

PRODUCT INFORMATION PACKET

marathon®
Motors

Model No: 184TTGN16027

Catalog No: C324B

Hazardous Duty® Explosion Proof Motor, 5 & 3 HP, 3 Ph, 60 & 50 Hz, 230/460 & 190/380 V,
1800 & 1500 RPM, 184TC Frame, EPFC



Regal and Marathon are trademarks of Regal Rexnord Corporation or one of its affiliated companies.

©2023 Regal Rexnord Corporation, All Rights Reserved. MC017097E

RegalRexnord

Nameplate Specifications

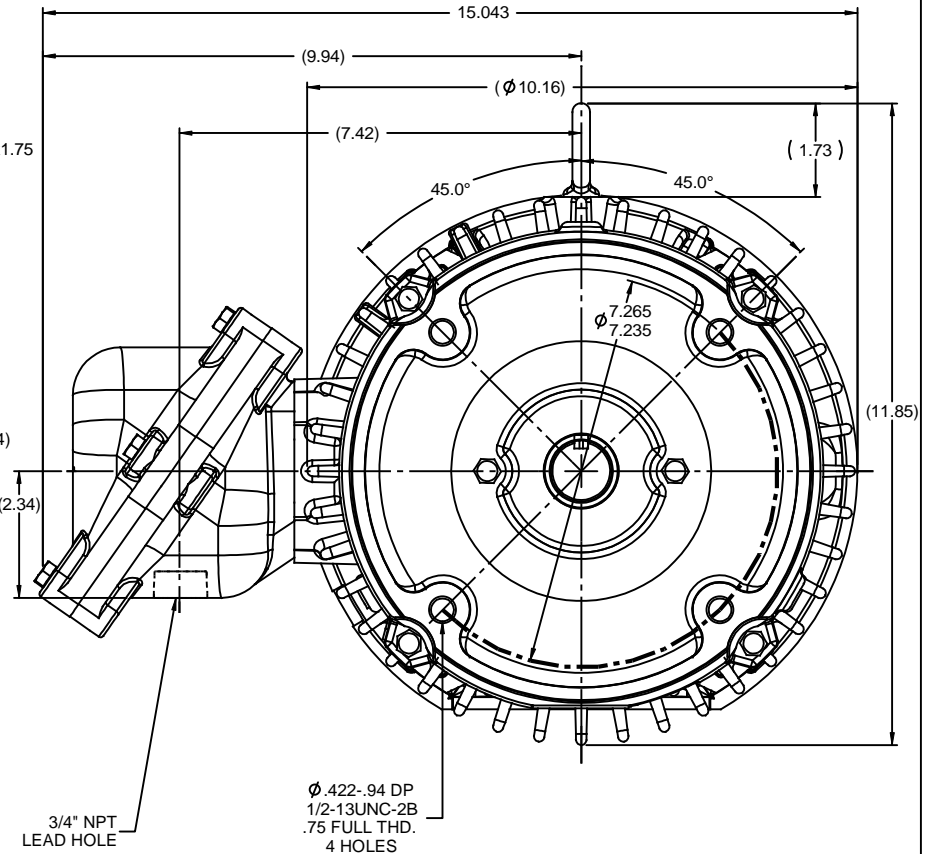
Phase	3	Output HP	5 & 3 Hp
Output KW	3.7 & 2.2 kW	Voltage	230/460 & 190/380 V
Speed	1755 & 1465 rpm	Service Factor	1.0 & 1.0
Frame	184TC	Enclosure	Explosion Proof Fan cooled
Thermal Protection	Thermostat	Efficiency	90.2 & 90.2 %
Ambient Temperature	40 °C	Frequency	60 & 50 Hz
Current	12.4/6.2 & 9.6/4.8 A	Power Factor	83.5
Duty	Continuous	Insulation Class	B
Design Code	B	KVA Code	J
Drive End Bearing Size	6207	Opp Drive End Bearing Size	6206
UL	UL Listed; also, UL Certified for Canada	CSA	N
CE	N	IP Code	54
Number of Speeds	1	Hazardous Location	DIV 1 EXP PROOF CL I GR D CL II GR FG T3B

