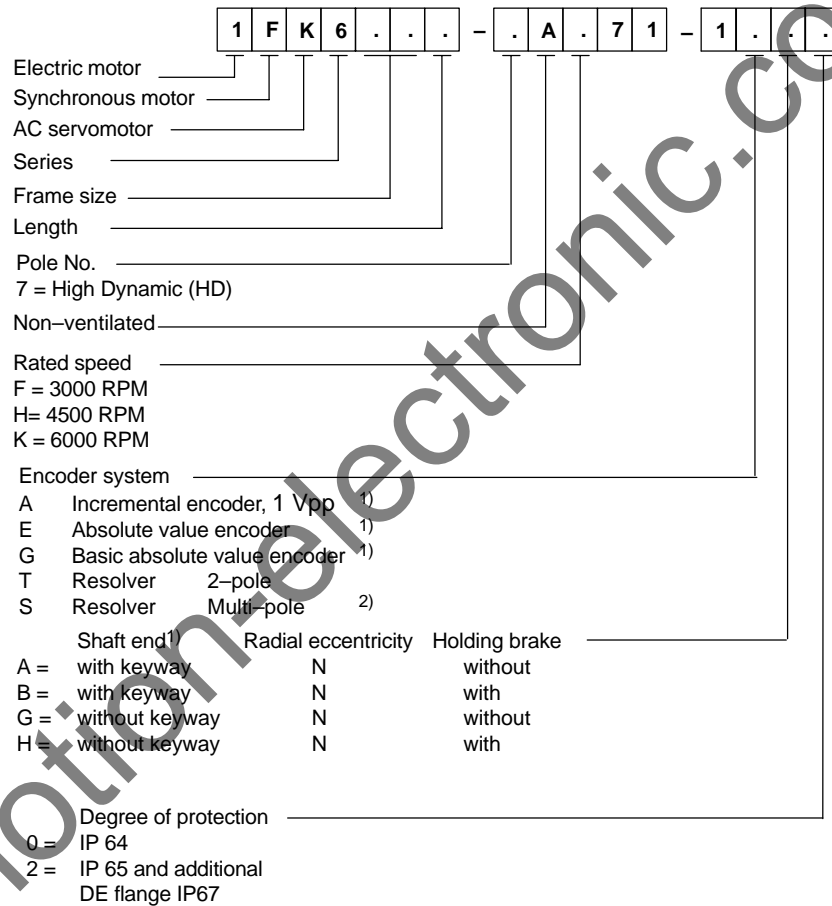


2

Order Designations

Order designation



1FK6

1) not for shaft height 36
2) encoder pole number corresponds to that of the motor



Table 3-8 Standard motor 1FK6100

1FK6100				
Technical data	Code	Units	-8AF7	
Engineering data				
Rated speed	n_{rated}	RPM	3000	
Rated torque	M_{rated} (100 K)	Nm	12.0	
Rated current	I_{rated}	A	8.4	
Stall torque	M_0 (60 K)	Nm	15	
Stall torque	M_0 (100 K)	Nm	18	
Stall current	I_0 (60 K)	A	9.8	
Stall current	I_0 (100 K)	A	12.2	
Moment of inertia (with brake)	J_{mot}	10^{-4} kgm ²	67.5	
Moment of inertia (without brake)	J_{mot}	10^{-4} kgm ²	57.2	
Limit data				
Max. speed	n_{max}	RPM	4300	
Max. torque	M_{max}	Nm	55	
Peak current	I_{max}	A	42	
Limiting torque	M_{limit}	Nm	53	
Limiting current	I_{limit}	A	41	
Physical constants				
Torque constant	k_T	Nm/A	1.48	
Voltage constant	k_E	V/1000 RPM	98	
Winding resistance	R_{ph}	Ohm	0.42	
Three-phase inductance	L_D	mH	3.5	
Electrical time constant	T_{el}	ms	8.3	
Mechanical time constant	T_{mech}	ms	3.3	
Thermal time constant	T_{th}	min	35	
Thermal resistance	R_{th}	W/K	0.12	
Weight with brake	m	kg	22.5	
Weight without brake	m	kg	21	

