

PRODUCT INFORMATION PACKET

marathon®
Motors

Model No: 145TTFN16046

Catalog No: E2204-P

XRI® General Purpose General Purpose Motor, 1.50 & 1.50 HP, 3 Ph, 60 & 50 Hz, 230/460 & 190/380 V,
1800 & 1500 RPM, 145T Frame, TEFC



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RegalRexnord

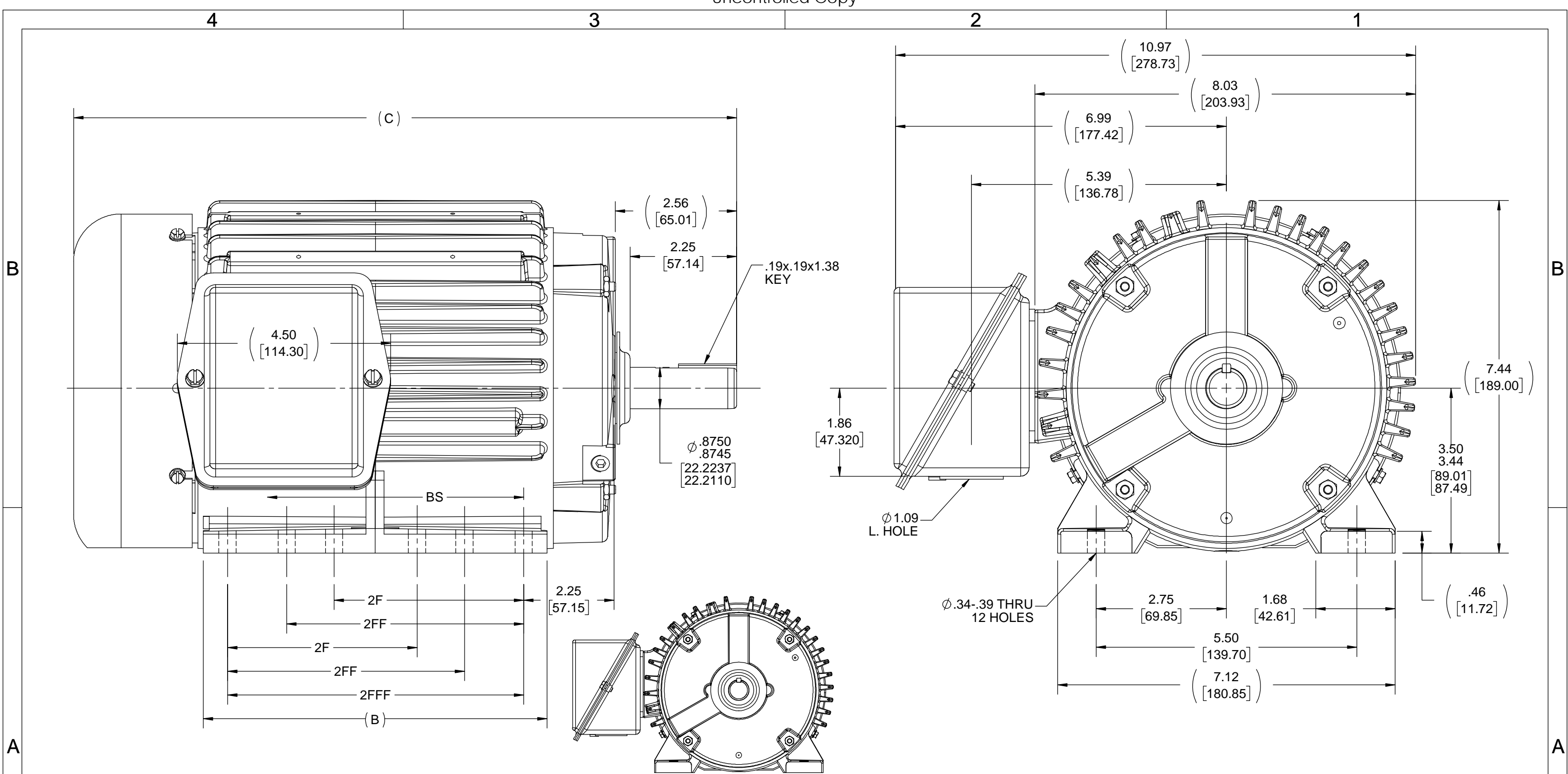


Nameplate Specifications

Phase	3	Output HP	1.50 & 1.50 Hp
Output KW	1.1 & 1.1 kW	Voltage	230/460 & 190/380 V
Speed	1755 & 1475 rpm	Service Factor	1.15 & 1.15
Frame	145T	Enclosure	Totally Enclosed Fan Cooled
Thermal Protection	No Protection	Efficiency	86.5 & 84 %
Ambient Temperature	40 °C	Frequency	60 & 50 Hz
Current	4.6/2.3 & 5.2/2.6 A	Power Factor	71
Duty	Continuous	Insulation Class	F
Design Code	B	KVA Code	P
Drive End Bearing Size	6205	Opp Drive End Bearing Size	6203
UL	Recognized	CSA	Y
CE	Y	IP Code	43
Number of Speeds	1		

Technical Specifications

Electrical Type	Squirrel Cage Inverter Rated	Starting Method	Line Or Inverter
Poles	4	Rotation	Reversible
Resistance Main	7.9 Ohms	Mounting	Rigid Base
Motor Orientation	Horizontal	Drive End Bearing	Ball
Opp Drive End Bearing	Ball	Frame Material	Cast Iron
Shaft Type	T	Overall Length	13.99 in
Frame Length	7.50 in	Shaft Diameter	0.875 in
Shaft Extension	2.56 in	Assembly/Box Mounting	F1/F2 CAPABLE
Connection Drawing	A-EE7308	Outline Drawing	A-104719-750



- NOTES**
1. BOX CAN BE ROTATED IN 90° STEPS
 2. BOX CAN MOUNTED ON OPPOSITE SIDE BY REMOVING BRACKETS AND TURNING FRAME 180°
 3. NAMEPLATE READ FROM CONDUIT SIDE OS MOTOR

DASH	FR.	B	C	BS	2F	2FF	2FFF
750	143/5T	7.25	13.99	5.06	4.00	5.00	6.25

