

PRODUCT INFORMATION PACKET

Model No: 254TTDBD6001

Catalog No: GT0061

General Purpose Motor, 20 HP, 3 Ph, 60 Hz, 208-230/460 V, 3600 RPM, 254T Frame, DP



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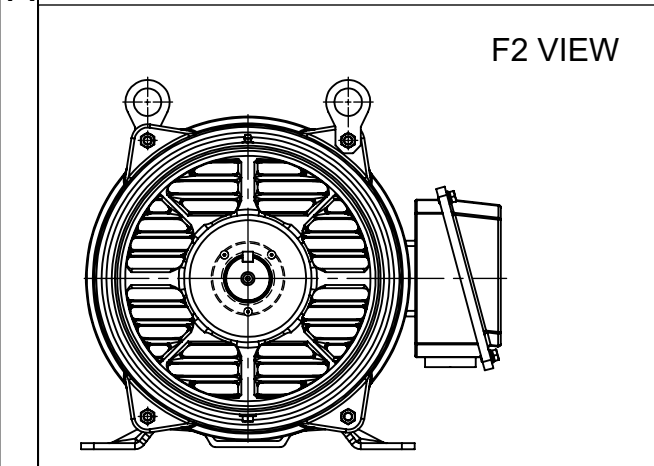
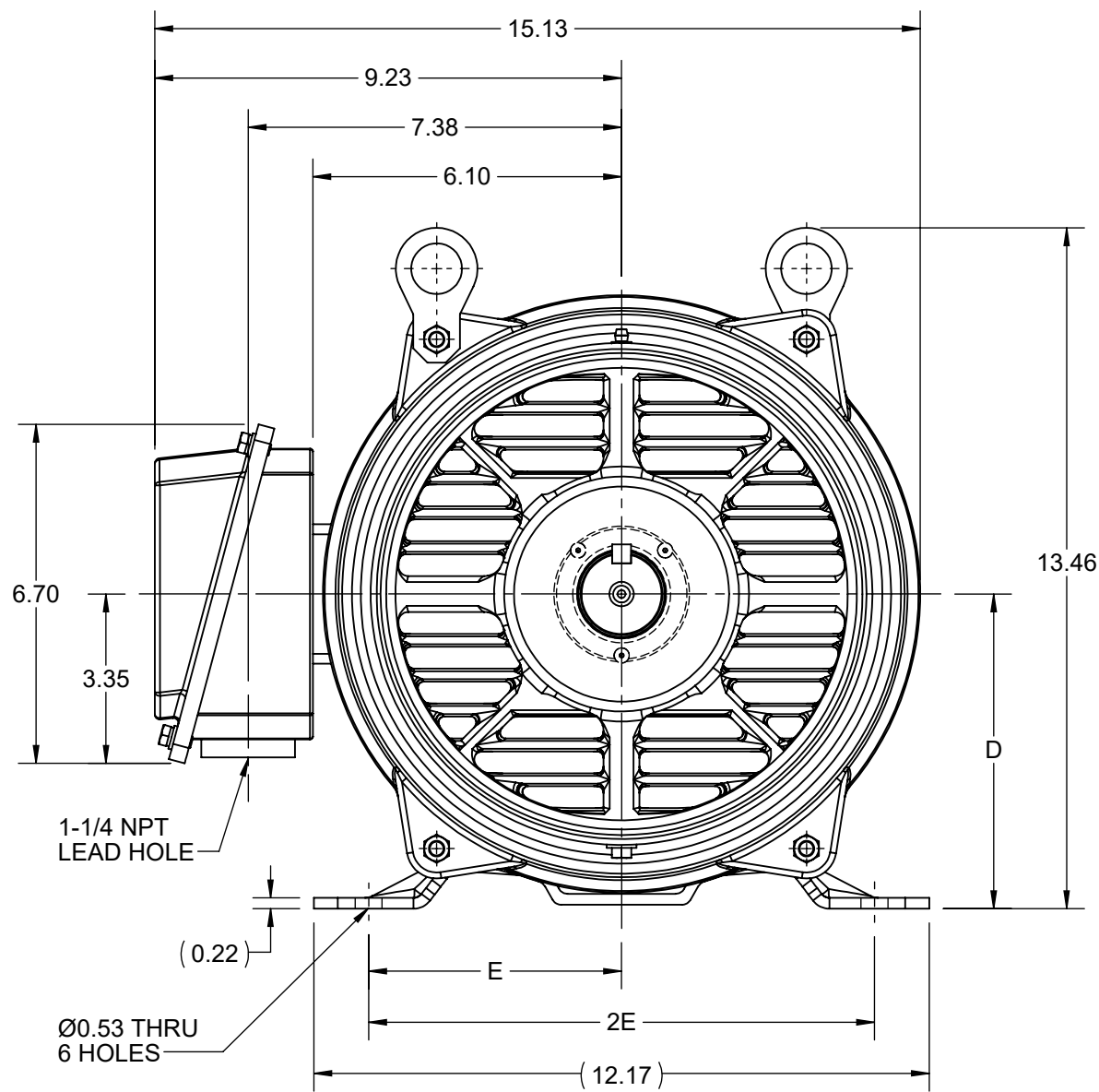
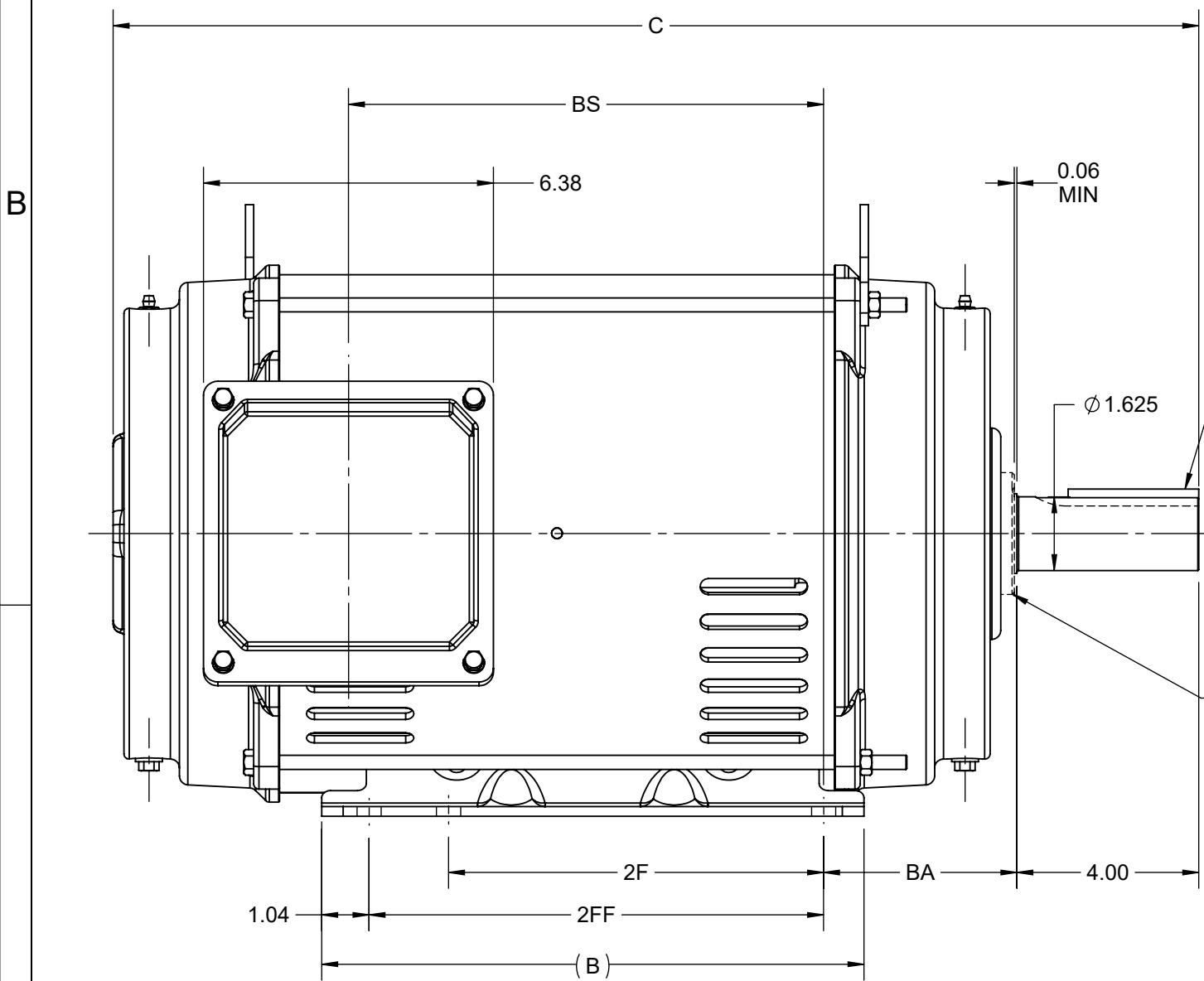
Nameplate Specifications

