

# PRODUCT INFORMATION PACKET



Model No: LM04003  
Catalog No: LM04003  
Encoder Motor, 5 HP, 3 Ph, 60 Hz, 230/460 V, 1800 RPM, 213TC Frame, TENV



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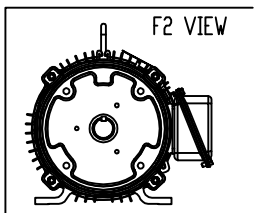
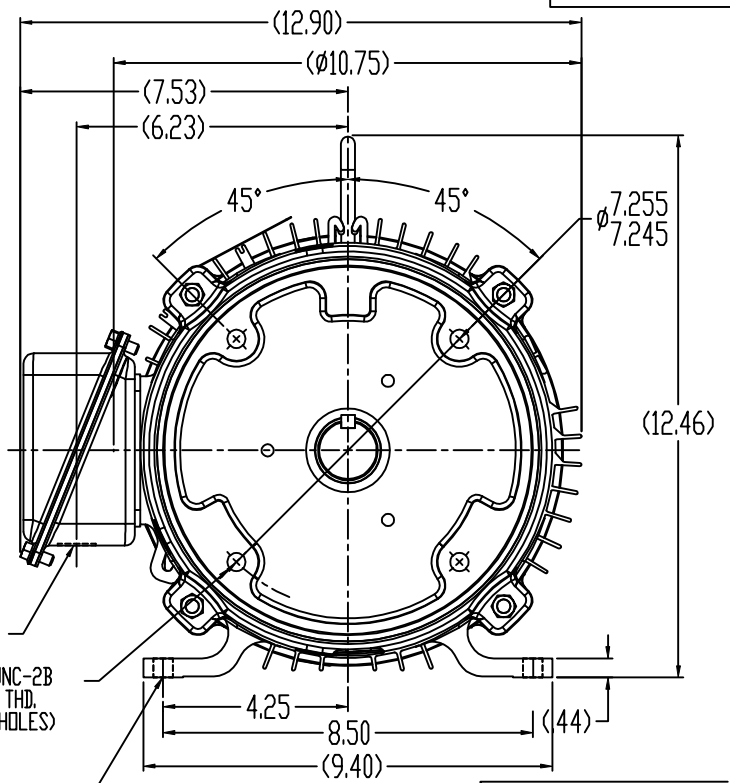
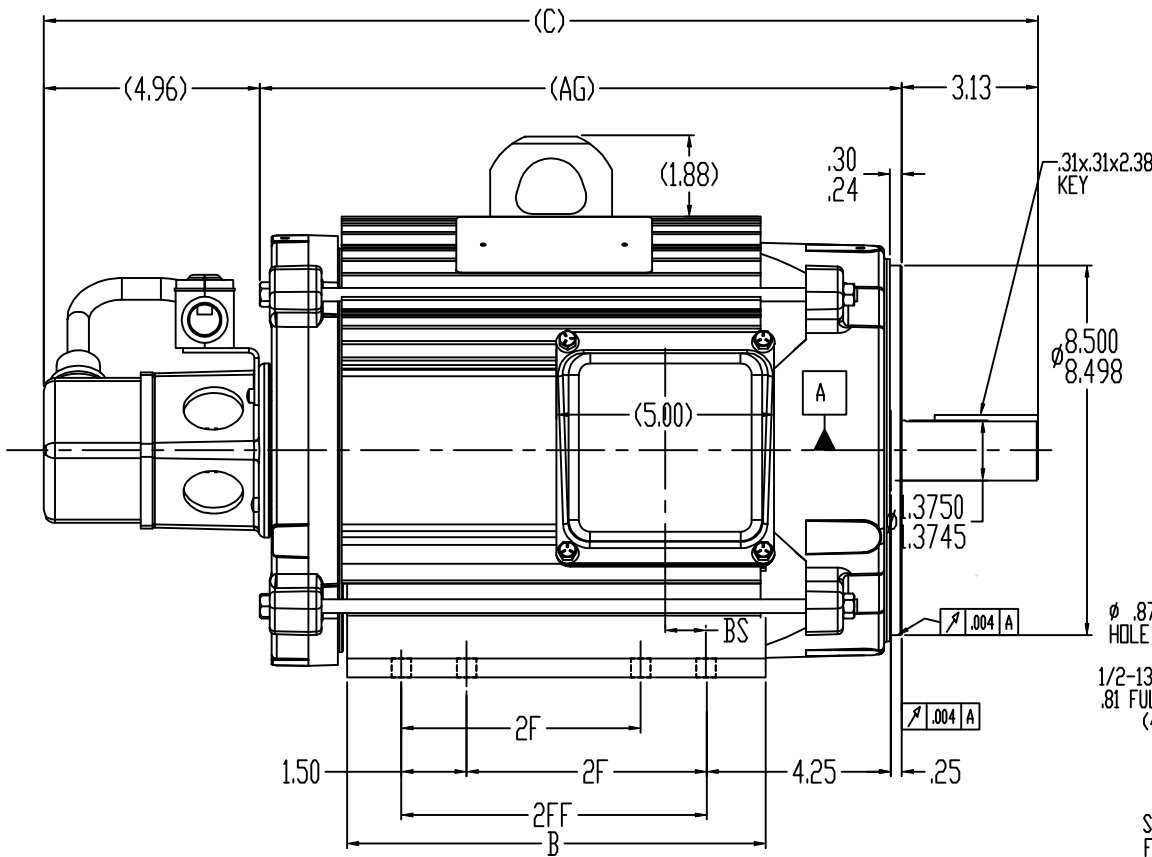
### Nameplate Specifications

