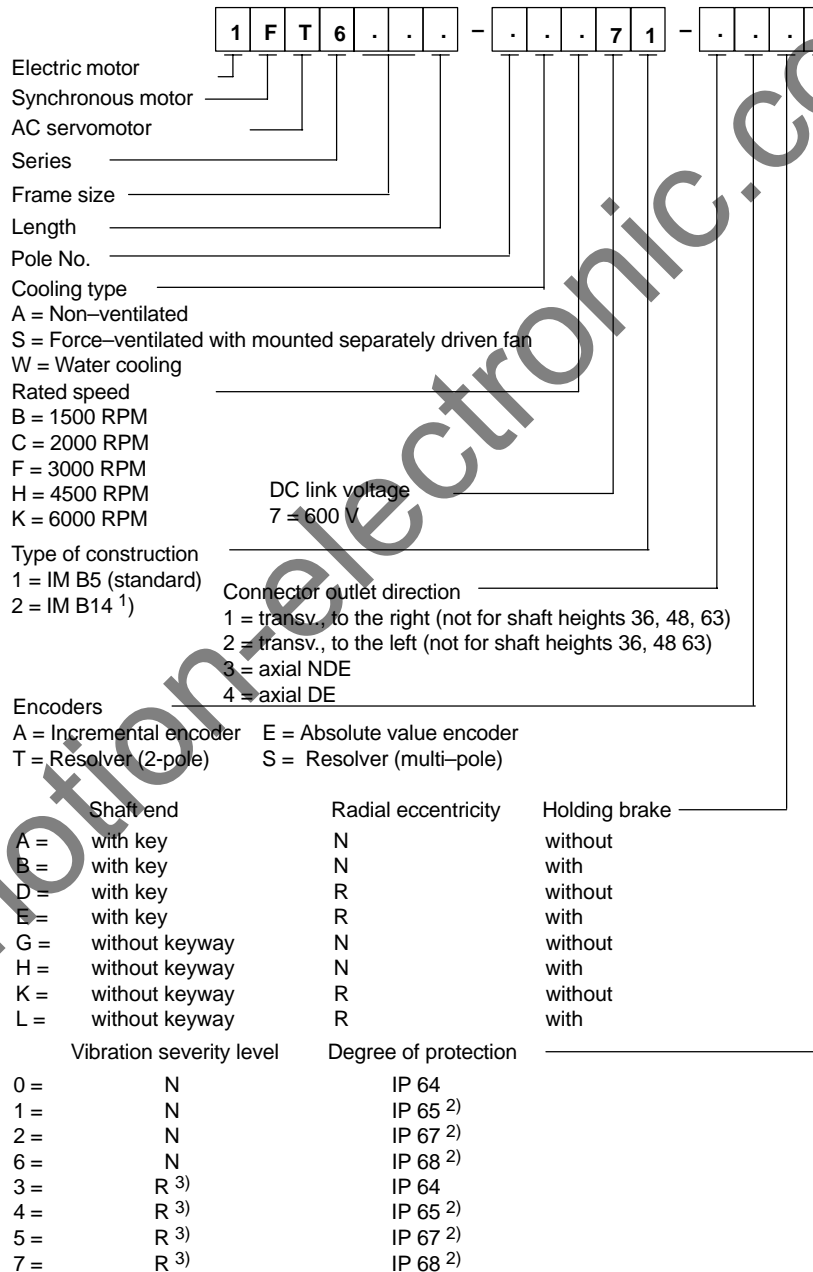


2

Order Designations

Order designation (standard type)

