

# PRODUCT INFORMATION PACKET

Model No: 143TTDR16005

Catalog No: E798A

General Purpose Motor, 1.50 HP, 3 Ph, 60 Hz, 575 V, 3600 RPM, 143T Frame, DP



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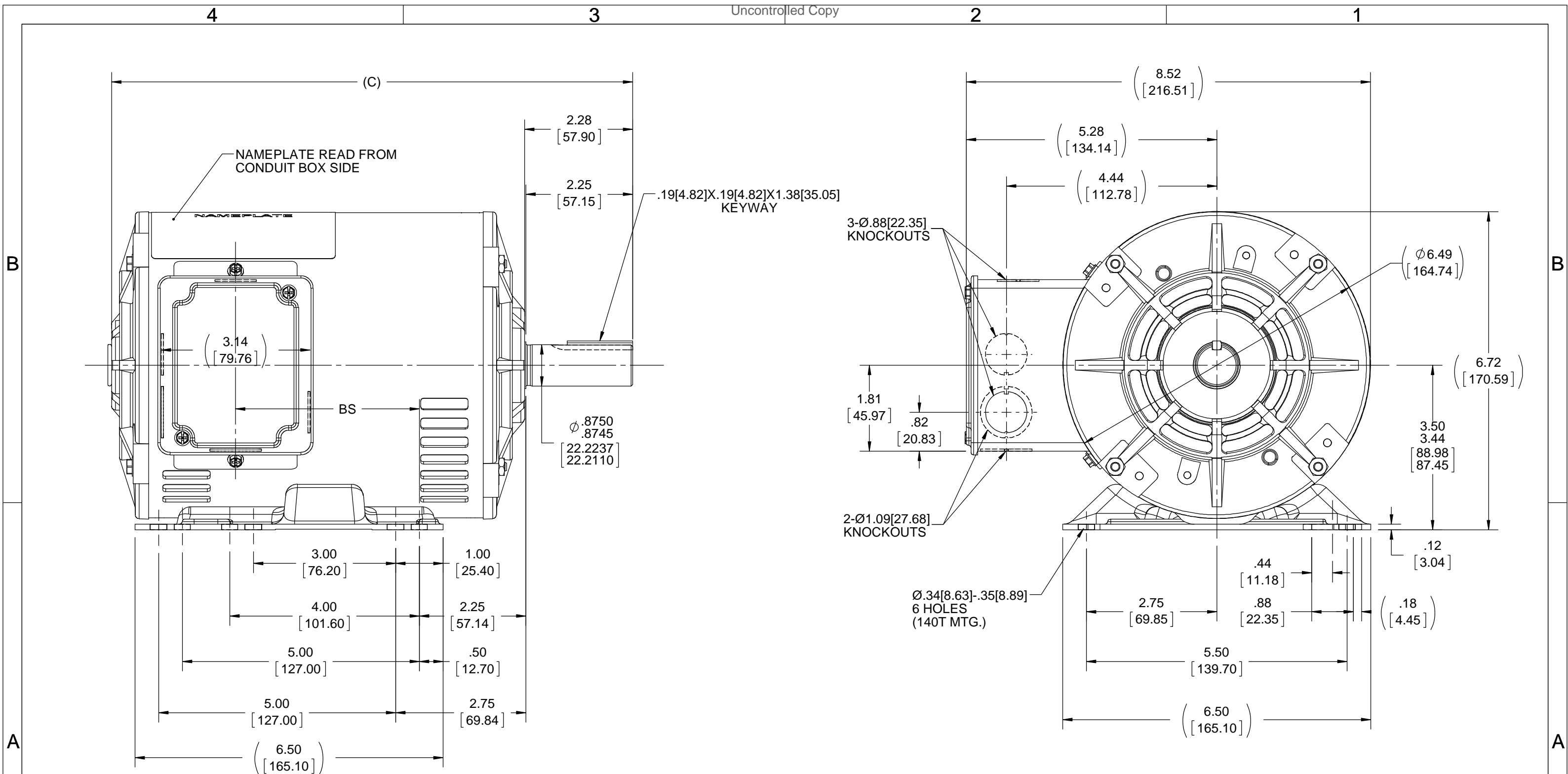
### Nameplate Specifications

