PRODUCT INFORMATION PACKET

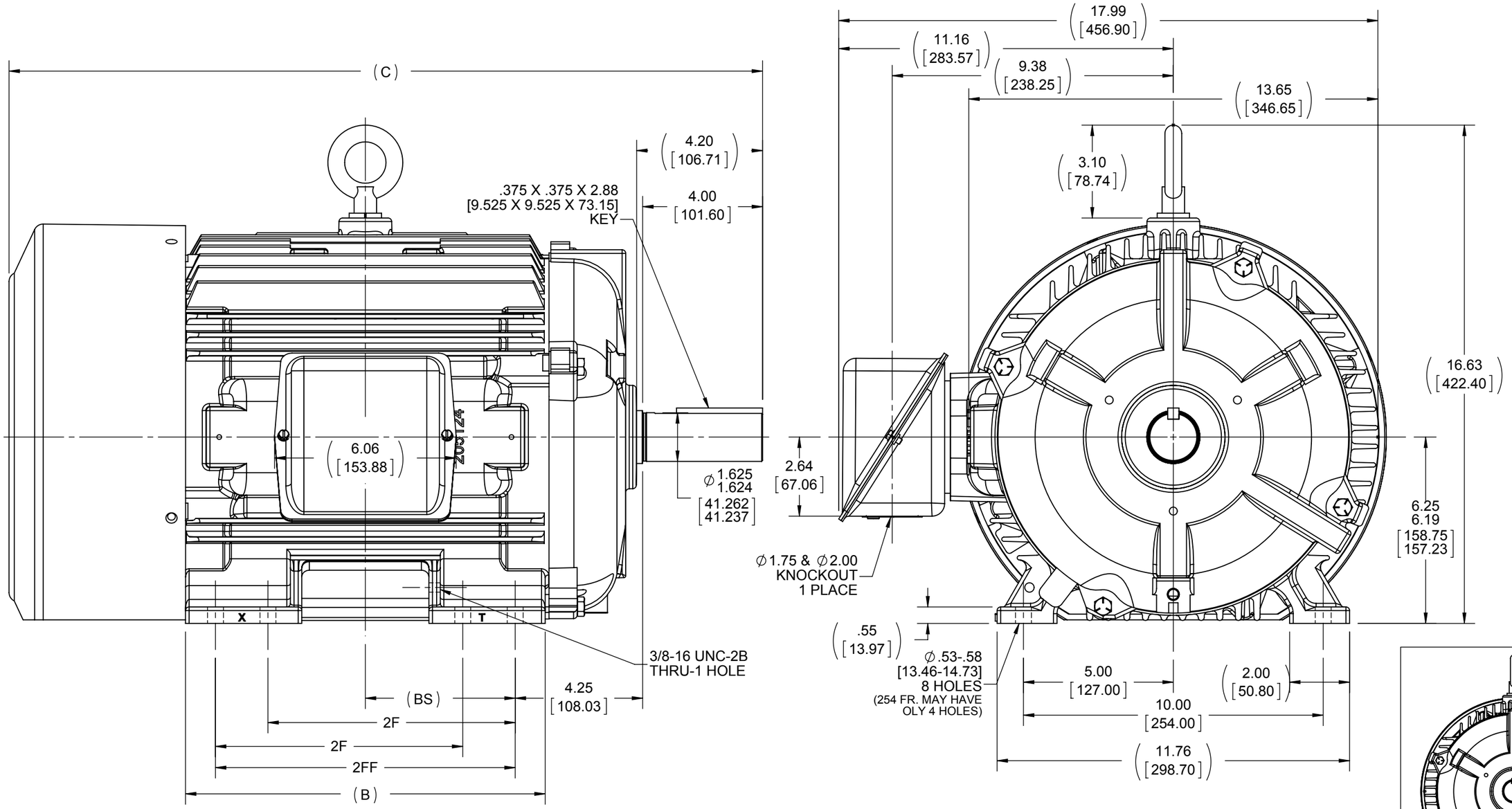
Model No: 256TTFNA16070
Catalog No: E206-P
XRI® General Purpose General Purpose Motor, 20 & 15 HP, 3 Ph, 60 & 50 Hz, 230/460 & 190/380 V, 1800 & 1500 RPM, 256T Frame, TEFC

