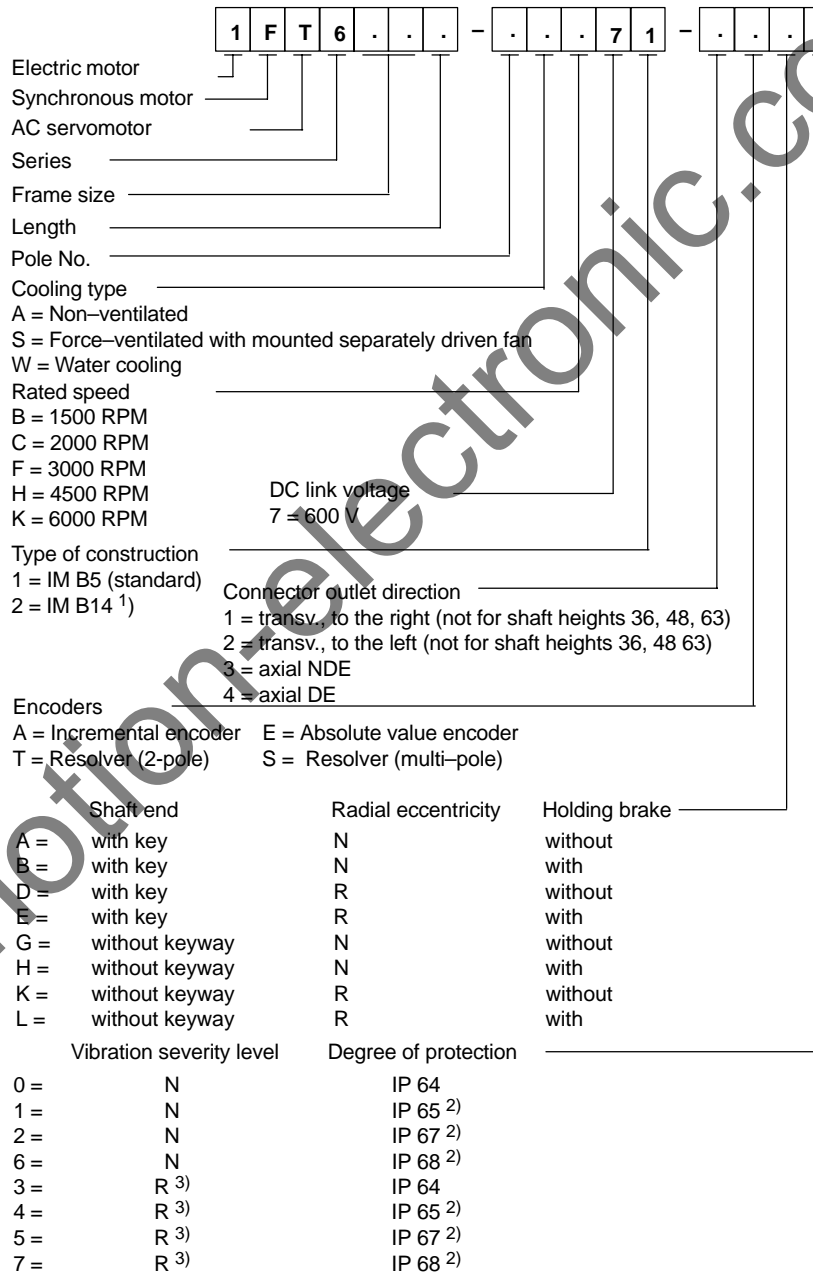


# 2

## Order Designations

### Order designation (standard type)

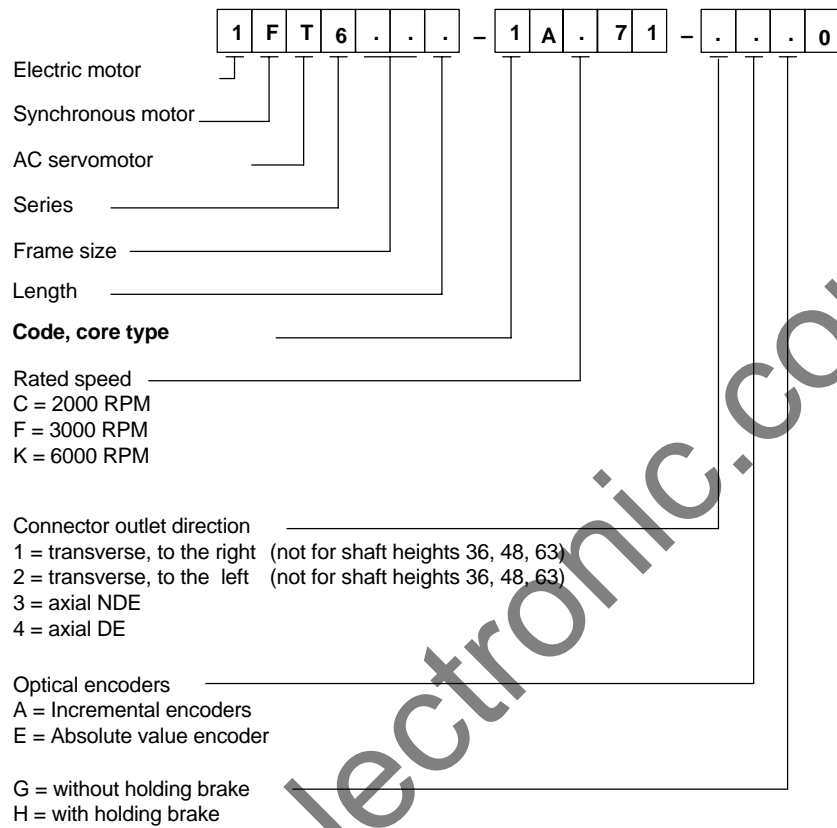


1FT6

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 <sup>2</sup>	61.5	61.5	61.5	61.5
Moment of inertia (without brake)	$J_{mot}$	$10^{-4}$ kgm <sup>2</sup>	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