Output HP	5 Hp	Output KW	3.7 kW
Frequency	60 Hz	Voltage	230/460 V
Current	15.6/7.8 A	Speed	1760 rpm
Service Factor	1	Phase	3
Efficiency	82.5 %	Power Factor	73
Duty	Continuous	Insulation Class	F
Design Code	INV	KVA Code	L
Frame	213TC	Enclosure	Totally Enclosed Non Ventilated
Thermal Protection	Thermostat	Ambient Temperature	40 °C
Drive End Bearing Size	208	Opp Drive End Bearing Size	206
UL	Recognized	CSA	Y
CE	Y	IP Code	43
Number of Speeds	1		

### Technical Specifications

Electrical Type	Squirrel Cage Inverter Duty	Starting Method	Inverter Only
Poles	4	Rotation	Reversible
Resistance Main	2 Ohms	Mounting	Rigid Base
Motor Orientation	Horizontal	Drive End Bearing	Ball
Opp Drive End Bearing	Ball	Frame Material	Aluminum
Shaft Type	T	Overall Length	21.14 in
Frame Length	8.00 in	Shaft Diameter	1.375 in
Shaft Extension	3.38 in	Assembly/Box Mounting	F1/F2 CAPABLE
Inverter Load	CONSTANT 100:1		
Connection Drawing	EE7308T-LN	Outline Drawing	SS330213LN-800

SS330213LN



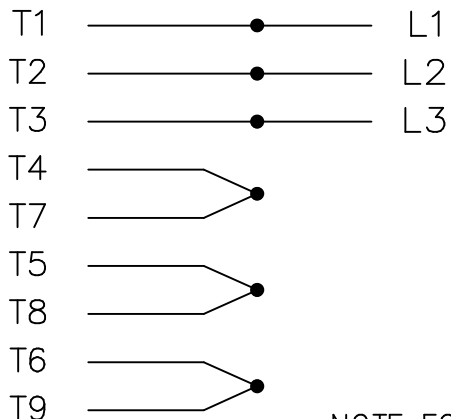
NOTES:  
 1- NAMEPLATE TO BE READ FROM C'BOX SIDE OF MOTOR  
 2- BOX CAN BE MOUNTED ON OPPOSITE SIDE BY REMOVING BRACKETS & TURNING FRAME 180°  
 \*- DASH -950 IS SHOWN