Nameplate Specifications

Phase	3	Output HP	20 & 15 Hp
Output KW	14.9 & 11.2 kW	Voltage	230/460 & 190/380 V
Speed	1775 & 1475 rpm	Service Factor	1.15 & 1.15
Frame	256T	Enclosure	Totally Enclosed Fan Cooled
Thermal Protection	No Protection	Efficiency	93 & 92.5 %
Ambient Temperature	40 °C	Frequency	60 & 50 Hz
Current	48/24.1 & 44/22 A	Power Factor	84
Duty	Continuous	Insulation Class	F
Design Code	B	KVA Code	G
Drive End Bearing Size	6309	Opp Drive End Bearing Size	6210
UL	Recognized	CSA	Y
CE	Y	IP Code	43
Number of Speeds	1		

Technical Specifications

Electrical Type	Squirrel Cage Inverter Rated	Starting Method	Line Or Inverter
Poles	4	Rotation	Reversible
Resistance Main	.474 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	25.27 in
Frame Length	12.25 in	Shaft Diameter	1.625 in
Shaft Extension	4.2 in	Assembly/Box Mounting	F1/F2 CAPABLE
Connection Drawing	A-EE7308	Outline Drawing	B-SS203015-1225



NOTES:
1. BOX CAN BE ROTATED ON ITS AXIS.
2. 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

DASH	FRAME	B	C	2F	2FF	BS
1050	254T	10.25 [260.35]	23.52 [597.41]	-	8.25 [209.55]	4.12 [104.65]
1225	256T	12.00 [304.80]	25.27 [641.86]	8.25 [209.55]	10.00 [254.00]	5.00 [127.00]

DRAWING REVISION	REVISION BY	DATE
F	DF	7-7-14
ECO	APPROVED BY	DATE
ECO-0054340		

ECO DESCRIPTION
NMR-0060600, MU117685

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 [.076/.381]
CORNER FILLETS: .02 [.51]
MACHINED SURFACES: 200 INCH / 5.1 mm
mm SHOWN IN [BRACKETS]

DRAWN BY	D.FROEHLICH
DATE	7-2-14
APPROVED BY	TB
DATE	7-7-14
REFERENCE	
THIRD ANGLE PROJECTION	

REGAL™ Regal Beloit America, Inc.

DESCRIPTION
OUTLINE
250T FR. - BB - TS - STD.

