

PRODUCT INFORMATION PACKET

Model No: 254THTL5736

Catalog No: Y562

Black Max® Inverter Duty Speed Ratio Motor, 15 HP, 3 Ph, 60 Hz, 575 V, 1800 RPM, 254TC Frame, TENV



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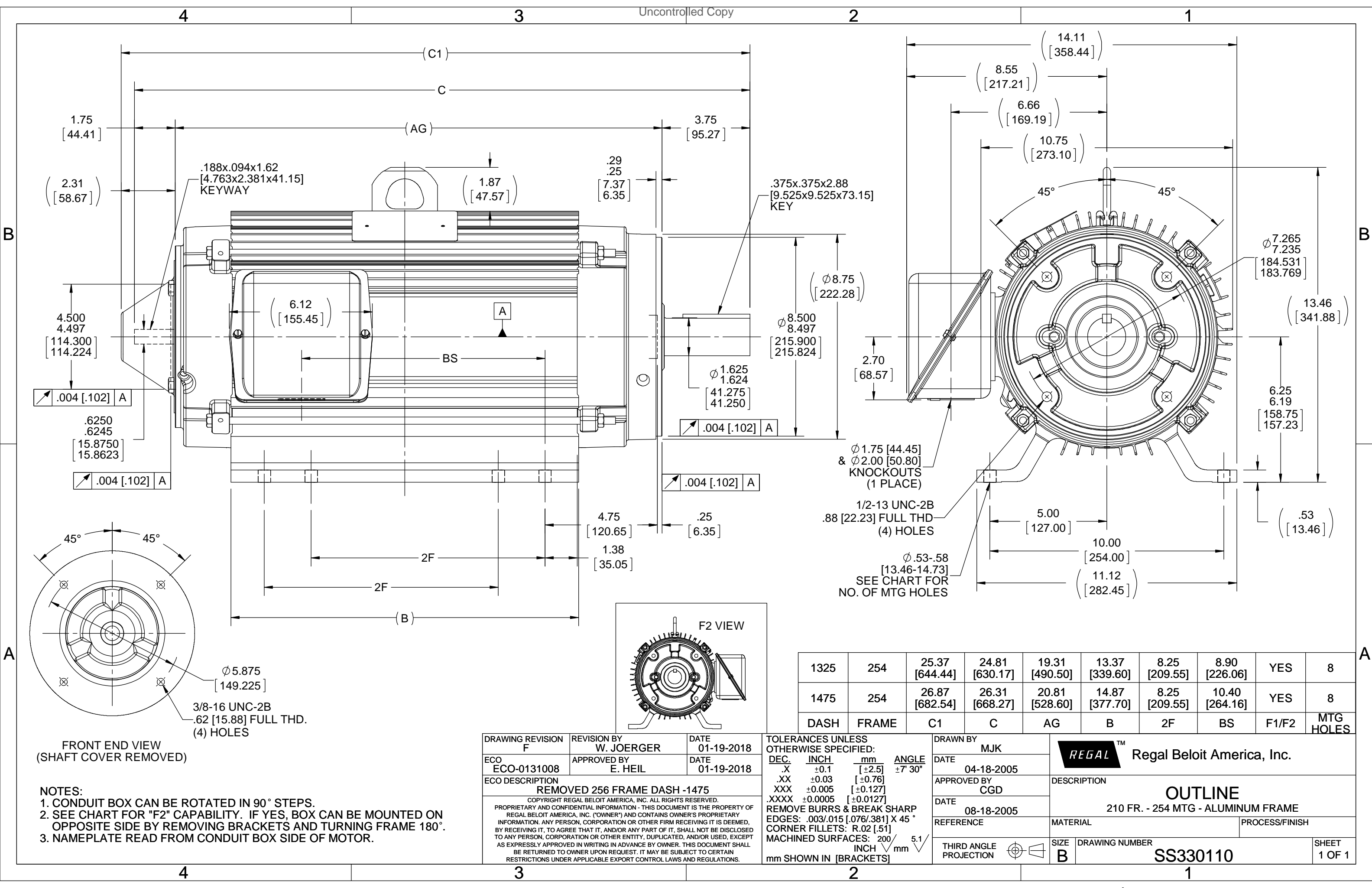
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Nameplate Specifications

