

PRODUCT INFORMATION PACKET

Model No: 254TTDC6003

Catalog No: U289

General Purpose Motor, 20 HP, 3 Ph, 60 Hz, 575 V, 3600 RPM, 254T Frame, DP



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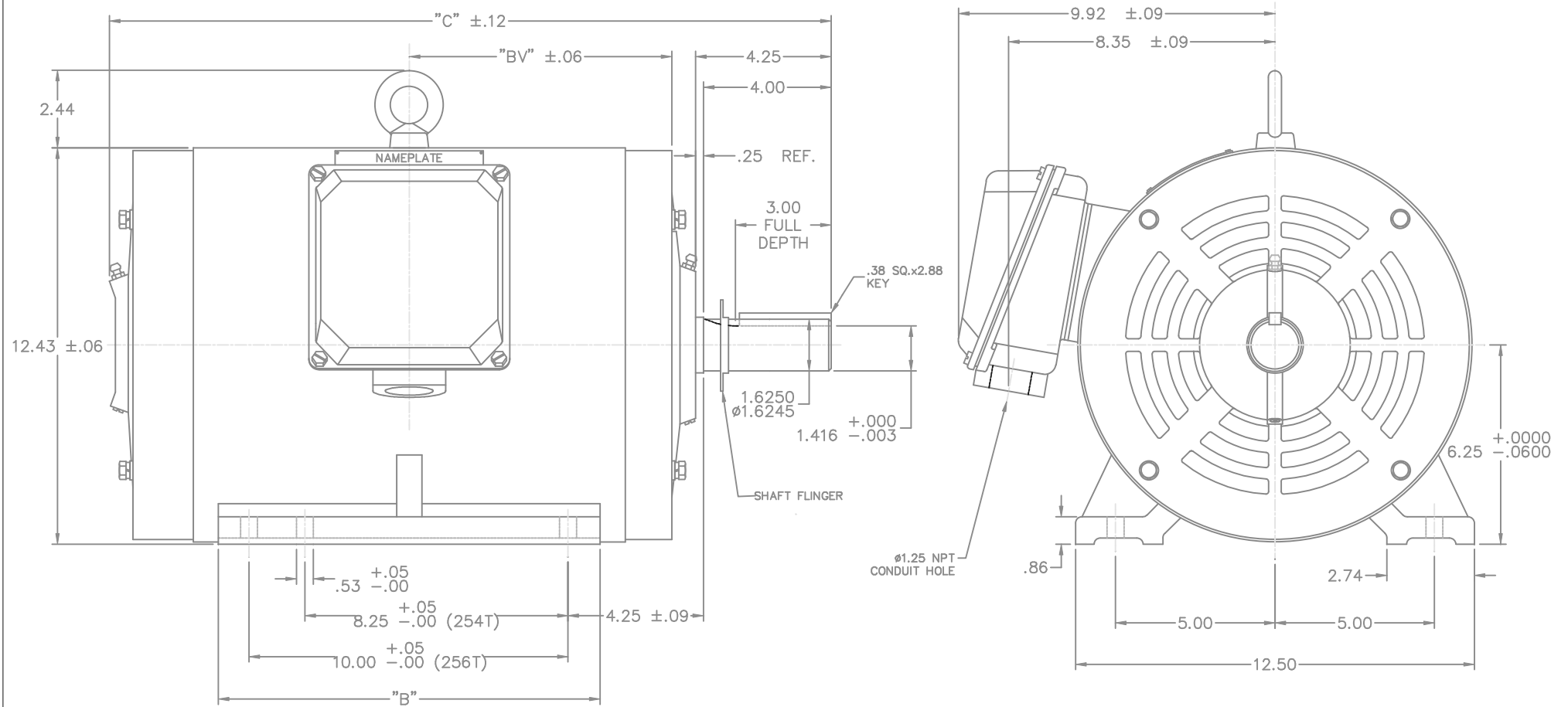
Nameplate Specifications

Output HP	20 Hp	Output KW	14.9 kW
Frequency	60 Hz	Voltage	575 V
Current	18.4 A	Speed	3550 rpm
Service Factor	1.15	Phase	3
Efficiency	93 %	Power Factor	89
Duty	Continuous	Insulation Class	F
Design Code	B	KVA Code	G
Frame	254T	Enclosure	Drip Proof
Thermal Protection	No Protection	Ambient Temperature	40 °C
Drive End Bearing Size	6309	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	.417 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	20.94 in
Shaft Diameter	1.625 in	Shaft Extension	4.25 in
Assembly/Box Mounting	F1/F2 Capable	Inverter Load	CONSTANT 10:1
Outline Drawing	16955160ME-254T	Connection Drawing	0051090.01

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NOTE: 256T HAS 6 MTG. HOLES, USING BOTH 254T AND 256T "2F" LOCATIONS.

