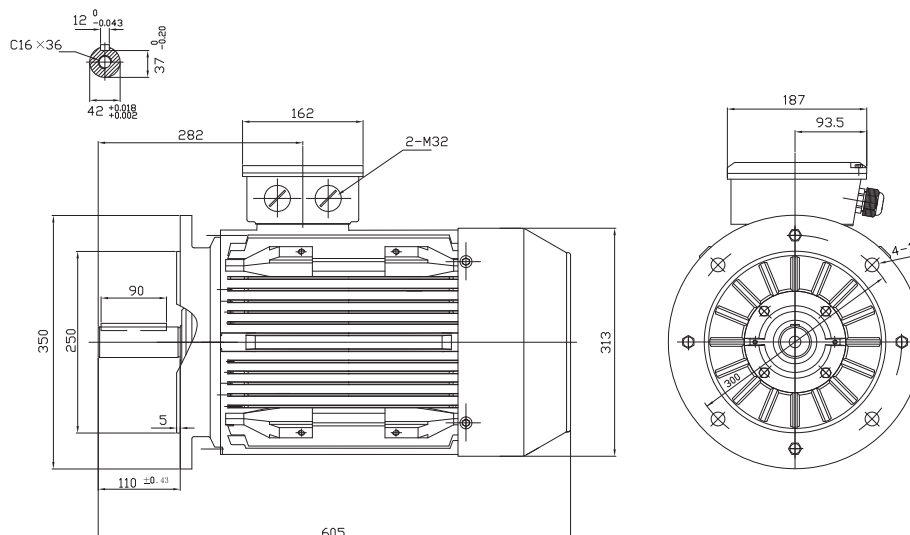


Type T3C 160M1-2

Cod. R1600211,0B5B5G0000T

Mounting position

IM	B5
IM	3001



Electrical data			
Rated motor power	11		Kw
Rated motor speed	2920		min <sup>-1</sup> 50Hz
	3505		min <sup>-1</sup> 60Hz
Rated motor frequency	50		Hz
Rated motor voltage(+/-10%)	400		VΔ/50Hz
	690		VY/50Hz
	480		VΔ/60Hz
	830		VY/60Hz
Rated motor torque	35.97		Nm (Mn)
Rated motor current	19.34	VΔ/50Hz	A (In)
	11.18	VY/50Hz	A (In)
Starting motor current	7.9		xIn
Starting motor torque	2.2		xMn
Breakdown motor torque	3		xMn
Starting			D.O.L.
Efficiency class	IE3		
Efficiency	50Hz	60Hz	
	91.2	91	100% load
	93.8	91.7	75% load
	93	90.3	50% load
Power factor cosφ	0.9	0.9	100% load

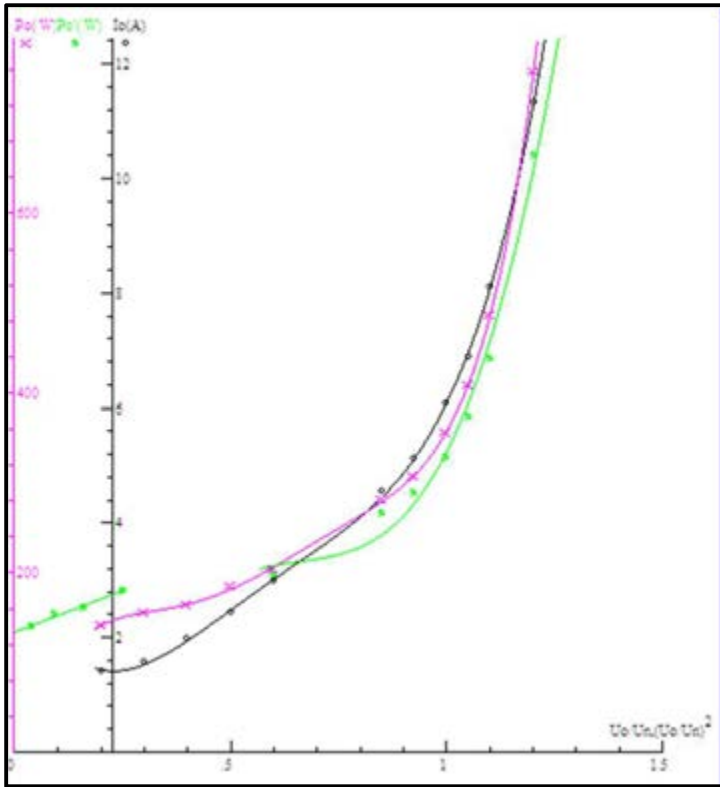
General data			
Frame size	160		
Mounting	B5		
Weight	137.76		Kg
Casing material	Cast iron		
Protection	IP	55	
Insulation class/Temperature rise	F	/	B
Tropicalization	Yes		
Vibration class	N		
Duty	S1		
Direction of rotation	Bidirectional		
Method of cooling	IC	411	
Cable entry	2-M32x1,5+1M16x1,5		
Standards	IEC/DIN/ISO/VDE/EN		
Execute at Standard	IEC 60034-1		
Feet removable	Yes		
Paintwork	RAL	7024	dark grey
Thermal protections	PTC 150°C		Standard

Site conditions	
Ambient temperature	from -20°C to +40°C
Altitude above sea level	1000 m