DASH	FRAME	C	AG	B	2F	2FF	BS	FOOT HOLES QUANTITY
800	213TC	21.14	13.05	8.12	5.50		0.93	4
*950	213/5TC	22.64	14.55	9.62	5.50	7.00	0.93	8

TOLERANCES UNLESS SPECIFIED				DRAWN	VV 03/21/2007
DEC	INCHES			CHK	AT 03/21/2007
X	±.1	TITLE	OUTLINE	APPR	AT 03/21/2007
XXX	±.005	210TC FR. - TENV - W/ ENCODER		SCALE	3/8
XXXX	±.0005	MATL		REF	
NO	REVISION	BY & DATE	CHK	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		CHK	MWG ±7'30"	PREV	MU78310
RFP	03/22/2007	CAD FILE	SS330210LN	SIZE	B
JUST	LB	REV		DRAWING NO	SS330213LN

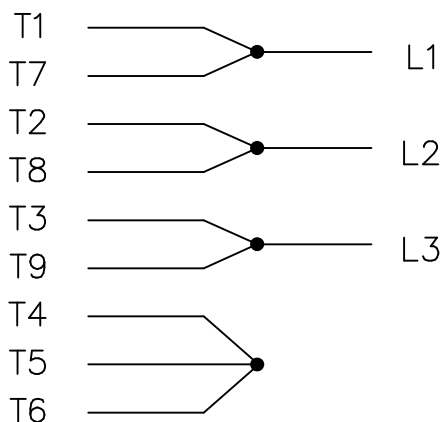
THREE PHASE  
DUAL VOLTAGE MOTOR

HIGH VOLTAGE

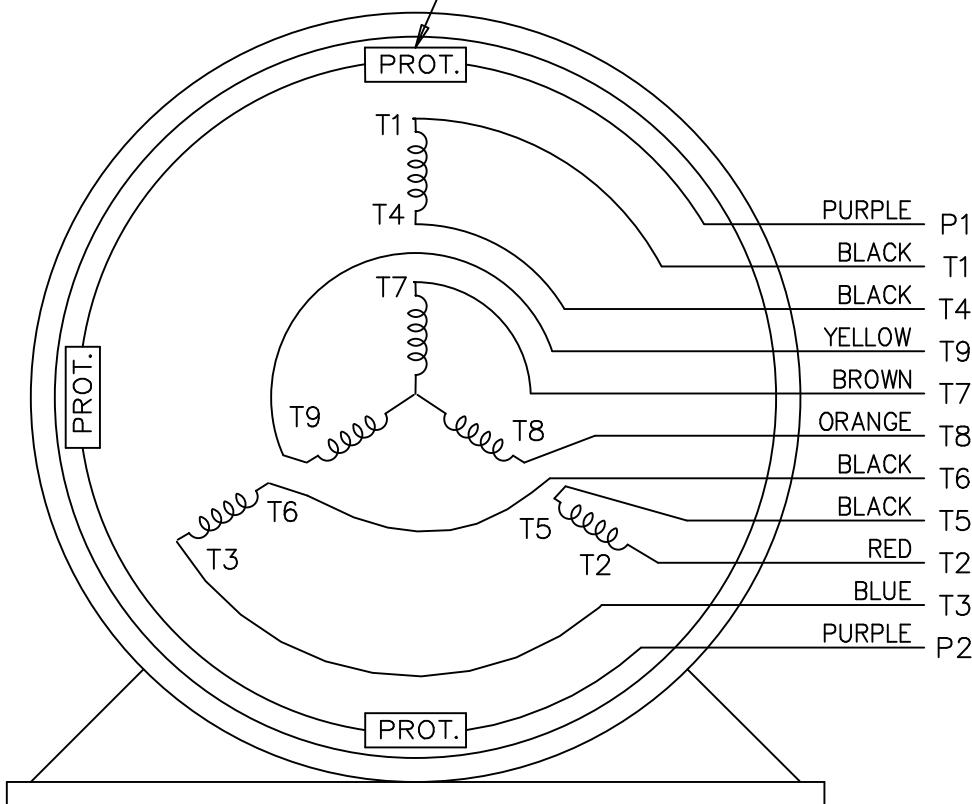


NOTE FOR FACTORY USE ONLY:  
TO SURGE TEST FOR COMMON CONNECT:  
HIGH VOLT: CONNECT P1 TO T1  
THEN P2 TO L1  
LOW VOLT: CONNECT P1 TO T1 & T7,  
THEN P2 TO L1