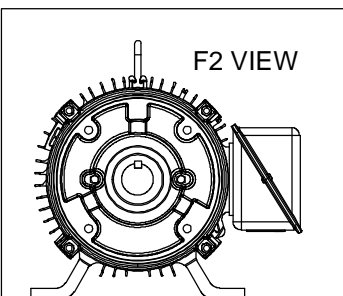
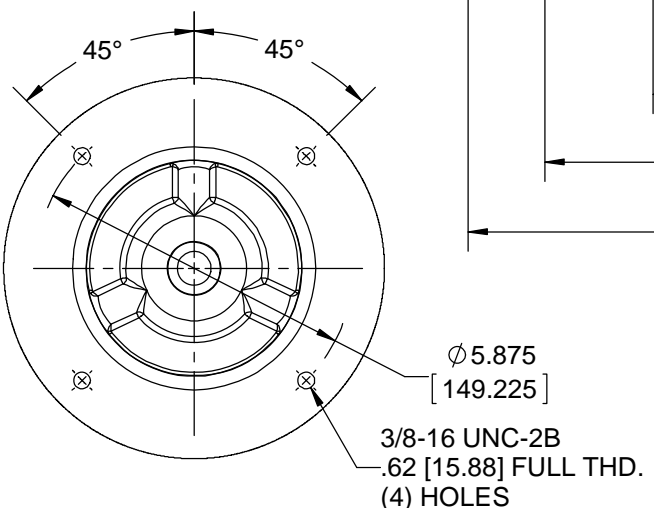
Output HP	15 Hp	Output KW	11.2 kW
Frequency	60 Hz	Voltage	575 V
Current	16.0 A	Speed	1765 rpm
Service Factor	1	Phase	3
Efficiency	91.7 %	Power Factor	76
Duty	Continuous	Insulation Class	F
Design Code	INV	KVA Code	K
Frame	254TC	Enclosure	Totally Enclosed Non Ventilated
Thermal Protection	Thermostat	Ambient Temperature	40 °C
Drive End Bearing Size	6309	Opp Drive End Bearing Size	6206
UL	Recognized	CSA	Y
CE	Y	IP Code	43
Number of Speeds	1		

Technical Specifications

Electrical Type	Squirrel Cage Inverter Duty	Starting Method	Inverter Only
Poles	4	Rotation	Reversible
Resistance Main	.448 Ohms	Mounting	Rigid Base
Motor Orientation	Horizontal	Drive End Bearing	Ball
Opp Drive End Bearing	Ball	Frame Material	Aluminum
Shaft Type	T	Overall Length	26.87 in
Frame Length	14.75 in	Shaft Diameter	1.625 in
Shaft Extension	3.75 in	Assembly/Box Mounting	F1/F2 CAPABLE
Inverter Load	CONSTANT 1000:1		
Outline Drawing	B-SS330110-1475	Connection Drawing	A-EE7300T



.004 [.102] A
 .6250
 .6245
 [15.8750
 15.8623]
 .004 [.102] A



1325	254	25.37 [644.44]	24.81 [630.17]	19.31 [490.50]	13.37 [339.60]	8.25 [209.55]	8.90 [226.06]	YES	8
1475	254	26.87 [682.54]	26.31 [668.27]	20.81 [528.60]	14.87 [377.70]	8.25 [209.55]	10.40 [264.16]	YES	8
DASH	FRAME	C1	C	AG	B	2F	BS	F1/F2	MTG HOLES

- NOTES:
1. CONDUIT BOX CAN BE ROTATED IN 90° STEPS.
 2. SEE CHART FOR "F2" CAPABILITY. IF YES, BOX CAN BE MOUNTED ON OPPOSITE SIDE BY REMOVING BRACKETS AND TURNING FRAME 180°.
 3. NAMEPLATE READ FROM CONDUIT BOX SIDE OF MOTOR.

DRAWING REVISION F
 ECO ECO-0131008
 ECO DESCRIPTION
 REMOVED 256 FRAME DASH -1475
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TOLERANCES UNLESS OTHERWISE SPECIFIED:
 DEC. INCH mm ANGLE
 .X ±0.1 [±2.5] ±7° 30"
 .XX ±0.03 [±0.76]
 .XXX ±0.005 [±0.127]
 .XXXX ±0.0005 [±0.0127]
 REMOVE BURRS & BREAK SHARP EDGES: .003/.015 [.076/.381] X 45°
 CORNER FILLETS: R.02 [.51]
 MACHINED SURFACES: 200 INCH mm 5.1
 mm SHOWN IN [BRACKETS]