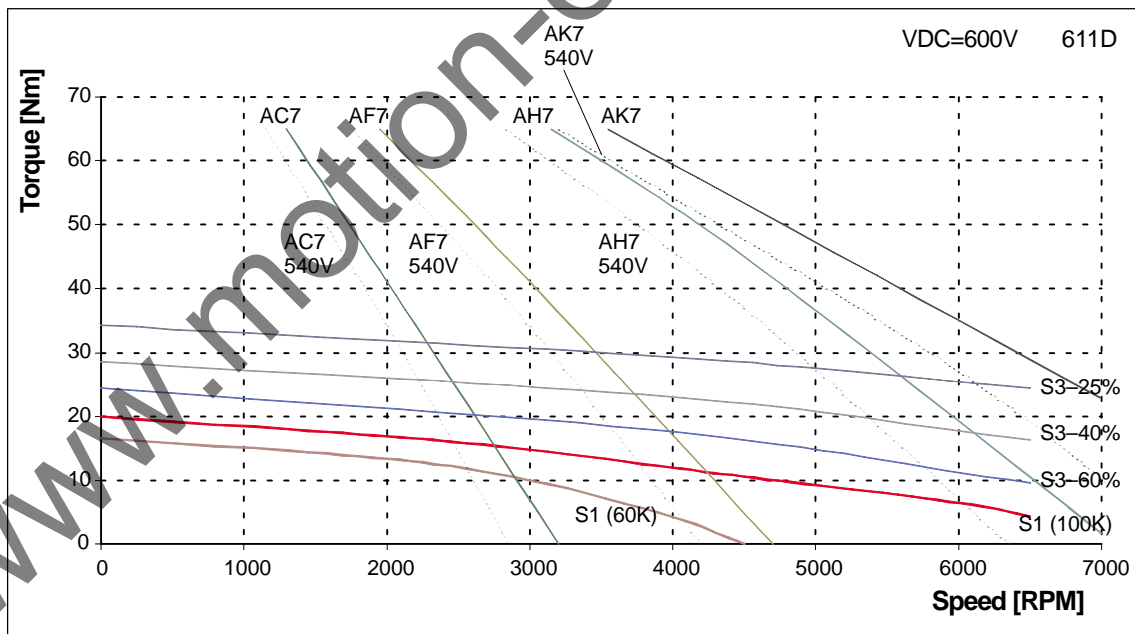


Fig. 3-12 Speed–torque diagram 1FT6084

4 Dimension Drawings

