

PRODUCT INFORMATION PACKET

marathon®
Motors

Model No: 405TTFS16082

Catalog No: M918B

Vertical Pump Motor, 75 HP, 3 Ph, 60 Hz, 230/460 V, 1200 RPM, 405HPV Frame, TEFC



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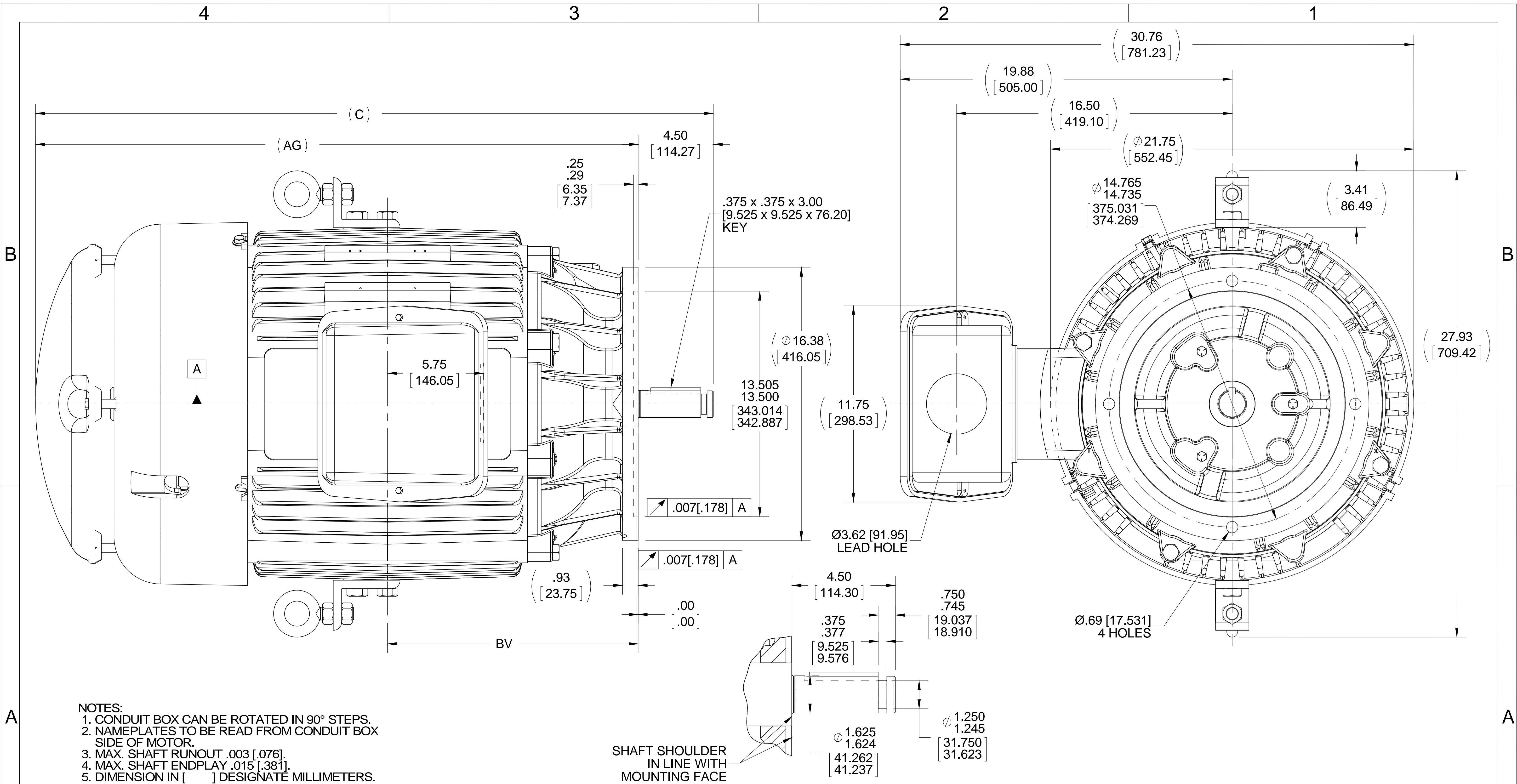
RegalRexnord