Technical Specifications

Electrical Type	Squirrel Cage Induction Run	Starting Method	Across The Line
Poles	4	Rotation	Reversible
Resistance Main	2.62 Ohms	Mounting	Round
Motor Orientation	Horizontal	Drive End Bearing	Ball
Opp Drive End Bearing	Ball	Frame Material	Cast Iron
Shaft Type	T	Overall Length	18.62 in
Frame Length	10.00 in	Shaft Diameter	1.125 in
Shaft Extension	2.62 in	Assembly/Box Mounting	F1 ONLY
Connection Drawing	EE7308T	Outline Drawing	035694-1000

1. NAMEPLATE TO BE READ FROM CONDUIT BOX SIDE OF MOTOR.
2. CONDUIT BOX CAN ROTATED IN 90° STEPS.
3. CONDUIT BOX CAN BE MOUNTED ON OPPOSITE SIDE BY REMOVING BRACKETS AND TURNING FRAME 180°. THIS MODIFICATION CAN BE PERFORMED ONLY BY MARATHON ELECTRIC OR BY A FACILITY THAT IS COVERED UNDER UNDERWRITERS LABORATORIES INC. PTQ, TITLED "MOTOR AND GENERATORS, REBUILT FOR USE HAZARDOUS LOCATIONS".

1000	182/184	18.62	16.00	7.38
DASH	FRAME	C	AG	BV

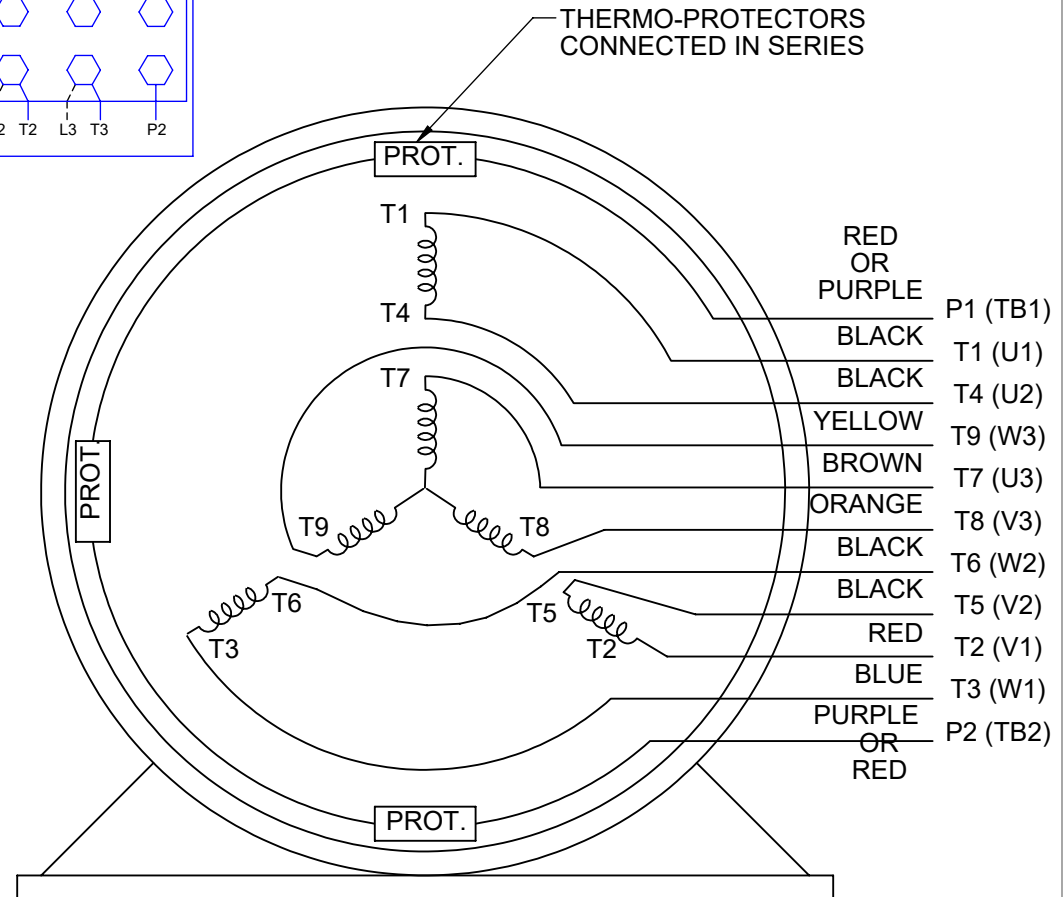
3 of 7

HIGH VOLTAGE



NOTE FOR FACTORY USE ONLY:
TO SURGE TEST FOR COMMON CONNECT:
HIGH VOLT: CONNECT P1 TO T1
THEN P2 TO L1
LOW VOLT: CONNECT P1 TO T1 & T7,
THEN P2 TO L1

