

PRODUCT INFORMATION PACKET



Model No: B199744.00
Catalog No: B199744.00
General Purpose Motor, 20 & 15 HP, 3 Ph, 60 & 50 Hz, 230/460 & 190/380 V, 3600 & 3000 RPM,
254TC Frame, DP



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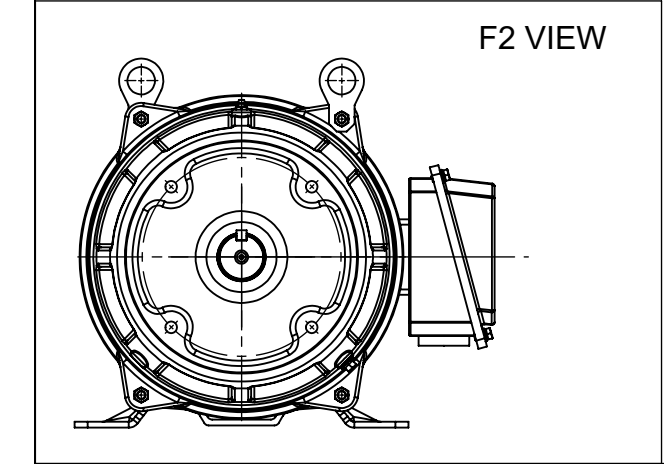
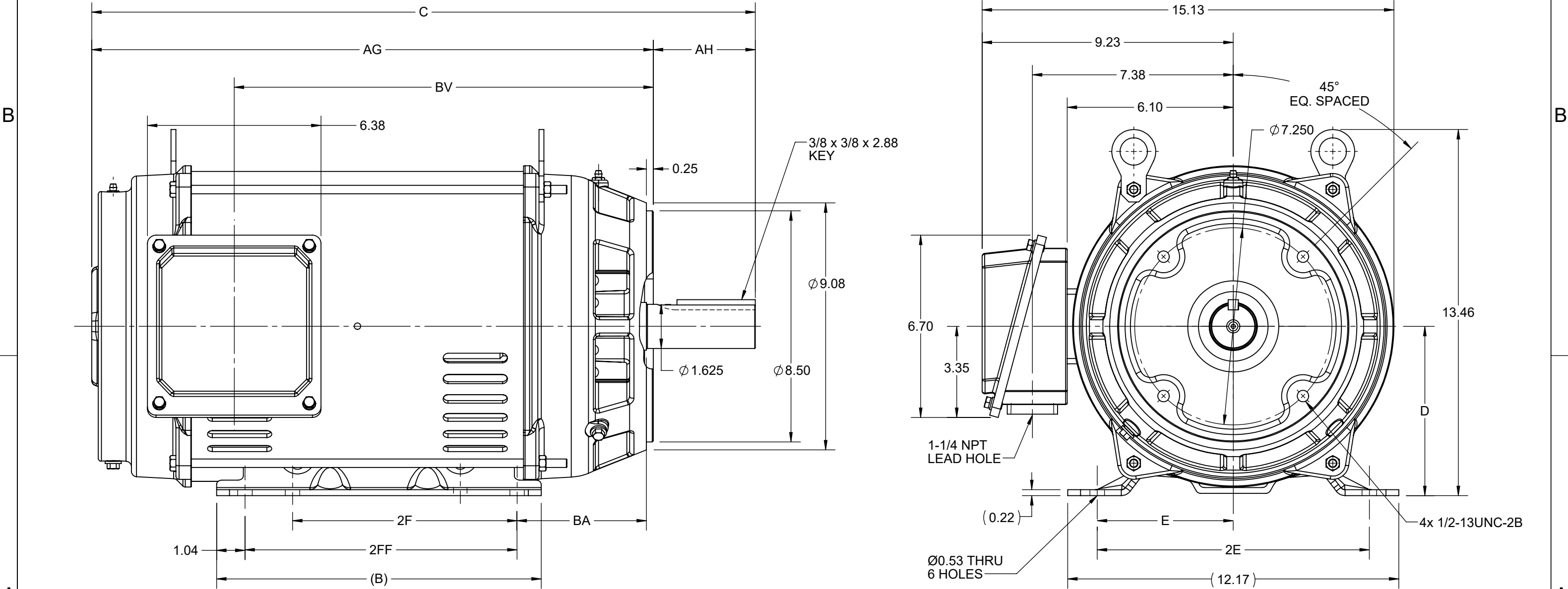
Nameplate Specifications

