

Producer: Siemens Standard Motors Ltd.								
Address : No. 110, West Street Qingshan Town Yizheng City Jiangsu Province 211417, P.R.China								
TYPE TEST CERTIFICATE OF INDUCTION MOTOR								
TEST No...Probe Nr. :								
TYPE... : 1LG0283-2AB		SERIAL-No: 49		spec.: 3				
90 kW	380 V	D	160 A	2970 /min	50 Hz			
S1	IP55	Isol. F	40 °C	IM B3	560 kg			
WINDING RESISTANCE - cold					$R_{f20} = 0.048668 \Omega$			
TERMINALS:		U-V	U-W	V-W	$R_{isol} > 0.5 G\Omega$			
$\vartheta = 11 \text{ °C}$	$R (\Omega) :$	0.03130	0.03130	0.03130				
$M_N = 289.4 \text{ Nm}$	LOAD TEST						1. MEASURING	
	1.	2.	3.	4.	5.	6.		
$P_{in} \text{ (W)}$	99650	95936					2. CORRECTED for Pn	
$P \text{ (W)}$	93484	90000	90000			90000		
$U \text{ (V)}$	380					380		
$I \text{ (A)}$	164.3	158.2	158.2			160		
$f \text{ (Hz)}$	50	50	50			50		
SPEED (1/min)	2970	2971	2971			2970	3. CORRECTED FOR T_{REF} according EN 60034-2	
Torque (Nm)	300.6							
$\eta \text{ (%)}$	93.81	93.81	93.8			93		
$\cos \varphi \text{ (-)}$	0.922	0.922				0.91		
$M_{ST} / M_N \diamond M_A / M_N \text{ (-)}$	2.5	2.5				2.0		
$I_{ST} / I_N \diamond I_A / I_N \text{ (-)}$	8.1	8.1				7.5	4. CORRECTED FOR T_{REF} according CEMEP	
$M_{MAX} / M_N \diamond M_K / M_N \text{ (-)}$	2.83	2.83				2.3		
SLIP ... (%)	1.00	0.96				1.00		
WINDING - $\Delta \vartheta \text{ (K)}$	74.2 (90 s)	70.1 (90 s)	EN 60034-2 $T_{ref} = 95 \text{ °C}$			80		
$\vartheta_a \text{ (°C)}$	14	14						
FRAME - $\Delta \vartheta \text{ (K)}$	57	53.9					5. MEASURING at 75% Pn	
TIME ... (min)	270							
BEARING_D - $\Delta \vartheta \text{ (K)}$	46	43.5						
RESISTANCE - warm (Ω)	0.04112 0.04112 0.04112	0.04060 0.04060 0.04060	$R_{isol} = 0.2 G\Omega$				6. GUARANTED	
NO-LOAD TEST				LOCKED ROTOR TEST				
VOLTAGE	CURRENT	POWER INPUT	POWER FACTOR	VOLTAGE	CURRENT	TORQUE	POWER INPUT	POWER FACTOR
$U_o \text{ (V)}$	$I_o \text{ (A)}$	$P_o \text{ (W)}$	$\cos \varphi_o \text{ (-)}$	$U_A \text{ (V)}$	$I_A \text{ (A)}$	$M_A \text{ (N.m.)}$	$P_A \text{ (W)}$	$\cos \varphi_A \text{ (-)}$
380	37.3669	3120	0.127	380	1302.1	713.4	354386	0.414
COIL TEST		HIGH-SPEED TEST		HIGH POTENCIAL TEST				
130% U_N - 3 min.		120% n_{MAX} - 2 min.		2500 V - 1 min.				
TESTS CONFORM to the ... EN 60034								
NOTE							order:	
A&D SD MF QM		DATE... 3/4/2009		PAGE... 1 / 6		SIGNATURE LAZ		