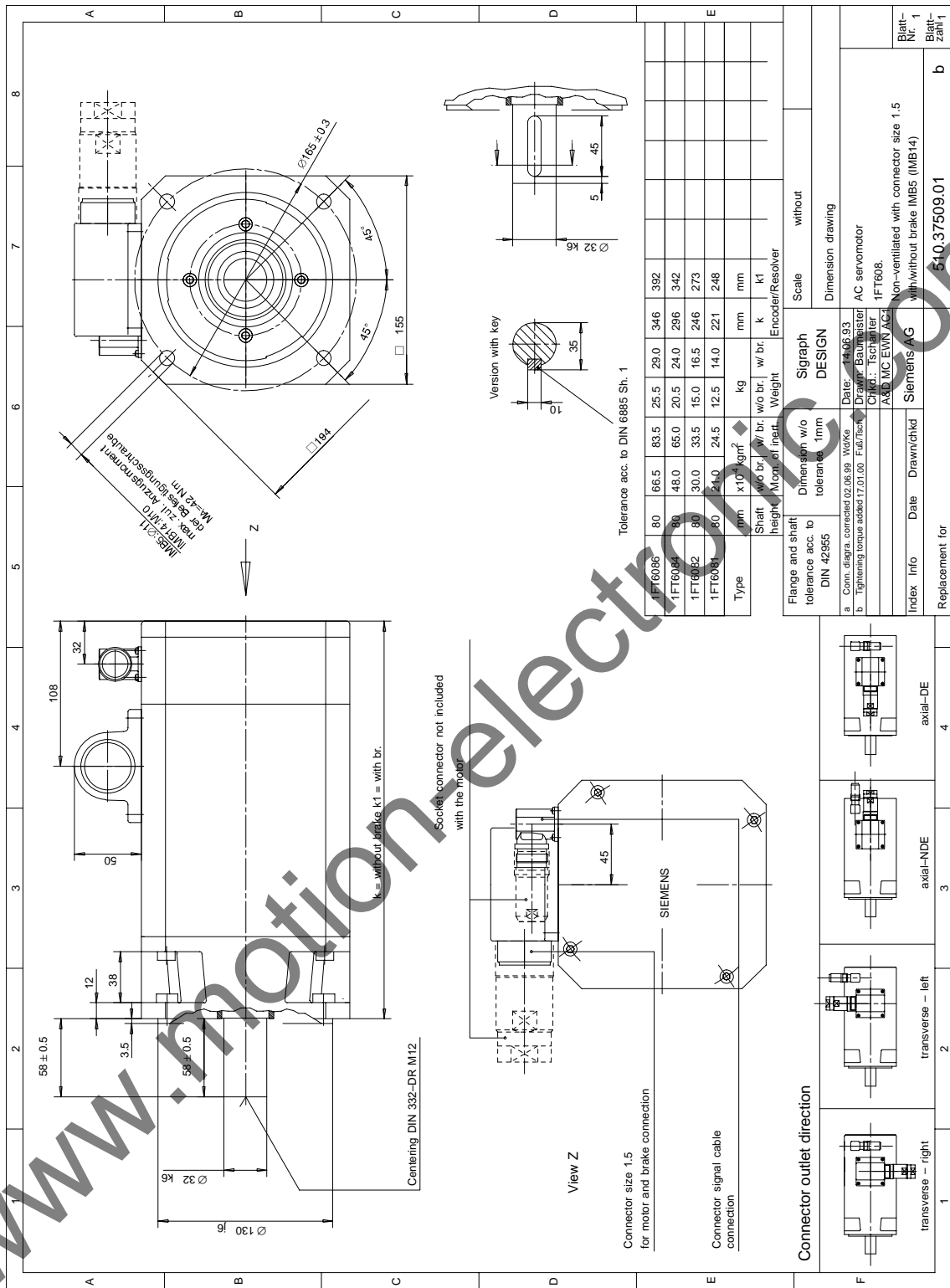


Fig. 4-5 1FT608 non-ventilated with connector size 1.5