PRODUCT INFORMATION PACKET

Model No: 254TTTCD16545
Catalog No: U1871A
XRI®-SD Cooling Tower Motor, 15 & 10 HP, 3 Ph, 60 & 50 Hz, 230/460 & 190/380 V, 1800 & 1500 RPM, 254TV Frame, TEAO

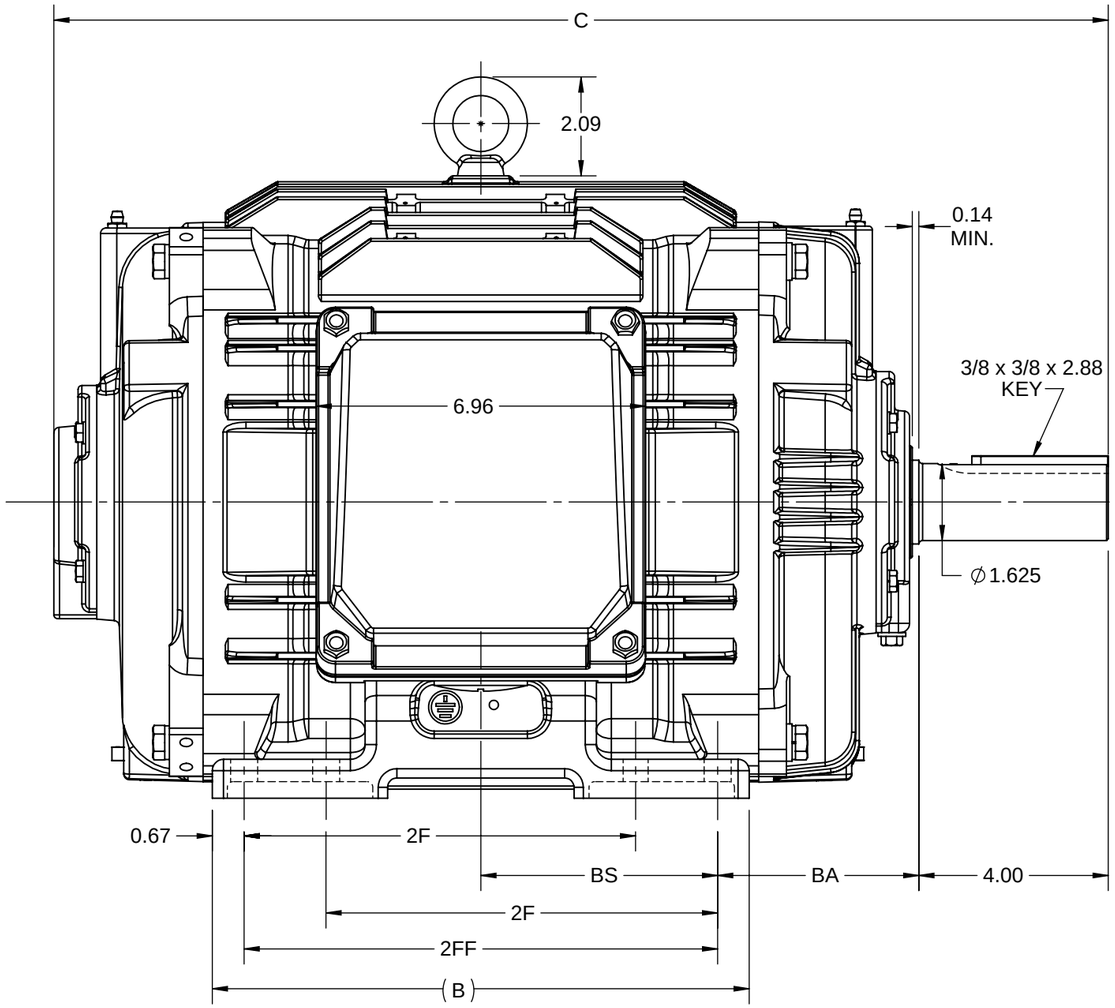
Nameplate Specifications

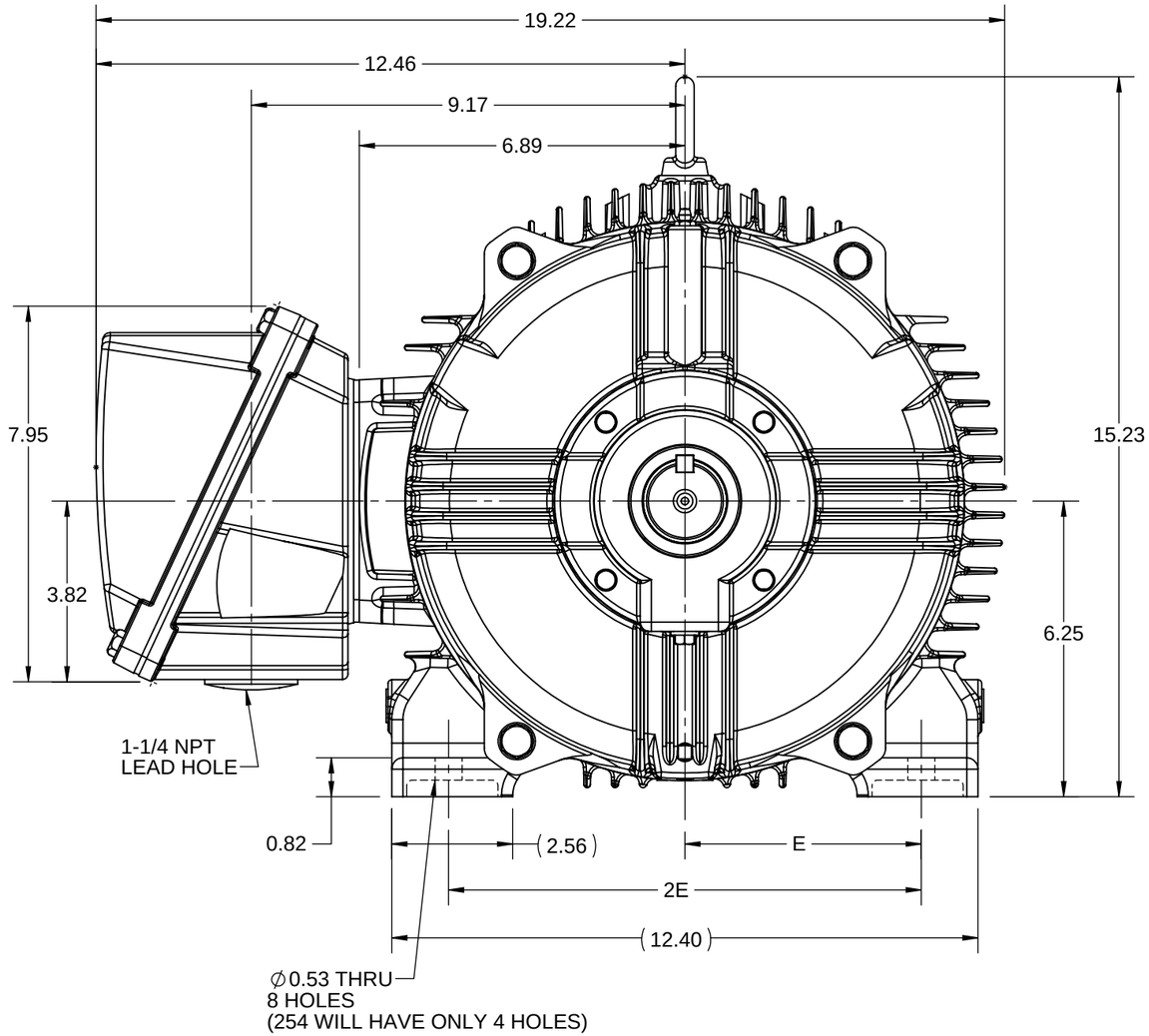
Phase	3	Output HP	15 & 10 Hp
Output KW	11.2 & 7.5 kW	Voltage	230/460 & 190/380 V
Speed	1772 & 1475 rpm	Service Factor	1.15 & 1.15
Frame	254TV	Enclosure	Totally Enclosed Air Over
Thermal Protection	No Protection	Efficiency	92.4 & 92.5 %
Ambient Temperature	40 °C	Frequency	60 & 50 Hz
Current	37.5/18.8 & 31/15.4 A	Power Factor	82
Duty	Continuous	Insulation Class	H
Design Code	B	KVA Code	G
Drive End Bearing Size	6309	Opp Drive End Bearing Size	6209
UL	Recognized	CSA	Y
CE	Y	IP Code	56
Number of Speeds	1		