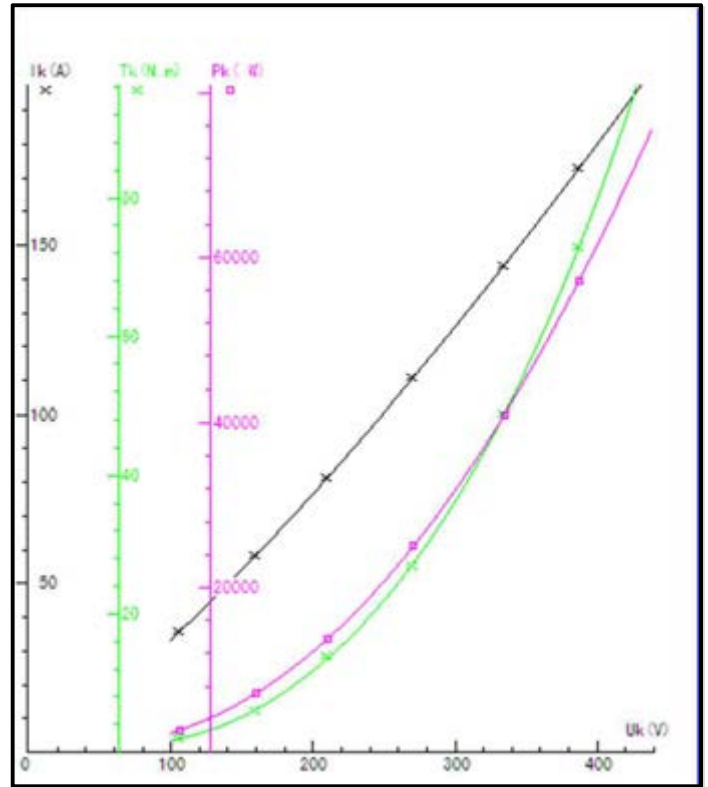
Mechanical data					
Noise level	LpA	75	dB(A)	Bearing DE side	6309-C3
	LwA	84	dB(A)	Bearing NDE side	6309-C3
Moment of inertia	0.04756		Kgm <sup>2</sup>	Average bearing lifetime	40000 h
Bearings type			NSK	Relubrication interval L1 DE bearing	12000 h
Lubricants for bearings	See installation and maintenance manual page 12			Relubrication interval L1 NDE bearing	12000 h
				Compensation ring	NDE SIDE

Type	T3C 160M1-2			Output	11 kW	Voltage	400/690 V	Current	A	Frequency	50 Hz	Kind of test
Duty	S1			Connection method	$\Delta / Y$	Poles	2 P	Speed	r/min	Basic temp.	95 °C	
Insulation resistance	(M $\Omega$ )	Phase vs.Phase	Phase vs.Ground	DC Resistance determination( $\Omega$ )		over loading test		160% of Rated torque.for 15S		Pass		
	Cold state			Line R	Value			150% of Rated current.for 120S		Pass		
	Hot state	300		R <sub>UV</sub>	0,4487	Inter-turns insulation test						
High-voltage	1760 V for		60 S	R <sub>UV</sub>	0,4489	130% of Rated voltage.for 180		Pass				
	Phase vs.Phase		Pass	R <sub>VW</sub>	0,4532	Over speed test						
	Phase vs.Ground		Pass	Ambient.	19,5 °C	120% of Rated max.frequency.for 120S		Pass				
Item		Result	Standard value	Tolerance (%)	Reference temp R ( $\Omega$ )	0,87576	Hot state temp. (°C)	19,6				
Efficiency	100% P <sub>n</sub>	(%)	91,26		Three-phase R deviation (%)	0,65	Middle part of enclosure temp.(°C)	69,6				
	75% P <sub>n</sub>	(%)	91,751		No-load current (A)	6,08	Temp. of frame (°C)	32				
	50% P <sub>n</sub>	(%)	91,227		No-load current deviation (%)	13,33	Temp. of Airin-N (°C)	67,5				
Power factor		0,901			No-load input power (W)	356,72	Temp. of Airout-D (°C)	19,6				
Temperature rise of stator winding	0 S	(K)	47,5		Full-load input current (A)	19,3	Environment humidity (%)					
	30/90 S	(K)	47,5		Full-load input power (W)	12053	Degree of protection (IP)	IP55				
Slip (%)		1,3074			Core loss (W)	195,89	Insulation class	F				
Locked current (A)		179,9			Friction and wind age loss(W)	133,98						
Locked rotor current /Rated current		9,32			StatorI2Rloss (W)	304,55	Cold checking test					
Locked torque (Nm)		79,76			RotorI2Rloss (W)	151,04	50 Hz 400/690 V No-load test data					
Locked rotor torque/Rated torque		2,25			Stary-load loss (W)	267,89	No-load current (A)					
Maximum torque (Nm)		121,1			wastage summation (W)	1053,3	No-load power (W)		356,72			
Breakdown torque/Rated torque		3,41			Output (W)	11000	50 Hz V Locked test data					
Pull-up torque (Nm)		35,35			Rated torque (N.m)	35,494	Locked current (A)					
Pull-up torque/Rated torque		1			Full-load speed (r/min)	2960,8	Locked power: (W)					
Noise Lp (A) dB												
Vibrancy (mm)												
Bearing temperature rise (K)		45										
Vibration Test												
Displacement ( $\mu$ m)												
velocity (mm/s)												
Acceleration (m/s <sup>2</sup> )					Mechanical check		Complete assembly, Flexible rotating, Correct Direction.					

NO LOAD



LOCKED ROTOR



LOAD