FRAME	"C"	"BV"	"B"
254T	20.94	8.23	10.25
256T	22.60	9.06	12.00

		TOLERANCES UNLESS SPECIFIED		MARATHON ELECTRIC		DRAWN CTO 04-23-2002	
		DEC.	INCHES			CHK	ML 05-20-2002
		.X	±.1	TITLE		APPD	SB 05-21-2002
		.XX	±.03	OUTLINE 250T FRAME		SCALE	1=1.125
		.XXX	±.005	ODP, RIGID MOUNT, NEW CON-BOX		REF	
		.XXXX	±.0005	MAT'L		FMF	
		CHK	ANG ±1/2'	FINISH		PREV	
1 NEW DRAWING		CTO 05/21/02		CAD FILE		16955160me	
NO. REVISION		BY & DATE		RFP		SIZE	DRAWING NO.
				DIST		B	169551-60ME
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						REV. 1	

CERTIFICATION DATA SHEET

Model#: 254TTDC6003 AA
 CONN. DIAGRAM: 51090.01
 OUTLINE: 169551.60ME

WINDING#: T12902025 NONE 4
 ASSEMBLY: F1/F2 CAPABLE

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
20	14.9	3600	3550	254T	DP	G	B

PH	Hz	VOLTS	FL AMPS	START TYPE	DUTY	INSL	S.F	AMB°C	ELEVATION
3	60	575	18.4	LINE OR INVERTER	CONTINUOUS	F2	1.15/1.0	40	3300

FULL LOAD EFF: 93	3/4 LOAD EFF: 92.4	1/2 LOAD EFF: 92	GTD. EFF	ELEC. TYPE	NO LOAD AMPS
FULL LOAD PF: 89	3/4 LOAD PF: 87.5	1/2 LOAD PF: 82	92.4	SQ CAGE INV RATED	4.9

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
30 LB-FT	116	57 LB-FT 190	84 LB-FT 280	48

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS /HOUR	APPROX. MOTOR WGT
75 dBA	85 dBA	- LB-FT^2	- LB-FT^2	15 SEC.	-	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	OPE						
BALL	BALL	POLYREX EM	T	NONE	NONE	1045 HOT ROLLED (C-204)	CAST IRON
6309	6208						

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: 1.5 X BASE SPEED
	ENCODER: NONE NONE NONE NONE NONE PPR
	BRAKE: NONE NONE NONE P/N NONE NONE NONE NONE FT-LB NONE V NONE Hz

DATE: 06/23/2017 02:19:33 AM
 FORM 3531 REV.3 02/07/99
 ** Subject to change without notice.

Data Sheet

Date: 16-06-2017
Customer: _____
Attention: _____
Submitted by: FAREEDA DUDEKULA



254TTDC6003

Submittal

Data @ 575 V

Motor Load Data

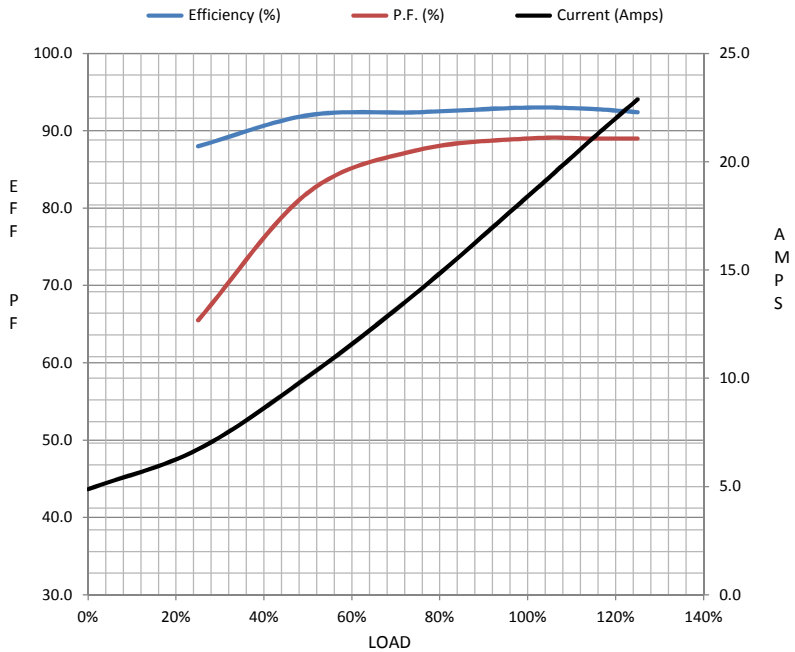
Load	0%	25%	50%	75%	100%	115%	125%	LR
Current (Amps)	4.9	6.7	10.1	14.0	18.4	21.1	22.9	116
Torque (ft-lb)	0.00	7.5	15.0	22.5	30.0	34.5	37.5	57.0
RPM	3600	3590	3575	3560	3550	3,540	3530	0
Efficiency (%)		88.0	92.0	92.4	93.0	92.8	92.4	
P.F. (%)	8.0	65.5	82.0	87.5	89.0	89.0	89.0	0.0

