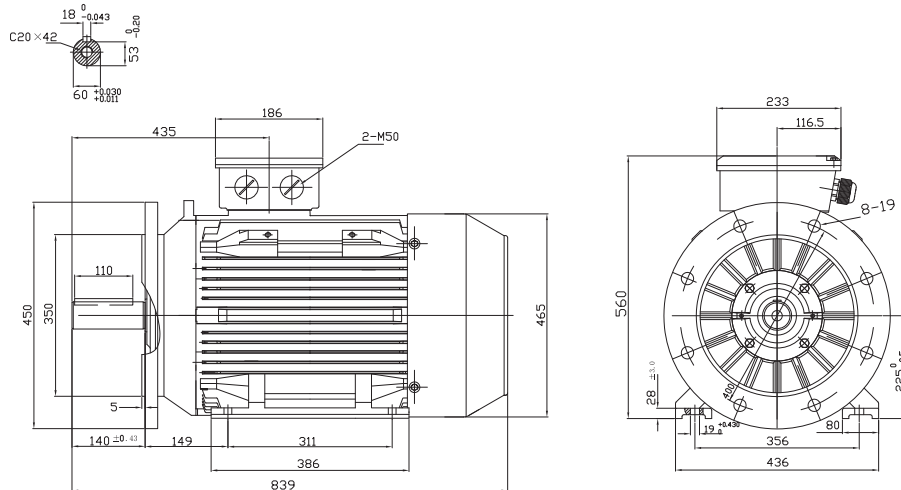


Type T2C 225M-4

Cod. I225M445,0AB5C0000T

Mounting position

IM	B35
IM	2001



Electrical data			
Rated motor power	45		Kw
Rated motor speed	1480		min ⁻¹ 50Hz
	1780		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	290.49		Nm (Mn)
Rated motor current	78.39	VΔ/50Hz	A (In)
	45.31	VY/50Hz	A (In)
Starting motor current	7.7		xIn
Starting motor torque	2.2		xMn
Breakdown motor torque	2.3		xMn
Starting			D.O.L.
Efficiency class	IE2		
Efficiency	50Hz	60Hz	
	93.1	94.5	100% load
	94.2	95.1	75% load
	92.8	93.2	50% load
Power factor cosφ	0.89	0.89	100% load

General data		
Frame size	225	
Mounting	B35	
Weight	354.4	Kg
Casing material	Cast iron	
Protection	IP	55
Insulation class	H	
Tropicalization	Yes	
Vibration class	A	
Duty	S1	
Direction of rotation	Bidirectional	
Method of cooling	IC	411
Cable entry	2-M50x1,5+1M16x1,5	
Standards	IEC/DIN/ISO/VDE/EN	
Execute at Standard	IEC 60034-1	
Feet removable	Yes	
Paintwork	7024	C2 standard
Thermal protections	n/a	

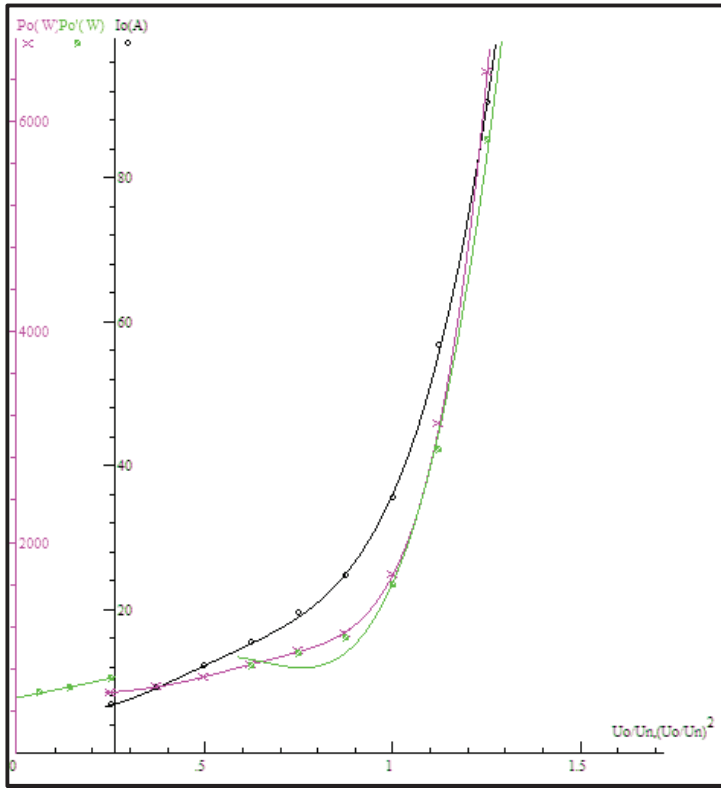
Site conditions	
Ambient temperature	from -20°C to +40°C
Altitude above sea level	1000 m