DRAWING REVISION E	REVISION BY KHADHAR	DATE 11/24/2020
ECO ECO-0194879	APPROVED BY PVR	DATE 11/24/2020
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TOLERANCES UNLESS OTHERWISE SPECIFIED:

DEC.	INCH	mm	ANGLE
.X	±0.1	[±2.5]	±0.5°
.XX	±0.03	[±0.76]	
.XXX	±0.005	[±0.127]	
.XXXX	±0.0005	[±0.0127]	

REMOVE BURRS & BREAK SHARP EDGES: .003/.015 [0.076/.381]
CORNER FILLETS: .02 [0.51]
MACHINED SURFACES: 125 INCH $\sqrt{\text{mm}}$ 3.2
mm SHOWN IN [BRACKETS]

DRAWN BY DRS	DATE 05/25/2000
APPROVED BY ET	DATE 05/25/2000
REFERENCE	
THIRD ANGLE PROJECTION	

REGAL ™ Regal Beloit America, Inc.	
DESCRIPTION OUTLINE 140 FR. - BB - TS - TEFC	
MATERIAL	PROCESS/FINISH
SIZE B	DRAWING NUMBER 104719
	SHEET 1 OF 1

EE7308

THREE PHASE
DUAL VOLTAGE MOTOR



VIEW OF TERMINAL END

REF.
WINDING DIAGRAM

T8Y, T2Y, T2BL, T4BX, T2EC, T2G
T6BZ, T2B, T6BL, T4AV, T6B, T4B

OPTIONAL CORD
CONNECTION

L1 — WHITE
L2 — RED
L3 — BLACK

NO.	REVISION	BY & DATE	CHK	ANG	TOLERANCES UNLESS SPECIFIED		FINISH	DRAWN RM 11/20/1990				
					DEC.	INCHES						
5	CHG TO REGAL LOGO	SL 09/10/2015	AB					CHK ML 11/21/1990				
4	REVISED IEC NOTATIONS	MSG 11/15/2011	CMN	.X	±.1			APPD SAS 04/24/2003				
3	ADDED IEC NOTATIONS... (U1), (V1) ETC. MU95194	MSG 5/10/2010	MJS	.XX	±.02		TITLE CONNECTION DIAGRAM	SCALE 1=1				
2	ADDED THE OPTIONAL CORD CONNECTION MU46318	RDH 04/24/2003	DRS	.XXX	±.005		3Ø - DUAL VOLTAGE MOTOR	REF				
1	REDRAWN	RM 11/20/1990		.XXXX	±.0005		MAT'L.	FMF				
					±7'30"			PREV				
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							DIST WP					



Regal Beloit America, Inc.

