

Type T3C 160L-4

Cod. R1600415,014B5G0000T

Mounting position

IM	B14
IM	3601

Electrical data			
Rated motor power	15		Kw
Rated motor speed	1445		min ⁻¹ 50Hz
	1735		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	99.13		Nm (Mn)
Rated motor current	25.55	VΔ/50Hz	A (In)
	14.77	VY/50Hz	A (In)
Starting motor current	7.8		xIn
Starting motor torque	2.4		xMn
Breakdown motor torque	2.9		xMn
Starting			D.O.L.
Efficiency class	IE3		
Efficiency	50Hz	60Hz	
	92.1	93	100% load
	92.9	93.7	75% load
	92.2	92.3	50% load
Power factor cosφ	0.92	0.92	100% load

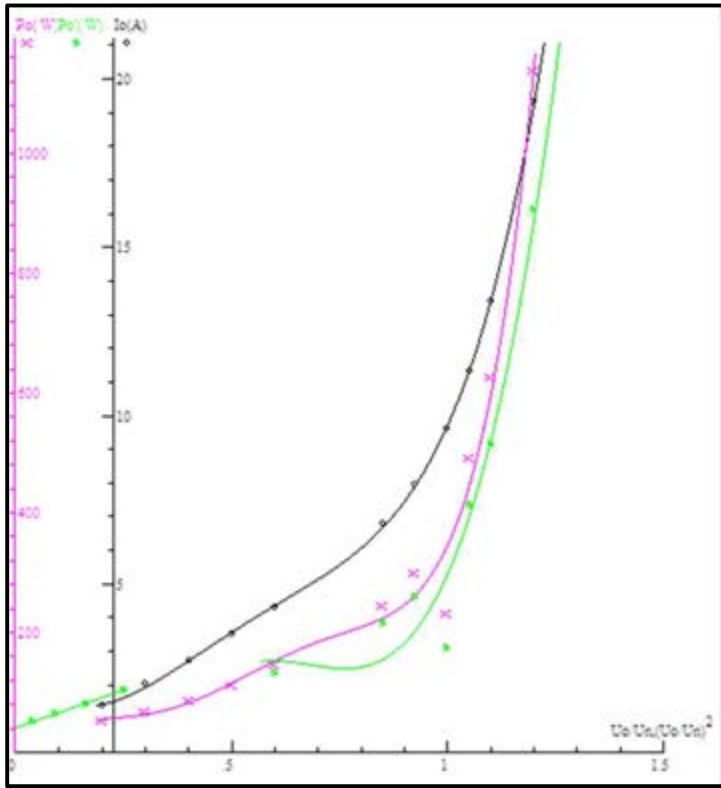
General data			
Frame size	160		
Mounting	B14		
Weight	161.28		Kg
Casing material	Cast iron		
Protection	IP	55	
Insulation class/Temperature rise	F	/	B
Tropicalization	Yes		
Vibration class	N		
Duty	S1		
Direction of rotation	Bidirectional		
Method of cooling	IC	411	
Cable entry	2-M32x1,5+1M16x1,5		
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