Output HP	<b>1.50 Hp</b>	Output KW	<b>1.1 kW</b>
Frequency	<b>60 Hz</b>	Voltage	<b>575 V</b>
Current	<b>1.5 A</b>	Speed	<b>3515 rpm</b>
Service Factor	<b>1.15</b>	Phase	<b>3</b>
Efficiency	<b>86.5 %</b>	Power Factor	<b>84</b>
Duty	<b>Continuous</b>	Insulation Class	<b>F</b>
Design Code	<b>B</b>	KVA Code	<b>L</b>
Frame	<b>143T</b>	Enclosure	<b>Drip Proof</b>
Thermal Protection	<b>No Protection</b>	Ambient Temperature	<b>40 °C</b>
Drive End Bearing Size	<b>6205</b>	Opp Drive End Bearing Size	<b>6203</b>
UL	<b>Recognized</b>	CSA	<b>Y</b>
CE	<b>Y</b>	IP Code	<b>22</b>
Number of Speeds	<b>1</b>		

### Technical Specifications

Electrical Type	<b>Squirrel Cage Inverter Rated</b>	Starting Method	<b>Line Or Inverter</b>
Poles	<b>2</b>	Rotation	<b>Reversible</b>
Resistance Main	<b>9.08 Ohms</b>	Mounting	<b>Rigid Base</b>
Motor Orientation	<b>Horizontal</b>	Drive End Bearing	<b>Ball</b>
Opp Drive End Bearing	<b>Ball</b>	Frame Material	<b>Rolled Steel</b>
Shaft Type	<b>T</b>	Overall Length	<b>12.49 in</b>
Frame Length	<b>8.56 in</b>	Shaft Diameter	<b>0.875 in</b>
Shaft Extension	<b>2.28 in</b>	Assembly/Box Mounting	<b>F1 ONLY</b>
Inverter Load	<b>CONSTANT 10:1</b>		
Connection Drawing	<b>A-EE7300</b>	Outline Drawing	<b>A-100085-856</b>





NOTES:  
1.CONDUIT BOX CAN BE ROTATED 180°.

DASH NO.	"C"	"BS"
706	10.99[279.14]	3.87[98.29]
756	11.49[291.84]	4.37[110.99]
806	11.99[304.54]	4.87[123.69]
856	12.49[317.24]	5.37[136.39]
906	12.99[329.94]	5.87[149.09]
956	13.49[342.64]	6.37[161.79]

DRAWING REVISION	REVISION BY	DATE
E	A. KEETHA	01-09-2018
ECO-0143026	APPROVED BY PST	DATE 04/11/2018
ECO DESCRIPTION		
OUTLINE CONVERSION PROJECT		
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TOLERANCES UNLESS OTHERWISE SPECIFIED:			
DEC.	INCH	mm	ANGLE
.X	$\pm$ 0.1	[ $\pm$ 2.5]	$\pm$ 7' 30"
.XX	$\pm$ 0.03	[ $\pm$ 0.76]	
.XXX	$\pm$ 0.005	[ $\pm$ 0.127]	
.XXXX	$\pm$ 0.0005	[ $\pm$ 0.0127]	
REMOVE BURRS & BREAK SHARP EDGES: .003/.015 [0.076/.381] X 45° CORNER FILLETS: R.02 [0.51]			
MACHINED SURFACES: 200 INCH/mm 5.1			
mm SHOWN IN [BRACKETS]			

DRAWN BY		REGAL™ Regal Beloit America, Inc.	
GK		DESCRIPTION	
DATE 02-04-1988		OUTLINE	
APPROVED BY FG		140T & 56HZ - DR.PR.	
DATE 02-04-1998		MATERIAL	
REFERENCE 100085		PROCESS/FINISH	
THIRD ANGLE PROJECTION		SIZE B	DRAWING NUMBER 100085
			SHEET 1 OF 1

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

TERMINAL BLOCK WHEN SPECIFIED

TO REVERSE ROTATION:  
INTERCHANGE ANY TWO LINE  
LEAD CONNECTIONS



VIEW OF TERMINAL END

**OPTIONAL CORD CONNECTION**

L1	WHITE
L2	RED
L3	BLACK

DRAWING REVISION AC	REVISION BY BS	REV DATE/© DATE 26/07/2022
REQUEST NUMBER CR-0010402	APPROVED BY SN	DATE 26/07/2022
REQUEST NUMBER DESCRIPTION DRAWING UPDATED		
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PRIMARY DIMENSIONS ARE INCH  
mm DIMENSIONS IN [BRACKETS]  
ARE FOR REFERENCE ONLY

