

PRODUCT INFORMATION PACKET

Model No: 405THFS8036

Catalog No: Y575

Encoder Motor, 100 HP, 3 Ph, 60 Hz, 230/460 V, 1800 RPM, 405T Frame, TEFC



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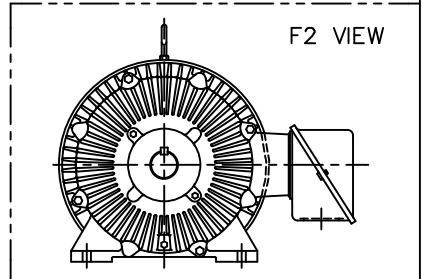
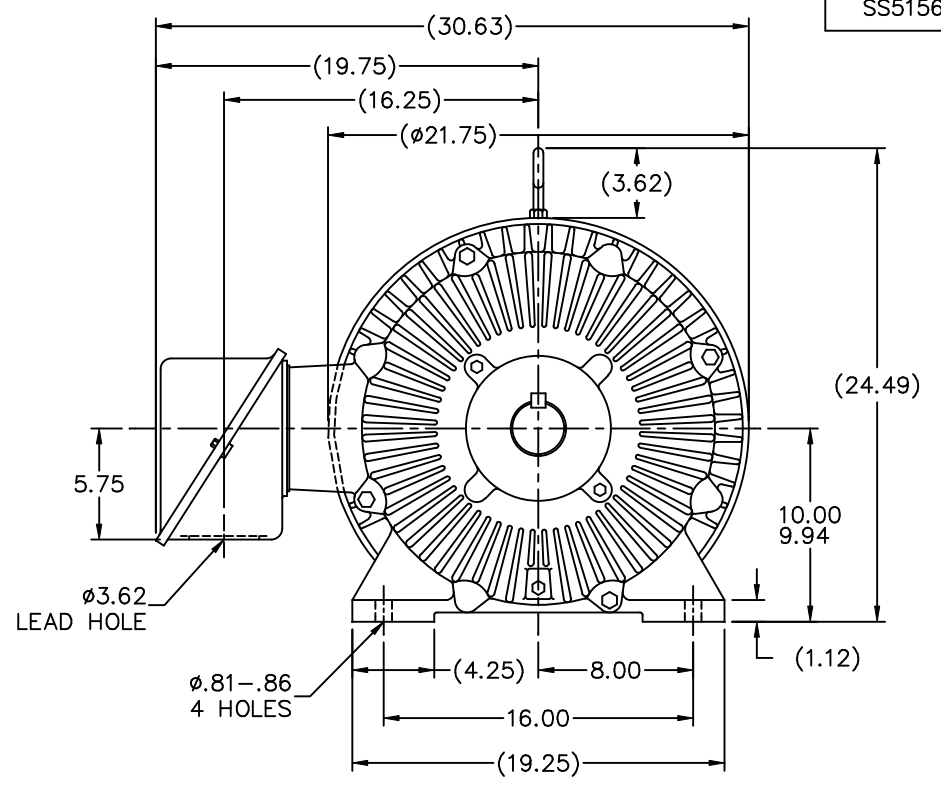
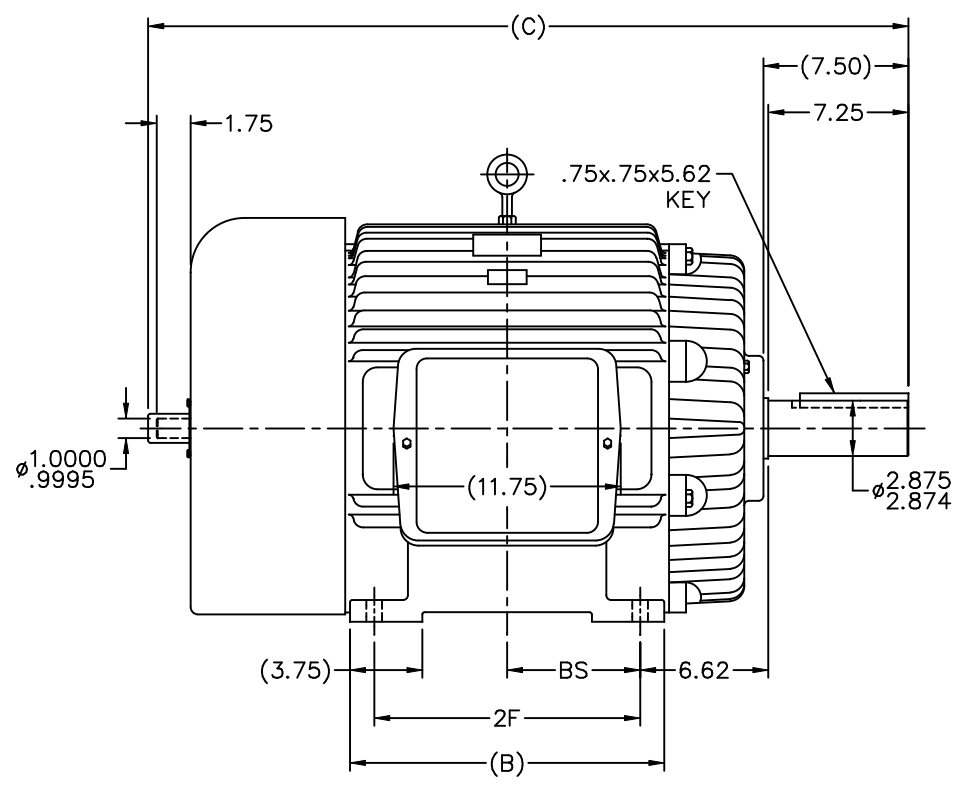
Nameplate Specifications

