Physikalisch-Technische Bundesanstalt

Braunschweig und Berlin

DATA SHEET 01 TO EC-TYPE-EXAMINATION CERTIFICATE PTB 03 ATEX 3087

Manufacturer: SÜD-ELECTRIC AG, 85614 Kirchseeon, Germany

for three phase asynchron motor type MD.-R3140-N6N-X

Ratings

This certificate is valid for the following designs providing the motors of this type differ only negligibly from the sample tested as regards the electrical and thermal stresses:

Power:			2.2			kW
Voltage:	110	230	400	500	690	V
Current:	19.6	9.4	5.4	4.3	3.15	A
Power factor:			0.72			
Frequency:			50			Hz
Speed: (motor)			945			min^{-1}
Duty Type:			S1			
I_A/I_N ratio:			4.9			
Thermal class:			F			

In addition to the above-mentioned voltages, intermediate values are also permissible. The associated currents are to be converted in the inverse ratio to the voltages. The mains voltage may vary by up to ± 5% and the mains frequency by up to ± 2% from the rated values, in keeping with range A according to IEC 60034-1.

Temperature monitoring

For the selection of a current dependent time-lag protective device, the times t_E were determined as follows:

Temperature class:	T1	T2	T3	T4	
Time t_E:	30	30	29	9	s

If embedded temperature sensors (PTC thermistors DIN 44082-M100) are used together with a control unit tested for its function in accordance with directive 94/9/EC, the requirements of EN 50019, subclause 4.7.4 are also met for motors in the locked-rotor condition up to **temperature class T4**. At rated voltage and starting from the cold state (20°C), the tripping time will be t_A = 30 s.

Test report PTB Ex 03-33320

Zertifizierungsstelle Explosionsschutz
By order

Braunschweig, December 1, 2003

Dr.-Ing. F. Lienesch
Oberregierungsrat

PHYSIKALISCH-TECHNISCHE BUNDESANSTALT

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