

# PRODUCT INFORMATION PACKET



Model No: B199701.00

Catalog No: B199701.00

Ultimate e™ General Purpose Motor, 20 & 15 HP, 3 Ph, 60 & 50 Hz, 230/460 & 190/380 V,  
3600 & 3000 RPM, 254T 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	254T	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

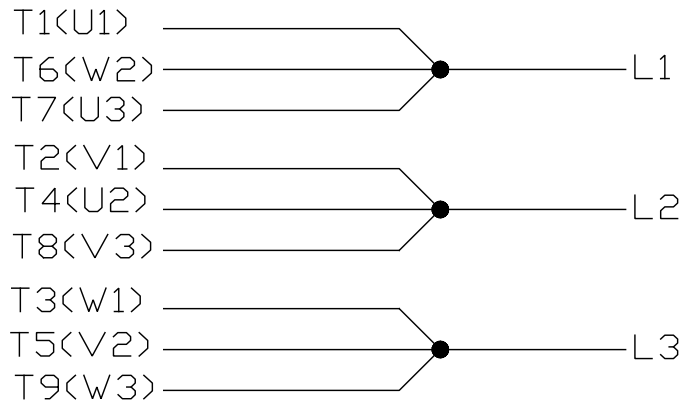
Electrical Type	Squirrel Cage Inverter Rated	Starting Method	Line Or Inverter
Poles	2	Rotation	Reversible
Resistance Main	.64 Ohms	Mounting	Rigid Base
Motor Orientation	Horizontal	Drive End Bearing	Ball
Opp Drive End Bearing	Ball	Frame Material	Rolled Steel
Shaft Type	T	Overall Length	22.64 in
Frame Length	10.62 in	Shaft Diameter	1.625 in
Shaft Extension	4 in	Assembly/Box Mounting	F1/F2 CAPABLE
Inverter Load	VARIABLE 10:1		
Connection Drawing	EE7308K	Outline Drawing	SS620685-254T



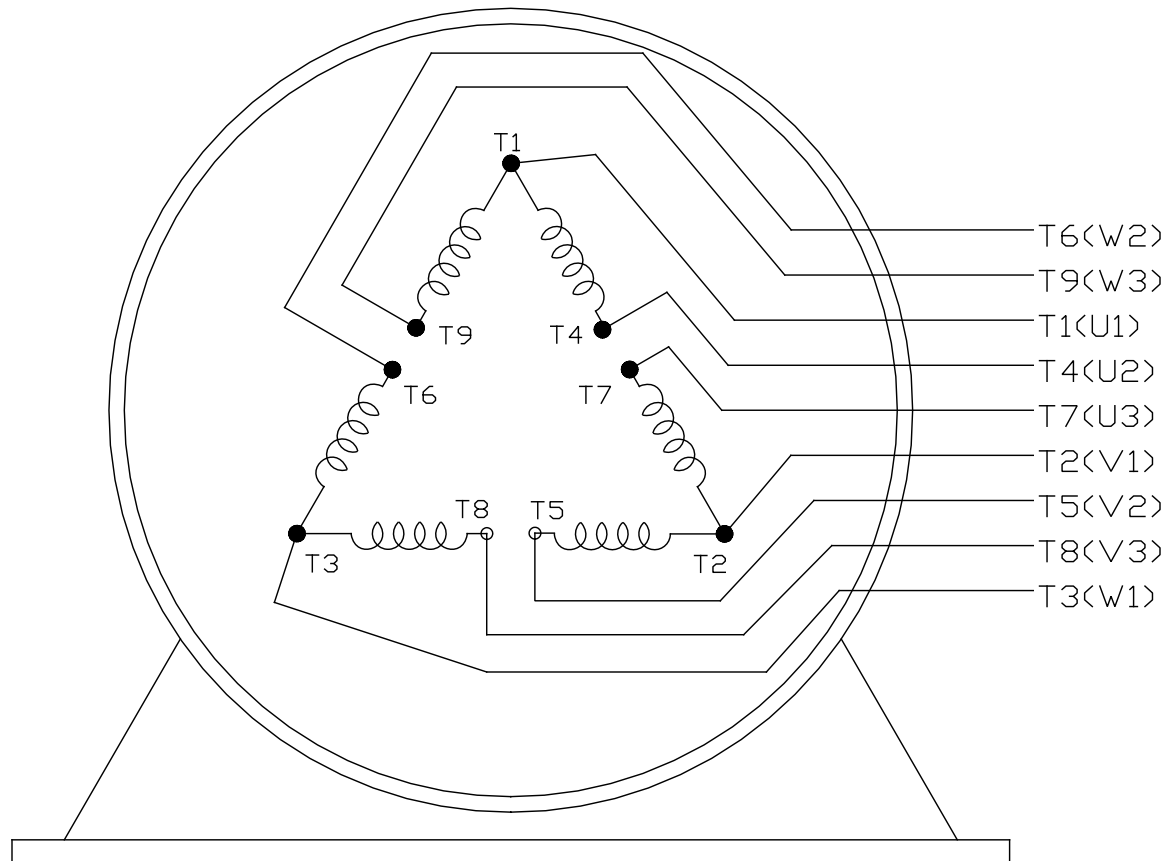
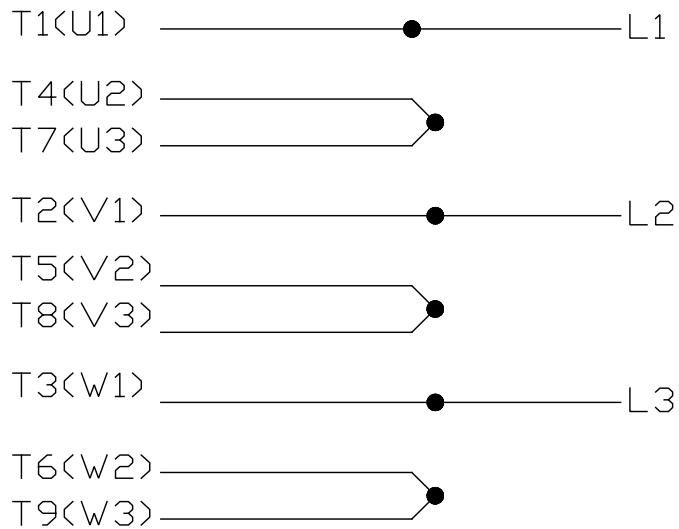