DRAWN BY MJK
 DATE 04-18-2005
 APPROVED BY CGD
 DATE 08-18-2005
 REFERENCE
 THIRD ANGLE PROJECTION

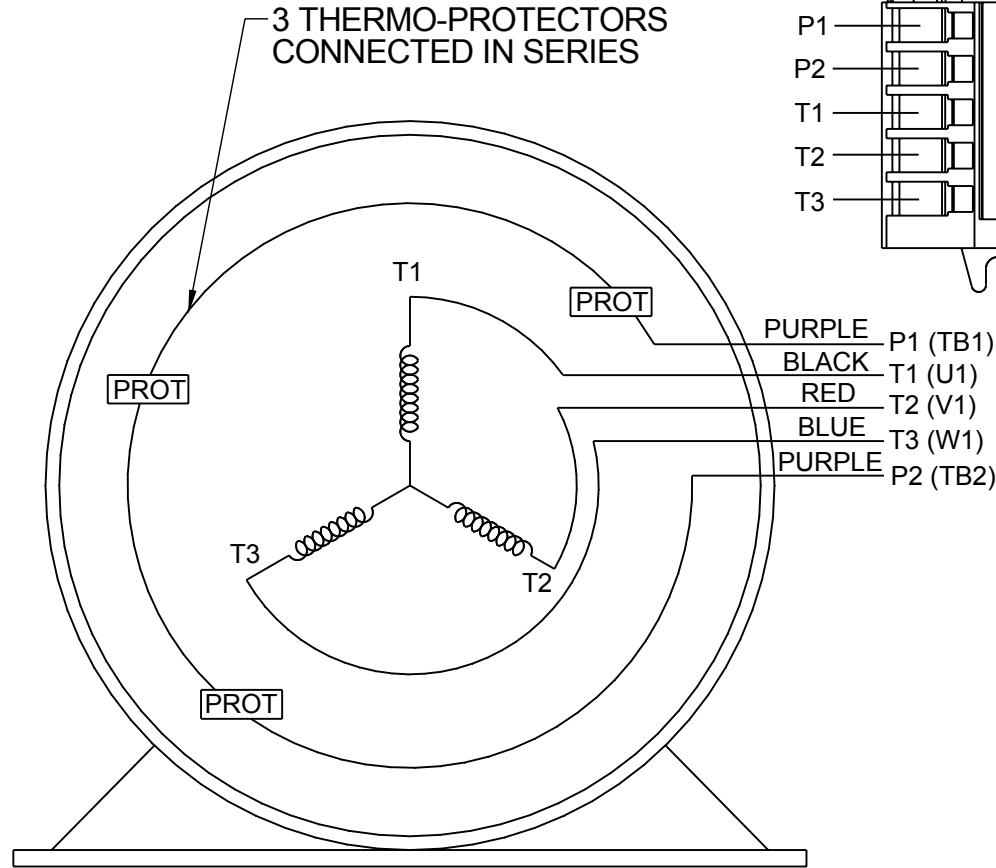
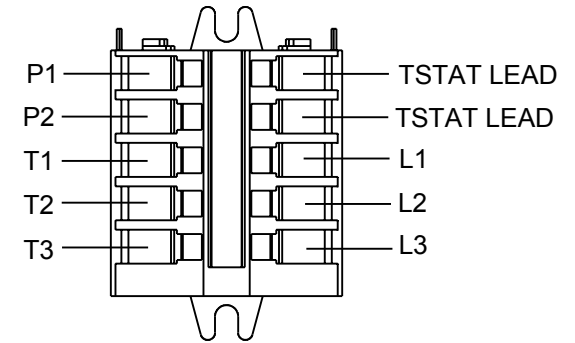
REGAL™ Regal Beloit America, Inc.
 DESCRIPTION
 210 FR. - 254 MTG - ALUMINUM FRAME
 MATERIAL PROCESS/FINISH
 SIZE B DRAWING NUMBER SS330110 SHEET 1 OF 1

**THREE PHASE - SINGLE VOLTAGE
MOTOR - CONDUIT BOX @ 'A'**

**TO REVERSE ROTATION:
INTERCHANGE ANY TWO LINE
LEAD CONNECTIONS**

**NOTE FOR FACTORY USE ONLY:
TO SURGE TEST:
FOR 3 LEAD COMMON CONNECT:
CONNECT P1 TO T1 THEN P2 TO L1
FOR 6 LEAD COMMON CONNECT:
CONNECT P1 TO BOTH T1
THEN P2 TO L1**