MATERIAL | PROCESS/FINISH

SIZE	DRAWING NUMBER	SHEET
B	SS203015	1 OF 1

EE7308

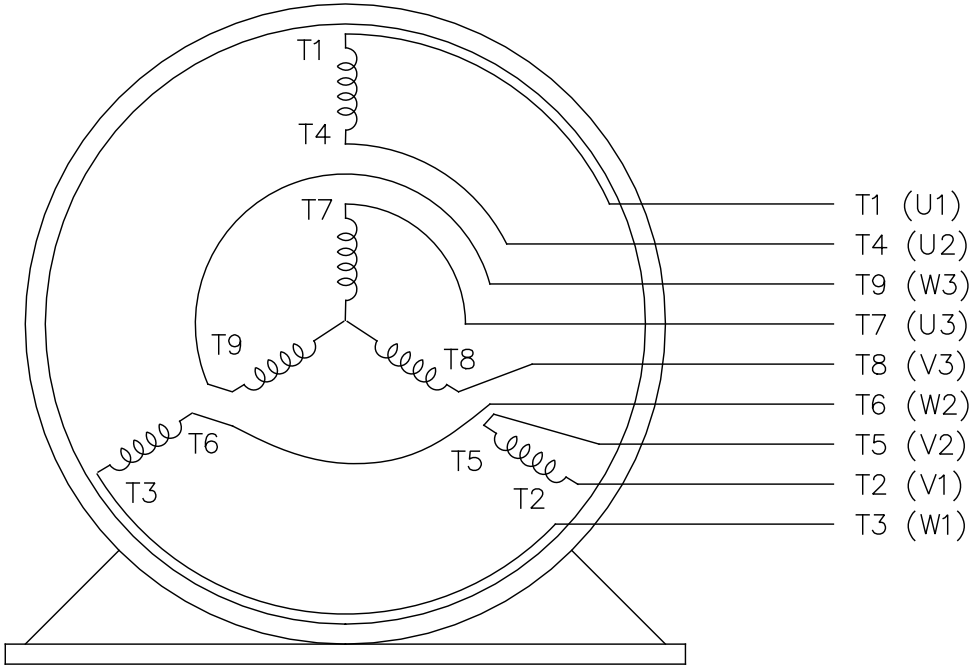
THREE PHASE
DUAL VOLTAGE MOTOR

HIGH VOLTAGE

(U1) T1 — L1
(V1) T2 — L2
(W1) T3 — L3
(U2) T4
(U3) T7
(V2) T5
(V3) T8
(W2) T6
(W3) T9

LOW VOLTAGE

(U1) T1
(U3) T7 — L1
(V1) T2
(V3) T8 — L2
(W1) T3
(W3) T9 — L3
(U2) T4
(V2) T5
(W2) T6



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
5	CHG TO REGAL LOGO	SL 09/10/2015	AB
4	REVISED IEC NOTATIONS	MSG 11/15/2011	CMN
3	ADDED IEC NOTATIONS... (U1), (V1) ETC. MU95194	MSG 5/10/2010	MJS
2	ADDED THE OPTIONAL CORD CONNECTION MU46318	RDH 04/24/2003	DRS
1	REDRAWN	RM 11/20/1990	

TOLERANCES UNLESS SPECIFIED

DEC.	INCHES
.X	±.1
.XX	±.02
.XXX	±.005
.XXXX	±.0005
ANG	±7'30"

Regal Beloit America, Inc.

TITLE CONNECTION DIAGRAM
3ø – DUAL VOLTAGE MOTOR

MAT'L.
FINISH
CAD FILE ee7308
RFP
DIST WP

DRAWN RM	11/20/1990
CHK ML	11/21/1990
APPD SAS	04/24/2003
SCALE	1=1
REF	
FMF	
PREV	

SIZE A | DRAWING NO. EE7308 | PAGE OF | REV. 5

CERTIFICATION DATA SHEET

Model#:	256TTFNA16070 AA	**WINDING#:**	K2564164 NONE 6
CONN. DIAGRAM:	A-EE7308	**ASSEMBLY:**	F1/F2 CAPABLE
OUTLINE:	B-SS203015-1225		

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
20&15	14.9&11.2	1800	1775&1475	256T	TEFC	G	B

PH	Hz	VOLTS	FL AMPS	START TYPE	DUTY	INSL	S.F	AMB°C	ELEVATION
3	60/50	230/460#190/380	48/24.1&44/22	LINE OR INVERTER	CONTINUOUS	F3	1.15/1.15	40	3300

FULL LOAD EFF: 93&92.5	3/4 LOAD EFF: 93.6	1/2 LOAD EFF: 93	GTD. EFF	ELEC. TYPE	NO LOAD AMPS
FULL LOAD PF: 84&83.5	**3/4 LOAD PF: 81**	**1/2 LOAD PF: 72**	92.4	SQ CAGE INV RATED	17 / 8.5

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
59.2 LB-FT	276 / 138	105 LB-FT 177	146 LB-FT 247	65

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS /HOUR	APPROX. MOTOR WGT
65 dBA	75 dBA	3.2 LB-FT^2	125 LB-FT^2	25 SEC.	2	400 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 6309	BALL 6210	POLYREX EM	T	NONE	NONE	1045 HOT ROLLED (C-204)	CAST IRON

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

INVERTER TORQUE: CONSTANT 10:1
INV. HP SPEED RANGE: NONE

ENCODER: NONE
NONE NONE
NONE NONE PPR

BRAKE: NONE NONE
NONE P/N NONE
NONE NONE
- FT-LB NONE V NONE Hz

* NOTES *

DATE: 06/21/2017 11:12:20 AM
FORM 3531 REV.3 02/07/99
** Subject to change without notice.