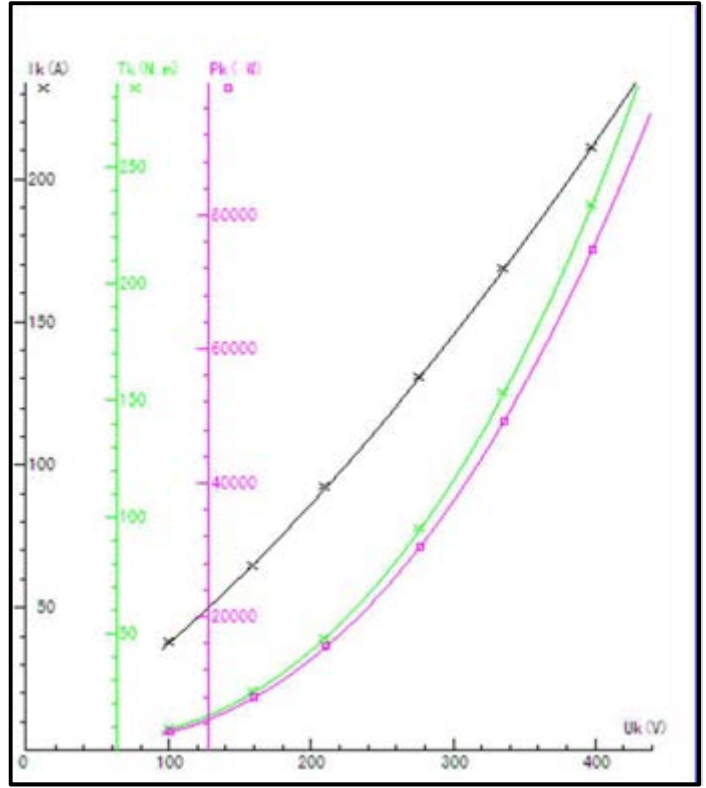
Mechanical data					
Noise level	LpA	67	dB(A)	Bearing DE side	6309-C3
	LwA	76	dB(A)	Bearing NDE side	6309-C3
Moment of inertia	0.11389		Kgm ²	Average bearing lifetime	40000 h
Bearings type			NSK	Relubrication interval L1 DE bearing	21500 h
Lubricants for bearings	See installation and maintenance manual page 12			Relubrication interval L1 NDE bearing	21500 h
				Compensation ring	NDE SIDE standard

Type	T3C 160L-4			Output	15 kW	Voltage	400/690 V	Current	A	Frequency	50 Hz	Kind of test	
Duty	S1			Connection method	Δ / Y	Poles	4 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}	0,3367		Inter-turns insulation test						
High-voltage	1760 V for		60 S	R _{UV}	0,3361	130% of Rated voltage.for 180		Pass					
	Phase vs.Phase		Pass	R _{VW}	0,3368	Over speed test							
	Phase vs.Ground		Pass	Ambient.	21 °C	120% of Rated max.frequency.for 120S		Pass					
Item		Result	Standard value	Tolerance (%)	Reference temp R (Ω)	0,65072	Hot state temp. (°C)	23,9					
Efficiency	100% P _n	(%)	91,89		Three-phase R deviation (%)	0,13	Middle part of enclosure temp.(°C)	88,1					
	75% P _n	(%)	92,776		No-load current (A)	9,695	Temp. of frame (°C)	63					
	50% P _n	(%)	92,857		No-load current deviation (%)	3,97	Temp. of Airin-N (°C)	90,7					
Power factor		0,877			No-load input power (W)	345,12	Temp. of Airout-D (°C)	23,9					
Temperature rise of stator winding	0 S	(K)	66,1		Full-load input current (A)	26,86	Environment humidity (%)						
	30/90 S	(K)	66,1		Full-load input power (W)	16323	Degree of protection (IP)	IP55					
Slip (%)		2,1265			Core loss (W)	245,96	Insulation class	F					
Locked current (A)		212,9			Friction and wind age loss(W)	41,094							
Locked rotor current /Rated current		7,93			StatorI2Rloss (W)	465,75	Cold checking test						
Locked torque (Nm)		236,8			RotorI2Rloss (W)	331,97	50 Hz 400/690 V No-load test data						
Locked rotor torque/Rated torque		2,42			Stary-load loss (W)	238,22	No-load current (A)						
Maximum torque (Nm)		291,7			wastage summation (W)	1323	No-load power (W) 345,12						
Breakdown torque/Rated torque		2,98			Output (W)	15000	50 Hz V Locked test data						
Pull-up torque (Nm)		154,4			Rated torque (N.m)	97,873	Locked current (A)						
Pull-up torque/Rated torque		1,58			Full-load speed (r/min)	1468,1	Locked power: (W)						
Noise Lp (A) dB													
Vibrancy (mm)													
Bearing temperature rise (K)		72											
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