Output HP	100 Hp	Output KW	75.0 kW
Frequency	60 Hz	Voltage	230/460 V
Current	230.0/115.0 A	Speed	1785 rpm
Service Factor	1	Phase	3
Efficiency	94.5 %	Power Factor	86.5
Duty	Continuous	Insulation Class	H
Design Code	INV	KVA Code	J
Frame	405T	Enclosure	Totally Enclosed Fan Cooled
Thermal Protection	Thermostat	Ambient Temperature	40 °C
Drive End Bearing Size	6316	Opp Drive End Bearing Size	6313
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	.046 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	39.32 in
Frame Length	16.75 in	Shaft Diameter	2.875 in
Shaft Extension	7.5 in	Assembly/Box Mounting	F1/F2 CAPABLE
Inverter Load	CONSTANT 2000:1		
Outline Drawing	B-SS515694-1675	Connection Drawing	A-EE7308AD

SS515694

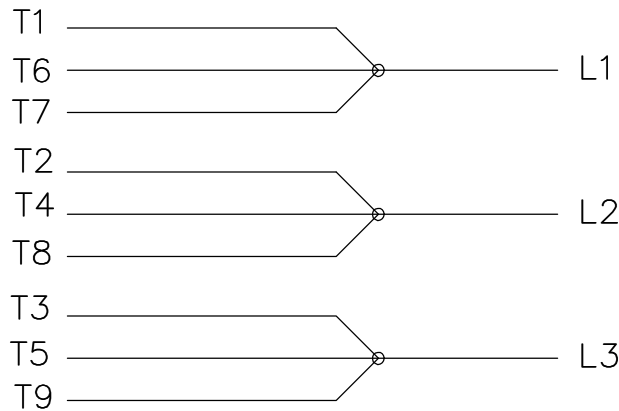


- NOTES:
 1. CONDUIT BOX CAN BE ROTATED IN 90° STEPS.
 2. CONDUIT BOX CAN BE MOUNTED ON OPPOSITE SIDE BY REMOVING BRACKETS AND TURNING FRAME 180°.
 3. NAMEPLATE TO BE READ FROM CONDUIT BOX SIDE OF MOTOR