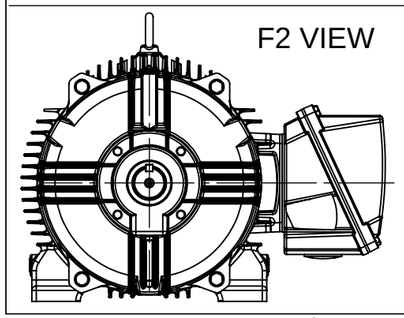
Technical Specifications

Electrical Type	Squirrel Cage Inverter Rated	Starting Method	Line Or Inverter
Poles	4	Rotation	Reversible
Resistance Main	.6738 Ohms	Mounting	Rigid Base
Motor Orientation	Horizontal Or Up Or Down	Drive End Bearing	Ball
Opp Drive End Bearing	Ball	Frame Material	Cast Iron
Shaft Type	T	Shaft Diameter	1.625 in
Assembly/Box Mounting	F1/F2 CAPABLE	Inverter Load	CONSTANT 10:1/VARIABLE 10:1
Connection Drawing	EE7308	Outline Drawing	SS620955-100

DASH NO.	B	C	E	2E	2F	2FF	BA	BS	MOUNTING	FRAME
100	9.60	20.53	5.00	10.00	-	8.25	4.25	4.13	F1 OR F2	254T
200	11.34	22.27			8.25	10.00		5.00		254/256T







DRAWING REVISION: B	REVISION BY: BISWA	REV DATE/É DATE: 13/01/2021
ECO: CR-0000557	APPROVED BY: GNK	DATE: 13/01/2021
ECO DESCRIPTION: NEW DRAWING RELEASE		

PRIMARY DIMENSIONS ARE INCH
mm DIMENSIONS IN [BRACKETS]
ARE FOR REFERENCE ONLY

DRAWN BY: SAI		Regal Beloit America, Inc.
DATE: 24/01/2020		
APPROVED BY: SBD	DESCRIPTION: OUTLINE 254T/256T FR-NEMA-TEAO/TENV	
DATE: 24/01/2020		
REFERENCE	MATERIAL	PROCESS/FINISH
THIRD ANGLE PROJECTION	SIZE: B / DRAWING NUMBER: SS620955	SHEET: 1 OF 1