Phase	3	Output HP	20 & 15 Hp
Output KW	14.9 & 11.2 kW	Voltage	230/460 & 190/380 V
Speed	3552 & 2958 rpm	Service Factor	1.15 & 1.15
Frame	254TC	Enclosure	Drip Proof
Thermal Protection	No Protection	Efficiency	91 & 91 %
Ambient Temperature	40 °C	Frequency	60 & 50 Hz
Current	48/24 & 45/22.5 A	Power Factor	85.5
Duty	Continuous	Insulation Class	F
Design Code	B	KVA Code	F
Drive End Bearing Size	6209	Opp Drive End Bearing Size	6208
UL	Recognized	CSA	Y
CE	Y	IP Code	12
Number of Speeds	1		

Technical Specifications



Electrical Type	Squirrel Cage Inverter Rated	Starting Method	Line Or Inverter
Poles	2	Rotation	Reversible
Resistance Main	.64 Ohms	Mounting	Rigid Base
Motor Orientation	Horizontal	Drive End Bearing	Ball
Opp Drive End Bearing	Ball	Frame Material	Rolled Steel
Shaft Type	T	Overall Length	23.14 in
Frame Length	10.62 in	Shaft Diameter	1.625 in
Shaft Extension	4 in	Assembly/Box Mounting	F1/F2 CAPABLE
Outline Drawing	SS620708-254TC	Connection Drawing	A-EE7308K

4				3				2				1	
DASH NO.	B	C	D	E	2E	2F	2FF	AG	AH	BA	BV	MOUNTING	FRAME
100	11.93	22.81	6.25	5.00	10.00	8.25	10.00	19.06	3.75	4.75	13.82	F1 OR F2	254TC
200		24.38						20.63			15.40		256TC



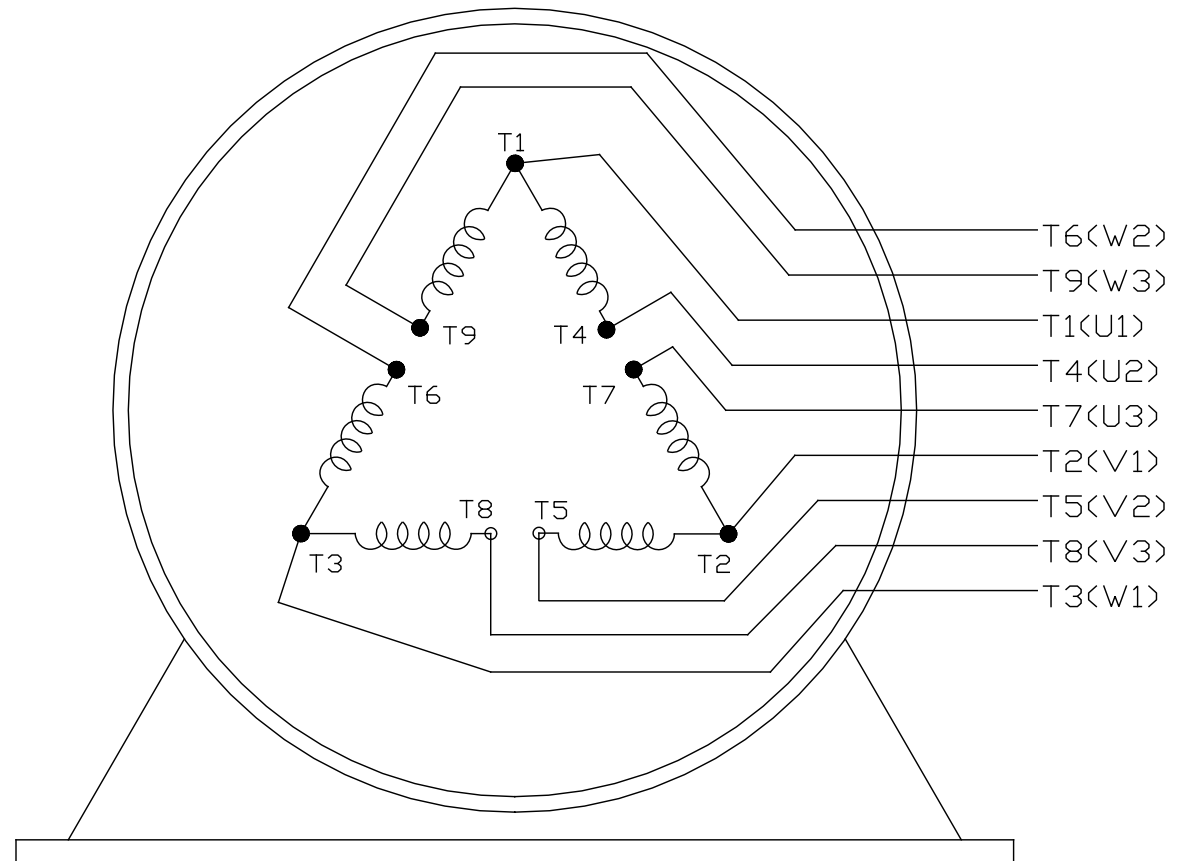
DRAWING REVISION C	REVISION BY RAM	REV DATE/© DATE 08/02/2022
REQUEST NUMBER CR-0006810	APPROVED BY SBD	DATE 08/02/2022
REQUEST NUMBER DESCRIPTION VIEWS UPDATED AS PER 3D		
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DRAWN BY ZXW	 Regal Beloit America, Inc.		
DATE 25/02/2016			
APPROVED BY ZXW	DESCRIPTION OUTLINE		
DATE 25/02/2016	254/256TC FR NEMA ODP RS		
REFERENCE	MATERIAL	PROCESS/FINISH	
THIRD ANGLE PROJECTION 	SIZE B	DRAWING NUMBER SS620708	SHEET 1 OF 1

