

# PRODUCT INFORMATION PACKET



Model No: M520M2

Catalog No: M520M2

General Purpose Motor, 20/5.0 HP, 3 Ph, 60 Hz, 200-230 V, 1800 RPM, S284T Frame, DP



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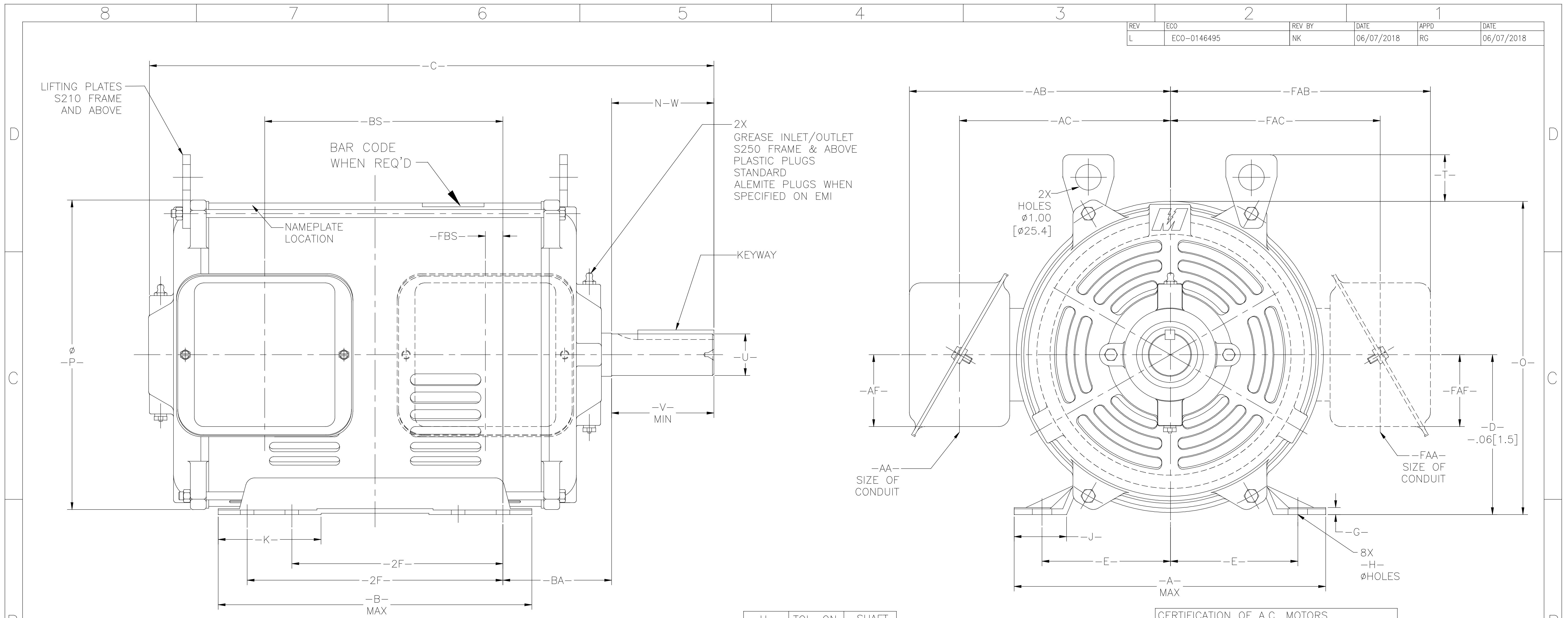
**Nameplate Specifications**

Output HP	<b>20/5.0 Hp</b>	Output KW	<b>14.9 kW</b>
Frequency	<b>60 Hz</b>	Voltage	<b>200-230 V</b>
Current	<b>56.0-51.0/21.5-2 A</b>	Speed	<b>1755/875 rpm</b>
Service Factor	<b>1.15</b>	Phase	<b>3</b>
Duty	<b>Continuous</b>	Insulation Class	<b>F</b>
Frame	<b>S284T</b>	Enclosure	<b>Drip Proof</b>
Thermal Protection	<b>No Protection</b>	Ambient Temperature	<b>40 °C</b>
UL	<b>Recognized</b>	CSA	<b>Y</b>
CE	<b>N</b>	Number of Speeds	<b>2-1-VT</b>

**Technical Specifications**

Electrical Type	<b>Three Phase</b>	Starting Method	<b>Across The Line</b>
Poles	<b>4/ 8</b>	Rotation	<b>Counterclockwise</b>
Mounting	<b>Rigid Base</b>	Drive End Bearing	<b>Ball</b>
Opp Drive End Bearing	<b>Ball</b>	Frame Material	<b>Rolled Steel</b>
Shaft Type	<b>Keyed</b>	Overall Length	<b>24.22 in</b>
Frame Length	<b>14.00 in</b>	Shaft Diameter	<b>1.875 in</b>
Shaft Extension	<b>5.09 in</b>		
Outline Drawing	<b>80009201-S01</b>	Connection Drawing	<b>80022805.PCX</b>

