

PRODUCT INFORMATION PACKET



Model No: B199702.00

Catalog No: B199702.00

Ultimate e™ General Purpose Motor, 20 & 15 HP, 3 Ph, 60 & 50 Hz, 230/460 & 190/380 V,
1800 & 1500 RPM, 256T Frame, DP



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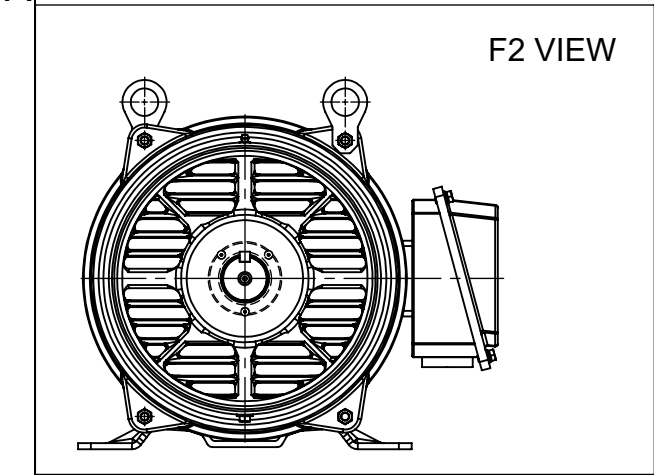
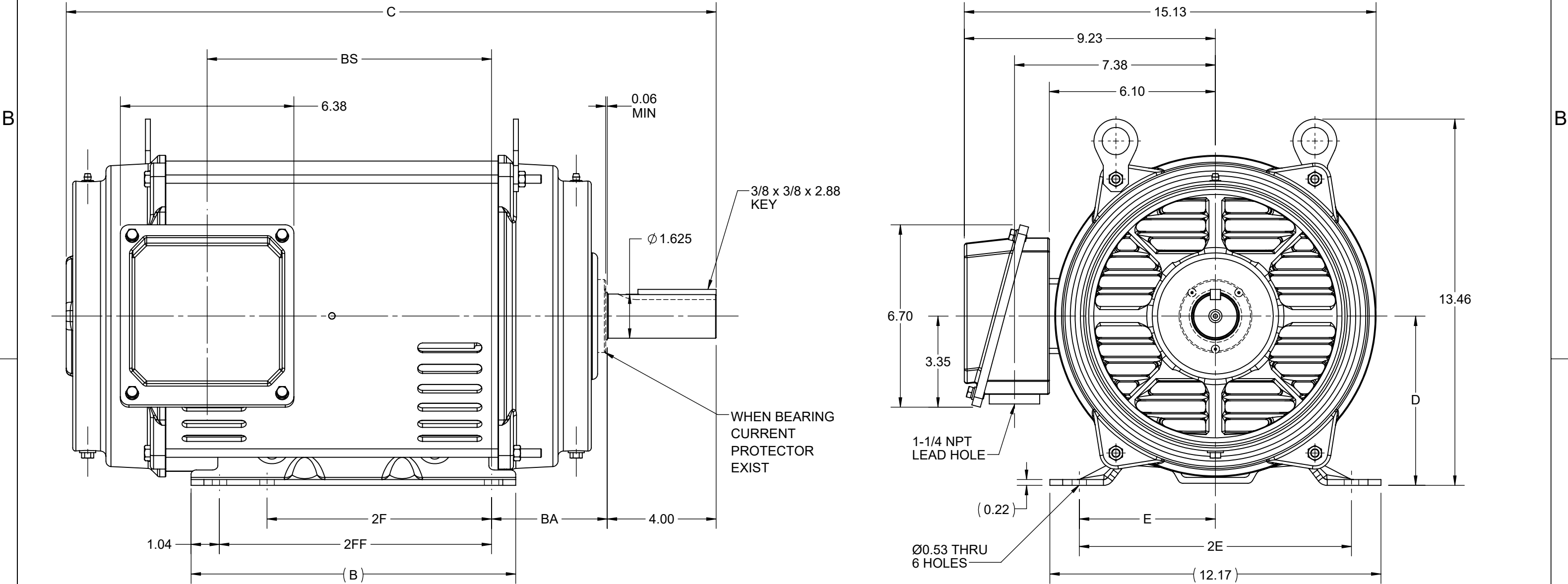
Nameplate Specifications