LOW VOLTAGE

EE7308K

HIGH VOLTAGE

VIEW OF TERMINAL END

			TOLERANCES UNLESS SPECIFIED			 REGAL - BELOIT CORPORATION		DRAWN PGK 06-04-1997		
NO.	REVISION	BY & DATE	CHK	ANG	± 7'30"			CHK	ML	06-05-1997
E	CORRECTED IEC MARKINGS ECD-0111208	WGJ 01-23-2017	EMH	DEC.	INCHES	TITLE CONNECTION DIAGRAM DELTA CON. - 3Ø - 9 LEADS		APPD	GK	06-15-1997
D	RE-DRAWN WITH REGAL LOGO ECD-0110493	WGJ 09-30-2016	EMH	.X	± .1					
8	ADDED IEC DESIGNATIONS MU95020	TJW 4/30/2010	MJS	.XX	± .02					
7	REVISED HIGH VOLTAGE L2 WAS L3 CN52600-354	MRB 09-21-1998		.XXX	± .005					
6	REDRAWN ON CADD	PGK 06-05-1997		.XXXX	± .0005					
			CHK	ANG	± 7'30"	FINISH		PREV		
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								E		



1051 CHEYENNE AVE.
GRAFTON, WI 53024
PH. 262-277-8810

DATA VOLTS: 460

CERTIFICATION DATA SHEET

CONN. DIAGRAM: A-EE7308K
OUTLINE: SS620708
WINDING: HE31602015

CAT #: B199744.00

NONE 2

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC RPM	FL RPM	FRAME	ENCLOSURE	TYPE	KVA CODE	DESIGN
20	14.9	3600	3552	254TC	DP	TDC	F	B

PH	HZ	VOLTS	AMPS	START TYPE	DUTY	INSL	S.F.	AMB	ELEV.
3	60/50	230/460#190/380	48/24&45/22.5	LINE OR INVERTER	CONT	F	1.15	40	3300

F.L. EFF	91.0	3/4 LD EFF	91.0	1/2 LD EFF	90.6	GTD EFF	ELECT. TYPE
F.L. PF	85.5	3/4 LD PF	80.5	1/2 LD PF	69.5	90.2	SQ CAGE INV RATED

F.L. TORQUE	LR AMPS @ 460 V	L.R. TORQUE	B.D. TORQUE	F.L. RISE (° C)
29.6 LB-FT	137	52.0 LB-FT 176%	74.0 LB-FT 250%	45

PRESSURE @ 3	SOUND	POWER	ROTOR WK²	MAX. LOAD WK²	SAFE STALL TIME	STARTS/HOUR	MOTOR WGT
75 dBA	84 dBA		1.10 LB-FT²	0 LB-FT²	15 SEC.	3	300 LB.