1FK6

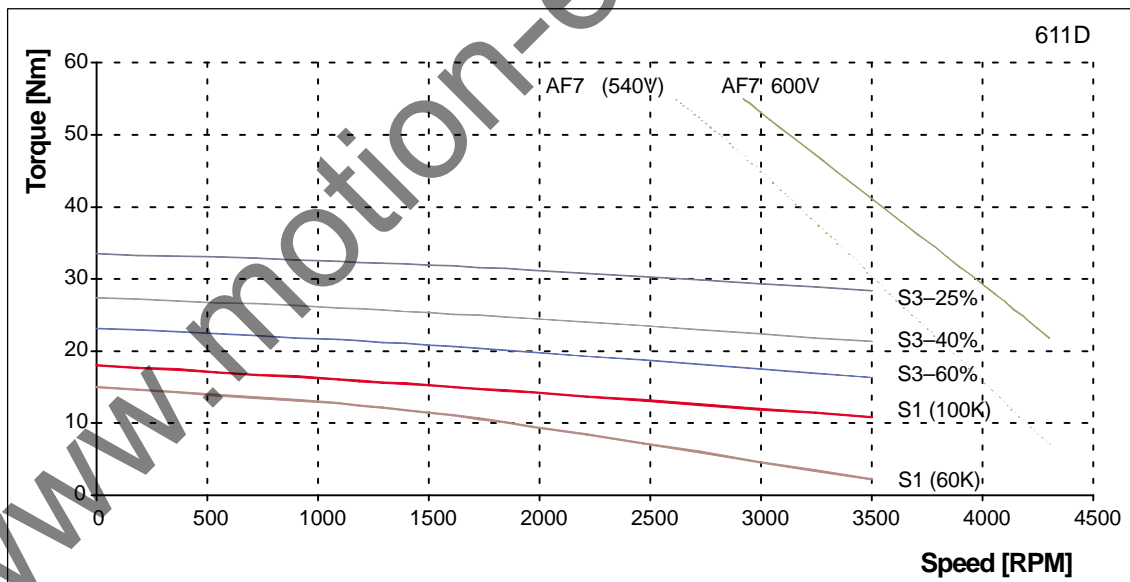


Fig. 3-8 Speed–torque diagram 1FK6100

4 Dimension Drawings

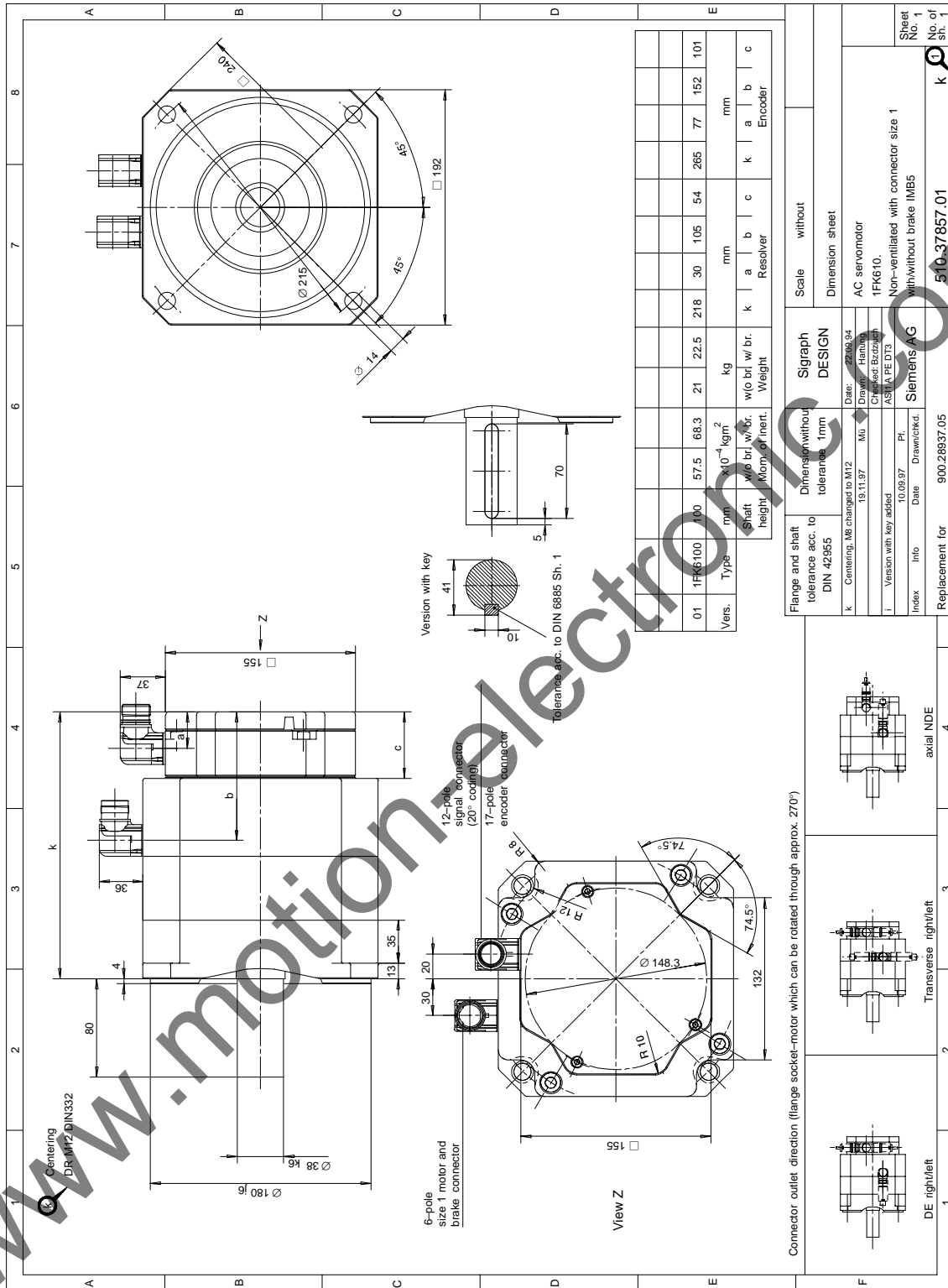