TERMINAL BLOCK WHEN SPECIFIED

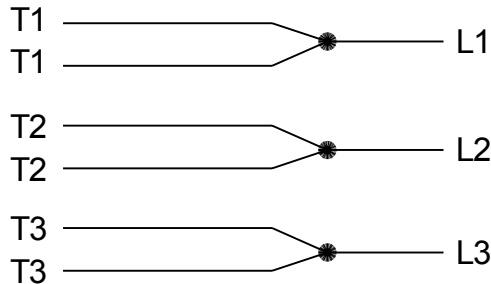


PURPLE P1 (TB1)
BLACK T1 (U1)
RED T2 (V1)
BLUE T3 (W1)
PURPLE P2 (TB2)

T2BM
T6AW
T6AL
T6Z
T4EG
T4BF
T8A
T6H
T6A
T4AX
T4A
T2A
T2F

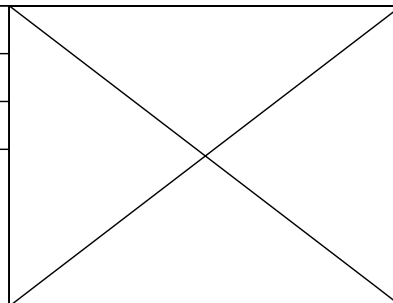
VIEW OF TERMINAL END

**IF MOTOR HAS MULTIPLE
T'S PER LEAD CONNECT
TOGETHER LIKE T'S**



A-9806 DECAL

DRAWING REVISION AB	REVISION BY AJW	DATE 07-17-2015
ECO ECO-0081632	APPROVED BY T.VUE	DATE 07-17-2015
ECO DESCRIPTION REV'D IEC MARKINGS PER IEC-60034-8		
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DRAWN BY LZ	Regal Beloit America, Inc.	
DATE 01-04-1994		
APPROVED BY GK	DESCRIPTION CONN DIAGRAM-EXTERNAL 3Ø-SINGLE VOLT-MOTOR WITH PROTECTOR	
DATE 01-20-1994	MATERIAL	
REFERENCE	PROCESS/FINISH	
THIRD ANGLE PROJECTION	SIZE A	DRAWING NUMBER EE7300T
		SHEET 1 OF 1

CERTIFICATION DATA SHEET

Model#: 254THTL5736 DC **WINDING#:** K2154371 NONE 3
CONN. DIAGRAM: A-EE7300T **ASSEMBLY:** F1/F2 CAPABLE
OUTLINE: B-SS330110-1475

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
15	11.2	1800	1765	254TC	TENV	K	INV

PH	Hz	VOLTS	FL AMPS	START TYPE	DUTY	INSL	S.F	AMB°C	ELEVATION
3	60	575	16	INVERTER ONLY	CONTINUOUS	F3	1.0	40	3300

FULL LOAD EFF: 91.7	3/4 LOAD EFF: 91.8	1/2 LOAD EFF: 90	GTD. EFF	ELEC. TYPE	NO LOAD AMPS
FULL LOAD PF: 76	3/4 LOAD PF: 70	1/2 LOAD PF: 56.4	91	SQ CAGE INV DUTY	8.8

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
44.6 LB-FT	124	140 LB-FT 314	170 LB-FT 381	105

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS /HOUR	APPROX. MOTOR WGT
62 dBA	72 dBA	1.6 LB-FT^2	0 LB-FT^2	0 SEC.	0	210 LBS.

EQUIVALENT WYE CKT.PARAMETERS (OHMS PER PHASE)

R1	R2	X1	X2	XM
0.31374	0.31563	1.04706	1.5687	22.1508

RM	ZREF	XR	TD	TD0
2079	18.9	4	0.0115	0.2

***** SUPPLEMENTAL INFORMATION *****

DE BRACKET TYPE	ODE BRACKET TYPE	MOUNT TYPE	ORIENTATION	SEVERE DUTY	HAZARDOUS LOCATION	DRIP COVER	SCREENS	PAINT
C-FACE	BRAKE OR ENCODER	RIGID	HORIZONTAL	FALSE	NONE	FALSE	NONE	BLACK (ENAMEL)

