# PRODUCT INFORMATION PACKET

Model No: KS17P822E10V45XSX
Catalog No: AL08D5240MFAFTOAOO
17.8 Kw, Crane Duty Slipring Motors , 3 phase, 8 Pole, 415 V, S5 Duty, KS225MB Frame, 100 CDF, 150 Start/Hr., TEFC

marathon® Motors

## Nameplate Specifications

| | | | |
|---|---|---|---|
| Phase | 3 | Output HP | 23.90 Hp |
| Output KW | 17.8 kW | Voltage | 415 V |
| Speed | 737 rpm | Frame | KS225MB |
| Enclosure | Totally Enclosed Fan Cooled | Thermal Protection | No Protection |
| Ambient Temperature | 45 °C | Frequency | 50 Hz |
| Current | 49.0 A | Duty | S5 |
| Drive End Bearing Size | 6314 | Opp Drive End Bearing Size | 6314 |
| UL | No | CSA | No |
| CE | No | IP Code | 55 |
| CDF | 100 % | Start/Hr | 150 |
| RA | 40.6 A | RV | 265 V |
| Insulation class Stator/Rotor | F/F | Temp. Rise Stator/Rotor | 75/75 K |
| Stator Connection | Delta | Rotor Connection | Star |
| Efficiency Class | Standard | | |

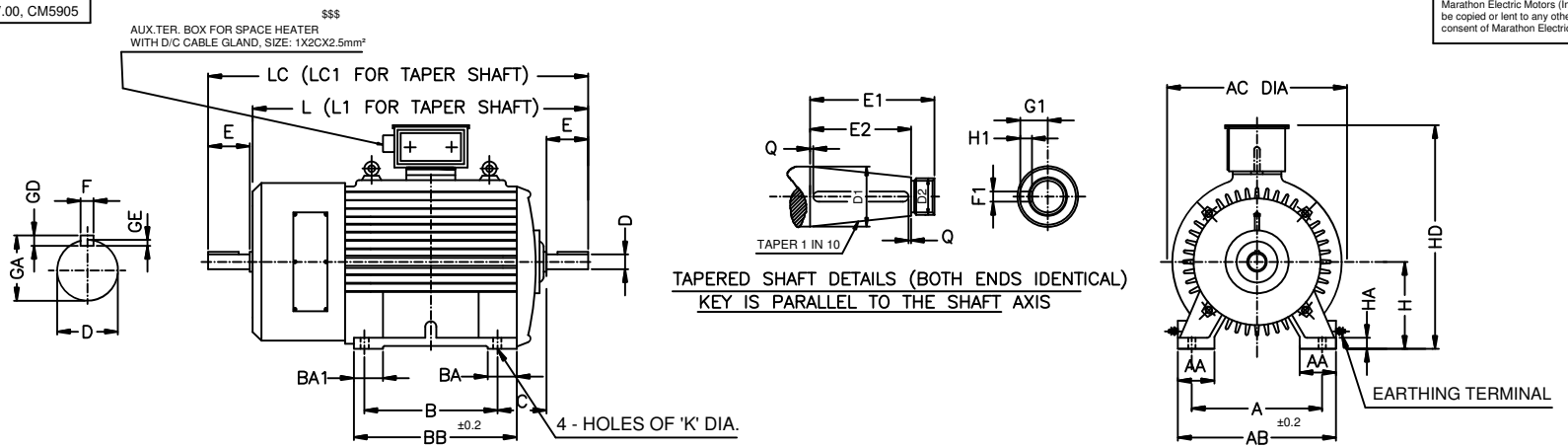
## Technical Specifications

| | | | |
|---|---|---|---|
| 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 | 1077.00 mm |
| Frame Length | 1077.00 mm | Shaft Diameter | 60.000 mm |
| Shaft Extension | 140 mm | Assembly/Box Mounting | Top |
| Rotor GD2 | 5.12 kg·m² | Pull Out Torque | 5.2 |
| Outline Drawing | CM19820.00 | Connection Drawing | DP2409 |

| DRAWING No. CM19820 REV. 00 | REF. AEI./ P.W DRG. NO. A3C 15019 / 60106 REV.00, CM5905 |
|---|---|



$$$ ~ 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 |

| REVISION | DATE | DETAIL OF REVISION | DONE BY | APPRVD |
|---|---|---|---|---|
| | | | | |
| | | | | |
| | | | | |

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

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

marathon® Motors

**Model No.** KS17P822E10V45XSX **Part No.** AL08D5240MFAFTOAOO

| 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] | | | % | | | |
| 17.8 | 23.9 | 737 | 5.2 | 1117 | 415 | 50 | 49 | 40.6 | 265 | 100 | S5 | 150 | KS225MB |

| | | | | |
|---|---|---|---|---|
| Motor type | Slipring | Degree of protection | IP-55 | |
| Enclosure | TEFC | Motor weight - approx. | 580 | kg |
| Frame Material | - | Gross wight- approx. | | kg |
| Mounting type | IMB3 | Motor GD2 | 5.12 | $kgm^2$ |
| 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 | 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.

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