

PRODUCT INFORMATION PACKET



Model No: R450M2

Catalog No: R450M2

Elevator Duty Motor, 20.0 HP, 3 Ph, 60 Hz, 200 V, 1800 RPM, S254T Frame, DP



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Nameplate Specifications

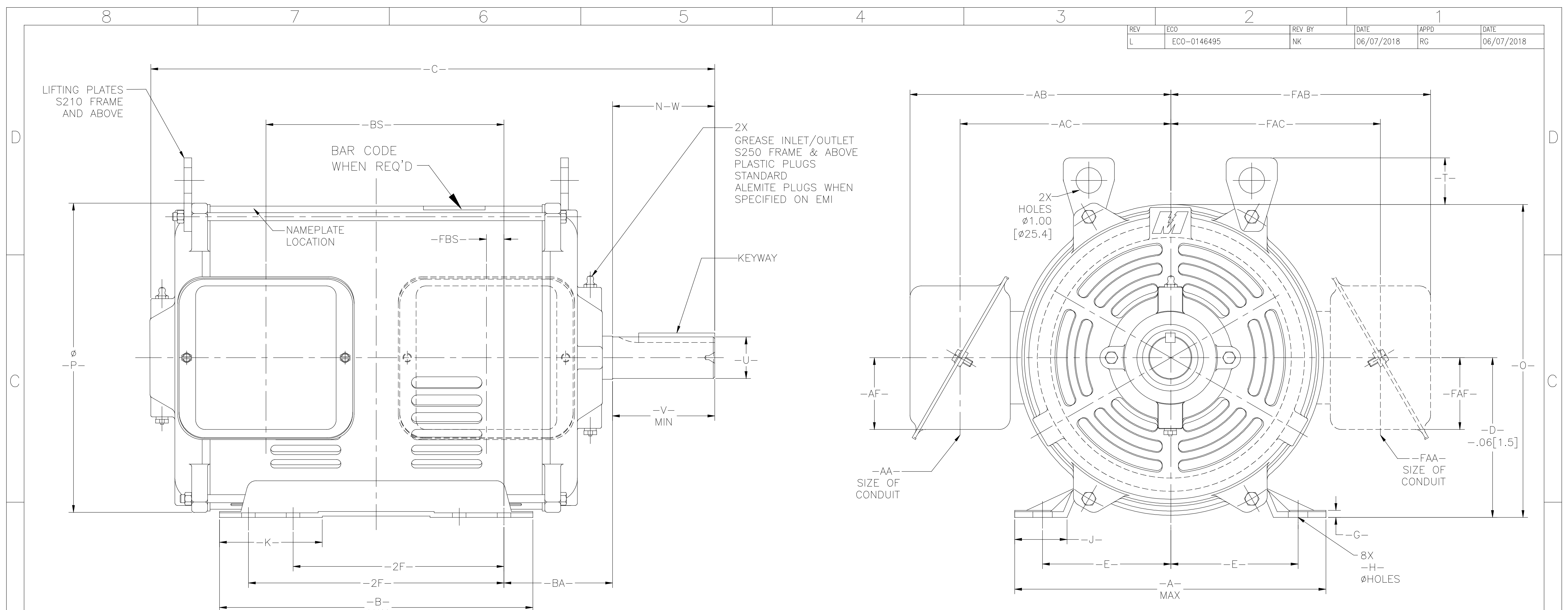
Output HP	20.0 Hp	Output KW	14.9 kW
Frequency	60 Hz	Voltage	200 V
Current	61.0 A	Speed	1740 rpm
Service Factor	1	Phase	3
Duty	30 Minute	Insulation Class	F
Frame	S254T	Enclosure	Drip Proof
Thermal Protection	No Protection	Ambient Temperature	40 °C
UL	Recognized	CSA	Y
CE	N	Number of Speeds	1

Technical Specifications

Electrical Type	Three Phase	Starting Method	Across The Line
Poles	4	Rotation	Reversible Counterclockwise
Mounting	Rigid Base	Drive End Bearing	Ball
Opp Drive End Bearing	Ball	Frame Material	Rolled Steel
Shaft Type	Keyed	Overall Length	22.10 in
Frame Length	13.00 in	Shaft Diameter	1.625 in
Shaft Extension	4.4 in		
Outline Drawing	80009201-S01	Connection Drawing	80022817.PCX

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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-										
S180	3/4	7.63	193.8	5.94	150.8	2.50	63.5	4.94	125.4	3/4	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	1	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 1.500 [38.1]	+0.000 [+0.000] -0.005 [-0.012]	UP TO 1.625 [41.2] .002 [0.05]
OVER 1.500 [38.1]	+0.00 [-0.01] -0.03 [-0.03]	OVER 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

800114
800112
ENG. REF.

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

UNLESS OTHERWISE SPECIFIED
 DIM. TOLERANCES ARE AS FOLLOWS:
 INCH ±.01 ±.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
 DATE: 04-25-1994
 11-11-2011
 FORMAT REV H

THIRD ANGLE PROJECTION

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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