BEARINGS		GREASE	SHAFT TYPE	SPECIAL DE	SPECIAL ODE	SHAFT MATERIAL	FRAME MATERIAL
DE	OPE						
BALL	BALL	POLYREX EM	T	NONE	NONE	1045 HOT ROLLED (C-204)	ALUMINUM
6309	6206						

THERMO-PROTECTORS				THERMISTORS	CONTROL	SPACE /n HEATERS
THERMOSTATS	PROTECTORS	WDG RTDs	BRG RTDs			
TSTATS (N/C)	NOT	NONE	NONE	NONE	FALSE	NONE VOLTS

If Inverter equals NONE, contact factory for further information

INVERTER TORQUE: CONSTANT 1000:1 INV. HP SPEED RANGE: 2.0 X BASE SPEED
ENCODER: PROVISIONS ONLY NORTHSTAR ST56 NONE NONE PPR
BRAKE: PROVISIONS ONLY NONE NONE P/N NONE

*
N
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T
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*

NONE	NONE		
NONE FT-LB	NONE V	NONE Hz	

DATE: 06/23/2017 01:55:44 AM
FORM 3531 REV.3 02/07/99
** Subject to change without notice.

Data Sheet

Date: 6/19/2017

254THTL5736

Customer: _____



Attention: _____

Submittal

Submitted by: FAREEDA DUDEKULA

Data @ 575 V

Motor Load Data

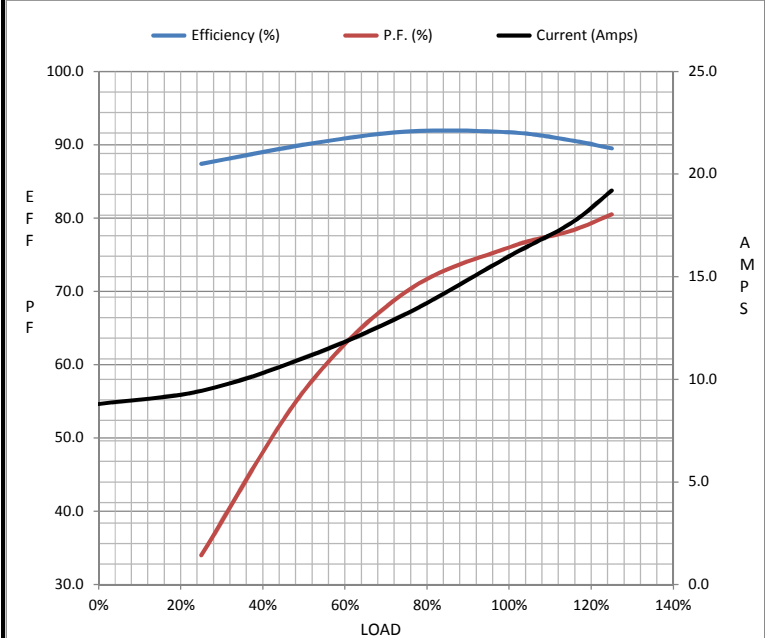
Load	0%	25%	50%	75%	100%	115%	125%	LR
Current (Amps)	8.8	9.4	11.0	13.2	16.0	17.6	19.2	124
Torque (ft-lb)	0.00	11.0	22.0	33.5	44.6	48.1	51.5	140
RPM	1800	1790	1785	1775	1765	1,761	1755	0
Efficiency (%)		87.4	90.0	91.8	91.7	90.6	89.5	
P.F. (%)	5.7	34.0	56.4	70.0	76.0	78.3	80.5	43.5