Nameplate Specifications

Phase	3	Output HP	75 Hp
Output KW	56.0 kW	Voltage	230/460 V
Speed	1185 rpm	Service Factor	1.15
Frame	405HPV	Enclosure	Totally Enclosed Fan Cooled
Thermal Protection	No Protection	Efficiency	94.5 %
Ambient Temperature	40 °C	Frequency	60 Hz
Current	180.0/90.0 A	Power Factor	83
Duty	Continuous	Insulation Class	F
Design Code	B	KVA Code	G
Drive End Bearing Size	6313	Opp Drive End Bearing Size	6314
UL	Recognized	CSA	Y
CE	Y	IP Code	43
Number of Speeds	1		

Technical Specifications

Electrical Type	Squirrel Cage Induction Run	Starting Method	Across The Line
Poles	6	Rotation	Reversible
Resistance Main	.092 Ohms	Mounting	Round
Motor Orientation	Shaft Down	Drive End Bearing	Ball
Opp Drive End Bearing	Ball	Frame Material	Cast Iron
Shaft Type	HP	Overall Length	40.58 in
Frame Length	16.75 in	Shaft Diameter	1.625 in
Shaft Extension	4.50 in	Assembly/Box Mounting	F1/F2 CAPABLE
Outline Drawing	B-SS508404-1675	Connection Drawing	A-EE7308



- NOTES:
1. CONDUIT BOX CAN BE ROTATED IN 90° STEPS.
 2. NAMEPLATES TO BE READ FROM CONDUIT BOX SIDE OF MOTOR.
 3. MAX. SHAFT RUNOUT .003 [.076].
 4. MAX. SHAFT ENDPLAY .015 [.381].
 5. DIMENSION IN [] DESIGNATE MILLIMETERS.

SHAFT SHOULDER IN LINE WITH MOUNTING FACE

DETAIL OF SHAFT EXTENSION

DRAWING REVISION G		REVISION BY JJB		DATE 09-08-2016		TOLERANCES UNLESS OTHERWISE SPECIFIED:		DRAWN BY DD		Regal Beloit America, Inc.	
ECO ECO-0104950		APPROVED BY JHA		DATE 09-08-2016		DEC. ±0.1 [±2.5] .XX ±0.03 [±0.76] .XXX ±0.005 [±0.127] .XXXX ±0.0005 [±0.0127]		DATE 04-28-1993			
ECO DESCRIPTION UPDATED TO CURRENT STANDARDS						REMOVE BURRS & BREAK SHARP EDGES: .003/.015 [.076/.381] X 45° CORNER FILLETS: R.02 [.51] MACHINED SURFACES: 200 INCH/mm SHOWN IN [BRACKETS]		APPROVED BY TB		DESCRIPTION OUTLINE	
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DASH 1675		FRAME 400HPV		C 40.58 [1030.73]		AG 36.08 [916.43]		BV 15.00 [381.00]		MATERIAL PROCESS/FINISH	
								THIRD ANGLE PROJECTION		SIZE B	
										DRAWING NUMBER SS508404	
										SHEET 1 OF 1	

EE7308

THREE PHASE
DUAL VOLTAGE MOTOR



REF.
WINDING DIAGRAM

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

VIEW OF TERMINAL END

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				
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 ee7308	SIZE A	DRAWING NO. EE7308	PAGE OF 5	REV. 5
							DIST WP					



Regal Beloit America, Inc.



P.O. BOX 8003
WAUSAU, WI 54401-8003
PH. 715-675-3311

DATA VOLTS: 460

CERTIFICATION DATA SHEET

CUSTOMER: _____ CUSTOMER P.O. #: _____
 ORDER #: _____ REFERENCE MODEL #: 405TTFS16082
 CONN. DIAGRAM: A-EE7308 CAT #: M318B
 OUTLINE: B-SS508404-1675 CUSTOMER PART #: _____
 WINDING: T405642 NONE 1 MOUNTING: F1/F2 CAPABLE
 SPEED: _____

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC RPM	FL RPM	FRAME	ENCLOSURE	TYPE	KVA CODE	DESIGN
75	56	1200	1185	405HPV	TEFC	TFS	G	B

PH	HZ	VOLTS	AMPS	START TYPE	DUTY	INSL	S.F.	AMB	ELEV.
3	60	230/460	180/90	ACROSS THE LINE	CONT	F	1.15	40	3300

F.L. EFF	94.5	3/4 LD EFF	95.0	1/2 LD EFF	94.5	GTD EFF	94.1	ELECT. TYPE	SQ CAGE IND RUN
F.L. PF	83.0	3/4 LD PF	79.0	1/2 LD PF	71.0				

