

# PRODUCT INFORMATION PACKET

**marathon®**  
Motors

Model No: KS20P022J10U33XSX

Catalog No: AL08D4730MFAFTOAOO

20.0 Kw, Crane Duty Slipring Motors , 3 phase, 6 Pole, 415 V, S3 Duty, KS225SB Frame, 100 CDF,  
6 Start/Hr., TEFC



Regal and Marathon are trademarks of Regal Rexnord Corporation or one of its affiliated companies.

©2023 Regal Rexnord Corporation, All Rights Reserved. MC017097E

**RegalRexnord**

## Nameplate Specifications

Output HP	27 Hp	Output KW	20.0 kW
Frequency	50 Hz	Voltage	415 V
Current	44.0 A	Speed	977 rpm
Phase	3	Duty	S3
Frame	KS225SB	Enclosure	Totally Enclosed Fan Cooled
Thermal Protection	No Protection	Ambient Temperature	45 °C
Drive End Bearing Size	6314	Opp Drive End Bearing Size	6314
UL	No	CSA	No
CE	No	IP Code	55
CDF	100 %	Start/Hr	6
RA	44 A	RV	280 V
Insulation class Stator/Rotor	F/F	Temp. Rise Stator/Rotor	75/75 K
Stator Connection	Delta	Rotor Connection	Star
Efficiency Class	Standard		

## Technical Specifications

Electrical Type	Slipring	Starting Method	Rotor resistance starter
Rotation	Bi-Directional	Mounting	IMB3
Motor Orientation	Horizontal	Drive End Bearing	Antifriction
Opp Drive End Bearing	Antifriction	Frame Material	Cast Iron/Fabricated
Shaft Type	Single Cylinder	Overall Length	1053.00 mm
Frame Length	1053.00 mm	Shaft Diameter	60.000 mm
Shaft Extension	140 mm	Assembly/Box Mounting	Top
Rotor GD2	3.4 kg-m²	Pull Out Torque	4
Outline Drawing	CM19820.00	Connection Drawing	DP2494



\$\$\$ ~ PROVIDED ON DEMAND



DIMENSIONAL DETAILS:-

FRAME	NO OF POLE	H		FIXING DIMENSION				HA	AC-DIA	HD	AA	AB	BA	BA1	BB
		NOM	TOL	A	B	C	K								
KS225S	4 -12	225	-0.5	356	286	149	19	27	500	635	108	457	108	108	345
KS225M	4 -12	225	-0.5	356	311	149	19	27	500	635	108	457	108	108	370
KS250S	4 -12	250	-0.5	406	311	168	24	30	500	660	108	483	115	115	382
KS250M	4 -12	250	-0.5	406	349	168	24	30	500	660	108	483	115	115	420

CYLINDRICAL SHAFT DIMENSIONS DETAILS (BOTH ENDS)												TAPER SHAFT DIMENSIONS DETAILS (BOTH)										
FRAME	L	LC	E	D		GA	F		GD		GE		L1	LC1	D1	D2	E1	E2	F1	H1	G1	Q
				NOM	TOL		NOM	TOL	NOM	TOL	NOM	TOL										
KS225S	1053	1194	140	60	+0.030 +0.011	64	18	-0.052	11	-0.011	7	+0.2	1053	1194	T 60	M42x3	140	105	16	10	31.4	5
KS225M	1077	1218	140	60	+0.030 +0.011	64	18	-0.052	11	-0.011	7	+0.2	1077	1218	T 60	M42x3	140	105	16	10	31.4	5
KS250S	1117	1256	140	65	+0.030 +0.011	69	18	-0.052	11	-0.011	7	+0.2	1117	1256	T 70	M48x3	140	105	18	11	36.4	5
KS250M	1155	1294	140	65	+0.030 +0.011	69	18	-0.052	11	-0.011	7	+0.2	1155	1294	T 70	M48x3	140	105	18	11	36.4	5

NOTE:  
1.0 ALL DIMENSIONS ARE IN mm EXCEPT OTHERWISE SPECIFIED.  
2.0 FOR TOLERANCES OF DIMENSIONS(NOT MENTIONED) REFER TO IS:2102.  
3.0 DIMENSIONS MARKED \* ARE MAXIMUM VALUES.



Marathon Electric Motors (India) Limited  
Paharpur Works, 58 Taratala Road.  
Kolkata - 700024 , INDIA

TITLE

OUTLINE DIMENSION DRAWING FOR KS225S & M  
KS250S & M MOTOR (CYLINDRICAL & TAPER SHAFT)

DRAWN	S.B	27.10.17	PROJECTION	DRAWING NO.	REV.
CHECKED	KAUSIK			CM19820	00
APPRVD.	P.LAHIRI		SCALE IF ANY		
	SIGN	DATE	N.T.S		

REVISION	DATE	DETAIL OF REVISION	DONE BY	APPRVD

**Model No.** KS20P022J10U33XSX**Part No.** AL08D4730MFAFTOAOO

P	P	n	POT	T	U	f	I	RA	RV	CDF	Duty	No. of Starts/Hr.	Frame
[kW]	[hp]	[RPM]	XFLT	[Nm]	(V)	[Hz]	[A]			%			
20	27	977	4	781	415	50	44	44	280	100	S3	6	KS225SB

Motor type	Slipring	Degree of protection	IP-55
Enclosure	TEFC	Motor weight - approx.	515 kg
Frame Material	-	Gross weight- approx.	kg
Mounting type	IMB3	Motor GD2	3.4 kgm <sup>2</sup>
Cooling method	IC411	Vibration level	As per IS:12075 mm/s
Voltage variation	+/-10%	Noise level ( 1meter distance from motor)	As per IS:12065 dB(A)
Frequency variation	+/-5%	Starting method	Rotor resistance starter
Combined variation	10%	Coupling	Direct / Gearbox
Insulation class	F/F	Direction of rotation	Bi-directional
Ambient temperature	45	Paint shade	RAL5011
Temperature rise (by resistance)	75/75	Type of Terminal Box	Standard
Altitude above sea level	Upto 1000	Terminal box position	Top
Efficiency		Max. Cable size	Refer to TBA drg.
Power Factor		Bearing type	Antifriction
Stator Connection	Delta	DE Bearing	6314
Rotor Connection	Star	NDE Bearing	6314
		Type of Lubrication	Grease

**NOTE**

All performance values at rated voltage and frequency.

All performance parameters are subjected to standard tolerance as per IEC 60034-1

Technical data are subject to change. There may be discrepancies between calculated and name plate values.