

Table 3-40 1FT6132 force ventilated

1FT6132					
Technical data	Code	Units	-6SB71	-6SC71	
Engineering data					
Rated speed	n_N	rpm	1500	2000	
Number of poles	2p		6	6	
Rated torque (100 K)	$M_{N(100\ K)}$	Nm	102	98	
Rated current (100K)	I_N	A	36	46	
Stall torque (60K)	$M_{0(60\ K)}$	Nm	91	91	
Stall torque (100K)	$M_{0(100\ K)}$	Nm	110	110	
Stall current (60K)	$I_{0(60\ K)}$	A	29	38	
Stall current (100K)	$I_{0(100\ K)}$	A	36	47	
Moment of inertia (with brake)	J_{mot}	$10^{-4}\ kgm^2$	508	508	
Moment of inertia (without brake)	J_{mot}	$10^{-4}\ kgm^2$	430	430	
Optimum operating point					
Optimum speed	n_{opt}	rpm	1500	2000	
Optimum power	P_{opt}	kW	16.0	20.5	
Limiting data					
Max. permissible speed (mech.)	n_{max}	rpm	3600	3600	
Maximum torque	M_{max}	Nm	248	248	
Maximum current	I_{max}	A	108	144	
Physical constants					
Torque constant					
Voltage constant	k_T	Nm/A	3.05	2.32	
Winding resistance at 20 °C	k_E	V/1000 rpm	196	149	
Rotating field inductance	R_{ph}	Ohm	0.17	0.10	
Electrical time constant	L_D	mH	6.4	3.7	
Shaft torsional stiffness	T_{el}	ms	38	37	
Mechanical time constant	α_t	Nm/rad	258000	258000	
Thermal time constant	T_{mech}	ms	2.4	2.4	
Weight with brake	T_{th}	min	25	25	
Weight without brake	m	kg	101	101	
	m	kg	91	91	

e-Servo

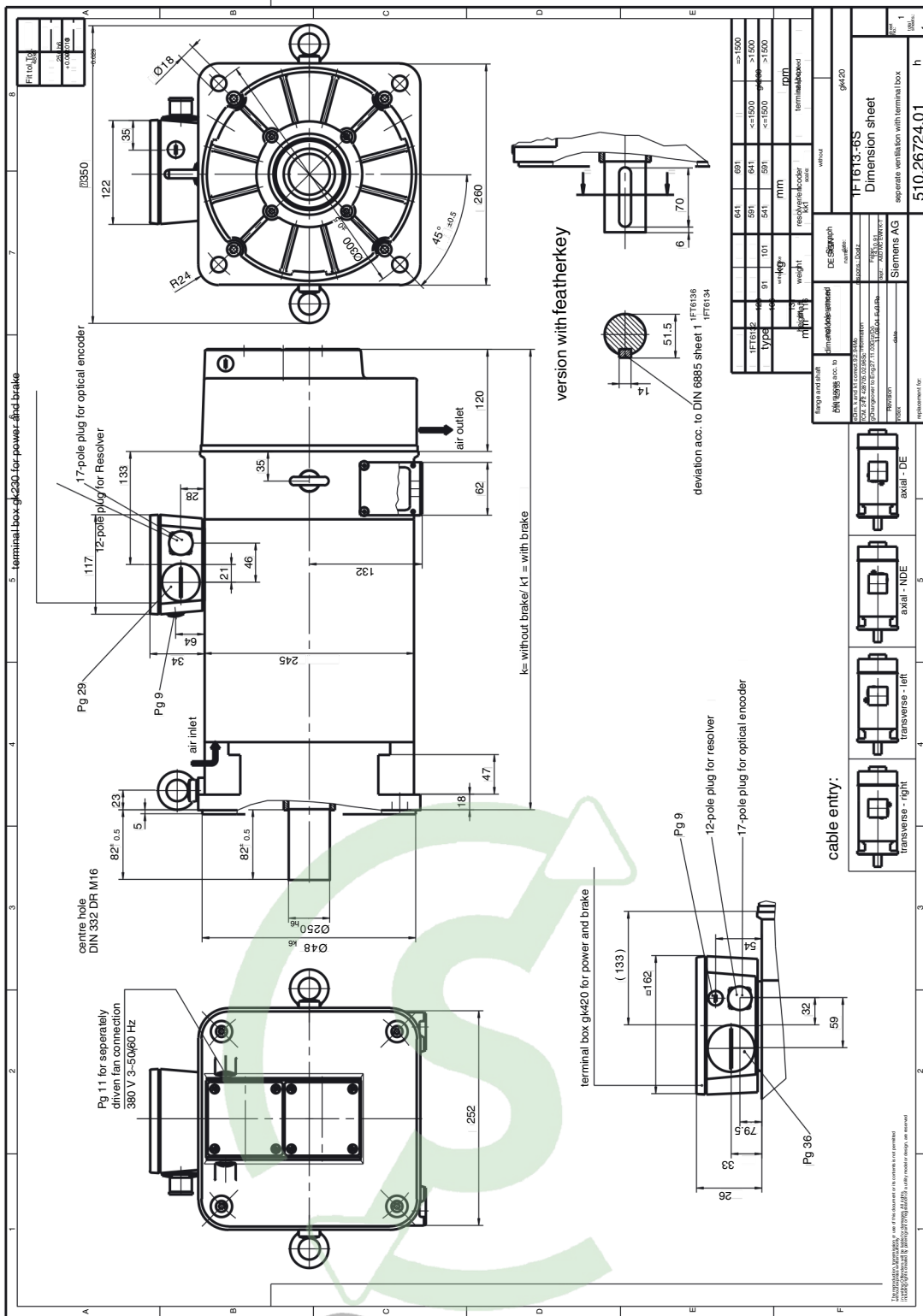


Fig. 6-14 1FT613 force ventilated with terminal box