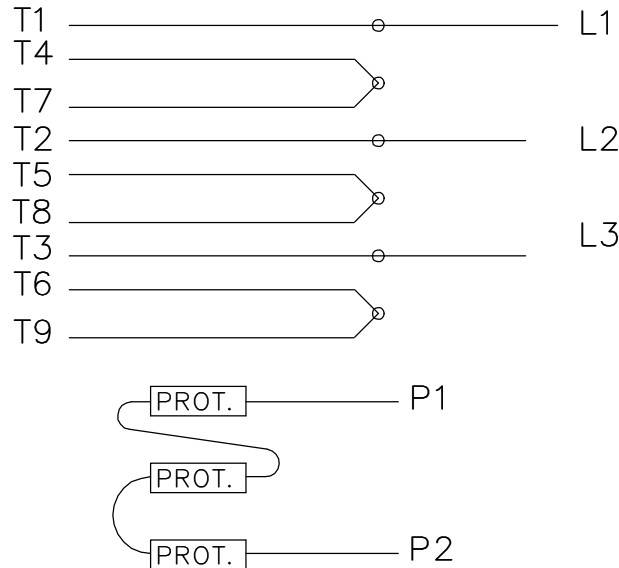
1675	405T	39.32	16.25	13.75	6.88		
DASH	FRAME	C	B	2F	BS		

		TOLERANCES UNLESS SPECIFIED		MARATHON ELECTRIC		DRAWN MRB 06-27-1996	
5	ADDED F2 VIEW	RWR 06-11-2007	ML	DEC.	INCHES	CHK	KL 06-28-1996
4	REDRAWN IN AUTOCAD	TAT 06-24-2005	DRS	.X	±.1	APPD	TB 06-28-1996
3	ADDED SHAFT COVER MU22706	KL 11-13-1999	.XX	±.03	TITLE	SCALE	5-32
2	ADDED .75 TO FRONT END EXTENSION CN 23942	BLR 02-20-1997	.XXX	±.005	405T FR. - TEFC - PROV. FOR HS35 TACH.	REF	
1	NEW DRAWING 4382064	MRB 07-01-1996	.XXXX	±.0005	MATL	FMF	
NO.	REVISION	BY & DATE	CHK	ANG	±7'30"	FINISH	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 ss515694
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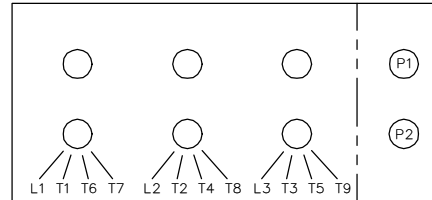
LOW VOLTAGE



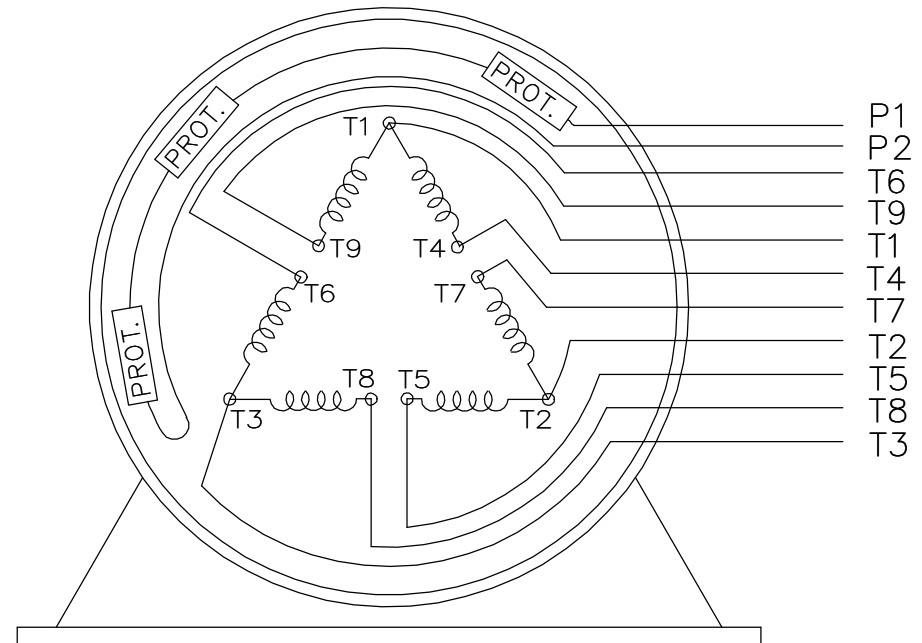
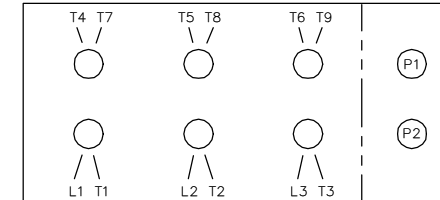
HIGH VOLTAGE