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REV	ECO	REV BY	DATE	APPD	DATE
L	ECO-0146495	NK	06/07/2018	RG	06/07/2018

FRAME	TERMINAL BOX F1 MTG										TERMINAL BOX F2 MTG						--BA--
	--AA--	--AB--	--AC--	--AF--	--BS--	--FAA--	--FAB--	--FAC--	--FAF--	--FBS--	--BA--	--BA--	--BA--				
S180	3/4	7.63 [193.8]	5.94 [150.8]	2.50 [63.5]	4.94 [125.4]	7.00 [177.8]	5.63 [143.0]	2.16 [54.8]	0.56 [14.2]	2.75 [69.8]							
S210	1	7.63 [193.8]	5.94 [150.8]	2.50 [63.5]	7.38 [187.4]	7.00 [177.8]	5.63 [143.0]	2.16 [54.8]	0.19 [4.8]	3.50 [88.9]							
S250	1-1/4	10.19 [258.8]	8.16 [207.3]	2.81 [71.4]	9.32 [236.7]	1-1/4	10.19 [258.8]	8.25 [209.6]	2.85 [72.4]	0.68 [72.3]	4.25 [107.9]						
G250	1-1/4	10.19 [258.8]	8.16 [207.3]	2.81 [71.4]	11.07 [281.2]	1-1/4	10.19 [258.8]	8.25 [209.6]	2.85 [72.4]	0.68 [72.3]	4.25 [107.9]						
S280	1-1/2	10.19 [258.8]	8.16 [207.3]	2.81 [71.4]	10.32 [262.1]	1-1/2	10.19 [258.8]	8.25 [209.6]	2.85 [72.4]	0.68 [72.3]	4.75 [120.6]						

-U- DIM.	TOL. ON -U- DIM.	SHAFT RUNOUT		
			UP TO	UP TO
1.500 [38.1]	+0.000 [+0.000] -0.005 [-0.012]	1.625 [41.2] .002 [0.05]		
1.500 [38.1]	+0.00 [-0.01] -0.03 [-0.03]	1.625 [41.2] .003 [0.08]		

CERTIFICATION OF A.C. MOTORS  
 CERTIFIED FOR \_\_\_\_\_  
 SPEC. NO. NO. ORDER NO. \_\_\_\_\_ NO.  
 ORDER I.D. I.D. NO. EMI H.P.  
 TYPE TYPE FRAME FRAME H.P. H.P.  
 R.P.M. RPM VOLTS VOLTS PHASE PHASE  
 HERTZ HERTZ AMPS AMPS CODE -  
 REMARKS \_\_\_\_\_  
 REMARKS2 \_\_\_\_\_  
 APPROVED BY \_\_\_\_\_ DATE: \_\_\_\_\_