Phase	3	Output HP	20 & 15 Hp
Output KW	14.9 & 11.2 kW	Voltage	230/460 & 190/380 V
Speed	1770 & 1474 rpm	Service Factor	1.15 & 1.15
Frame	256T	Enclosure	Drip Proof
Thermal Protection	No Protection	Efficiency	93 & 92.4 %
Ambient Temperature	40 °C	Frequency	60 & 50 Hz
Current	48.5/24.3 & 45/22.4 A	Power Factor	83.5
Duty	Continuous	Insulation Class	F
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	22
Number of Speeds	1		

Technical Specifications

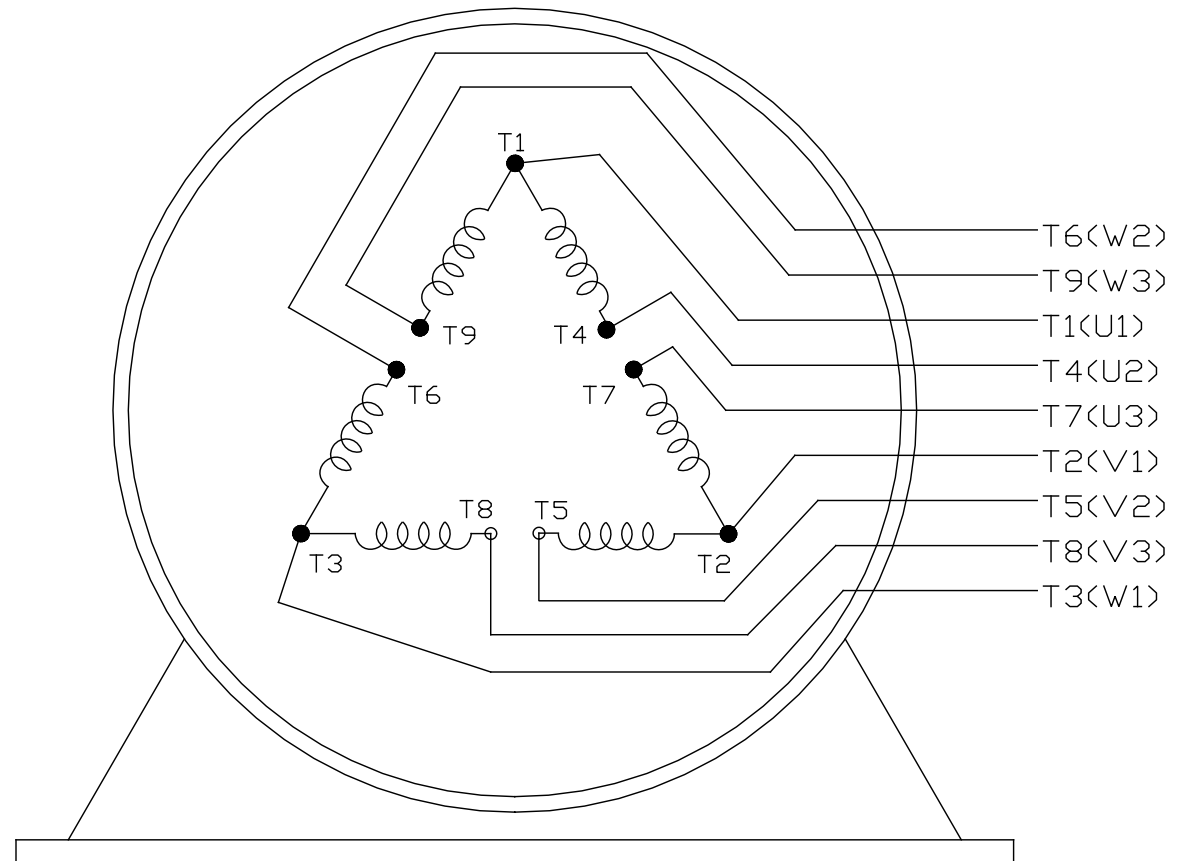
Electrical Type	Squirrel Cage Inverter Rated	Starting Method	Line Or Inverter
Poles	4	Rotation	Reversible
Resistance Main	.546 Ohms	Mounting	Rigid Base
Motor Orientation	Horizontal	Drive End Bearing	Ball
Opp Drive End Bearing	Ball	Frame Material	Rolled Steel
Shaft Type	T	Overall Length	24.22 in
Frame Length	2.56 in	Shaft Diameter	1.625 in
Shaft Extension	4 in	Assembly/Box Mounting	F1/F2 CAPABLE
Connection Drawing	EE7308K	Outline Drawing	SS620685-256T