LOW VOLTAGE

THREE PHASE
DUAL VOLTAGE MOTOR

VIEW OF TERMINAL END

NOTE: LEAD'S COLOR CAN BE YELLOW OR WHITE FOR MT2 PLANT

DRAWING REVISION T	REVISION BY ZR	DATE 01-14-2019
ECO ECO-0159915	APPROVED BY DR	DATE 01-15-2019

ECO DESCRIPTION
ADDED TERMINAL CONNECTION DIAGRAM

COPYRIGHT REGAL BELOIT AMERICA, INC. ALL RIGHTS RESERVED.
PROPRIETARY AND CONFIDENTIAL INFORMATION - THIS DOCUMENT IS THE PROPERTY OF
REGAL BELOIT AMERICA, INC. ("OWNER") AND CONTAINS OWNER'S PROPRIETARY
INFORMATION. ANY PERSON, CORPORATION OR OTHER FIRM RECEIVING IT IS DEEMED,
BY RECEIVING IT, TO AGREE THAT IT, AND/OR ANY PART OF IT, SHALL NOT BE DISCLOSED
TO ANY PERSON, CORPORATION OR OTHER ENTITY, DUPLICATED, AND/OR USED, EXCEPT
AS EXPRESSLY APPROVED IN WRITING IN ADVANCE BY OWNER. THIS DOCUMENT SHALL
BE RETURNED TO OWNER UPON REQUEST. IT MAY BE SUBJECT TO CERTAIN
RESTRICTIONS UNDER APPLICABLE EXPORT CONTROL LAWS AND REGULATIONS.

DRAWN BY
SMC

DATE
05-13-1992

APPROVED BY
TB

DATE
05-13-1992

REFERENCE
EE7308/EE7300

THIRD ANGLE
PROJECTION



Regal Beloit America, Inc.

DESCRIPTION

CONN DIAGRAM-INTERNAL
3 PHASE - DUAL VOLTAGE MOTOR

MATERIAL

PROCESS/FINISH

SIZE
A

DRAWING NUMBER

EE7308T

SHEET
1 OF 1



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 #: 184TTGN16027
CONN. DIAGRAM: EE7308T CAT #: C324B
OUTLINE: 035694-1000 CUSTOMER PART #: _____
WINDING: K1844215 NONE 1 MOUNTING: F1 ONLY
SPEED: _____

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC RPM	FL RPM	FRAME	ENCLOSURE	TYPE	KVA CODE	DESIGN
5	3.7	1800	1755	184TC	TEFC	TFN	J	B

PH	HZ	VOLTS	AMPS	START TYPE	DUTY	INSL	S.F.	AMB	ELEV.
3	60/50	230/460#190/380	12.4/6.2&9.6/4.8	ACROSS THE LINE	CONT	B	1.15	40	3300

F.L. EFF	90.2	3/4 LD EFF	90.2	1/2 LD EFF	90.2	GTD EFF	89.5	ELECT. TYPE	SQ CAGE IND RUN
F.L. PF	83.5	3/4 LD PF	78.5	1/2 LD PF	70.0				

F.L. TORQUE	LR AMPS @ 460 V	L.R. TORQUE	B.D. TORQUE	F.L. RISE (° C)	
15.0 LB-FT	46.0	34.5 LB-FT 230%	45.0 LB-FT 300%	50	

@ 3 FT.	POWER	ROTOR WK²	MAX. LOAD WK²	SAFE STALL TIME	STARTS/HOUR	MOTOR WGT
62 dBA	71 dBA	0.50 LB-FT²	50 LB-FT²	25 SEC.	2	130 LB.