LOW VOLTAGE



HIGH VOLTAGE



VIEW OF TERMINAL END

WHEN MORE THAN ONE PROT. IS USED; PROT. ARE CONNECTED IN SERIES

DRAWING REVISION L		REVISION BY JP	REV DATE/© DATE 06-21-2019	TOLERANCES (EXCEPT AS NOTED): DEC. INCH mm ANGLE		DRAWN BY MJD		Regal Beloit America, Inc.	
ECO ECO-0168744		APPROVED BY MH	DATE 06-21-2019	.X ±0.1 [±3]	±7° 30"	DATE 12-19-1997			
ECO DESCRIPTION UPDATED TO CURRENT STANDARDS				REMOVE BURRS & BREAK SHARP EDGES: .003/.015 [.08/.38] X 45°		APPROVED BY GK		DESCRIPTION CONN DIAGRAM-EXTERNAL	
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				MACHINED SURFACES: 200/ 5.1 INCH mm		REFERENCE		PROCESS/FINISH	
				mm DIMENSIONS IN [BRACKETS] ARE FOR REFERENCE ONLY		THIRD ANGLE PROJECTION		SIZE A DRAWING NUMBER EE7308AD SHEET 1 OF 1	

CERTIFICATION DATA SHEET

Model#: 405THFS8036 DT WINDING#: T4054115 R6 1
 CONN. DIAGRAM: A-EE7308AD ASSEMBLY: F1/F2 CAPABLE
 OUTLINE: B-SS515694-1675

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN				
100	75	1800	1785	405T	TEFC	J	INV				
PH	Hz	VOLTS	FL AMPS	START TYPE	DUTY	INSL	S.F	AMB°C	ELEVATION		
3	60	230/460	230/115	INVERTER ONLY	CONTINUOUS	H1	1.0	40	3300		
FULL LOAD EFF: 94.5		3/4 LOAD EFF: 94.1		1/2 LOAD EFF: 93		GTD. EFF		ELEC. TYPE		NO LOAD AMPS	
FULL LOAD PF: 86.5		3/4 LOAD PF: 83		1/2 LOAD PF: 75		94.1		SQ CAGE INV DUTY		76 / 38	
F.L. TORQUE		LOCKED ROTOR AMPS		L.R. TORQUE		B.D. TORQUE		F.L. RISE°C			
295 LB-FT		1800 / 900		585 LB-FT 198		900 LB-FT 305		55			
SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS /HOUR	APPROX. MOTOR WGT					
80 dBA	90 dBA	27 LB-FT^2	- LB-FT^2	- SEC.	-	1308 LBS.					

