

PRODUCT INFORMATION PACKET

marathon®
Motors

Model No: 254TTFL16078

Catalog No: C255B

XRI® General Purpose General Purpose Motor, 7.50 & 5 HP, 3 Ph, 60 & 50 Hz, 230/460 & 190/380 V,
1200 & 1000 RPM, 254TC Frame, TEFC



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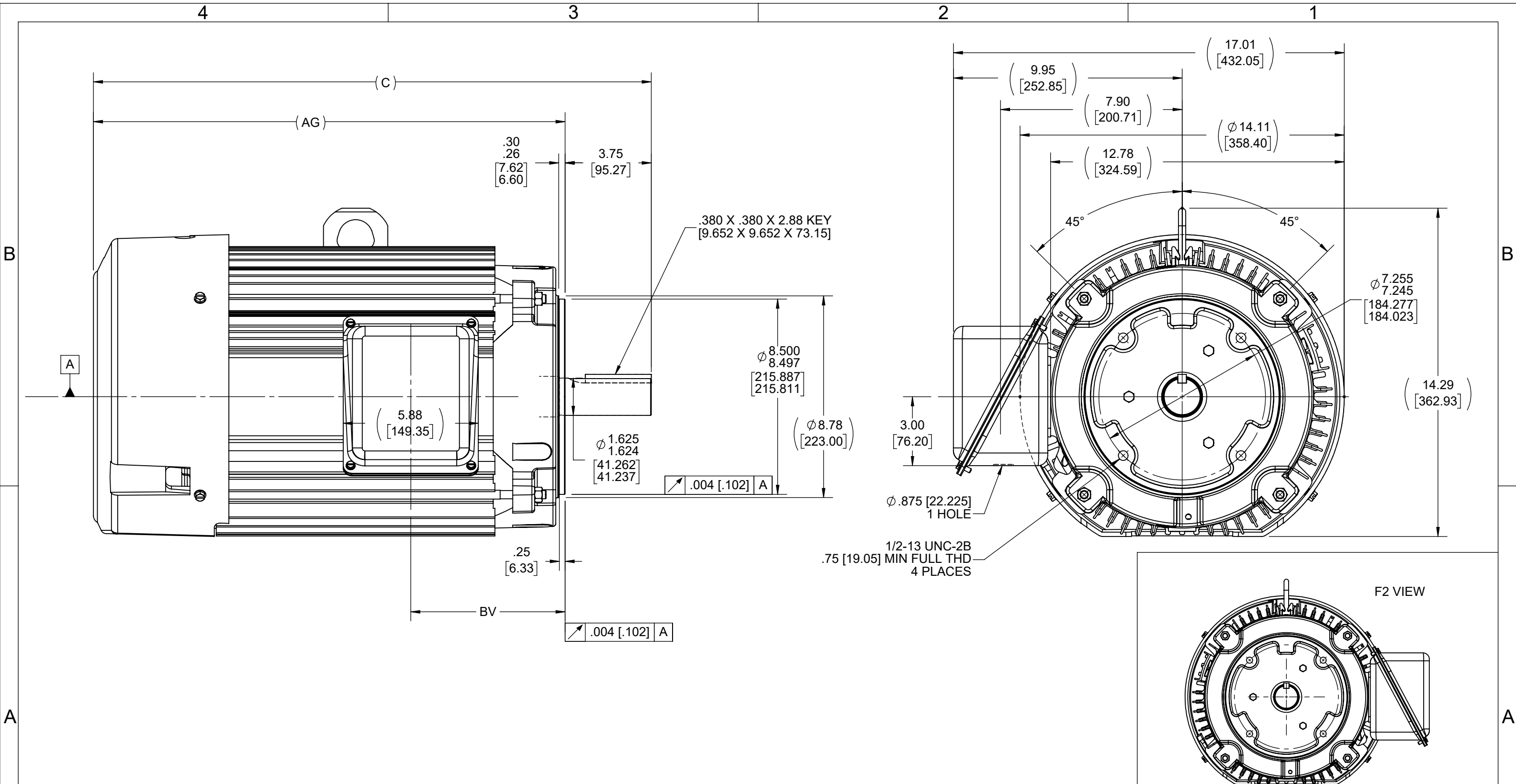
RegalRexnord

