

Type T3C 160M2-2

Cod. R1600215,014B5G0000T

Mounting position

IM	B14
IM	3601

Electrical data			
Rated motor power	15		Kw
Rated motor speed	2918		min ⁻¹ 50Hz
	3505		min ⁻¹ 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	49.09		Nm (Mn)
Rated motor current	25.89	VΔ/50Hz	A (In)
	14.97	VY/50Hz	A (In)
Starting motor current	7.9		xIn
Starting motor torque	2.3		xMn
Breakdown motor torque	3		xMn
Starting			D.O.L.
Efficiency class	IE3		
Efficiency	50Hz	60Hz	
	91.9	91	100% load
	93.1	91.7	75% load
	92.9	90.3	50% load
Power factor cosφ	0.91	0.91	100% load

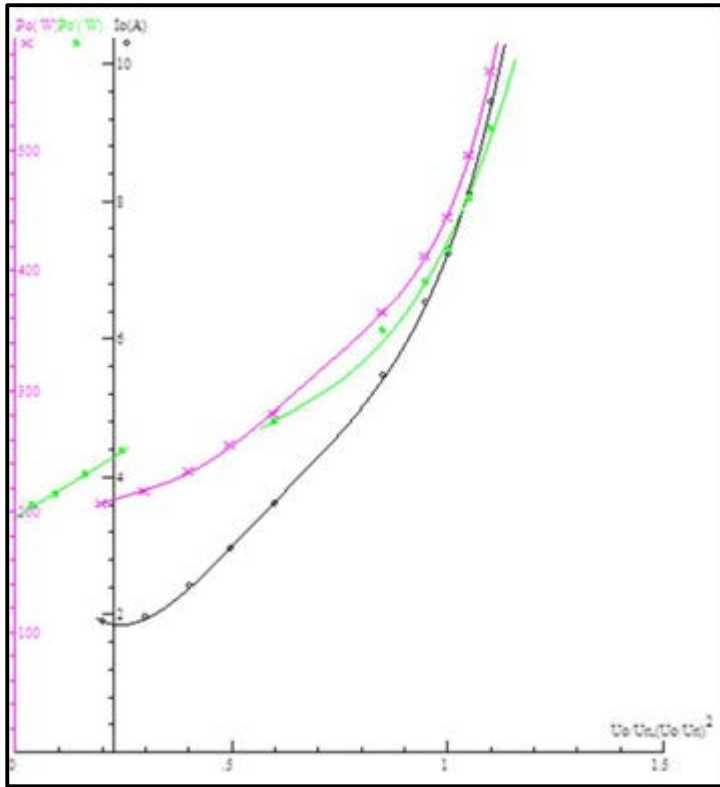
General data			
Frame size	160		
Mounting	B14		
Weight	159.04		Kg
Casing material	Cast iron		
Protection	IP	55	
Insulation class/Temperature rise	F	/	B
Tropicalization	Yes		
Vibration class	N		
Duty	S1		
Direction of rotation	Bidirectional		
Method of cooling	IC	411	
Cable entry	2-M32x1,5+1M16x1,5		
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