*** SUPPLEMENTAL INFORMATION ***

DE BRACKET TYPE	ODE BRACKET TYPE	MOUNT TYPE	MOTOR ORIENTATION	SEVERE DUTY	HAZARDOUS LOCATION	DRIP COVER	SCREENS	PAINT
C-FACE	STANDARD	RIGID	HORIZONTAL	NO	NONE	NO	NONE	WATTSaver

BEARINGS	GREASE	SHAFT TYPE	SPECIAL DE	SPECIAL ODE	SHAFT MATERIAL	FRAME MATERIAL
DE ODE						
BALL BALL	POLYREX EM	T	NONE	NONE	AISI 1045 (C-240)	ROLLED STEEL
6209 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
0.394	0.149	1.159	0.875	26.446	0.150	ODE

* N O T E S *	INVERTER TORQUE: VARIABLE 10:1 INV. HP SPEED RANGE: NONE	
	ENCODER: NONE NONE NONE	
	BRAKE: NONE NONE NONE	
	FT-LB: NA VOLTAGE: NONE	
	UL: Y-(LEESON UL REC)	

DATE:	9/11/2018
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Data Sheet

Date: 9/11/2018

B199744.00



Data @ 460 V

Motor Load Data

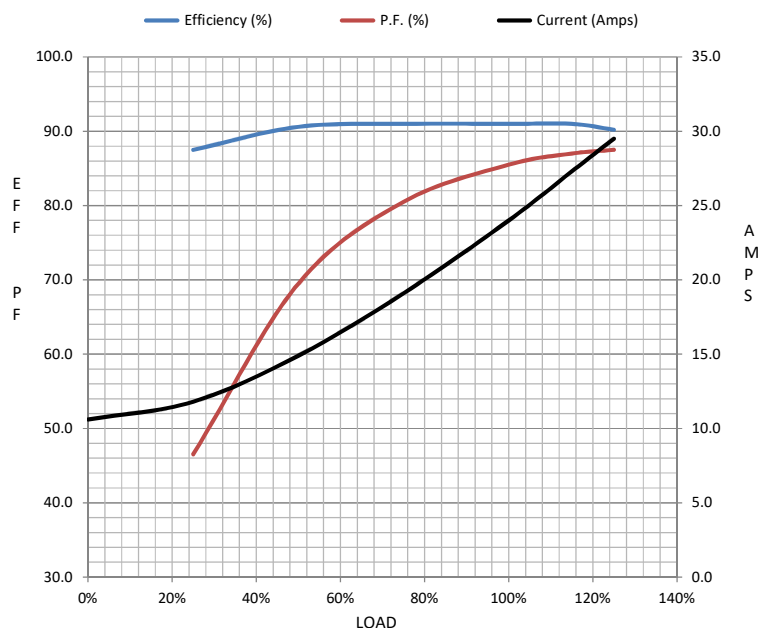
Load	0%	25%	50%	75%	100%	115%	125%	LR	
Current (Amps)	10.6	11.8	14.9	19.1	24.0	27.3	29.5	137	
Torque (ft-lb)	0.00	7.3	14.7	22.2	29.6	34.2	37.2	52.0	
RPM	3600	3588	3578	3566	3552	3,545	3540	0	
Efficiency (%)		87.5	90.6	91.0	91.0	91.0	90.2		
P.F. (%)	7.0	46.5	69.5	80.5	85.5	87.0	87.5	39.0	

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	1800	3340	3552	3600
Current (Amps)	137	122	83.0	24.0	10.6
Torque (ft-lb)	52.0	44.0	74.0	29.6	0.00

Information Block

HP	20.0			
Sync. RPM	3600			
Frame	254			
Enclosure	DP			
Construction	TDC			
Voltage	230/460#190/380	V		
Frequency	60	Hz		
Design	B			
LR Code letter	F			
Service Factor	1.15			
Temp Rise @ FL	45	° C		
Duty	CONT			
Ambient	40	° C		
Elevation	1,000	feet		
Rotor/Shaft wk²	1.10	Lb-Ft²		
Ref Wdg	HE31602015 NONE			
Sound Pressure @ 1M	75	dBA		
VFD Rating	VARIABLE 10:1			
Outline Dwg	SS620708			
Conn. Diag	A-EE7308K			
Additional Specifications:				
0				
0				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
0.3940	0.1490	1.1590	0.8750	26.4460



Speed - Torque Curve

