

# PRODUCT INFORMATION PACKET

marathon®  
Motors

Model No: KS76P028B25V35XSX

Catalog No: AL08D7030MFAFTOAOO

76.0 Kw, Crane Duty Slipring Motors , 3 phase, 6 Pole, 415 V, S5 Duty, KS280M2 Frame, 25 CDF,  
150 Start/Hr., TEFC



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RegalRexnord

### Nameplate Specifications

|                               |               |                            |                             |
|-------------------------------|---------------|----------------------------|-----------------------------|
| Output HP                     | 102 Hp        | Output KW                  | 76.0 kW                     |
| Frequency                     | 50 Hz         | Voltage                    | 415 V                       |
| Current                       | 148.0 A       | Speed                      | 980 rpm                     |
| Phase                         | 3             | Duty                       | S5                          |
| Frame                         | KS280M2       | Enclosure                  | Totally Enclosed Fan Cooled |
| Thermal Protection            | No Protection | Ambient Temperature        | 45 °C                       |
| Drive End Bearing Size        | 6317 C3       | Opp Drive End Bearing Size | 6317 C3                     |
| UL                            | No            | CSA                        | No                          |
| CE                            | No            | IP Code                    | 55                          |
| CDF                           | 25 %          | Start/Hr                   | 150                         |
| RA                            | 112 A         | RV                         | 410 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

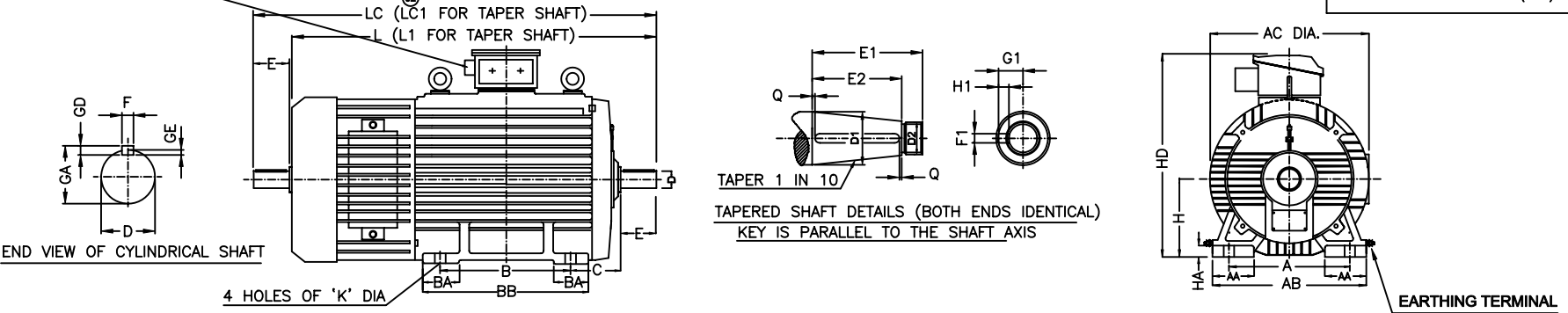
|                       |                        |                       |                          |
|-----------------------|------------------------|-----------------------|--------------------------|
| Electrical Type       | Slipping               | Starting Method       | Rotor resistance starter |
| 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        | 1300.00 mm               |
| Frame Length          | 1300.00 mm             | Shaft Diameter        | 75.000 mm                |
| Shaft Extension       | 140 mm                 | Assembly/Box Mounting | Top                      |
| Rotor GD2             | 10.9 kg·m <sup>2</sup> | Pull Out Torque       | 2.9                      |
| Connection Drawing    | DP2768                 | Outline Drawing       | cm5906                   |



AUX. TER. BOX FOR SPACE HEATER \$\$\$ WITH D/C CABLE GLAND, SIZE: 1X2CX2.5mm<sup>3</sup>

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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<br>+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<br>+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<br>+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<br>+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**  
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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    | <b>CM5906</b> | <b>02</b> |
| 4 of 5  |          |          | SIGN DATE N.T.S |               |           |

**Model No.** KS76P028B25V35XSX**Part No.** AL08D7030MFAFTOAOO

| 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] |     |     | %   |      |                   |         |
| 76   | 102  | 980   | 2.9  | 210  | 415 | 50   | 148 | 112 | 410 | 25  | S5   | 150               | KS280M2 |

|                                  |           |   |                          |
|----------------------------------|-----------|---|--------------------------|
| Motor type                       | Slipring  | Degree of protection                      | IP-55                    |
| Enclosure                        | TEFC      | Motor weight - approx.                    | 1040 kg                  |
| Frame Material                   | -         | Gross weight- approx.                     | kg                       |
| Mounting type                    | IMB3      | Motor GD2                                 | 10.9 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                                | 6317 C3                  |
| Rotor Connection                 | Star      | NDE Bearing                               | 6317 C3                  |
|                                  |           | 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.