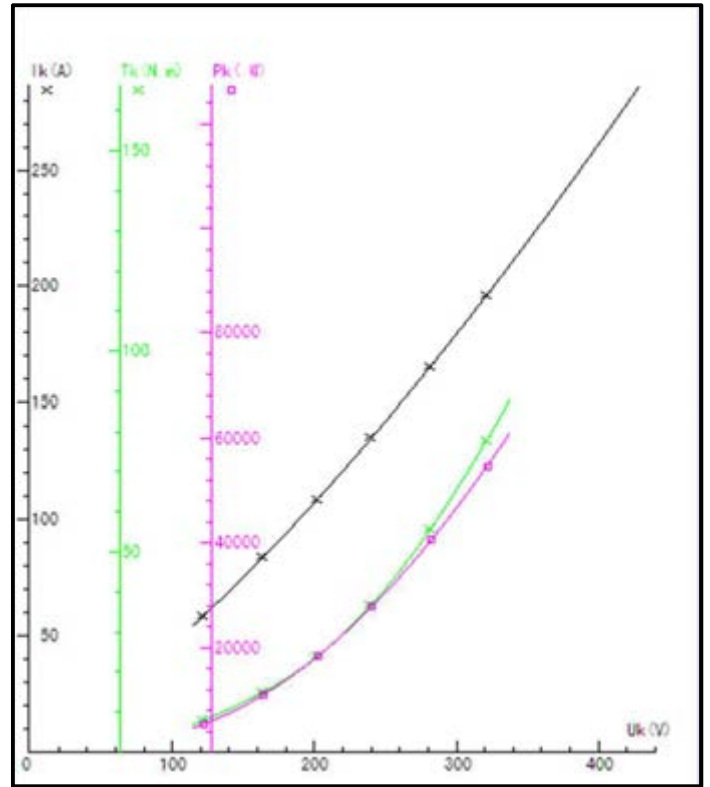
Mechanical data					
Noise level	LpA	75	dB(A)	Bearing DE side	6309-C3
	LwA	84	dB(A)	Bearing NDE side	6309-C3
Moment of inertia	0.0641		Kgm ²	Average bearing lifetime	40000 h
Bearings type			NSK	Relubrication interval L1 DE bearing	12000 h
Lubricants for bearings	See installation and maintenance manual page 12			Relubrication interval L1 NDE bearing	12000 h
				Compensation ring	NDE SIDE

Type	T3C 160M2-2			Output	15 kW	Voltage	400/690 V	Current	A	Frequency	50 Hz	Kind of test	
Duty	S1			Connection method	Δ/Y	Poles	2 P	Speed	r/min	Basic temp.	95 °C		
Insulation resistance	(M Ω)	Phase vs.Phase	Phase vs.Ground	DC Resistance determination(Ω)		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 _{UV}	0,3001	Inter-turns insulation test							
High-voltage	1760 V for		60 S	R _{UV}	0,3	130% of Rated voltage.for 180		Pass					
	Phase vs.Phase		Pass	R _{VW}	0,3002	Over speed test							
	Phase vs.Ground		Pass	Ambient.	23,5 °C	120% of Rated max.frequency.for 120S		Pass					
Item		Result	Standard value	Tolerance (%)	Reference temp R (Ω)	0,57466	Hot state temp. (°C)	22,8					
Efficiency	100% P _n	(%)	92,93		Three-phase R deviation (%)	0,03	Middle part of enclosure temp.(°C)	62,1					
	75% P _n	(%)	93,129		No-load current (A)	7,235	Temp. of frame (°C)	38					
	50% P _n	(%)	92,404		No-load current deviation (%)	3,22	Temp. of Airin-N (°C)	79,1					
Power factor		0,916			No-load input power (W)	445,5	Temp. of Airout-D (°C)	22,8					
Temperature rise of stator winding	0 S	(K)	54,1		Full-load input current (A)	25,43	Environment humidity (%)						
	30/90 S	(K)	54,1		Full-load input power (W)	16141	Degree of protection (IP)	IP55					
Slip	(%)	1,2862			Core loss (W)	221,82	Insulation class	F					
Locked current	(A)	261			Friction and wind age loss(W)	195,46							
Locked rotor current /Rated current		10,26			StatorI2Rloss (W)	354,46	Cold checking test						
Locked torque	(Nm)	137,8			RotorI2Rloss (W)	200,19	50 Hz 400/690 V No-load test data						
Locked rotor torque/Rated torque		2,83			Stary-load loss (W)	168,9	No-load current (A)						
Maximum torque	(Nm)	179,8			wastage summation (W)	1140,8	No-load power (W) 445,5						
Breakdown torque/Rated torque		3,69			Output (W)	15000	50 Hz V Locked test data						
Pull-up torque	(Nm)	68,9			Rated torque (N.m)	48,715	Locked current (A)						
Pull-up torque/Rated torque		1,41			Full-load speed (r/min)	2961,4	Locked power: (W)						
Noise Lp (A)	dB												
Vibrancy	(mm)												
Bearing temperature rise	(K)	50											
Vibration Test													
Displacement	(μ m)												
velocity	(mm/s)												
Acceleration	(m/s ²)				Mechanical check	Complete assembly, Flexible rotating, Correct Direction.							

NO LOAD



LOCKED ROTOR



LOAD