Fig. 4-7 1FK6100 non-ventilated with connector, size 1

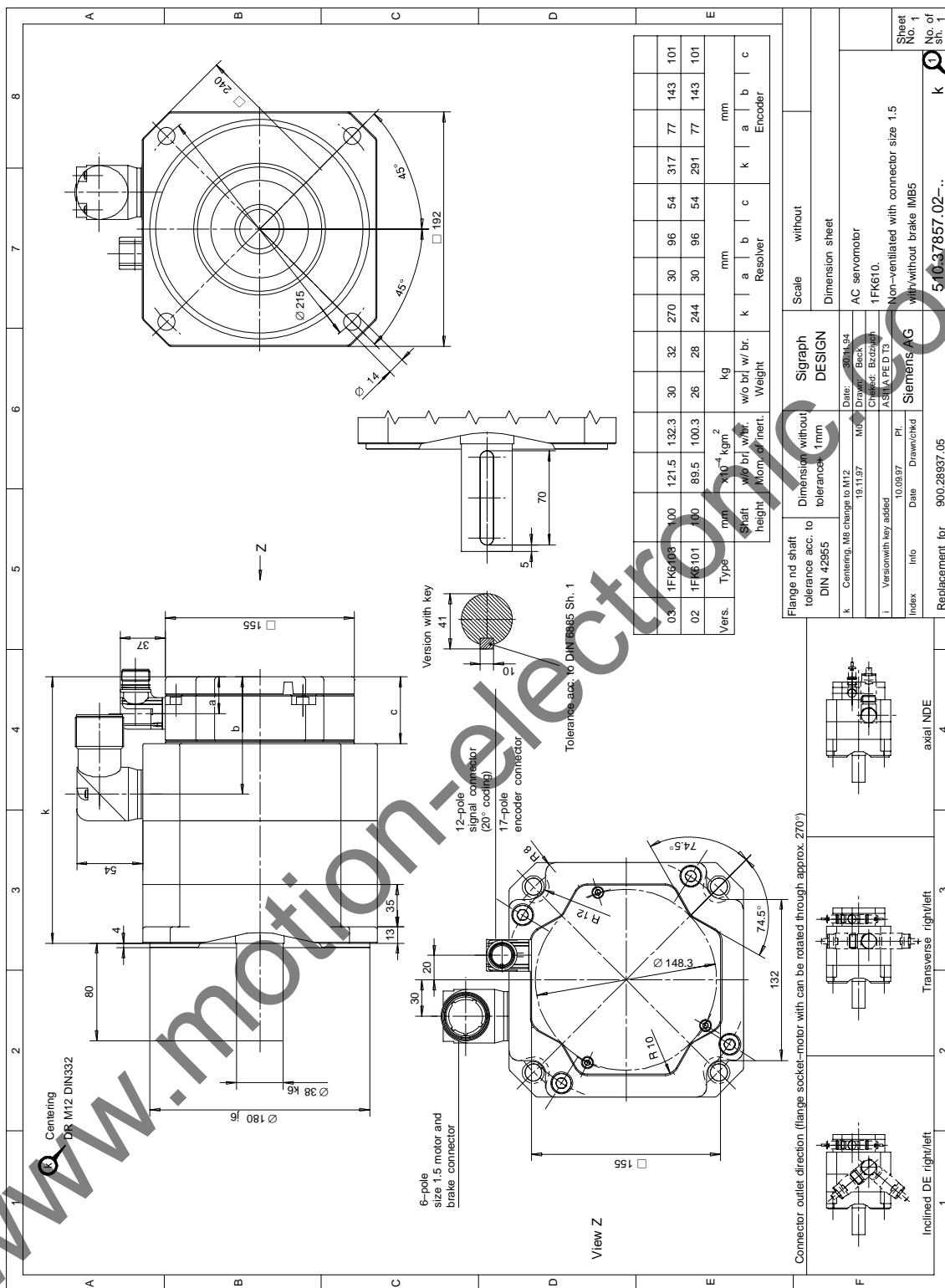


Fig. 4-8 1FK610□ non-ventilated with connector, size 1.5

1FK6