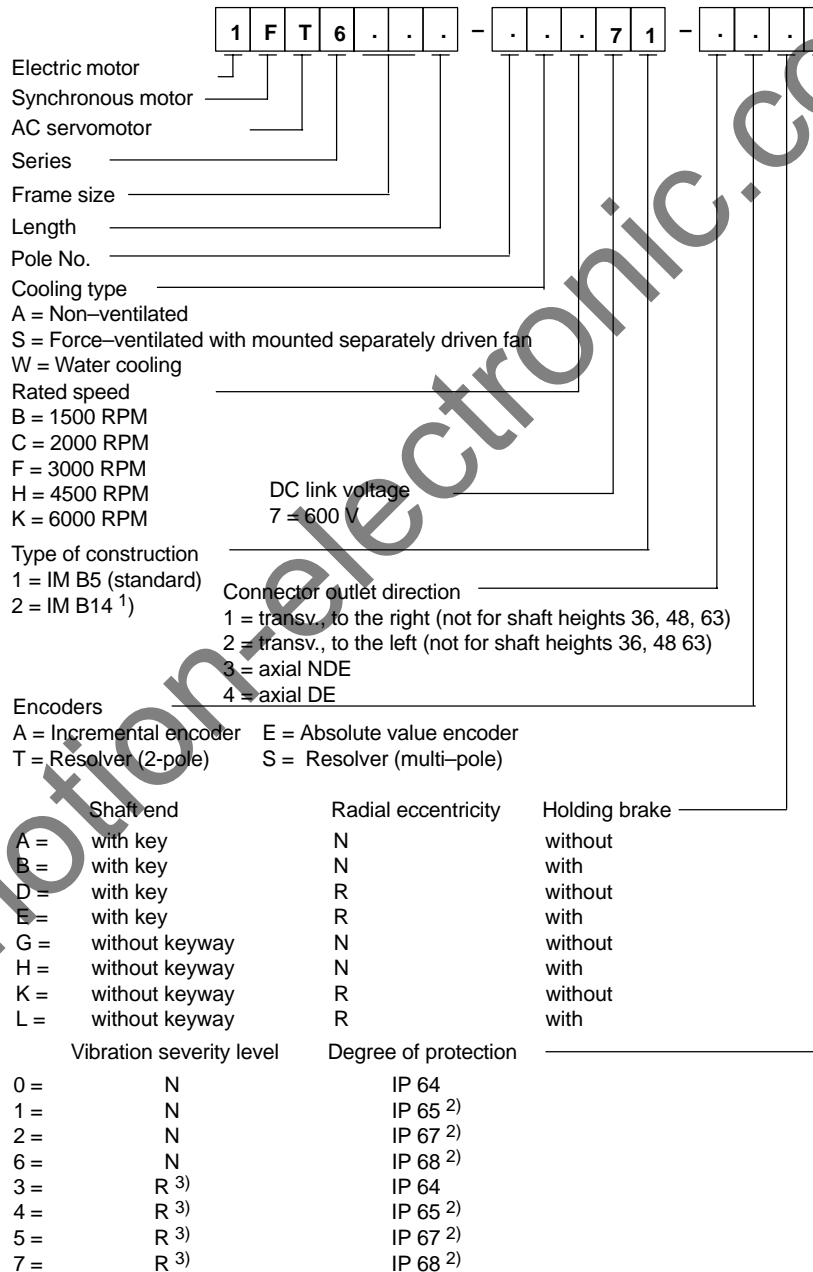


# 2

## Order Designations

### Order designation (standard type)

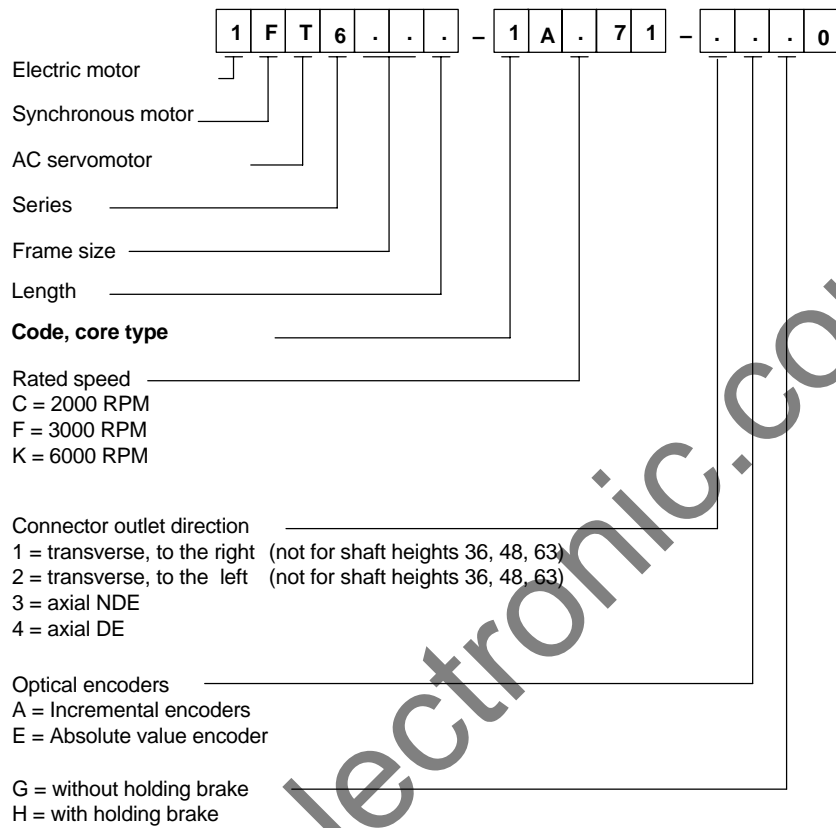


1FT6

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 <sup>2</sup>	16.2	16.2	16.2	16.2
Moment of inertia (without brake)	$J_{mot}$	$10^{-4}$ kgm <sup>2</sup>	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