Output HP	20 Hp	Output KW	14.9 kW
Frequency	60 Hz	Voltage	208-230/460 V
Current	51.5-48.0/24.0 A	Speed	3552 rpm
Service Factor	1.15	Phase	3
Efficiency	91 %	Power Factor	85.5
Duty	Continuous	Insulation Class	F
Design Code	B	KVA Code	F
Frame	254T	Enclosure	Drip Proof
Thermal Protection	No Protection	Ambient Temperature	40 °C
Drive End Bearing Size	6209	Opp Drive End Bearing Size	6208
UL	Recognized	CSA	Y
CE	Y	IP Code	22
Number of Speeds	1		

Technical Specifications

Electrical Type	Squirrel Cage Inverter Rated	Starting Method	Line Or Inverter
Poles	2	Rotation	Reversible
Resistance Main	.64 Ohms	Mounting	Rigid Base
Motor Orientation	Horizontal	Drive End Bearing	Ball
Opp Drive End Bearing	Ball	Frame Material	Rolled Steel
Shaft Type	T	Overall Length	22.64 in
Frame Length	10.62 in	Shaft Diameter	1.625 in
Shaft Extension	4 in	Assembly/Box Mounting	F1/F2 CAPABLE
Inverter Load	CONSTANT 2:1/VARIABLE 10:1		
Outline Drawing	SS620685-100	Connection Drawing	EE7308K

DASH NO.	4			3				2		1	
	B	C	D	E	2E	2F	2FF	BA	BS	MOUNTING	FRAME
100	11.93	22.31	6.25	5.00	10.00	8.25	10.00	4.25	8.82	F1 OR F2	254T
200		23.88							10.45		256T



DRAWING REVISION C	REVISION BY GOPI J	REV DATE/© DATE 08/02/2022
REQUEST NUMBER CR-0006810	APPROVED BY SBD	DATE 08/02/2022
REQUEST NUMBER DESCRIPTION VIEWS UPDATED AS PER 3D		
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DRAWN BY XZ	Regal Rexnord Regal Beloit America, Inc.	
DATE 25/02/2016	DESCRIPTION OUTLINE 254/256T FR NEMA ODP RS	
APPROVED BY	MATERIAL	PROCESS/FINISH
DATE	SIZE B	DRAWING NUMBER SS620685
REFERENCE	THIRD ANGLE PROJECTION	SHEET 1 OF 1

LOW VOLTAGE



HIGH VOLTAGE



VIEW OF TERMINAL END

				TOLERANCES UNLESS SPECIFIED		 REGAL - BELOIT CORPORATION	DRAWN PGK 06-04-1997		
NO.	REVISION	BY & DATE	CHK	ANG	±		UNIT	SCALE	
E	CORRECTED IEC MARKINGS ECD-0111208	WGJ 01-23-2017	EMH	DEC.		INCHES	CHK	ML 06-05-1997	
D	RE-DRAWN WITH REGAL LOGO ECD-0110493	WGJ 09-30-2016	EMH	.X	±.1		APPD	GK 06-15-1997	
8	ADDED IEC DESIGNATIONS MU95020	TJW 4/30/2010	MJS	.XX	±.02		TITLE CONNECTION DIAGRAM		
7	REVISED HIGH VOLTAGE L2 WAS L3 CN52600-354	MRB 09-21-1998		.XXX	±.005		REF DELTA CON. - 3Ø - 9 LEADS		
6	REDRAWN ON CADD	PGK 06-05-1997		.XXXX	±.0005		FMF		
					±7'30"		PREV		
THIS DRAWING IN DESIGN AND DETAIL IS OUR PROPERTY AND MUST NOT BE USED EXCEPT IN CONNECTION WITH OUR WORK ALL RIGHTS OF DESIGN AND INVENTION ARE RESERVED THIS IS AN ELECTRONICALLY GENERATED DOCUMENT - DO NOT SCALE THIS PRINT			RFP	CAD FILE EE7308K			SIZE	DRAWING NO. PAGE OF	REV.
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**P.O. BOX 8003
WAUSAU, WI 54401-8003
PH. 715-675-3311**

CERTIFICATION DATA SHEET

CUSTOMER:

CUSTOMER PO#:

ORDER #:

MODEL #: 254TTDBD6001 AA

CONN. DIAGRAM: EE7308K

CUSTOMER PART

#:

OUTLINE: SS620685

MOUNTING: F1/F2 CAPABLE

WINDING #: HE31602015 2

TYPICAL MOTOR PERFORMANCE DATA

HP	kW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
20&15	14.9&11.2	3600	3552&2958	254T	DP	F	B