EQUIVALENT WYE CKT.PARAMETERS (OHMS PER PHASE)

R1	R2	X1	X2	XM
0.03408	0.021016	0.236288	0.219248	6.816
RM	ZREF	XR	TD	TD0
332.28	2.84	5.7	0.0347	0.895

*** SUPPLEMENTAL INFORMATION ***

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

BEARINGS		GREASE	SHAFT TYPE	SPECIAL DE	SPECIAL ODE	SHAFT MATERIAL	FRAME MATERIAL
DE	OPE	POLYREX EM	T	NONE	NONE	1045 HOT ROLLED (C-204)	CAST IRON
BALL	BALL						
6316	6313						

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

If Inverter equals NONE, contact factory for further information

INVERTER TORQUE: CONSTANT 2000:1 INV. HP SPEED RANGE: 1.5 X BASE SPEED
ENCODER: PROVISIONS ONLY DYNAPAR HS35 NONE NONE PPR
BRAKE: NONE NONE NONE P/N NONE

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NONE	NONE		
NONE FT-LB	NONE V	NONE Hz	

DATE: 06/21/2017 08:12:08 AM
FORM 3531 REV.3 02/07/99
** Subject to change without notice.

Data Sheet

Date: 20-06-2017
Customer: _____
Attention: _____
Submitted by: FAREEDA DUDEKULA



405THFS8036

Submittal

Data @ **460 V**

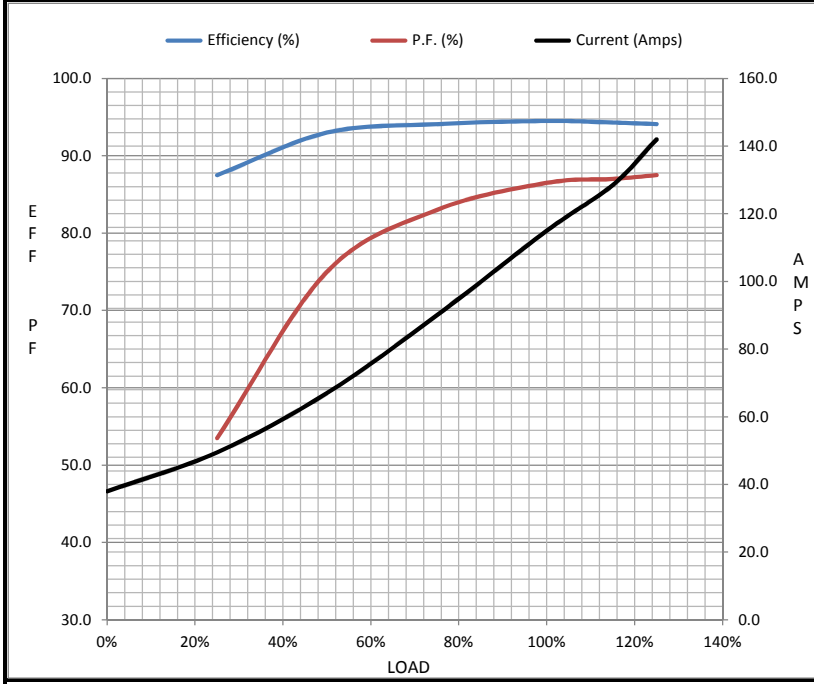
Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR
Current (Amps)	38.0	49.5	67.0	90.0	115	129	142	900
Torque (ft-lb)	0.00	73.0	147	220	295	333	370	585
RPM	1800	1796	1792	1788	1785	1,783	1780	0
Efficiency (%)		87.5	93.0	94.1	94.5	94.3	94.1	
P.F. (%)	8.5	53.5	75.0	83.0	86.5	87.0	87.5	30.5

