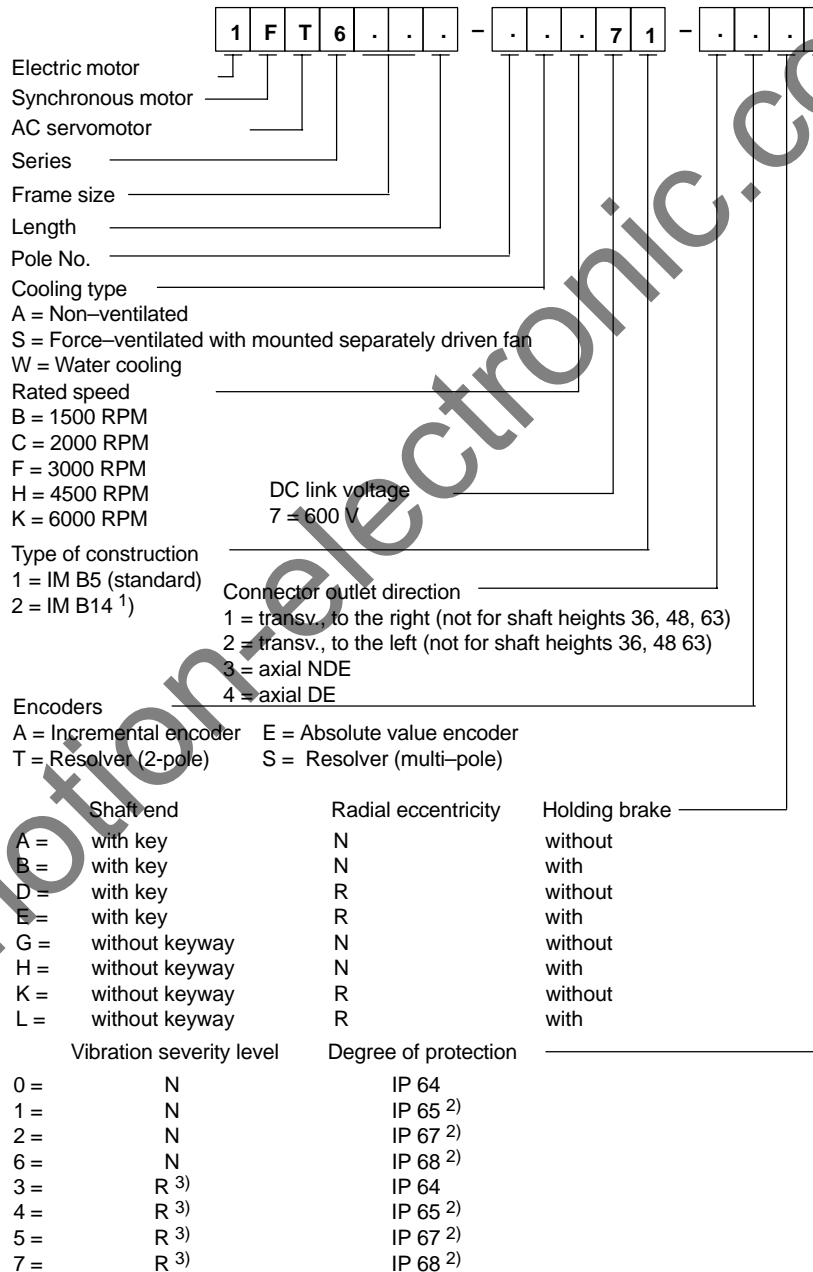


2

Order Designations

Order designation (standard type)

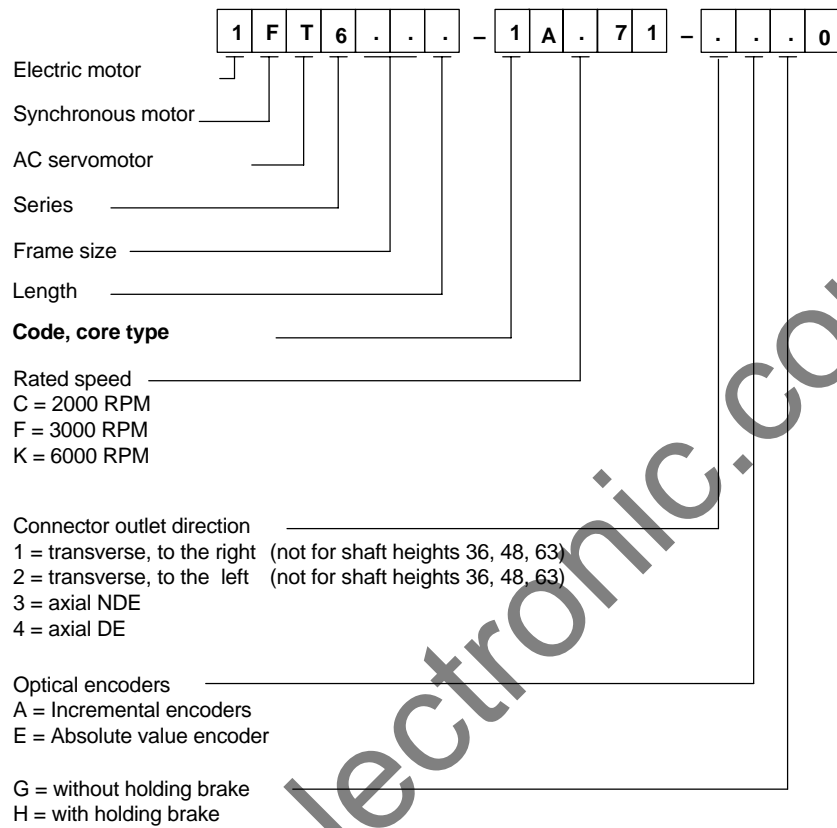


1FT6

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 3-11 Standard motor 1FT6084