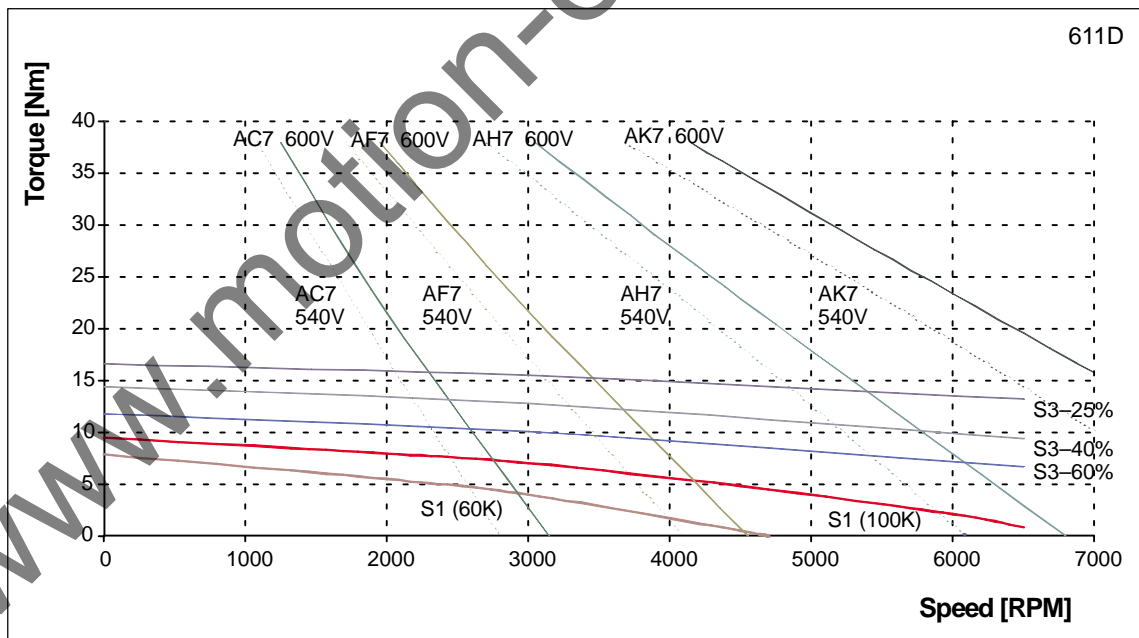


Fig. 3-9 Speed-torque diagram 1FT6064