F.L. TORQUE	LR AMPS @ 460 V	L.R. TORQUE	B.D. TORQUE	F.L. RISE (°C)
333 LB-FT	535	650 LB-FT 195%	750 LB-FT 225%	75

@ 3 FT.	POWER	ROTOR WK ²	MAX. LOAD WK ²	SAFE STALL TIME	STARTS/HOUR	MOTOR WGT
68 dBA	77 dBA	38.0 LB-FT ²	1200 LB-FT ²	25 SEC.	2	1350 LB.

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

DE BRACKET TYPE	ODE BRACKET TYPE	MOUNT TYPE	MOTOR ORIENTATION	SEVERE DUTY	HAZARDOUS LOCATION	DRIP COVER	SCREENS	PAINT
P-BASE	STANDARD	ROUND	SHAFT DOWN	NO	NONE	YES	NONE	BLUE (ENAMEL)

BEARINGS		GREASE	SHAFT TYPE	SPECIAL DE	SPECIAL ODE	SHAFT MATERIAL	FRAME MATERIAL
DE	ODE						
BALL	BALL	POLYREX EM	HP	NONE	NONE	1045 HOT ROLLED (C-204)	CAST IRON
6313	6314						

THERMOSTATS	PROTECTORS	WDG RTD's	BRG RTD's	THERMISTORS	CONTROL	SPACE HEATERS
NONE	NOT	NONE	NONE	NONE	FALSE	NA

R1 (ohms/ph)	R2 (ohms/ph)	X1 (ohms/ph)	X2 (ohms/ph)	Xm (ohms/ph)	VIBRATION (in/sec)	FLOAT
0.068	0.042	0.325	0.507	8.732	0.150	ODE

* N O T E S *	INVERTER TORQUE: NONE	
	INV. HP SPEED RANGE: NONE	
	ENCODER: NONE	
	NONE	
	NONE PPR	

PREPARED BY: FAREEDA DUDEKULA	BRAKE: NONE
DATE: 9/11/2018	NONE NONE
	FT-LB: NA
	VOLTAGE: NONE HZ:
FORM: 3531 REV_4 2/27/06	UL: V-INS, CONST UL REC

Data Sheet

405TTFS16082

Date: 12/3/2018
 Customer: _____
 Attention: _____
 Submitted by: FAREEDA DUDEKULA



Submittal

Data @ 460 V

Motor Load Data

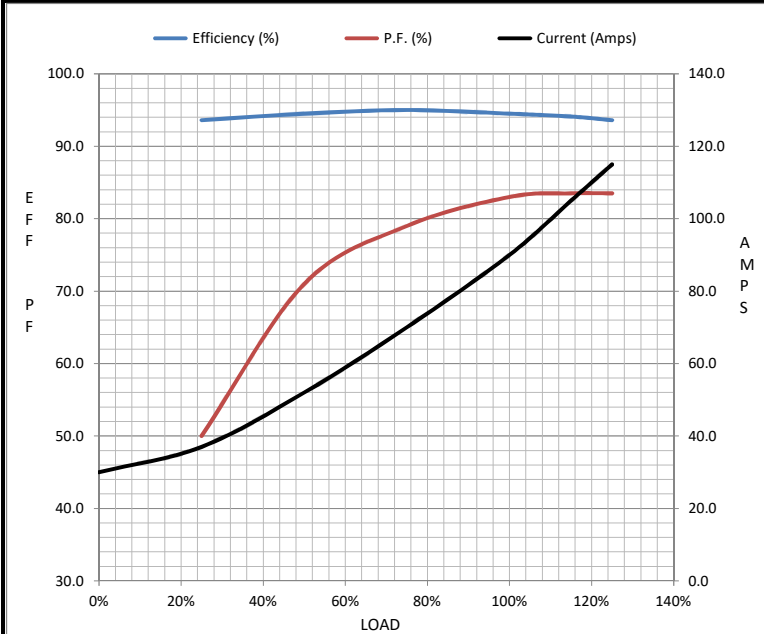
Load	0%	25%	50%	75%	100%	115%	125%	LR
Current (Amps)	30.0	37.0	52.0	70.0	90.0	105	115	535
Torque (ft-lb)	0.00	82.5	165	248	333	385	417	650
RPM	1200	1196	1192	1188	1185	1,180	1175	0
Efficiency (%)		93.6	94.5	95.0	94.5	94.1	93.6	
P.F. (%)	4.0	50.0	71.0	79.0	83.0	83.5	83.5	37.0