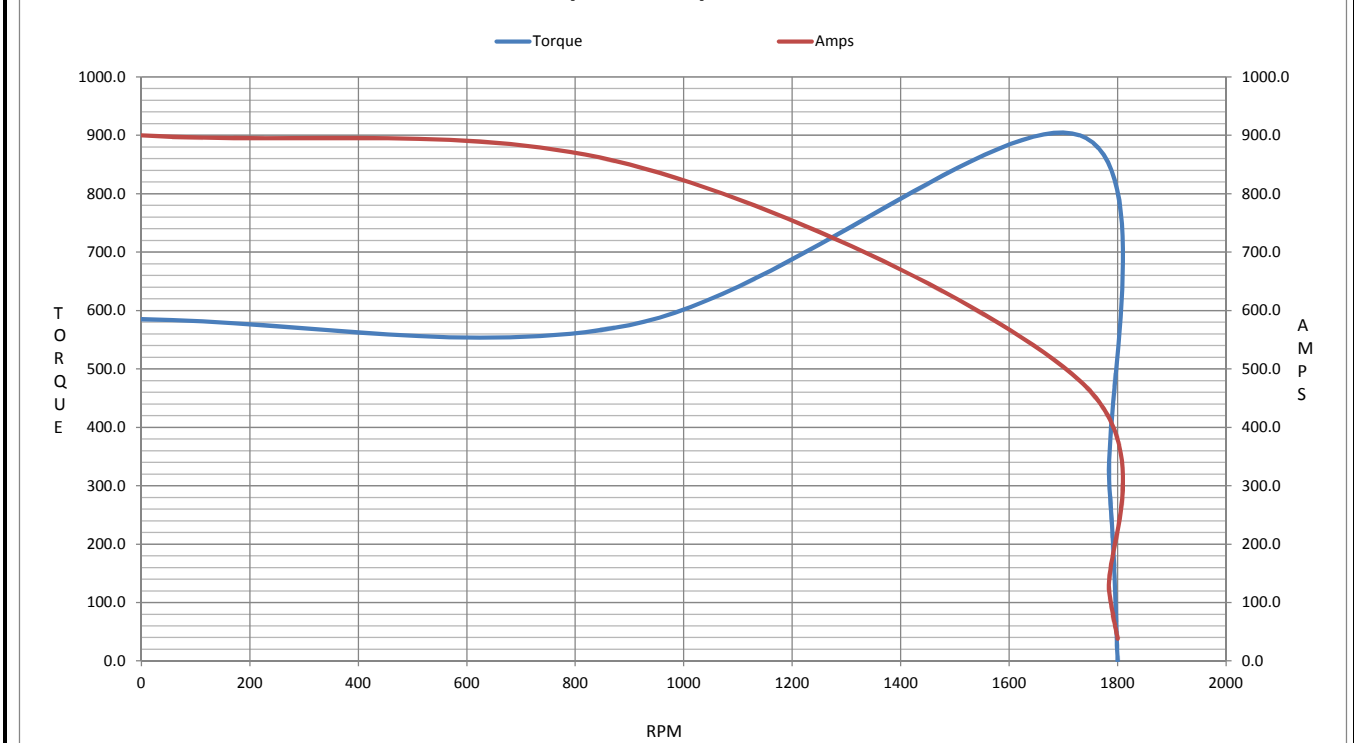
Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	900	1730	1785	1800
Current (Amps)	900	850	480	115	38.0
Torque (ft-lb)	585	575	900	295	0.00

Information Block				
HP	100.0			
Sync. RPM	1800			
Frame	405			
Enclosure	TEFC			
Construction	TFS			
Voltage	230/460 V			
Frequency	60 Hz			
Design	A			
LR Code letter	J			
Service Factor	1.0			
Temp Rise @ FL	55 ° C			
Duty	CONT			
Ambient	40 ° C			
Elevation	1,000 feet			
Rotor/Shaft wk ²	27.0 Lb-Ft ²			
Ref Wdg	T4054115 R6			
Sound Pressure @ 1M	80 dBA			
VFD Rating	CONSTANT 2000:1			
Outline Dwg	B-SS515694-1675			
Conn. Diag	A-EE7308AD			
Additional Specifications:				
0				
365THFS8036				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
0.0340	0.0210	0.2360	0.2190	6.8160



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 : 405THFS8036

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

Catalog No : Y575

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