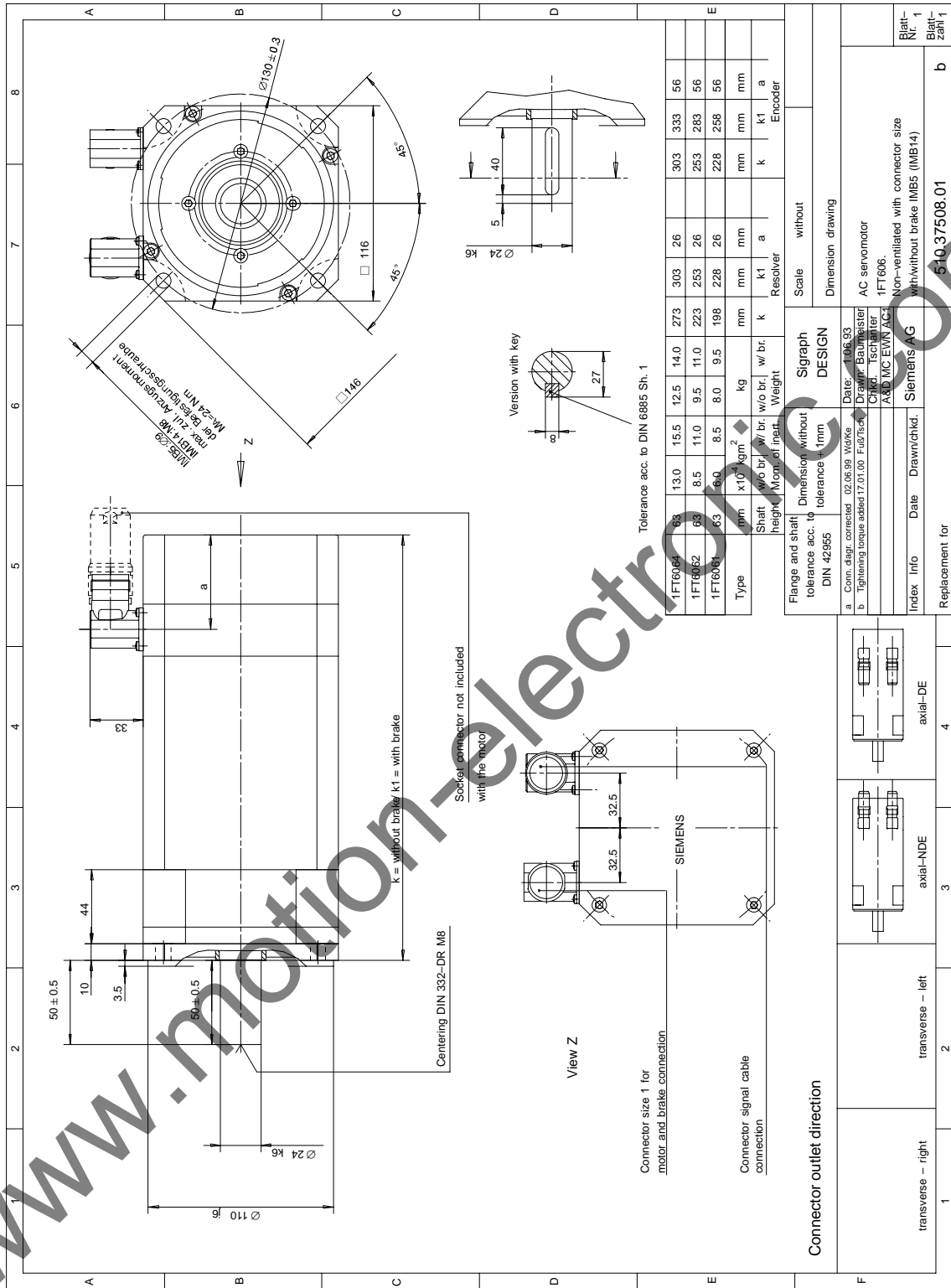


Fig. 4-4 1FT606□ non-ventilated with connector size 1

1FT6