CERTIFICATION DATA SHEET

Model#: 145TTFN16046 AA
CONN. DIAGRAM: A-EE7308
OUTLINE: A-104719-750

WINDING#: ZT4256 R1 3
ASSEMBLY: F1/F2 CAPABLE

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
1 1/2&1 1/2	1.12&1.12	1800	1755&1475	145T	TEFC	P	B

PH	Hz	VOLTS	FL AMPS	START TYPE	DUTY	INSL	S.F	AMB°C	ELEVATION
3	60/50	230/460#190/ 380	4.6/2.3&4/2	LINE OR INVERTER	CONTINUOU S	F3	1.15/1.15	40	3300

FULL LOAD EFF: 86.5&85.2	3/4 LOAD EFF: 85.5	1/2 LOAD EFF: 82.5	GTD. EFF	ELEC. TYPE	NO LOAD AMPS
FULL LOAD PF: 71&66.9	3/4 LOAD PF: 62.5	1/2 LOAD PF: 49	84	SQ CAGE INV RATED	3 / 1.5

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
4.5 LB-FT	48 / 24	21.2 LB-FT 471	26 LB-FT 578	30

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS /HOUR	APPROX. MOTOR WGT
62 dBA	72 dBA	0.14 LB-FT^2	10 LB-FT^2	20 SEC.	2	50 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)	CAST IRON
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

INVERTER TORQUE: CONSTANT 20:1		
INV. HP SPEED RANGE: NONE		
ENCODER: NONE		
NONE	NONE	
NONE	NONE	PPR
BRAKE:	PROVISIONS FOR KIT	NONE
NONE	P/N	NONE
NONE	NONE	
NONE FT-LB	NONE V	NONE Hz

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DATE: 06/23/2017 06:59:15 AM

FORM 3531 REV.3 02/07/99

** Subject to change without notice.

Data Sheet

Date: 1/2/2019
 Customer: _____
 Attention: _____
 Submitted by: FAREEDA DUDEKULA



145TTFN16046

Submittal
 Data @ **460 V**

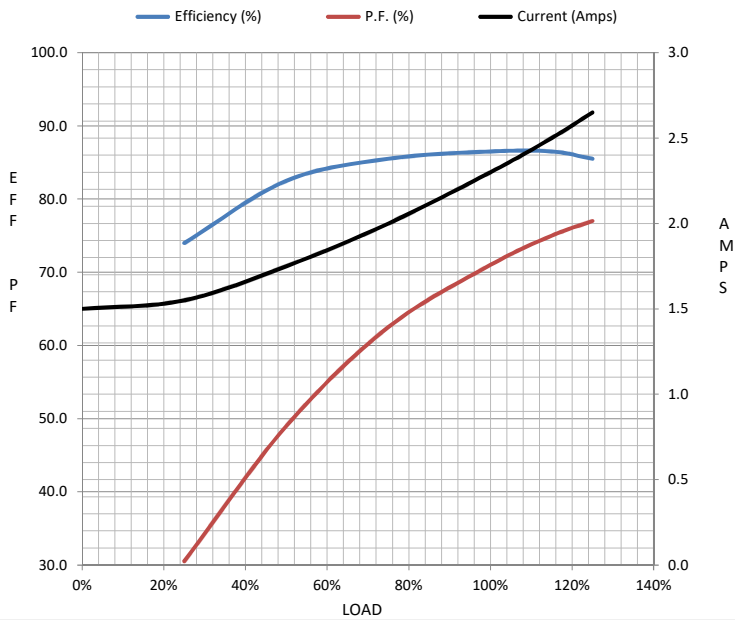
Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR
Current (Amps)	1.50	1.55	1.75	2.00	2.30	2.50	2.65	24.0
Torque (ft-lb)	0.00	1.10	2.20	3.5	4.5	5.2	5.7	21.2
RPM	1800	1790	1780	1765	1755	1,750	1745	0
Efficiency (%)		74.0	82.5	85.5	86.5	86.5	85.5	
P.F. (%)	7.5	30.5	49.0	62.5	71.0	75.0	77.0	69.5