1FT6084						
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	16.90	14.70	10.5	6.5
Rated current	I_{rated} (100 K)	A	8.3	11.0	12.5	9.2
Stall torque	M_0 (60 K)	Nm	16.60	16.60	16.60	16.60
Stall torque	M_0 (100 K)	Nm	20.00	20.00	20.00	20.00
Stall current	I_0 (60 K)	A	7.70	11.30	17.50	20.20
Stall current	I_0 (100 K)	A	9.50	14.00	21.60	25.00
Moment of inertia (with brake)	J_{mot}	10^{-4} kgm ²	61.5	61.5	61.5	61.5
Moment of inertia (without brake)	J_{mot}	10^{-4} kgm ²	48.0	48.0	48.0	48.0
Limit data						
Max. speed	n_{max}	RPM	3200	4700	7100	7900
Max. torque	M_{max}	Nm	65	65	65	65
Peak current	I_{max}	A	38	56	83	100
Limiting torque (600 V)	M_{limit}	Nm	41	41	45	35
Limiting current (600 V)	I_{limit}	A	20.8	31.0	52.0	47.0
Physical constants						
Torque constant	k_T	Nm/A	2.11	1.43	0.93	0.80
Voltage constant (phase-to-phase)	k_E	V/1000 RPM	132	90	58	50
Winding resistance	$R_{ph.}$	Ohm	0.88	0.41	0.17	0.13
Three-phase inductance	L_D	mH	10.4	4.8	2.0	1.5
Electrical time constant	T_{el}	ms	12.0	12.0	12.0	12.0
Mechanical time constant	T_{mech}	ms	2.9	2.9	2.9	2.9
Thermal time constant	T_{th}	min	42	42	42	42
Thermal resistance	R_{th}	W/K	0.09	0.09	0.09	0.09
Weight with brake	m	kg	24.0	24.0	24.0	24.0
Weight without brake	m	kg	20.5	20.5	20.5	20.5

1FT6

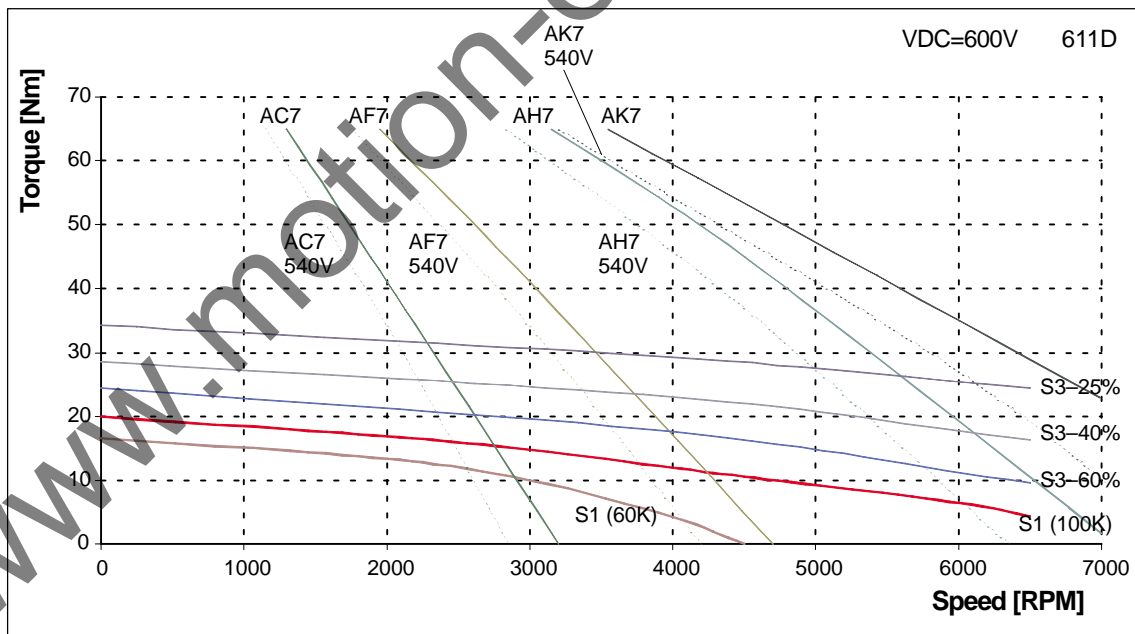


Fig. 3-12 Speed–torque diagram 1FT6084