Data Sheet

Date: 6/29/2017
Customer:
Attention:
Submitted by: FAREEDA DUDEKULA

marathon electric

256TTFNA16070

Submittal

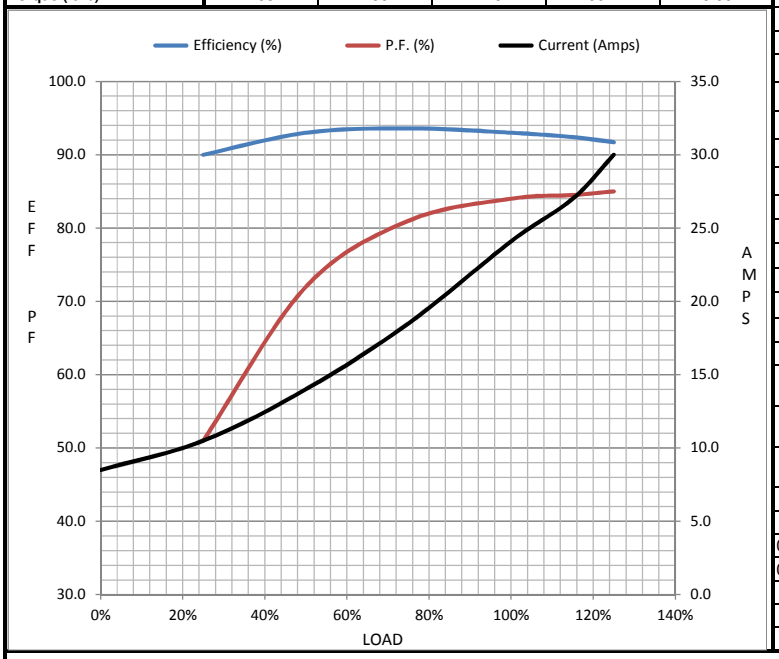
Data @ 460 V

Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR	
Current (Amps)	8.5	10.5	14.0	18.5	24.1	27.0	30.0	138	
Torque (ft-lb)	0.00	14.5	29.5	44.5	59.2	68.0	74.5	105	
RPM	1800	1795	1785	1780	1775	1,770	1760	0	
Efficiency (%)		90.0	93.0	93.6	93.0	92.4	91.7		
P.F. (%)	8.5	51.0	72.0	81.0	84.0	84.5	85.0	40.0	

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	900	1625	1775	1800
Current (Amps)	138	115	86.0	24.1	8.5
Torque (ft-lb)	105	100	146	59.2	0.00



Information Block

HP	20.0
Sync. RPM	1800
Frame	256
Enclosure	TEFC
Construction	TFN
Voltage	230/460#190/380 V
Frequency	60 Hz
Design	B
LR Code letter	G
Service Factor	1.15
Temp Rise @ FL	65 ° C
Duty	CONT
Ambient	40 ° C
Elevation	1,000 feet
Rotor/Shaft wk²	3.2 Lb-Ft²
Ref Wdg	K2564164 NONE
Sound Pressure @ 1M	65 dBA
VFD Rating	CONSTANT 10:1
Outline Dwg	B-SS203015-1225
Conn. Diag	A-EE7308
Additional Specifications:	
0	
0	

EQUIV CKT (OHMS / PHASE)

R1	R2	X1	X2	Xm
0.2670	0.2070	0.9900	1.4910	28.4000

Speed -Torque Curve