Motor Speed Data

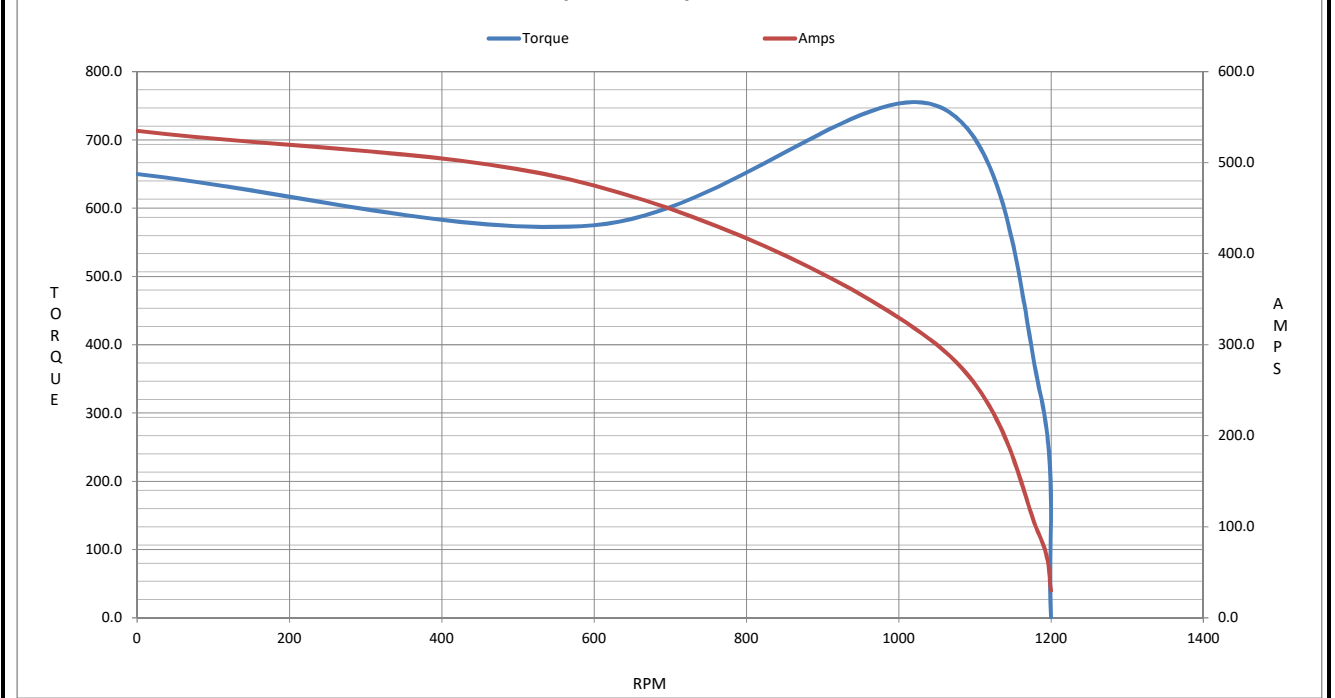
	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	600	1050	1185	1200
Current (Amps)	535	475	300	90.0	30.0
Torque (ft-lb)	650	575	750	333	0.00

Information Block

HP	75.0			
Sync. RPM	1200			
Frame	405			
Enclosure	TEFC			
Construction	TFS			
Voltage	230/460 V			
Frequency	60 Hz			
Design	B			
LR Code letter	G			
Service Factor	1.15			
Temp Rise @ FL	75 °C			
Duty	CONT			
Ambient	40 °C			
Elevation	1,000 feet			
Rotor/Shaft wk ²	38.0 Lb-Ft ²			
Ref Wdg	T405642 NONE			
Sound Pressure @ 1M	68 dBA			
VFD Rating	NONE			
Outline Dwg	B-SS508404-1675			
Conn. Diag	A-EE7308			
Additional Specifications:				
0				
0				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
0.0680	0.0420	0.3250	0.5070	8.7320



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 : 405TTFS16082

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

Catalog No : M918B

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