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|---|-------------------------------|-------------------------------|--|---------------------|-------------------------------|------------------|--|------------------------|
| 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... : 1LG0186-4AA | | SERIAL-No: 29701 | | spec.: 3 | | | | |
| 22 kW | 380 V | D | 42.5 A | 1470 /min | 50 Hz | | | |
| S1 | IP55 | Isol. F | 40 °C | IM B3 | 190 kg | | | |
| WINDING RESISTANCE - cold | | | | | $R_{f20} = 0.357554 \ \Omega$ | | | |
| TERMINALS: | | U-V | U-W | V-W | $R_{isol} > 0.5 \ G\Omega$ | | | |
| $\vartheta = 18 \ ^\circ\text{C}$ | $R (\ \Omega) :$ | 0.23630 | 0.23670 | 0.23650 | | | | |
| $M_N = 142.9 \ \text{Nm}$ | LOAD TEST | | | | | | 1. MEASURING | |
| | 1. | 2. | 3. | 4. | 5. | 6. | | |
| $P_{in} \ (W)$ | 25860 | 24223 | | | | | 2. CORRECTED for Pn | |
| $P \ (W)$ | 23422 | 22000 | 22000 | | | 22000 | | |
| $U \ (V)$ | 380 | | | | | 380 | | |
| $I \ (A)$ | 45.1 | 42.4 | 42.4 | | | 42.5 | | |
| $f \ (Hz)$ | 50 | 50 | 50 | | | 50 | | |
| SPEED $(1/min)$ | 1462 | 1464 | 1464 | | | 1470 | 3. CORRECTED FOR T_{REF} according EN 60034-2 | |
| Torque (Nm) | 153.0 | | | | | | | |
| $\eta \ (\%)$ | 90.57 | 90.82 | 90.8 | | | 89.9 | | |
| $\cos \varphi \ (-)$ | 0.872 | 0.869 | | | | 0.86 | | |
| $M_{ST} / M_N \ \blacklozenge \ M_A / M_N \ (-)$ | 2.0 | 2.0 | | | | 2.2 | | |
| $I_{ST} / I_N \ \blacklozenge \ I_A / I_N \ (-)$ | 7.2 | 7.2 | | | | 7.5 | 4. CORRECTED FOR T_{REF} according CEMEP | |
| $M_{MAX} / M_N \ \blacklozenge \ M_K / M_N \ (-)$ | 2.53 | 2.53 | | | | 2.3 | | |
| SLIP ... $(\%)$ | 2.53 | 2.38 | | | | 2.00 | | |
| WINDING - $\Delta \vartheta \ (K)$ | 85.7 (30 s) | 78.0 (30 s) | EN 60034-2 $T_{ref} = 95^\circ\text{C}$ | | | 80 | | |
| $\vartheta_a \ (^\circ\text{C})$ | 18 | 18 | | | | | | |
| FRAME - $\Delta \vartheta \ (K)$ | 41 | 37.3 | | | | | 5. MEASURING at 75% Pn | |
| TIME ... (min) | 270 | | | | | | | |
| BEARING_D - $\Delta \vartheta \ (K)$ | 53 | 48.3 | | | | | | |
| RESISTANCE - warm $(\ \Omega)$ | 0.31660 0.31660 0.31660 | 0.30945 0.30945 0.30945 | $R_{isol} = 0.2 \ G\Omega$ | | | | 6. GUARANTED | |
| NO-LOAD TEST | | | | LOCKED ROTOR TEST | | | | |
| VOLTAGE | CURRENT | POWER INPUT | POWER FACTOR | VOLTAGE | CURRENT | TORQUE | POWER INPUT | POWER FACTOR |
| $U_o \ (V)$ | $I_o \ (A)$ | $P_o \ (W)$ | $\cos \varphi_o \ (-)$ | $U_A \ (V)$ | $I_A \ (A)$ | $M_A \ (N.m.)$ | $P_A \ (W)$ | $\cos \varphi_A \ (-)$ |
| 380 | 15.4741 | 836 | 0.082 | 380 | 305.8 | 284.6 | 94228 | 0.468 |
| 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... 7/11/2008 | | PAGE... 1 / 6 | | SIGNATURE LAZ | | |