DRAWN BY DA
DATE 03-26-1993
APPROVED BY TB
DATE 03-26-1993
REFERENCE
THIRD ANGLE PROJECTION

		Regal Beloit America, Inc.	
DESCRIPTION <b>CONNECTION DIAGRAM</b> EXTERNAL - SINGLE VOLTAGE - 3Ø MOTOR			
MATERIAL		PROCESS/FINISH	
SIZE <b>A</b>	DRAWING NUMBER <b>EE7300</b>		SHEET 1 OF 1

**CERTIFICATION DATA SHEET**

**Model#:** 143TTDR16005 AA  
**CONN. DIAGRAM:** A-EE7300  
**OUTLINE:** A-100085-856

**WINDING#:** ZT2168 DR 4  
**ASSEMBLY:** F1 ONLY

**TYPICAL MOTOR PERFORMANCE DATA**

HP	KW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
1 1/2	1.12	3600	3515	143T	DP	L	B

PH	Hz	VOLTS	FL AMPS	START TYPE	DUTY	INSL	S.F	AMB°C	ELEVATION
3	60	575	1.5	LINE OR INVERTER	CONTINUOUS	F3	1.15	40	3300

FULL LOAD EFF: 86.5	3/4 LOAD EFF: 88.3	1/2 LOAD EFF: 86.6	GTD. EFF	ELEC. TYPE	NO LOAD AMPS
FULL LOAD PF: 84	3/4 LOAD PF: 78.7	1/2 LOAD PF: 67.6	84	SQ CAGE INV RATED	.7

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
2.25 LB-FT	14.9	6.8 LB-FT 302	10 LB-FT 444	20

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS /HOUR	APPROX. MOTOR WGT
68 dBA	78 dBA	0 LB-FT^2	0 LB-FT^2	10 SEC.	0	0 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 (POWDER)

BEARINGS		GREASE	SHAFT TYPE	SPECIAL DE	SPECIAL ODE	SHAFT MATERIAL	FRAME MATERIAL
DE	OPE						
BALL	BALL	POLYREX EM	T	NONE	NONE	1144 STRESSPROOF (C-223)	ROLLED STEEL
6205	6203						

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

If Inverter equals NONE, contact factory for further information

\*  
N  
O  
T  
E  
S  
\*

INVERTER TORQUE: CONSTANT 10:1
INV. HP SPEED RANGE: NONE
ENCODER: NONE
NONE NONE
NONE NONE PPR
BRAKE: NONE NONE
NONE P/N NONE
NONE NONE
- FT-LB NONE V NONE Hz

DATE: 06/22/2017 05:54:16 AM  
 FORM 3531 REV.3 02/07/99  
 \*\* Subject to change without notice.

Data Sheet

Date: 1/3/2019  
 Customer: \_\_\_\_\_  
 Attention: \_\_\_\_\_  
 Submitted by: FAREEDA DUDEKULA



143TTDR16005

Submittal

Data @ 575 V

Motor Load Data

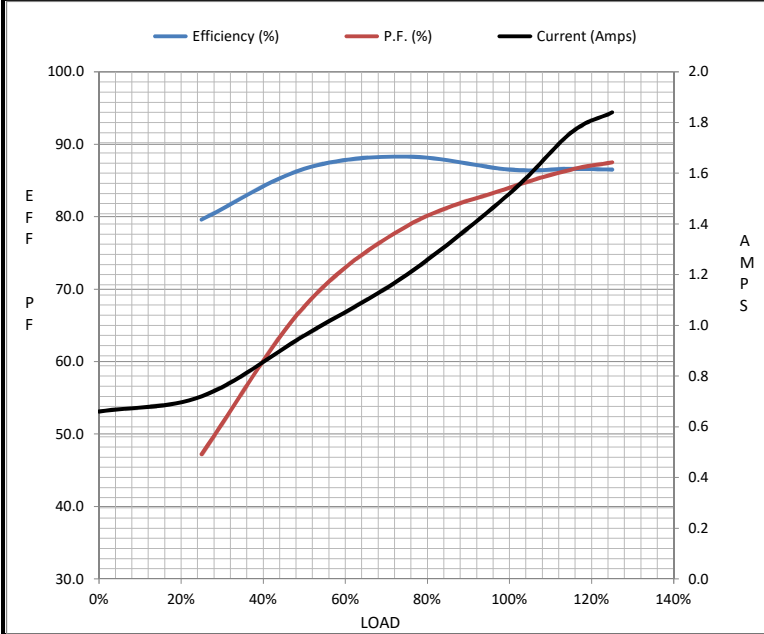
Load	0%	25%	50%	75%	100%	115%	125%	LR
Current (Amps)	0.66	0.72	0.96	1.20	1.52	1.76	1.84	14.9
Torque (ft-lb)	0.00	0.55	1.10	1.68	2.25	2.60	2.80	6.8
RPM	3600	3580	3560	3540	3515	3,505	3495	0
Efficiency (%)		79.6	86.6	88.3	86.5	86.6	86.5	
P.F. (%)	14.3	47.2	67.6	78.7	84.0	86.5	87.5	62.5