Mechanical data					
Noise level	LpA	70	dB(A)	Bearing DE side	6313-C3
	LwA	80	dB(A)	Bearing NDE side	6313-C3
Moment of inertia	0.59389		Kgm ²	Average bearing lifetime	40000 h
Bearings type			NSK	Relubrication interval L1 DE bearing	16500 h
Lubricants for bearings	See installation and maintenance manual			Relubrication interval L1 NDE bearing	16500 h
				Compensation ring	NDE SIDE

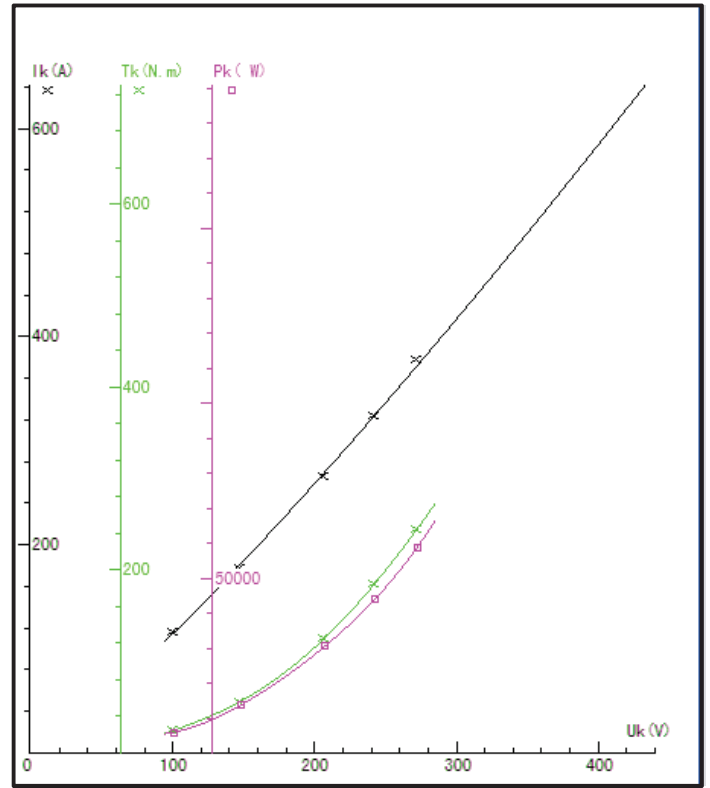
There may be differences between rating plate and calculated values.