LOW VOLTAGE



THREMO-PROTECTORS  
CONNECTED IN SERIES.



VIEW OF TERMINAL END

				TOLERANCES UNLESS SPECIFIED			DRAWN BJK 07-16-2002			
				DEC.	INCHES		CHK DRS 07-18-2002			
				.X	±.1		APPD GK 07-18-2002			
				.XX	±.02		SCALE 1=1			
2	ADDED COLORS TO "T & P" LEADS	CN 40494	MSG 08-08-2006	ML	.XXX	±.005	TITLE CONNECTION DIAGRAM 3 PHASE - DUAL VOLTAGE MOTOR		REF	
1	NEW DRAWING		BJK 07-18-2002	DRS	.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 ee7308t_ln			SIZE	DRAWING NO. PAGE OF	REV.
				DIST	LB			A	EE7308T-LN	2

Data Sheet

Date: 2/1/2018

LM04003



Data @ **460 V**

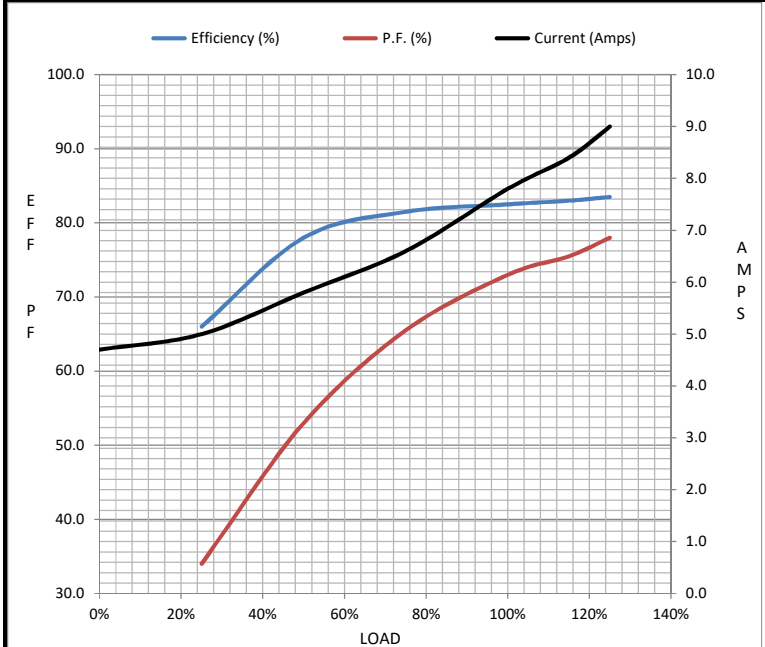
Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR
Current (Amps)	4.7	5.0	5.8	6.6	7.8	8.4	9.0	61.0
Torque (ft-lb)	0.00	3.7	7.4	11.1	14.9	16.9	18.8	45.0
RPM	1800	1790	1780	1770	1760	1.756	1750	0
Efficiency (%)		66.0	78.0	81.5	82.5	83.0	83.5	
P.F. (%)	9.5	34.0	53.0	65.5	73.0	75.5	78.0	0.0