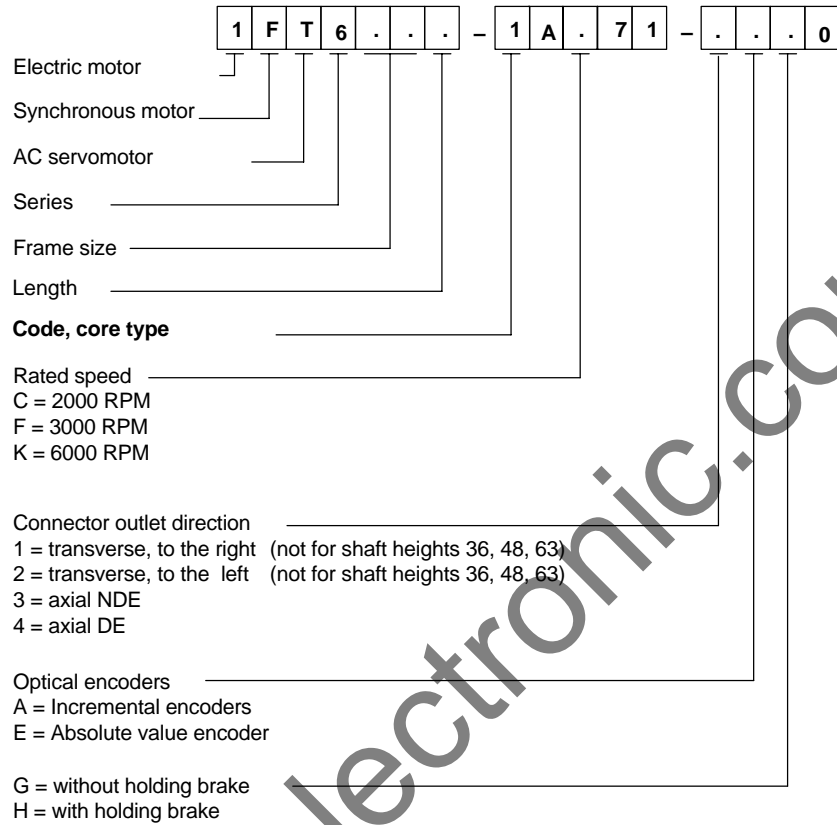


1FT6

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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Table 3-5 Standard motor 1FT6044

1FT6044					
Technical data	Code	Units	-□AF7	-□AK7	
Engineering data					
Rated speed	n_{rated}	RPM	3000	6000	
Rated torque	M_{rated} (100 K)	Nm	4.30	3.00	
Rated current	I_{rated} (100 K)	A	2.9	4.1	
Stall torque	M_0 (60 K)	Nm	4.20	4.20	
Stall torque	M_0 (100 K)	Nm	5.00	5.00	
Stall current	I_0 (60 K)	A	2.50	4.90	
Stall current	I_0 (100 K)	A	3.00	5.90	
Moment of inertia (with brake)	J_{mot}	10^{-4} kgm ²	6.16	6.16	
Moment of inertia (without brake)	J_{mot}	10^{-4} kgm ²	5.1	5.1	
Limit data					
Max. speed	n_{max}	RPM	4050	7700	
Max. torque	M_{max}	Nm	18.0	18.0	
Peak current	I_{max}	A	11.0	22.0	
Limiting torque (600 V)	M_{limit}	Nm	16.7	17.6	
Limiting current (600 V)	I_{limit}	A	10.2	22	
Physical constants					
Torque constant	k_T	Nm/A	1.67	0.85	
Voltage constant (phase-to-phase)	k_E	V/1000 RPM	108	55	
Winding resistance	$R_{ph.}$	Ohm	3.05	0.79	
Three-phase inductance	L_D	mH	16	4.1	
Electrical time constant	T_{el}	ms	5.2	5.2	
Mechanical time constant	T_{mech}	ms	1.7	1.7	
Thermal time constant	T_{th}	min	40	40	
Thermal resistance	R_{th}	W/K	0.18	0.18	
Weight with brake	m	kg	9.5	9.5	
Weight without brake	m	kg	8.3	8.3	

1FT6

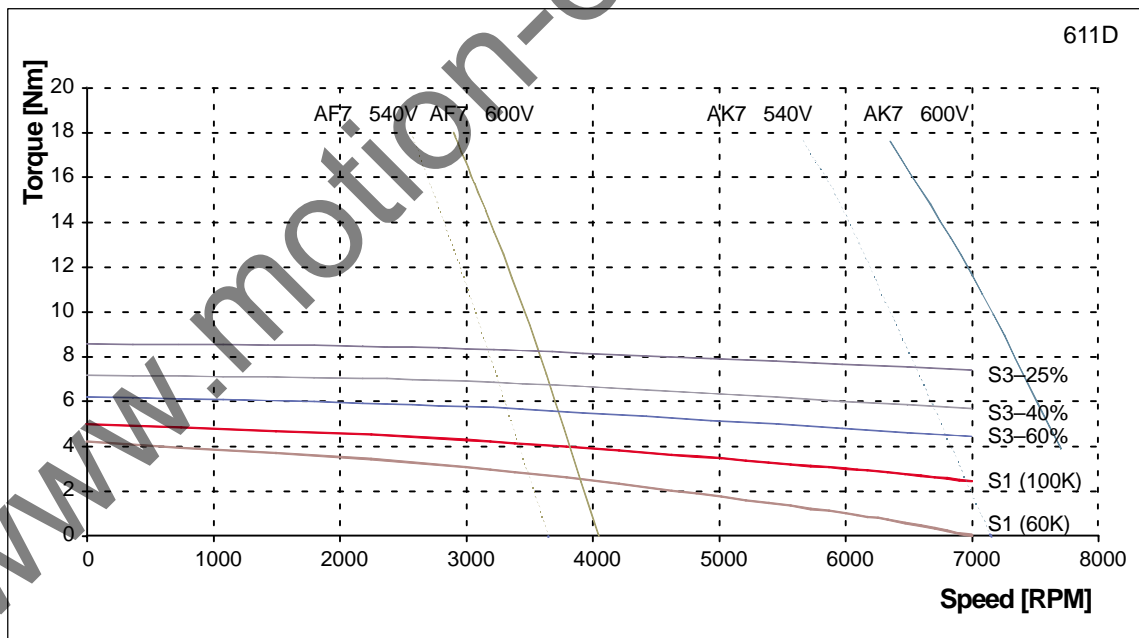


Fig. 3-6 Speed–torque diagram 1FT6044