Type	T2C 225M-4			Output	45 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	500		R _{UW}	0,0445		Inter-turns insulation test						
High-voltage	1760 V for 60 S			R _{UV}	0,0447	130% of Rated voltage.for 180			Pass				
	Phase vs.Phase		Pass	R _{VW}	0,0446	Over speed test							
	Phase vs.Ground		Pass	Ambient.	16 °C	120% of Rated max.frequency.for 120S			Pass				
Item		Result	Standard value	Tolerance (%)	Reference temp R (Ω)	0,087956	Hot state temp. (°C)	16,1					
Efficiency	100%P _n	(%)	93,14		Three-phase R deviation (%)	0,22	Middle part of enclosure temp.(°C)	71,2					
	75%P _n	(%)	92,909		No-load current (A)	35,99	Temp. of frame (°C)	29,5					
	50%P _n	(%)	91,545		No-load current deviation (%)	3,33	Temp. of Airin-N (°C)	29,5					
Power factor		0,829			No-load input power (W)	1685,9	Temp. of Airout-D (°C)	16,1					
Temperature rise of stator winding	0 S	(K)	55,9		Full-load input current (A)	84,07	Environment humidity (%)						
	12	(K)	50,7		Full-load input power (W)	48313	Degree of protection (IP)	IP55					
Slip (%)		1,3686			Core loss (W)	1057,7	Insulation class	F					
Locked current (A)		584,4			Friction and wind age loss(W)	525,39							
Locked rotor current /Rated current		6,95			StatorI2Rloss (W)	591,9	Cold checking test						
Locked torque (Nm)		604,7			RotorI2Rloss (W)	638,64	50 Hz 400/690 V No-load test data						
Locked rotor torque/Rated torque		2,07			Stary-load loss (W)	498,97	No-load current (A)						
Maximum torque (Nm)		973,6			wastage summation (W)	3312,6	No-load power (W) 1685,9						
Breakdown torque/Rated torque		3,33			Output (W)	45000	50 Hz V Locked test data						
Pull-up torque (Nm)		544,6			Rated torque (N.m)	291,95	Locked current (A)						
Pull-up torque/Rated torque		1,87			Full-load speed (r/min)	1479,5	Locked power: (W)						
Noise Lp (A) dB		70,8											
Vibrancy (mm)													
Bearing temperature rise (K)		40											
Vibration Test													
Displacement (μ m)													
velocity (mm/s)													
Acceleration (m/s ²)					Mechanical check		Complete assembly, Flexible rotating, Correct Direction.						

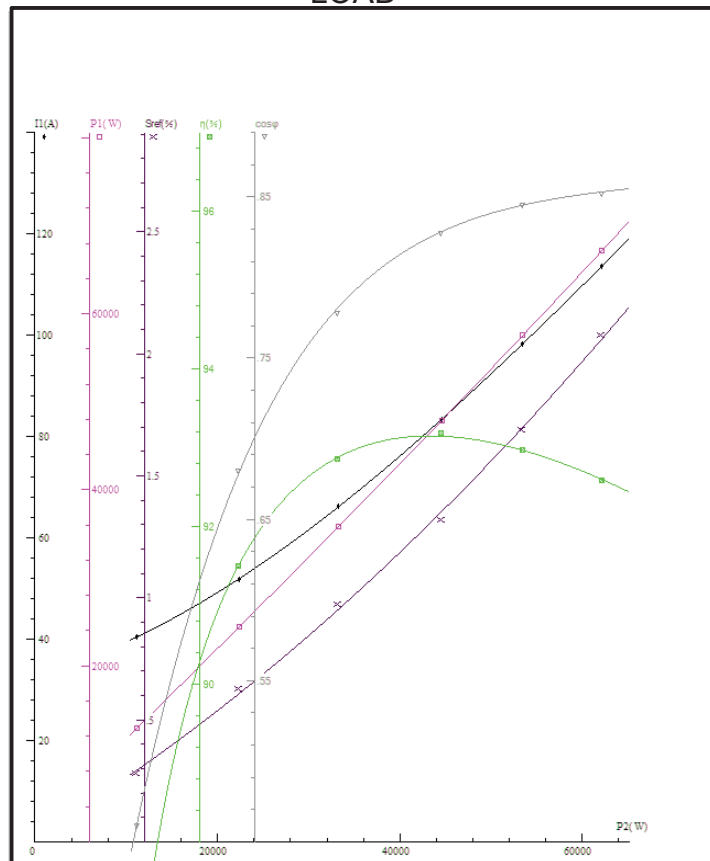
NO LOAD



LOCKED ROTOR



LOAD



Torque, Current - Speed Curve