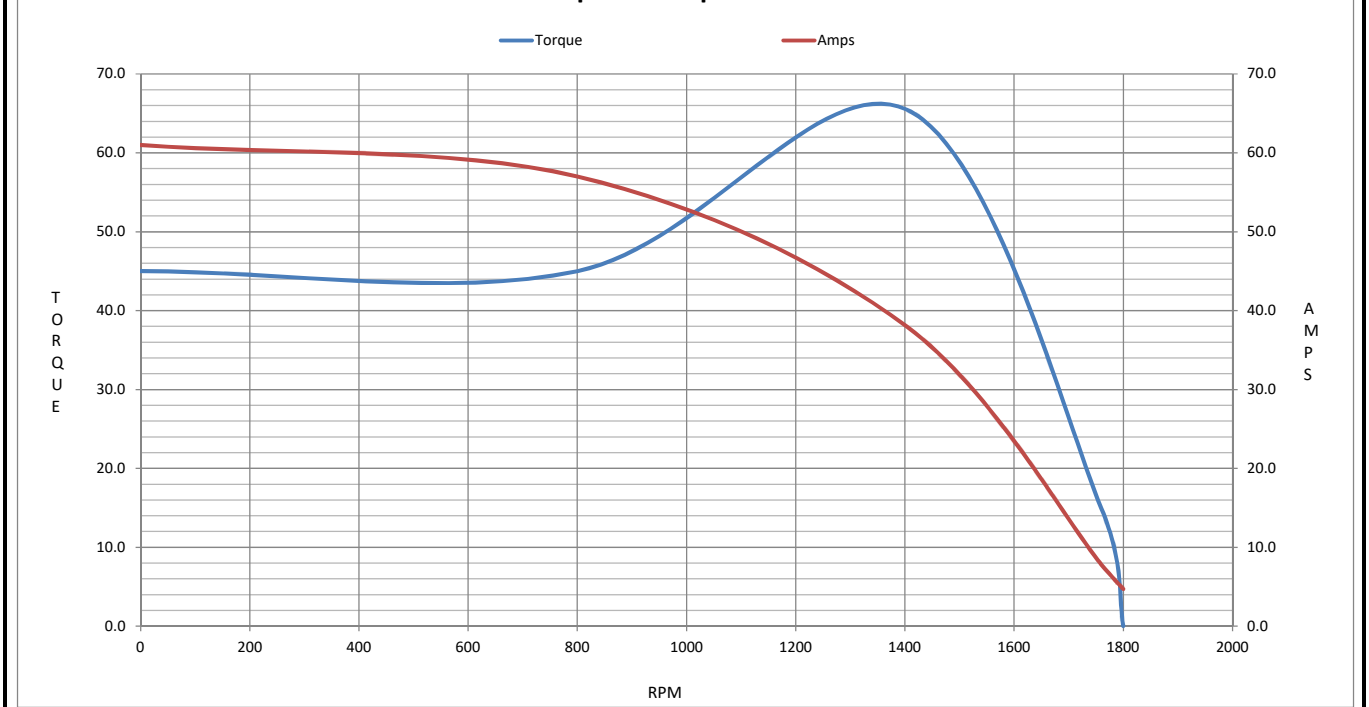
Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	800	1403	1760	1800
Current (Amps)	61.0	57.0	38.0	7.8	4.7
Torque (ft-lb)	45.0	45.0	65.5	14.9	0.00

Information Block				
HP	5.0			
Sync. RPM	1800			
Frame	213			
Enclosure	TENV			
Construction	TTL			
Voltage	230/460 V			
Frequency	60 Hz			
Design	B			
LR Code letter	L			
Service Factor	1.15			
Temp Rise @ FL	65 °C			
Duty	CONT			
Ambient	40 °C			
Elevation	1,000 feet			
Rotor/Shaft wk <sup>2</sup>	0.55 Lb-Ft <sup>2</sup>			
Ref Wdg	K2134125 R4			
Sound Pressure @ 1M	62 dBA			
VFD Rating	CONSTANT 100:1			
Outline Dwg	B-SS330213LN-800			
Conn. Diag	A-EE7308T-LN			
Additional Specifications:				
0				
0				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
1.3040	0.9130	3.2090	4.3660	58.9680



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 : LM04003

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

Catalog No : LM04003

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 09/01/2022

**CE 22**