EE7308

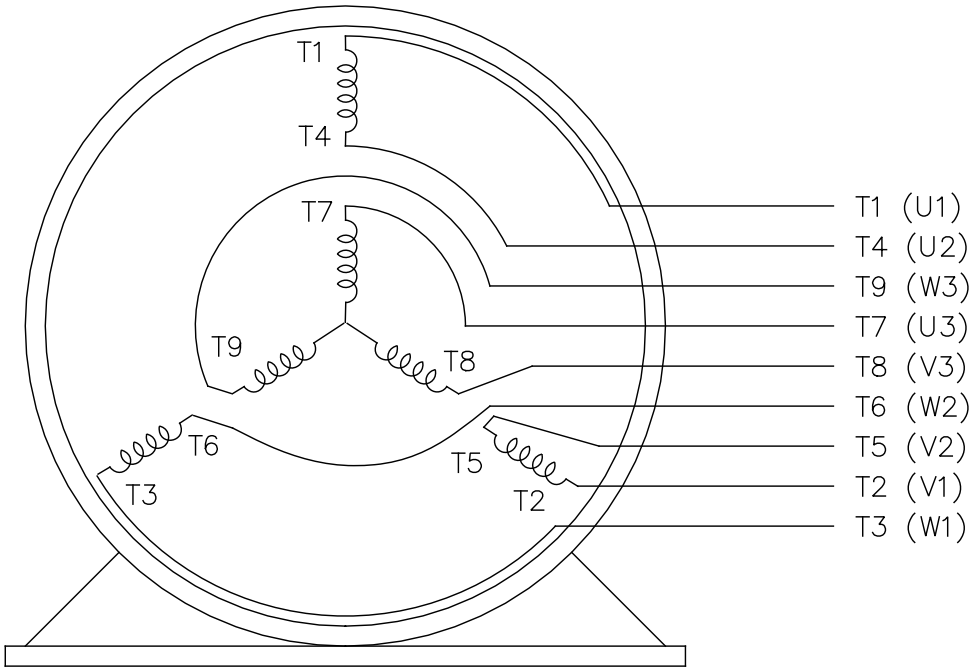
THREE PHASE
DUAL VOLTAGE MOTOR

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

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

REGAL™ 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

Data Sheet

Date: 9/7/2023

Customer:

Attention:

Submitted by: RAMYA

marathon® Motors

254TTTCD16545

Submittal

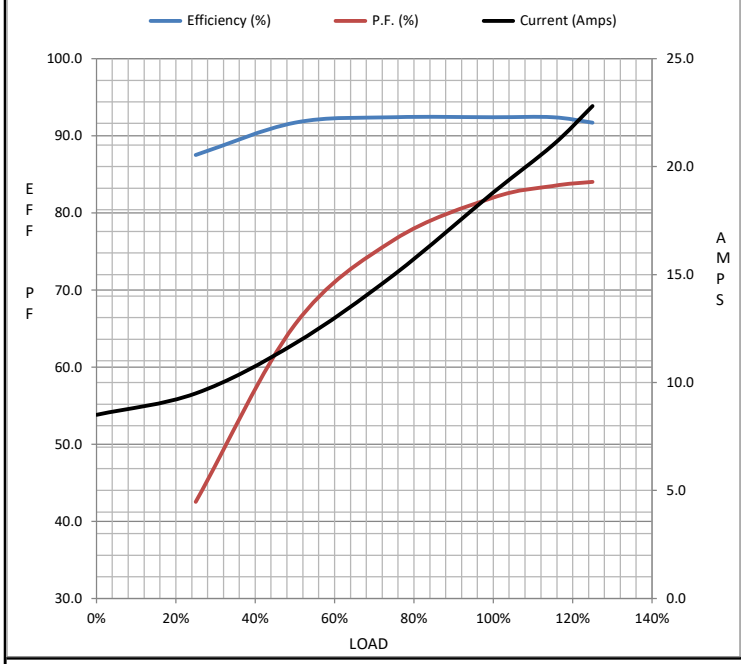
Data @ 460 V

Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR	
Current (Amps)	8.5	9.5	11.8	15.0	18.8	21.0	22.8	113	
Torque (ft-lb)	0.00	11.0	22.0	33.5	44.5	51.5	56.0	110	
RPM	1800	1792	1785	1780	1772	1,768	1762	0	
Efficiency (%)		87.5	91.7	92.4	92.4	92.4	91.7		
P.F. (%)	5.0	42.5	65.5	76.5	82.0	83.5	84.0	41.0	

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	900	1622	1772	1800
Current (Amps)	113	100	66.0	18.8	8.5
Torque (ft-lb)	110	76.5	138	44.5	0.00



Information Block

HP	15.0	
Sync. RPM	1800	
Frame	254	
Enclosure	TEAO	
Construction	TTC	
Voltage	230/460#190/380	V
Frequency	60	Hz
Design	B	
LR Code letter	G	
Service Factor	1.15	
Temp Rise @ FL	0	° C
Duty	CONT	
Ambient	40	° C
Elevation	3,300	feet
Rotor/Shaft wk²	2.40	Lb-Ft²
Ref Wdg	HA31604019 R1	
Sound Pressure @ 1M	999	dBA
VFD Rating	CONSTANT 10:1/VARIABLE 10:1	
Outline Dwg		
Conn. Diag	EE7308	

Additional Specifications:

0

0

EQUIV CKT (OHMS / PHASE)

R1	R2	X1	X2	Xm
0.4400	0.2440	1.3040	1.4670	31.5630

Speed -Torque Curve