Motor Speed Data

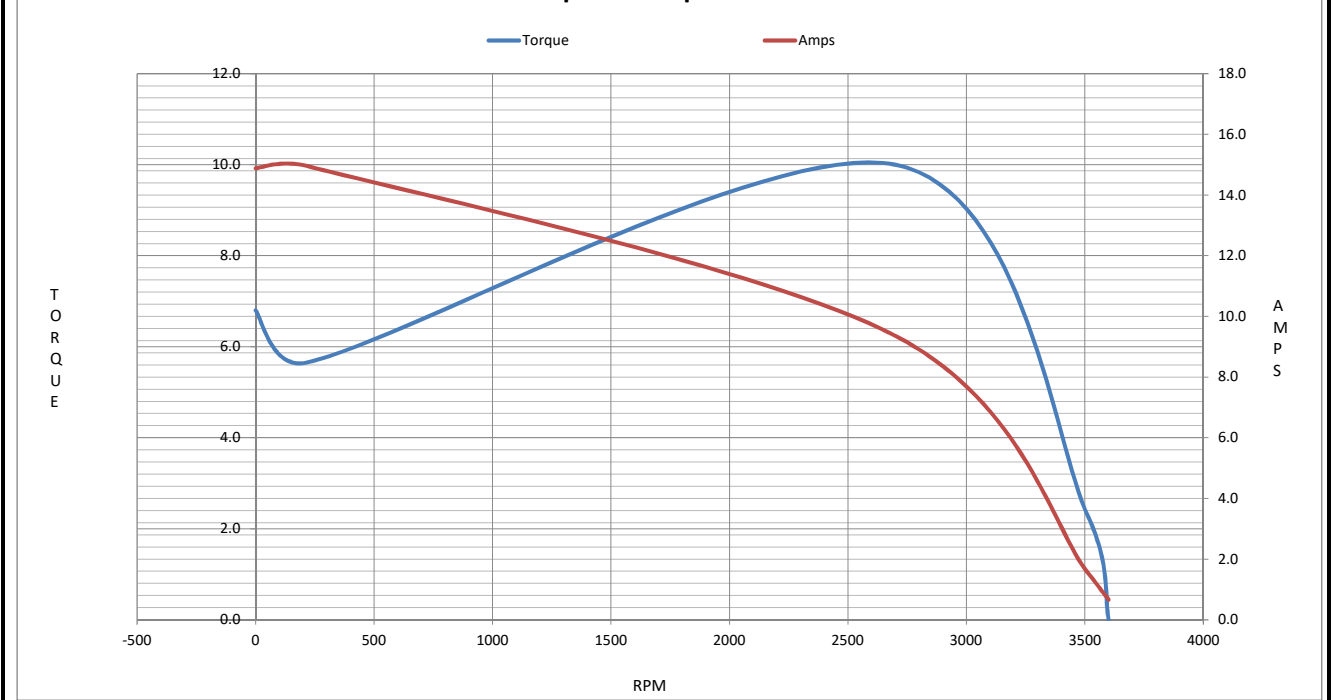
	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	215	2700	3515	3600
Current (Amps)	14.9	15.0	9.4	1.52	0.66
Torque (ft-lb)	6.8	5.7	10.0	2.25	0.00

Information Block

HP	1.5			
Sync. RPM	3600			
Frame	143			
Enclosure	DP			
Construction	TDR			
Voltage	575 V			
Frequency	60 Hz			
Design	B			
LR Code letter	L			
Service Factor	1.15			
Temp Rise @ FL	20 °C			
Duty	CONT			
Ambient	40 °C			
Elevation	3300 feet			
Rotor/Shaft wk <sup>2</sup>	0.00 Lb-Ft <sup>2</sup>			
Ref Wdg	ZT2168 DR			
Sound Pressure @ 1M	68 dBA			
VFD Rating	CONSTANT 10:1			
Outline Dwg	A-100085-856			
Conn. Diag	A-EE7300			
Additional Specifications:				
0				
0				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
8.2730	5.9090	14.4780	14.7730	561.3910



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 : 143TTDR16005

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

Catalog No : E798A

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**