Nameplate Specifications

Phase	3	Output HP	7.50 & 5 Hp
Output KW	5.6 & 3.7 kW	Voltage	230/460 & 190/380 V
Speed	1175 & 975 rpm	Service Factor	1.15 & 1.0
Frame	254TC	Enclosure	Totally Enclosed Fan Cooled
Thermal Protection	No Protection	Efficiency	91 & 89.5 %
Ambient Temperature	40 °C	Frequency	60 & 50 Hz
Current	19.8/9.9 & 17/8.5 A	Power Factor	78
Duty	Continuous	Insulation Class	F
Design Code	B	KVA Code	H
Drive End Bearing Size	6309	Opp Drive End Bearing Size	6208
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	1.319 Ohms	Mounting	Round
Motor Orientation	Horizontal	Drive End Bearing	Ball
Opp Drive End Bearing	Ball	Frame Material	Aluminum
Shaft Type	T	Overall Length	24.02 in
Frame Length	12.00 in	Shaft Diameter	1.625 in
Shaft Extension	3.75 in	Assembly/Box Mounting	F1/F2 CAPABLE
Connection Drawing	EE7308	Outline Drawing	B-SS321108-1200



NOTES:
 1. CONDUIT BOX CAN BE ROTATED IN 90° STEPS.
 2. NAMEPLATE TO BE READ FROM CONDUIT BOX SIDE OF MOTOR.

DASH	FRAME	C	BV	AG
1200	254TC	24.28 [616.60]	6.72 [170.69]	20.53 [521.34]
1375	254/6TC	26.03 [661.16]	6.72 [170.69]	22.28 [565.91]

DRAWING REVISION C	REVISION BY SP	DATE 05-26-2021
ECO CR-0001205	APPROVED BY AS	DATE 05-26-2021
ECO DESCRIPTION REPLACED FAN GUARD 3C223-E3 TO 205016B		
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TOLERANCES UNLESS OTHERWISE SPECIFIED:
 DEC. INCH mm ANGLE
 .X ±0.1 [±2.5] ±7° 30"
 .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] X 45°
 CORNER FILLETS: R.02 [0.51]
 MACHINED SURFACES: 200 INCH mm 5.1
 mm SHOWN IN [BRACKETS]

DRAWN BY
LPC
 DATE
07-24-2015
 APPROVED BY
TVUE
 DATE
07-24-2015
 REFERENCE
 THIRD ANGLE PROJECTION

REGAL™ Regal Beloit America, Inc.

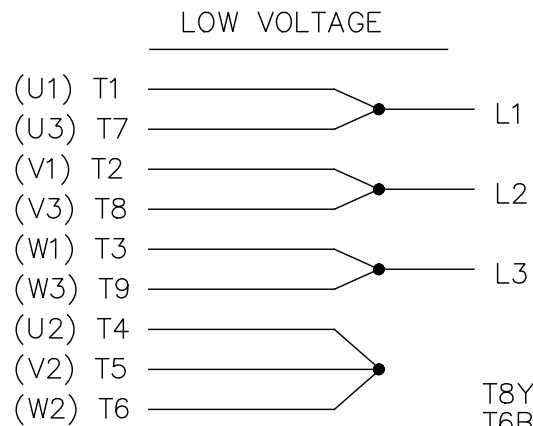
DESCRIPTION
OUTLINE
250TC FR - ALUM FR - TEFC

MATERIAL PROCESS/FINISH

SIZE **B** DRAWING NUMBER **SS321108** 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				
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					





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 #: 254TTFL16078
 CONN. DIAGRAM: EE7308 CAT #: C255B
 OUTLINE: B-SS321108-1200 CUSTOMER PART #: _____
 WINDING: 254653 R14 6 MOUNTING: F1/F2 CAPABLE
 SPEED: _____

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC RPM	FL RPM	FRAME	ENCLOSURE	TYPE	KVA CODE	DESIGN
7.5	5.6	1200	1175	254TC	TEFC	TFY	H	B

PH	HZ	VOLTS	AMPS	START TYPE	DUTY	INSL	S.F.	AMB	ELEV.
3	60/50	230/460#190/380	19.8/9.9&17/8.5	ACROSS THE LINE	CONT	F	1.15	40	3300

F.L. EFF	91.0	3/4 LD EFF	91.0	1/2 LD EFF	90.2	GTD EFF	ELECT. TYPE
F.L. PF	78.0	3/4 LD PF	72.5	1/2 LD PF	61.0	90.2	SQ CAGE IND RUN