PH	Hz	VOLTS	AMPS	START TYPE	DUTY	INSL	S.F.	AMB°C
3	60/50	230/460&190/380	48/24&45/22.5	LINE OR INVERTER	CONTINUOUS	F7	1.15/1.15	40

FULL LOAD EFF:	91&91	3/4 LOAD EFF:	91	1/2 LOAD EFF:	90.6	GTD. EFF		ELEC. TYPE	
FULL LOAD PF:	85.5&84.5	3/4 LOAD PF:	80.5	1/2 LOAD PF:	69.5	90.2		SQ CAGE INV RATED	

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
29.6 LB-FT	274 / 137	52 LB-FT 176 %	74 LB-FT 250 %	45

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS / HOUR	APPROX. MOTOR WGT
75 dBA	85 dBA	1.1 LB-FT^2	- LB-FT^2	15 SEC.	3	300 LBS.

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

DE BRACKET TYPE	ODE BRACKET TYPE	MOUNT TYPE	ORIENTATION	SEVERE DUTY	HAZARDOUS LOCATION	DRIP COVER	SCREENS	PAINT
STANDARD	STANDARD	RIGID	HORIZONTAL	FALSE	NONE	FALSE	NONE	BLUE (ENAMEL)

BEARINGS		GREASE	SHAFT TYPE	SPECIAL DE	SPECIAL ODE	SHAFT MATERIAL	FRAME MATERIAL
DE	ODE						
BALL	BALL	POLYREX EM	T	NONE	NONE	1045 HOT ROLLED (C-204)	ROLLED STEEL
6209	6208						

THERMO-PROTECTORS				THERMISTORS	CONTROL	SPACE HEATERS
THERMOSTATS	PROTECTORS	WDG RTDs	BRG RTDs			
NONE	NOT	NONE	NONE	NONE	FALSE	NONE VOLTS

* N O T E S *	INVERTER TORQUE: CONSTANT 2:1/VARIABLE 20:1 INV. HP SPEED RANGE: NONE
	ENCODER: NONE NONE NONE NONE NONE PPR
	BRAKE: NONE NONE NONE P/N NONE NONE NONE NONE FT-LB NONE V NONE Hz

PREPARED BY: Anusha Muthyala
DATE: 05/04/2018 03:17:41 AM
 FORM 3531 REV.3 02/07/99
 ** Subject to change without notice.

Data Sheet

Date: 12/2/2021
 Customer: _____
 Attention: _____
 Submitted by: _____



254TTDBD6001

Submittal

Data @ 460 V

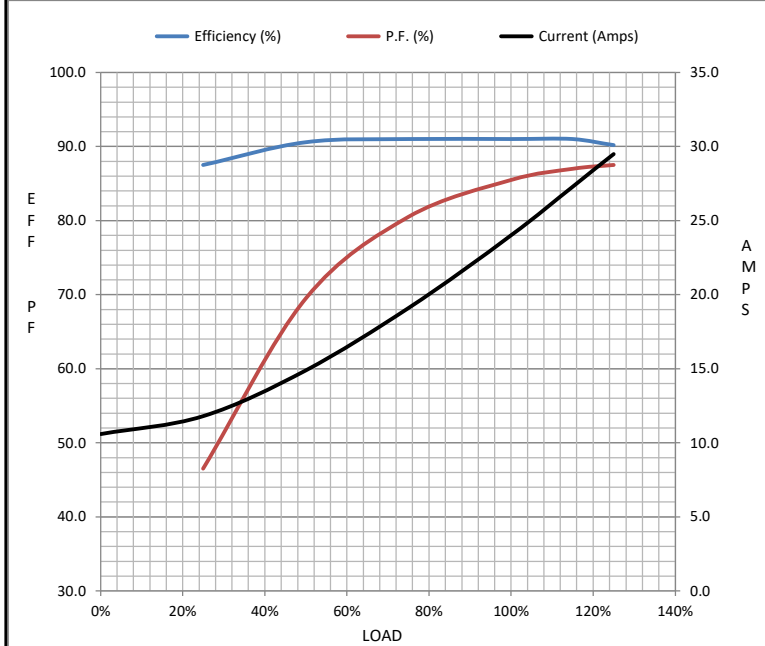
Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR
Current (Amps)	10.6	11.8	14.9	19.1	24.0	27.3	29.5	137
Torque (ft-lb)	0.00	7.3	14.7	22.2	29.6	34.2	37.2	52.0
RPM	3600	3588	3578	3566	3552	3,545	3540	0
Efficiency (%)		87.5	90.6	91.0	91.0	91.0	90.2	
P.F. (%)	7.0	46.5	69.5	80.5	85.5	87.0	87.5	39.0