4				3				2			1
DASH NO.	B	C	D	E	2E	2F	2FF	BA	BS	MOUNTING	FRAME
100	11.93	22.31	6.25	5.00	10.00	8.25	10.00	4.25	8.82	F1 OR F2	254T
200		23.88							10.45		256T



DRAWING REVISION C	REVISION BY GOPI J	REV DATE/© DATE 08/02/2022	PRIMARY DIMENSIONS ARE INCH mm DIMENSIONS IN [BRACKETS] ARE FOR REFERENCE ONLY	DRAWN BY XZ	 Regal Beloit America, Inc.		
REQUEST NUMBER CR-0006810	APPROVED BY SBD	DATE 08/02/2022		DATE 25/02/2016			
REQUEST NUMBER DESCRIPTION VIEWS UPDATED AS PER 3D				APPROVED BY	DESCRIPTION OUTLINE 254/256T FR NEMA ODP RS		
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				REFERENCE	MATERIAL	PROCESS/FINISH	
				THIRD ANGLE PROJECTION		SIZE B	DRAWING NUMBER SS620685

EE7308K

LOW VOLTAGEHIGH 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				
						MAT'L.			
						FINISH			
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 EE7308K		SIZE
						DIST			A
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							EE7308K		E



P.O. BOX 8003
WAUSAU, WI 54401-8003
PH. 715-675-3311

DATA VOLTS: 460

CERTIFICATION DATA SHEET

CONN. DIAGRAM: EE7308K
OUTLINE: SS620685
WINDING: HE31604015

CAT #: B199702.00

NONE 2

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC RPM	FL RPM	FRAME	ENCLOSURE	TYPE	KVA CODE	DESIGN
20	14.9	1800	1770	256T	DP	TDC	G	B

PH	HZ	VOLTS	AMPS	START TYPE	DUTY	INSL	S.F.	AMB	ELEV.
3	60/50	230/460#190/380	48.5/24.3&45/22.4	LINE OR INVERTER	CONT	F	1.15	40	3300

F.L. EFF	93.0	3/4 LD EFF	93.0	1/2 LD EFF	92.4	GTD EFF	92.4	ELECT. TYPE	SQ CAGE INV RATED
F.L. PF	83.5	3/4 LD PF	79.5	1/2 LD PF	69.5				

F.L. TORQUE	LR AMPS @ 460 V	L.R. TORQUE	B.D. TORQUE	F.L. RISE (°C)
59.4 LB-FT	144	118 LB-FT 199%	146 LB-FT 246%	45

PRESSURE @ 3	POWER	ROTOR WK²	MAX. LOAD WK²	SAFE STALL TIME	STARTS/HOUR	MOTOR WGT
74 dBA	83 dBA	2.80 LB-FT²	125 LB-FT²	20 SEC.	2	325 LB.