FRAME	KEYWAY			-A-	-B-	-C-	-D-	-E-	-2F-	-G-	-H-	-J-	-K-	N-W	-O-	-P-	-T-	-U-	-V-
	WIDTH	DEPTH	LENGTH																
S182T	0.250 [6.35]	0.125 [3.17]	2.50 [63.5]	9.00 [228.6]	7.75 [196.6]	13.65 [346.7]	4.500 [114.3]	3.750 [95.2]	4.500 [114.3]	0.164 [4.16]	.406 [10.31]	1.48 [37.6]	2.93 [74.4]	2.75 [69.9]	8.78 [223.0]	8.53 [216.6]	-----	1.125 [28.57]	2.75 [69.8]
S184T	0.250 [6.35]	0.125 [3.17]	2.50 [63.5]	9.00 [228.6]	7.75 [196.6]	13.65 [346.7]	4.500 [114.3]	3.750 [95.2]	5.500 [139.7]	0.164 [4.16]	.406 [10.31]	1.48 [37.6]	2.93 [74.4]	2.75 [69.9]	8.78 [223.0]	8.53 [216.6]	-----	1.125 [28.57]	2.75 [69.8]
S213T	0.312 [7.92]	0.156 [3.96]	3.13 [79.5]	10.00 [254]	10.75 [273.0]	17.28 [438.9]	5.250 [133.35]	4.250 [107.95]	5.500 [139.7]	0.180 [4.57]	.406 [10.31]	1.58 [40.1]	3.43 [87.1]	3.38 [85.8]	9.53 [242.0]	8.57 [217.6]	1.77 [44.9]	1.375 [34.9]	3.25 [82.5]
S215T	0.312 [7.92]	0.156 [3.96]	3.13 [79.5]	10.00 [254]	10.75 [273.0]	17.28 [438.9]	5.250 [133.35]	4.250 [107.95]	7.000 [177.8]	0.180 [4.57]	.406 [10.31]	1.58 [40.1]	3.43 [87.1]	3.38 [85.8]	9.53 [242.0]	8.57 [217.6]	1.77 [44.9]	1.375 [34.9]	3.25 [82.5]
S254T	0.375 [9.52]	0.188 [4.77]	3.75 [95.3]	12.18 [309.4]	12.25 [311.6]	22.12 [561.8]	6.250 [158.75]	5.000 [127]	8.250 [209.55]	0.194 [4.92]	.531 [13.48]	2.06 [52.3]	4.06 [103.1]	4.00 [101.6]	12.25 [311.1]	12.00 [304.8]	1.82 [46.2]	1.625 [41.2]	3.88 [98.5]
G256T	0.375 [9.52]	0.188 [4.77]	3.75 [95.3]	12.18 [309.4]	12.25 [311.6]	23.85 [605.8]	6.250 [158.75]	5.000 [127]	8.250 [209.55]	0.194 [4.92]	.531 [13.48]	2.06 [52.3]	4.06 [103.1]	4.00 [101.6]	12.25 [311.1]	12.00 [304.8]	1.82 [46.2]	1.625 [41.2]	3.88 [98.5]
S256T	0.375 [9.52]	0.188 [4.77]	3.75 [95.3]	12.18 [309.4]	12.25 [311.6]	22.12 [561.8]	6.250 [158.75]	5.000 [127]	10.000 [254]	0.194 [4.92]	.531 [13.48]	2.06 [52.3]	4.06 [103.1]	4.00 [101.6]	12.25 [311.1]	12.00 [304.8]	1.82 [46.2]	1.625 [41.2]	3.88 [98.5]
S284T	0.500 [12.7]	0.250 [6.35]	4.38 [111.2]	12.75 [323.8]	13.25 [336.5]	24.25 [615.9]	7.000 [177.8]	5.500 [139.7]	9.500 [241.3]	0.194 [4.92]	.531 [13.48]	1.81 [45.9]	3.81 [96.8]	4.62 [117.3]	13.00 [330.2]	12.00 [304.8]	1.82 [46.2]	1.875 [47.6]	4.50 [114.3]
S284TS	0.375 [9.52]	0.188 [4.77]	3.00 [76.2]	12.75 [323.8]	13.25 [336.5]	22.88 [581.2]	7.000 [177.8]	5.500 [139.7]	9.500 [241.3]	0.194 [4.92]	.531 [13.48]	1.81 [45.9]	3.81 [96.8]	3.25 [82.5]	13.00 [330.2]	12.00 [304.8]	1.82 [46.2]	1.625 [41.2]	3.12 [79.2]
S286T	0.500 [12.7]	0.250 [6.35]	4.38 [111.2]	12.75 [323.8]	13.25 [336.5]	24.25 [615.9]	7.000 [177.8]	5.500 [139.7]	11.000 [279.4]	0.194 [4.92]	.531 [13.48]	1.81 [45.9]	3.81 [96.8]	4.62 [117.3]	13.00 [330.2]	12.00 [304.8]	1.82 [46.2]	1.875 [47.6]	4.50 [114.3]
S286TS	0.375 [9.52]	0.188 [4.77]	3.00 [76.2]	12.75 [323.8]	13.25 [336.5]	22.88 [581.2]	7.000 [177.8]	5.500 [139.7]	11.000 [279.4]	0.194 [4.92]	.531 [13.48]	1.81 [45.9]	3.81 [96.8]	3.25 [82.5]	13.00 [330.2]	12.00 [304.8]	1.82 [46.2]	1.625 [41.2]	3.12 [79.2]

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GEOMETRIC CHARACTERISTICS & SYMBOLS □ FLATNESS - STRAIGHTNESS ∠ ANGULARITY ⊥ PERPENDICULARITY (SQUARENESS) ∥ PARALLELISM ○ ROUNDNESS (CIRCULARITY) ⊙ CYLINDRICITY Ⓢ PROFILE OF ANY SURFACE Ⓡ PROFILE OF ANY LINE Ⓡ RUNOUT ⊕ TRUE POSITION ⊙ CONCENTRICITY = SYMMETRY ASME Y14.5M 1994	UNLESS OTHERWISE SPECIFIED DIM. TOLERANCES ARE AS FOLLOWS: INCH X XX XXX XXXX ±.1 ±.02 ±.005 ±.0005 mm ±0.5 ±0.13 ±0.013 ANG. ±50 DEG REMOVE BURRS & BREAK SHARP EDGES: INCH .003-.015 mm 0.1-0.4 CORNER FILLETS TO: INCH .020 mm 0.5 MACHINE SURFACES: INCH 125 mm 3.2	DR BY: SBC APPD: MAS EDS DATE: 04-25-1995 04-25-1994 11-11-2011 THIRD ANGLE PROJECTION CONFIDENTIAL: THIS DRAWING AND ITS INFORMATION ARE THE EXCLUSIVE AND CONFIDENTIAL PROPERTY OF REGAL-BELOIT CORPORATION AND ARE NOT TO BE DISCLOSED, DUPLICATED, DISTRIBUTED OR OTHERWISE USED WITHOUT THE WRITTEN CONSENT OF REGAL-BELOIT CORPORATION. -ALL RIGHTS RESERVED.	REGAL REGAL-BELOIT CORPORATION DESCRIPTION: OUTLINE MOT-S180/S280 F1/F2 STDT SIZE: D DWG NO: 80009201 SCALE: NONE SHEET: 1
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