F.L. TORQUE	LR AMPS @ 460 V	L.R. TORQUE	B.D. TORQUE	F.L. RISE (°C)
33.5 LB-FT	63.5	72.0 LB-FT 215%	103 LB-FT 307%	40

@ 3 FT.	POWER	ROTOR WK²	MAX. LOAD WK²	SAFE STALL TIME	STARTS/HOUR	MOTOR WGT
56 dBA	65 dBA	2.50 LB-FT²	170 LB-FT²	20 SEC.	2	350 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	NONE	NO	NONE	BLUE (ENAMEL)

BEARINGS		GREASE	SHAFT TYPE	SPECIAL DE	SPECIAL ODE	SHAFT MATERIAL	FRAME MATERIAL
DE	ODE	POLYREX EM	T	NONE	NONE	1045 HOT ROLLED (C-204)	ALUMINUM
BALL	BALL						
6309	6208						

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
0.737	0.673	2.903	3.153	53.487	0.150	ODE

* N O T E S *	INVERTER TORQUE: NONE INV. HP SPEED RANGE: NONE					
	ENCODER: NONE NONE NONE					
	BRAKE: NONE NONE NONE					
	FT-LB: NA VOLTAGE: NONE HZ:					
	UL: V-INS, CONST UL REC					

PREPARED BY: FAREEDA DUDEKULA
 DATE: 9/10/2018

Data Sheet

254TTFL16078

Date: 11/29/2018
 Customer: _____
 Attention: _____
 Submitted by: FAREEDA DUDEKULA



Submittal

Data @ 460 V

Motor Load Data

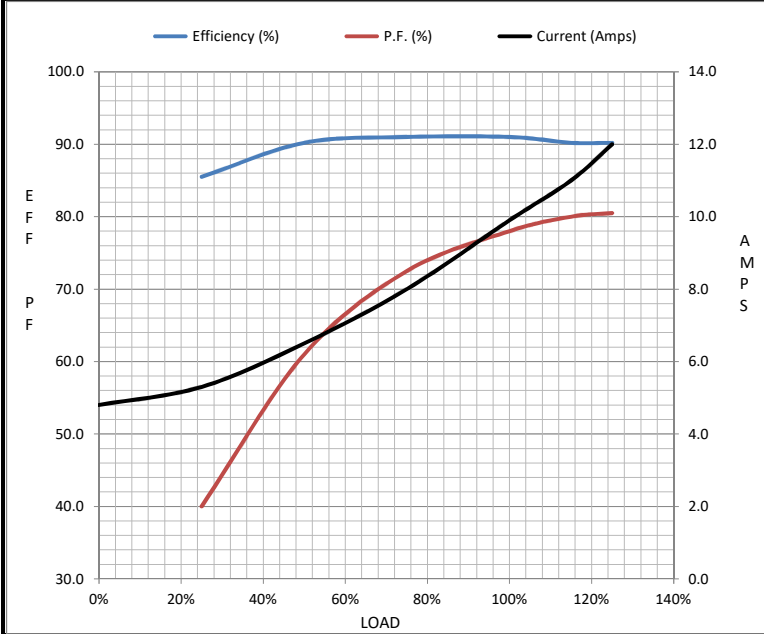
Load	0%	25%	50%	75%	100%	115%	125%	LR
Current (Amps)	4.8	5.3	6.5	8.0	9.9	11.0	12.0	63.5
Torque (ft-lb)	0.00	8.0	16.5	25.0	33.5	38.5	42.0	72.0
RPM	1200	1195	1190	1180	1175	1,170	1165	0
Efficiency (%)		85.5	90.2	91.0	91.0	90.2	90.2	
P.F. (%)	7.0	40.0	61.0	72.5	78.0	80.0	80.5	42.0

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	600	1065	1175	1200
Current (Amps)	63.5	59.0	39.5	9.9	4.8
Torque (ft-lb)	72.0	69.0	103	33.5	0.00

Information Block

HP	7.5			
Sync. RPM	1200			
Frame	254			
Enclosure	TEFC			
Construction	TFL			
Voltage	230/460#190/380 V			
Frequency	60 Hz			
Design	B			
LR Code letter	H			
Service Factor	1.15			
Temp Rise @ FL	40 °C			
Duty	CONT			
Ambient	40 °C			
Elevation	1,000 feet			
Rotor/Shaft wk ²	2.50 Lb-Ft ²			
Ref Wdg	254653 R14			
Sound Pressure @ 1M	56 dBA			
VFD Rating	NONE			
Outline Dwg	B-SS321108-1200			
Conn. Diag	EE7308			
Additional Specifications:				
0				
0				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
0.7370	0.6730	2.9030	3.1530	53.4870



Speed - Torque Curve