*** SUPPLEMENTAL INFORMATION ***

DE BRACKET TYPE	ODE BRACKET TYPE	MOUNT TYPE	MOTOR ORIENTATION	SEVERE DUTY	HAZARDOUS LOCATION	DRIP COVER	SCREENS	PAINT
STANDARD	STANDARD	RIGID	HORIZONTAL	NO	NONE	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)	ROLLED STEEL
6309 6209						

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
0.338	0.192	1.068	1.235	27.321	0.080	ODE

* N O T E S *		INVERTER TORQUE: VARIABLE 10:1 INV. HP SPEED RANGE: NONE
	ENCODER: NONE NONE NONE	NONE PPR

DATE: 1/30/2018

BRAKE: NONE
NONE NONE

FT-LB: NA

VOLTAGE: NONE HZ:

UL: Y-(LEESON UL REC)

Data Sheet

Date: 1/30/2018

B199702.00



Data @ 460 V

Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR	
Current (Amps)	9.8	11.2	14.6	19.1	24.3	27.7	30.1	144	
Torque (ft-lb)	0.00	14.5	29.5	44.3	59.4	68.4	74.5	118	
RPM	1800	1793	1785	1778	1770	1765	1762	0	
Efficiency (%)		89.5	92.4	93.0	93.0	92.7	92.1		
P.F. (%)	5.0	47.0	69.5	79.5	83.5	84.5	85.0	43.0	

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle																																	
Speed (RPM)	0	900	1628	1770	1800	Information Block																																
Current (Amps)	144	129	82.0	24.3	9.8	HP	20.0																															
Torque (ft-lb)	118	98.0	146	59.4	0.00	Sync. RPM	1800																															
<div><div>— Efficiency (%)</div><div>— P.F. (%)</div><div>— Current (Amps)</div><table border="1"><caption>Graph Data Points (Estimated)</caption><thead><tr><th>Load (%)</th><th>Efficiency (%)</th><th>P.F. (%)</th><th>Current (Amps)</th></tr></thead><tbody><tr><td>20</td><td>90.0</td><td>-</td><td>10.0</td></tr><tr><td>40</td><td>92.0</td><td>47.0</td><td>12.0</td></tr><tr><td>60</td><td>93.0</td><td>75.0</td><td>16.0</td></tr><tr><td>80</td><td>93.0</td><td>82.0</td><td>20.0</td></tr><tr><td>100</td><td>93.0</td><td>85.0</td><td>25.0</td></tr><tr><td>120</td><td>92.0</td><td>85.0</td><td>30.0</td></tr></tbody></table></div>						Load (%)	Efficiency (%)	P.F. (%)	Current (Amps)	20	90.0	-	10.0	40	92.0	47.0	12.0	60	93.0	75.0	16.0	80	93.0	82.0	20.0	100	93.0	85.0	25.0	120	92.0	85.0	30.0	Frame	256			
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						Construction	TDC																															
						Voltage	230/460#190/380		V																													
						Frequency	60		Hz																													
						Design	B																															
						LR Code letter	G																															
						Service Factor	1.15																															
Temp Rise @ FL	45		° C																																			
Duty	CONT																																					
Ambient	40		° C																																			
Elevation	1,000		feet																																			
Rotor/Shaft wk²	2.80		Lb-Ft²																																			
Ref Wdg	HE31604015 NONE																																					
Sound Pressure @ 1M	74		dBA																																			
VFD Rating	VARIABLE 10:1																																					
Outline Dwg	SS620685																																					
Conn. Diag	EE7308K																																					
Additional Specifications:																																						
0																																						
0																																						
EQUIV CKT (OHMS / PHASE)																																						
R1	R2	X1		X2	Xm																																	
0.3380	0.1920	1.0680		1.2350	27.3210																																	

Speed - Torque Curve