Motor Speed Data

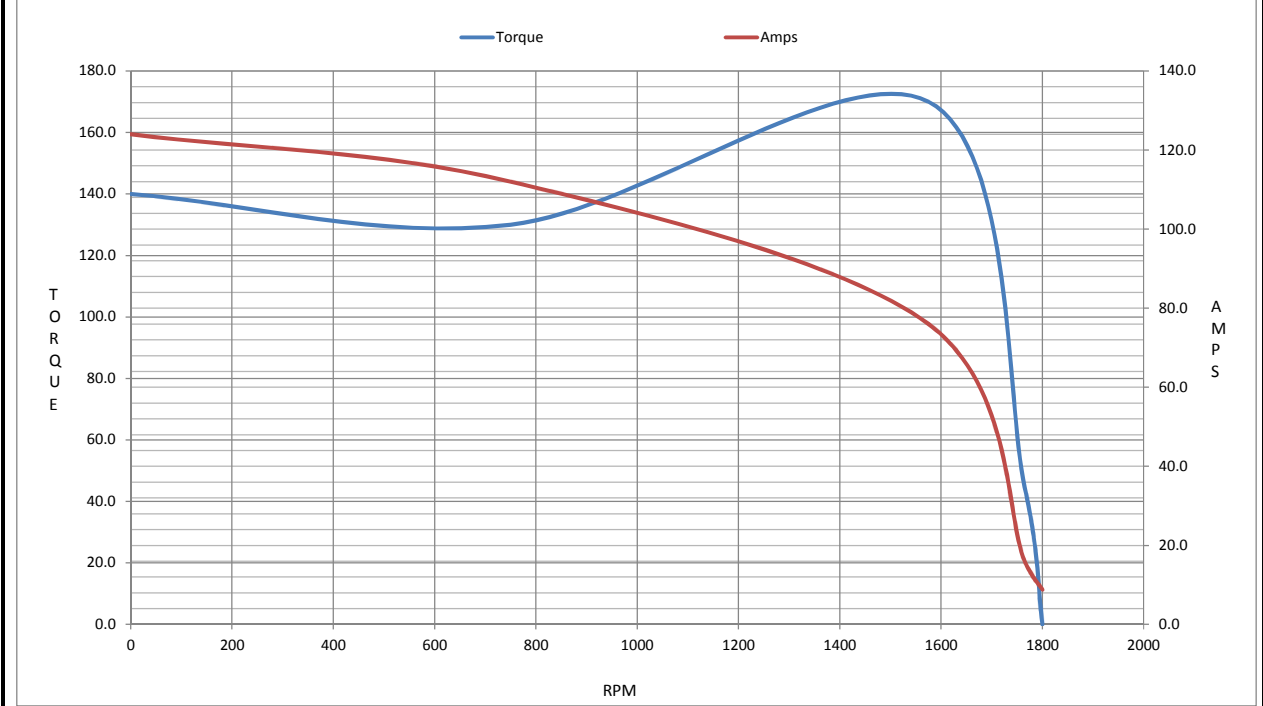
	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	750	1575	1765	1800
Current (Amps)	124	112	76.0	16.0	8.8
Torque (ft-lb)	140	130	170	44.6	0.00

Information Block

HP	15.0			
Sync. RPM	1800			
Frame	254			
Enclosure	TENV			
Construction	TTL			
Voltage	575 V			
Frequency	60 Hz			
Design	A			
LR Code letter	K			
Service Factor	1.0			
Temp Rise @ FL	105 °C			
Duty	CONT			
Ambient	40 °C			
Elevation	1,000 feet			
Rotor/Shaft wk ²	1.60 Lb-Ft ²			
Ref Wdg	K2154371 NONE			
Sound Pressure @ 1M	62 dBA			
VFD Rating	CONSTANT 1000:1			
Outline Dwg	B-SS330110-1475			
Conn. Diag	A-EE7300T			
Additional Specifications:				
0				
0				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
0.4900	0.4930	1.6360	2.4510	34.6110



Speed -Torque Curve



EC Declaration of Conformity

The undersigned representing
the manufacturer:

Regal Beloit America
100 East Randolph St.
Wausau, WI 54401

and the authorized representative
established within the Community:

Marathon Electric UK
6F Thistleton Road Ind. Estate
Market Overton
Oakham, Rutland LE15 7PP UK

are committed to providing customers with products that comply with applicable regulations and international protocols to which they are subject, including the requirements of the European Parliament Directive on the Harmonization of the laws relating to electrical equipment designed for use within certain voltage limits (2014/35/EU).

Regal Beloit America declares that the following product(s), to which this declaration relates, are in conformity with the relevant sections of the EC standards listed below.

This statement supersedes any statements previously issued pertaining to the product(s) listed below and is subject to change without notice.

Model No : 254THTL5736

(Model No. may contain prefix and/or suffix characters)

Catalog No : Y562

Rework No : N/A

Directives :

Low Voltage Directive 2014/35/EU

Harmonized Standards Used :

EN 60034-1: 2010 (IEC 60034-1: 2010)

EN 60034-5: 2001/A1:2007 (IEC 60034-5: 2000/A1:2006)

Authorized Representative:



Michael A. Logsdon
Vice President, Technology

Authorized Representative in the Community:



Julian Clark
Marketing Engineer

Created on 09/01/2022

CE 22