Motor Speed Data

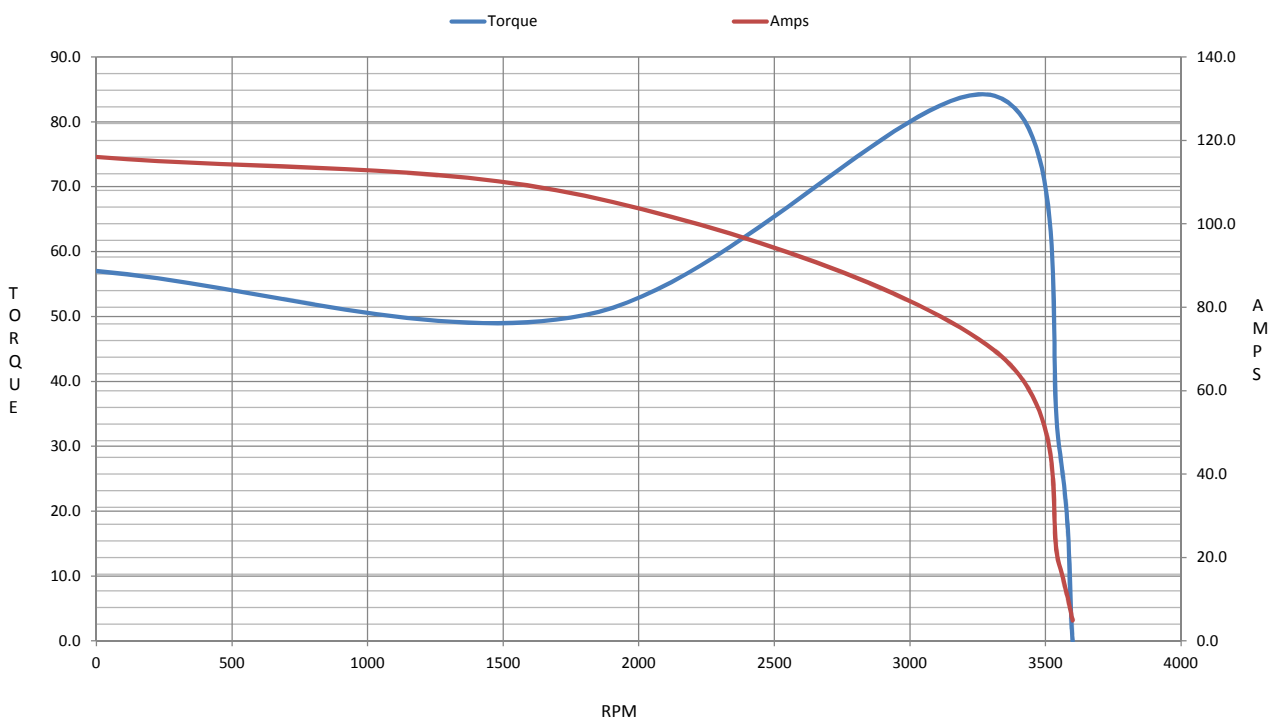
	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	1800	3312	3550	3600
Current (Amps)	116	107	69.6	18.4	4.9
Torque (ft-lb)	57.0	50.2	84.0	30.0	0.00

Information Block

HP	20.0			
Sync. RPM	3600			
Frame	254			
Enclosure	DP			
Construction	TDC			
Voltage	575 V			
Frequency	60 Hz			
Design	A			
LR Code letter	G			
Service Factor	1.15			
Temp Rise @ FL	48 ° C			
Duty	CONT			
Ambient	40 ° C			
Elevation	1,000 feet			
Rotor/Shaft wk ²	0.00 Lb-Ft ²			
Ref Wdg	T12902025 NONE			
Sound Pressure @ 1M	75 dBA			
VFD Rating	CONSTANT 10:1			
Outline Dwg	169551.60ME			
Conn. Diag	51090.01			
Additional Specifications:				
0				
365THFS8036				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
0.0000	0.0000	0.0000	0.0000	0.0000



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 : 254TTDC6003

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

Catalog No : U289

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