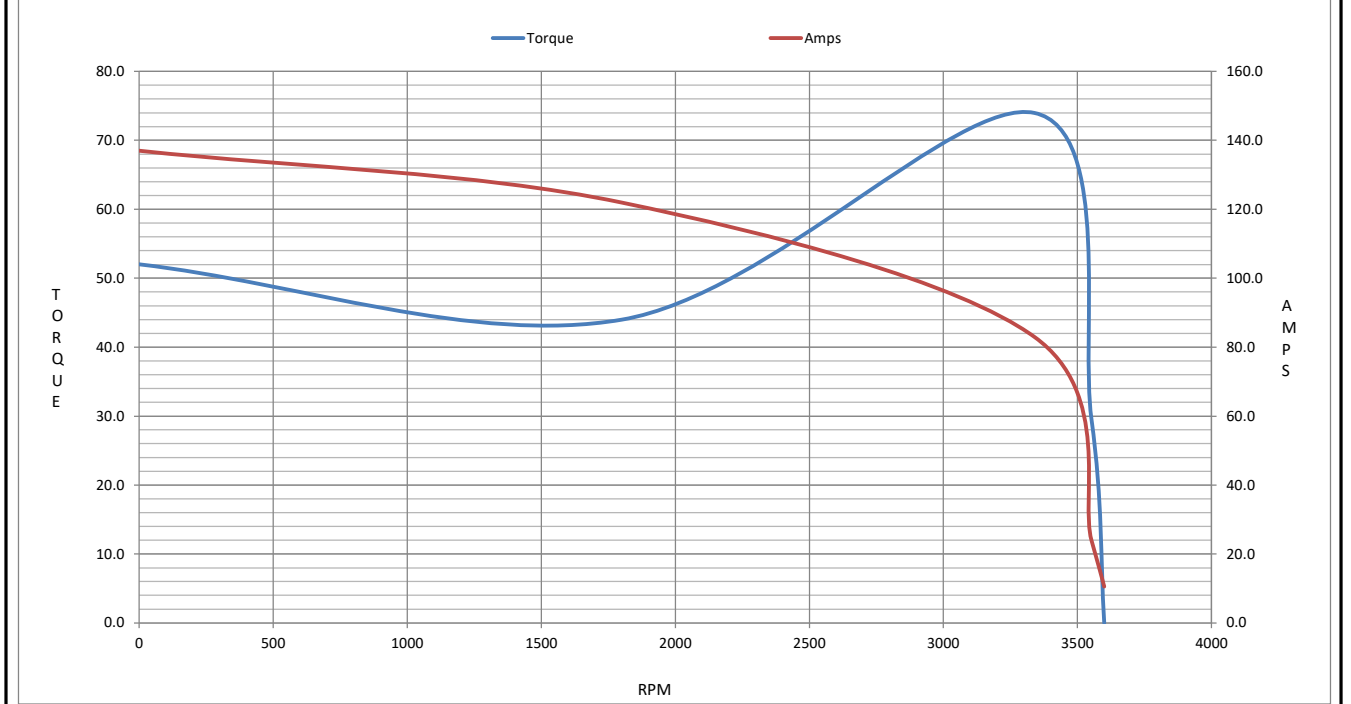
Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	1800	3340	3552	3600
Current (Amps)	137	122	83.0	24.0	10.6
Torque (ft-lb)	52.0	44.0	74.0	29.6	0.00

Information Block				
HP	20.0			
Sync. RPM	3600			
Frame	254			
Enclosure	DP			
Construction	TDB			
Voltage	208-230/460#190/380 V			
Frequency	60 Hz			
Design	B			
LR Code letter	F			
Service Factor	1.15			
Temp Rise @ FL	45 ° C			
Duty	CONT			
Ambient	40 ° C			
Elevation	3,300 feet			
Rotor/Shaft wk ²	1.10 Lb-F ²			
Ref Wdg	HA31602015 NONE			
Sound Pressure @ 1M	75 dBA			
VFD Rating	CONSTANT 2:1/VARIABLE 20:1			
Outline Dwg	SS620685-100			
Conn. Diag	EE7308K			
Additional Specifications:				
0				
0				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
0.3940	0.1490	1.1590	0.8750	26.4460



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 : 254TTDBD6001

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

Catalog No : GT0061

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