

PRODUCT INFORMATION PACKET

marathon®
Motors

Model No: KS87P031A25U53XSX

Catalog No: KS87P031A25U53XSX

87.0 Kw, Crane Duty Slipring Motors , 3 phase, 10 Pole, 415 V, S3 Duty, KS315M1 Frame, 25 CDF,
6 Start/Hr., TEFC



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Nameplate Specifications

Output HP	116.70 Hp	Output KW	87.0 kW
Frequency	50 Hz	Voltage	415 V
Current	180.0 A	Speed	585 rpm
Phase	3	Duty	S3
Frame	KS315M1	Enclosure	Totally Enclosed Fan Cooled
Thermal Protection	No Protection	Ambient Temperature	45 °C
Drive End Bearing Size	6319	Opp Drive End Bearing Size	6319
UL	No	CSA	No
CE	No	IP Code	55
CDF	25 %	Start/Hr	6
RA	142 A	RV	370 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	1425.00 mm
Frame Length	1425.00 mm	Shaft Diameter	80.000 mm
Shaft Extension	170 mm	Assembly/Box Mounting	Top
Rotor GD2	27.7 kg·m ²	Pull Out Torque	2.7
Connection Drawing	DP3068	Outline Drawing	cm5906

AUX. TER. BOX FOR SPACE HEATER \$\$\$ WITH D/C CABLE GLAND, SIZE: 1x2CX2.5mm³

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\$\$\$ - 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								
KS280S	4 -12	280	-1	457	368	190	24	32	560	830	112	560	120	120	490
KS280M	4 -12	280	-1	457	419	190	24	32	560	830	112	560	120	120	490
KS315S	4 -12	315	-1	508	406	216	28	36	620	885	120	620	143	143	520
KS315M	4 -12	315	-1	508	457	216	28	36	620	885	120	620	143	143	520

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										
KS280S	1300	1428	140	75	+0.030 +0.011	79.5	20	-0.052	12	-110	7.5	+0.2	1330	1488	T 80	M56x4	170	130	20	12	41.3	5
KS280M	1300	1428	140	75	+0.030 +0.011	79.5	20	-0.052	12	-110	7.5	+0.2	1330	1488	T 80	M56x4	170	130	20	12	41.3	5
KS315S	1425	1602	170	80	+0.030 +0.011	85	22	-0.052	14	-110	9	+0.2	1425	1602	T 90	M64x4	170	130	22	14	46.7	5
KS315M	1425	1602	170	80	+0.030 +0.011	85	22	-0.052	14	-110	9	+0.2	1425	1602	T 90	M64x4	170	130	22	14	46.7	5

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

marathon electric
 A Regal Beloit Company
 Marathon Electric Motors (India) Limited
 Paharpur Works, 58 Taratala Road.
 Kolkata - 700024, INDIA

TITLE
 OUTLINE DIMENSION DRAWING FOR KS280S & M
 KS315S & M MOTOR (CYLINDRICAL & TAPER SHAFT)

02	28.11.11	IN THE FIGURE 'L1' AND 'LC1' DIM. INCORPORATED		
01	06.06.11	EARTHING TERMINAL INCORPORATED		
REVISION	DATE	DETAIL OF REVISION	DONE BY	APPRVD

DRAWN	S.B	18.12.07	PROJECTION	DRAWING NO.	REV.
CHECKED	KAUSIK				
APPRVD.	R.RANJAN		SCALE IF ANY	CM5906	02
4 of 5			SIGN	DATE	N.T.S

Model No. KS87P031A25U53XSX**Part No.**

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]			%			
87	117	585	2.7	3544	415	50	180	142	370	25	S3	6	KS315M1

Motor type	Slipring	Degree of protection	IP-55
Enclosure	TEFC	Motor weight - approx.	1480 kg
Frame Material	-	Gross weight- approx.	kg
Mounting type	IMB3	Motor GD2	27.7 kgm ²
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	6319
Rotor Connection	Star	NDE Bearing	6319
		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.