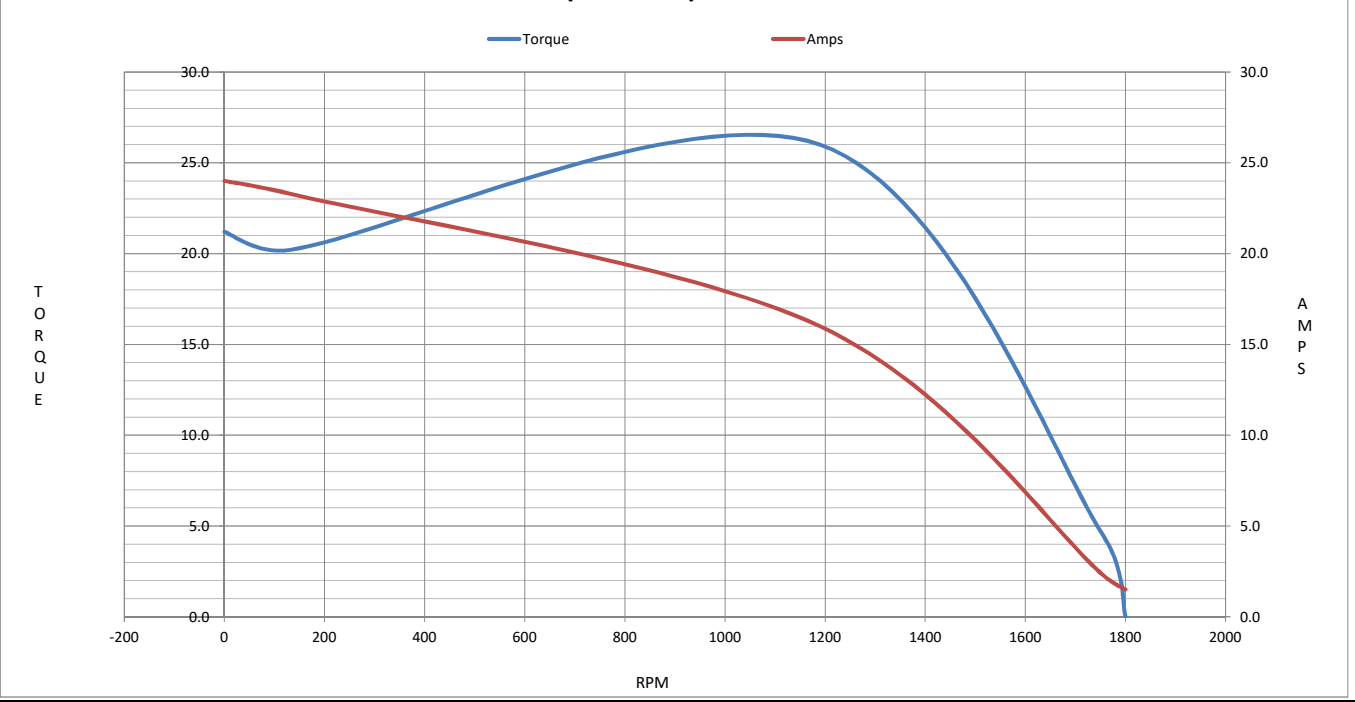
Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	130	1190	1755	1800
Current (Amps)	24.0	23.3	16.0	2.30	1.50
Torque (ft-lb)	21.2	20.2	26.0	4.5	0.00

Information Block				
HP	1.5			
Sync. RPM	1800			
Frame	145			
Enclosure	TEFC			
Construction	TFS			
Voltage	230/460#190/380 V			
Frequency	60 Hz			
Design	B			
LR Code letter	P			
Service Factor	1.15			
Temp Rise @ FL	30 °C			
Duty	CONT			
Ambient	40 °C			
Elevation	1,000 feet			
Rotor/Shaft wk ²	0.14 Lb-Ft ²			
Ref Wdg	ZT4256 R1			
Sound Pressure @ 1M	62 dBA			
VFD Rating	CONSTANT 20:1			
Outline Dwg	A-104719-750			
Conn. Diag	A-EE7308			
Additional Specifications:				
0				
0				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
4.8380	3.7800	7.1250	7.1630	189.6050



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 : 145TTFN16046

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

Catalog No : E2204-P

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