*** SUPPLEMENTAL INFORMATION ***

DE BRACKET TYPE	ODE BRACKET TYPE	MOUNT TYPE	MOTOR ORIENTATION	SEVERE DUTY	HAZARDOUS LOCATION	DRIP COVER	SCREENS	PAINT
C-FACE	STANDARD	ROUND	HORIZONTAL	NO	DOF CL I GR D CL II GR	NO	NONE	BLUE (ENAMEL)

BEARINGS		GREASE	SHAFT TYPE	SPECIAL DE	SPECIAL ODE	SHAFT MATERIAL	FRAME MATERIAL
DE	ODE						
BALL	BALL	POLYREX EM	T	NONE	NONE	1045 HOT ROLLED (C-204)	CAST IRON
6207	6206						

THERMOSTATS	PROTECTORS	WDG RTD's	BRG RTD's	THERMISTORS	CONTROL	SPACE HEATERS
TSTATS (N/C)	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
1.508	1.128	3.691	5.693	104.328	0.150	ODE

* N O T E S *		INVERTER TORQUE: NONE INV. HP SPEED RANGE: NONE
	ENCODER: NONE NONE NONE	NONE PPR
PREPARED BY: FAREEDA DUDEKULA DATE: 11/1/2018	BRAKE: NONE NONE FT-LB: NA VOLTAGE: NONE	NONE H2:
FORM: 3531 REV_4 2/27/06	UL: NONE	

Data Sheet

Date: 11/1/2018

Customer: _____

Attention: _____

Submitted by: FAREEDA DUDEKULA



184TTGN16027

Submittal

Data @ 460 V

Motor Load Data

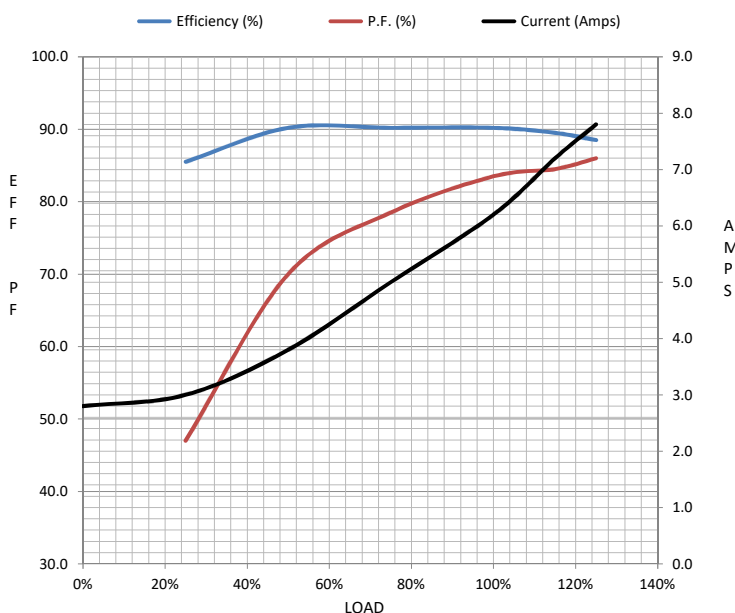
Load	0%	25%	50%	75%	100%	115%	125%	LR	
Current (Amps)	2.80	3.0	3.8	5.0	6.2	7.2	7.8	46.0	
Torque (ft-lb)	0.00	3.7	7.4	11.5	15.0	17.5	19.0	34.5	
RPM	1800	1790	1780	1765	1755	1,745	1740	0	
Efficiency (%)		85.5	90.2	90.2	90.2	89.5	88.5		
P.F. (%)	6.5	47.0	70.0	78.5	83.5	84.5	86.0	48.0	