LOW VOLTAGE


EE7308K



# HIGH VOLTAGE



VIEW OF TERMINAL END

				TOLERANCES UNLESS SPECIFIED		 <b>REGAL - BELOIT CORPORATION</b>		DRAWN PGK 06-04-1997				
E	CORRECTED IEC MARKINGS ECD-0111208	WGJ 01-23-2017	EMH	DEC.	INCHES			CHK	ML 06-05-1997			
D	RE-DRAWN WITH REGAL LOGO ECD-0110493	WGJ 09-30-2016	EMH	.X	±.1			APPD	GK 06-15-1997			
8	ADDED IEC DESIGNATIONS MU95020	TJW 4/30/2010	MJS	.XX	±.02	TITLE CONNECTION DIAGRAM DELTA CON. - 3Ø - 9 LEADS		SCALE				
7	REVISD HIGH VOLTAGE L2 WAS L3 CN52600-354	MRB 09-21-1998		.XXX	±.005			REF				
6	REDRAWN ON CADD	PGK 06-05-1997		.XXXX	±.0005	MAT'L.		FMF				
NO.	REVISION	BY & DATE	CHK	ANG	± 7'30"	FINISH		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 EE7308K			SIZE	DRAWING NO.	PAGE	OF	REV.
			DIST					A	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: HE31602015

CAT #: B199701.00

NONE 2

### TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC RPM	FL RPM	FRAME	ENCLOSURE	TYPE	KVA CODE	DESIGN
20	14.9	3600	3552	254T	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 @	POWER	ROTOR WK <sup>2</sup>	MAX. LOAD WK <sup>2</sup>	SAFE STALL TIME	STARTS/HOUR	MOTOR WGT
75 dBA	84 dBA	1.10 LB-FT <sup>2</sup>	0 LB-FT <sup>2</sup>	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
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
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	0.080	ODE

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

DATE: 1/31/2018

**BRAKE:** NONE  
NONE

**FT-LB:** NA  
**VOLTAGE:** NONE

**HZ:**

**UL:** Y-(LEESON UL REC)

## Data Sheet

Date: 1/31/2018

B199701.00



Data @ 460 V

## Motor Load Data

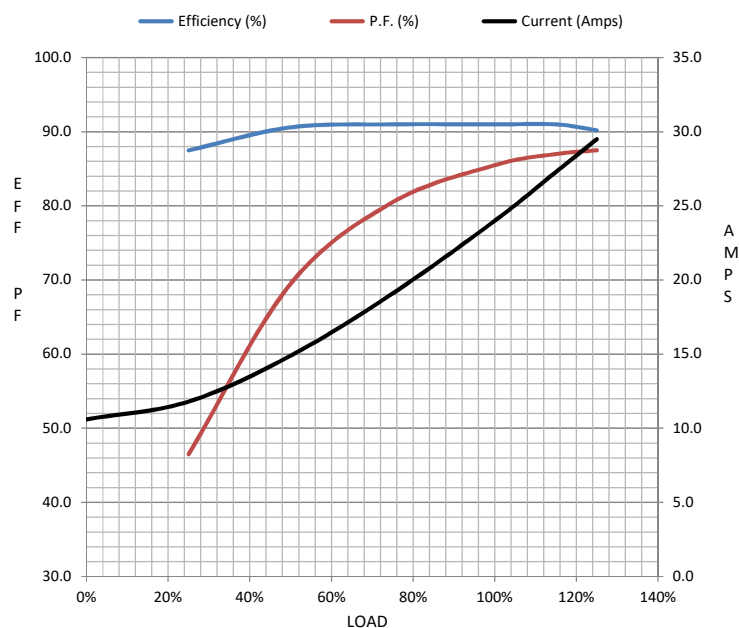
Load	0%	25%	50%	75%	100%	115%	125%	LR	
Current (Amps)	10.6	11.8	14.9	19.1	24.0	27.3	29.5	137	
Torque (ft-lb)	0.00	7.3	14.7	22.2	29.6	34.2	37.2	52.0	
RPM	3600	3588	3578	3566	3552	3,545	3540	0	
Efficiency (%)		87.5	90.6	91.0	91.0	91.0	90.2		
P.F. (%)	7.0	46.5	69.5	80.5	85.5	87.0	87.5	39.0	

