

Title:-		<b>Technical data</b>		Document No :-
				<b>NT752TEC</b>
				1/1
<b>ABB Motors</b>	Issued by:-	Tom Eklöf	Date :-	1998-09-10
	Unit:-	ABB Motors Oy, Finland	Replaces:-	1998-05-11
				<b>ABB</b>

Asynchr. generator type M2LG 400LKD 4/6 B3  
Weight 3400 kg  
Moment of inertia 16,2 kgm<sup>2</sup>  
Surface finish Standard surface treatment of generators manufactured at the Vasa works (see file 9)

#### Bearings

Drive end 6228/C3, ball bearing  
Non drive end 6319/C3, ball bearing  
Lubrication grease  
Lubricating nipple M 10x1 acc. to DIN 71412  
Type of grease SHELL ALVANIA G3  
Regreasing interval 4000 h, 60g  
Bearing condition  
checking device SPM-nipples

Stator windings Two layer winding (4-pole), one layer winding (6-pole)  
Rotor windings Squirrel cage windings (Cu )  
Thermal protection system 3+3 pcs Pt-100, measuring resistors in the winding (hot spot)  
3+3 pcs PTC thermistors in the winding (hot spot)

#### Condensation preventing system

Vibration level Drainholes  
Grade R according to ISO 2373,  
r.m.s.-value max. 1,8 mm/s, full key

#### Connection

Cable glands Delta / Delta  
6xPG48 (main), 2xPG16 (accessories)

#### Degree of protection

IP 54

#### Cooling

IC4A1W7

#### Insulation class

F

#### Temperature rise class, IEC

B

#### Environment

-20°C...+40°C

#### Cooling media temperature max.

+40°C

#### Cooling media flow min.

30 l/min

#### Quality control system

ISO 9001

### RATED DATA

		4-pole	6-pole
Power	kW	750	200
Voltage	V	690 D	690 D
Current	A	695	205
Speed	r.p.m.	1510	1005
Frequency	Hz	50	50
Power factor	cosφ	0,91	0,82

**PERFORMANCE DATA**

ASYNCHR. GENERATOR TYPE		M2LG 400LKD 4/6
NUMBER OF POLES		4 / 6
ST.WINDING CONNECTION		D / D
RATED POWER, S1		750 / 200 kW
RATED VOLTAGE		690 / 690 V
RATED FREQUENCY		50 Hz
SYNCHRONOUS SPEED		1500 / 1000 r.p.m.
NOMINAL SPEED		1509.7 / 1005.4 r.p.m.
SLIP		-0.65 / -0.54 %
POWER FACTOR	5/4	0.91 / 0.84
Tolerance acc. to IEC 34-1.	4/4	0.90 / 0.82
	3/4	0.88 / 0.76
	2/4	0.83 / 0.64
	1/4	0.63 / 0.41
EFFICIENCY	5/4	97.1 / 94.6 %
IEC 34-2, summation of losses,	4/4	97.4 / 94.8 %
tolerance acc. to IEC 34-1.	3/4	97.2 / 95.0 %
External cooling losses excluded.	2/4	96.8 / 94.4 %
	1/4	95.0 / 91.6 %
FULL LOAD CURRENT		695 / 205 A
NO-LOAD CURRENT		171 / 85 A
LOCKED ROTOR CURRENT	$I_s$	5300 / 1700 A
	$I_k$	4100 / 1400 A
REACTIVE POWER AT NO LOAD		205 / 101 kVAr
NOMINAL TORQUE	$T_n$	4880 / 2002 Nm
STARTING TORQUE (as a motor)	$T_s/T_n$	1.0 / 1.4
BREAKDOWN TORQUE	$T_{max}/T_n$	3.2 / 3.7
TEMPERATURE RISE		
- rated power, stator winding		B-class / B-class
INSULATION CLASS		F / F
COOLING FLUID FLOW AND MAX. INLET TEMP.		30 l/min, 40 °C
WEIGHT		3400 kg
MOMENT OF INERTIA		16.2 kgm <sup>2</sup>
SOUND PRESSURE LEVEL		80 / 72 dB(A)
Tolerance +3 dB(A).		