Motor Speed Data

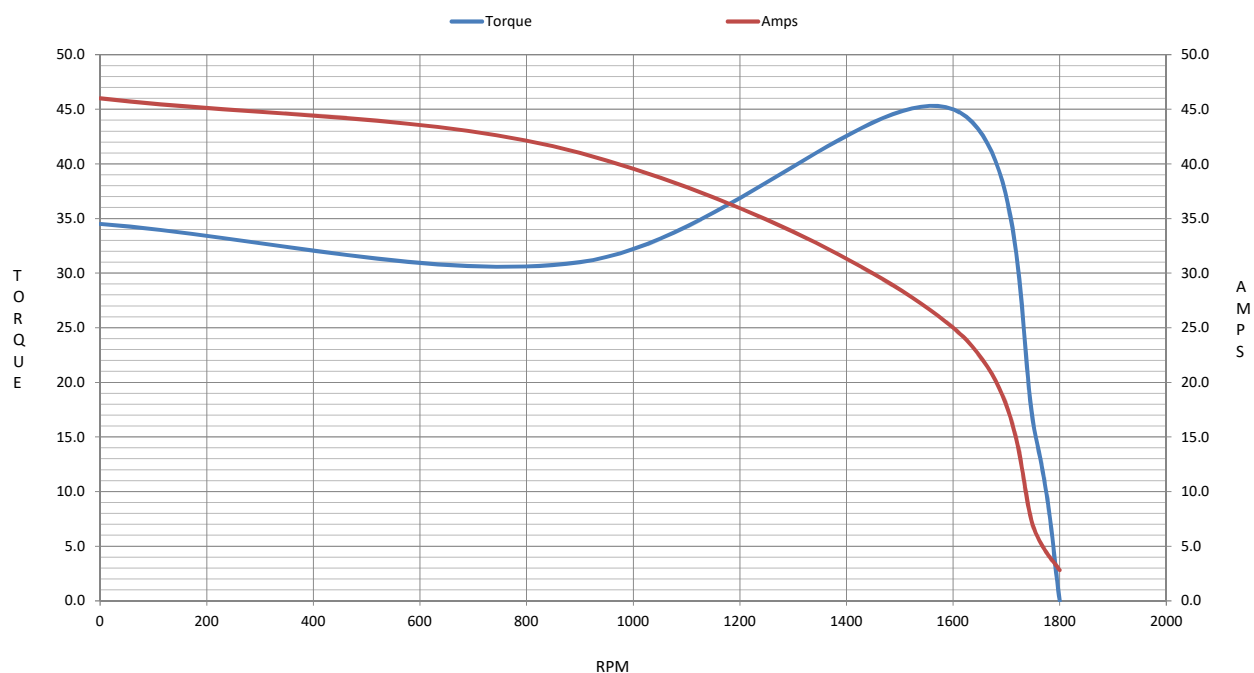
	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	900	1600	1755	1800
Current (Amps)	46.0	41.0	25.0	6.2	2.80
Torque (ft-lb)	34.5	31.0	45.0	15.0	0.00

Information Block

HP	5.0			
Sync. RPM	1800			
Frame	184182TTF6080			
Enclosure	TEFC			
Construction	TFN			
Voltage	230/460#190/380	V		
Frequency	60	Hz		
Design	B			
LR Code letter	J			
Service Factor	1.15			
Temp Rise @ FL	50	° C		
Duty	CONT			
Ambient	40	° C		
Elevation	1,000	feet		
Rotor/Shaft wk²	0.50	Lb-Ft²		
Ref Wdg	K1844215 NONE			
Sound Pressure @ 1M	62	dBA		
VFD Rating	NONE			
Outline Dwg	035694-1000			
Conn. Diag	EE7308T			
Additional Specifications:				
0				
0				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
1.5080	1.1280	3.6910	5.6930	104.3280



Speed -Torque Curve



CERTIFICATE OF COMPLIANCE

Certificate Number 20220221- E12044
Report Reference E12044-20090313
Issue Date 2022-FEBRUARY-21

Issued to: REGAL BELOIT AMERICA INC
1946 W COOK RD
FORT WAYNE IN 46818

Tradename: Marathon

**This certificate confirms that
representative samples of**

MOTORS FOR USE IN HAZARDOUS LOCATIONS
Electric motors for use in hazardous locations; Class I,
Groups C and D; Class II, Groups F and G; Inclusive of
Model Number 184TTGN16027 (may have prefix and/or
suffix characters).

Have been investigated by UL in accordance with the
Standard(s) indicated on this Certificate.

Standard(s) for Safety: UL 674 - Electric Motors and Generators for Use in Division
1 Hazardous (Classified) Locations,
CSA C22.2 No. 145, Electric Motors and Generators for
Use in Hazardous (Classified) Locations

Additional Information: See the UL Online Certifications Directory at
<https://iq.ulprospector.com> for additional information.

This *Certificate of Compliance* does not provide authorization to apply the UL Mark. Only the UL Follow-Up
Services Procedure provides authorization to apply the UL Mark.

Only those products bearing the UL Mark should be considered as being UL Certified and covered under UL's
Follow-Up Services.

Look for the UL Certification Mark on the product.

This is to certify that representative samples of the product as specified on this certificate were tested
according to the current UL requirements.



Bruce Mahrenholz, Director North American Certification Program
UL LLC

Any information and documentation involving UL Mark services are provided on behalf of UL LLC (UL) or any authorized licensee of UL. For questions, please
contact a local UL Customer Service Representative at <http://ul.com/aboutul/locations/>