## Motor Speed Data

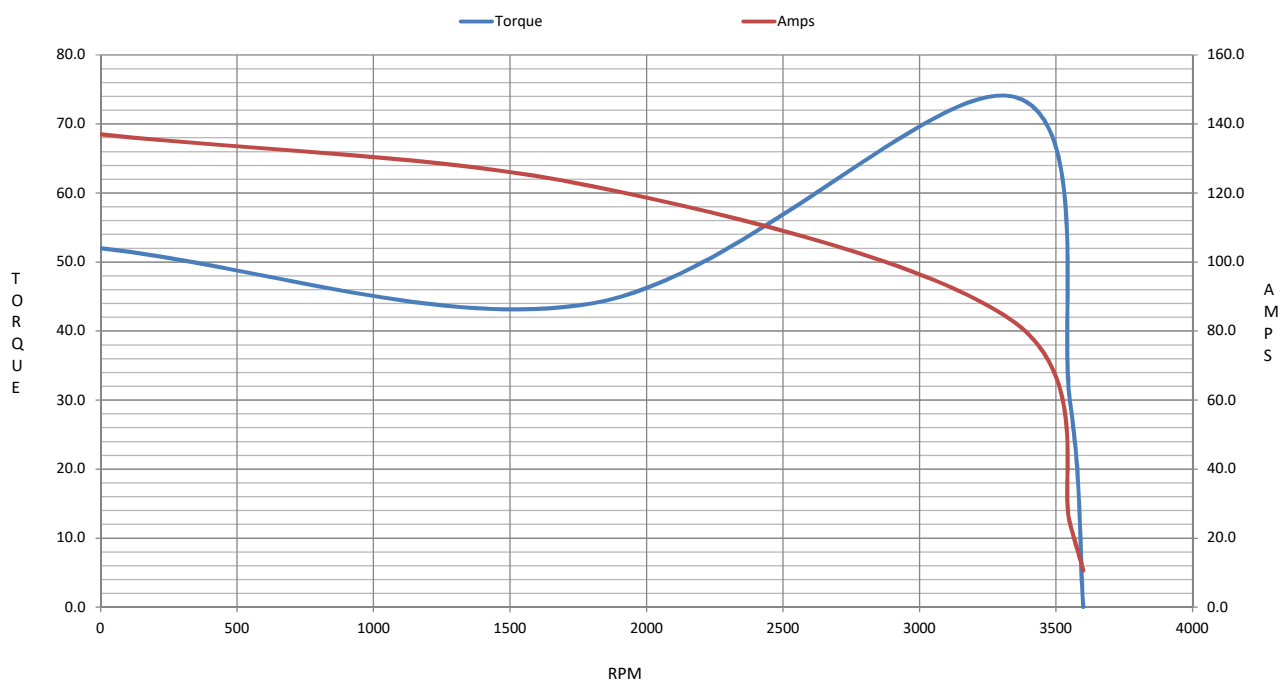
	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	1800	3340	3552	3600
Current (Amps)	137	122	83.0	24.0	10.6
Torque (ft-lb)	52.0	44.0	74.0	29.6	0.00

## 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	SS620685			
Conn. Diag	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



## EC Declaration of Conformity

The undersigned representing  
the manufacturer:

Regal Beloit America  
100 East Randolph St.  
Wausau, WI 54401

and the authorized representative  
established within the Community:

Marathon Electric UK  
6F Thistleton Road Ind. Estate  
Market Overton  
Oakham, Rutland LE15 7PP UK

are committed to providing customers with products that comply with applicable regulations and international protocols to which they are subject, including the requirements of the European Parliament Directive on the Harmonization of the laws relating to electrical equipment designed for use within certain voltage limits (2014/35/EU).

Regal Beloit America declares that the following product(s), to which this declaration relates, are in conformity with the relevant sections of the EC standards listed below.

This statement supersedes any statements previously issued pertaining to the product(s) listed below and is subject to change without notice.

Model No : B199701.00

(Model No. may contain prefix and/or suffix characters)

Catalog No : B199701.00

Rework No : N/A

Directives :

Low Voltage Directive 2014/35/EU

Harmonized Standards Used :

EN 60034-1: 2010 (IEC 60034-1: 2010)

EN 60034-5: 2001/A1:2007 (IEC 60034-5: 2000/A1:2006)

Authorized Representative:



Michael A. Logsdon  
Vice President, Technology

Authorized Representative in the Community:



Julian Clark  
Marketing Engineer

Created on 10/11/2022

**CE 22**