

# PRODUCT INFORMATION PACKET



Model No: LM22665  
Catalog No: LM22665

Speed Ratio Motor, 1.50 HP, 3 Ph, 60 Hz, 230/460 V, 1800 RPM, 56HC Frame, TEFC



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### Nameplate Specifications

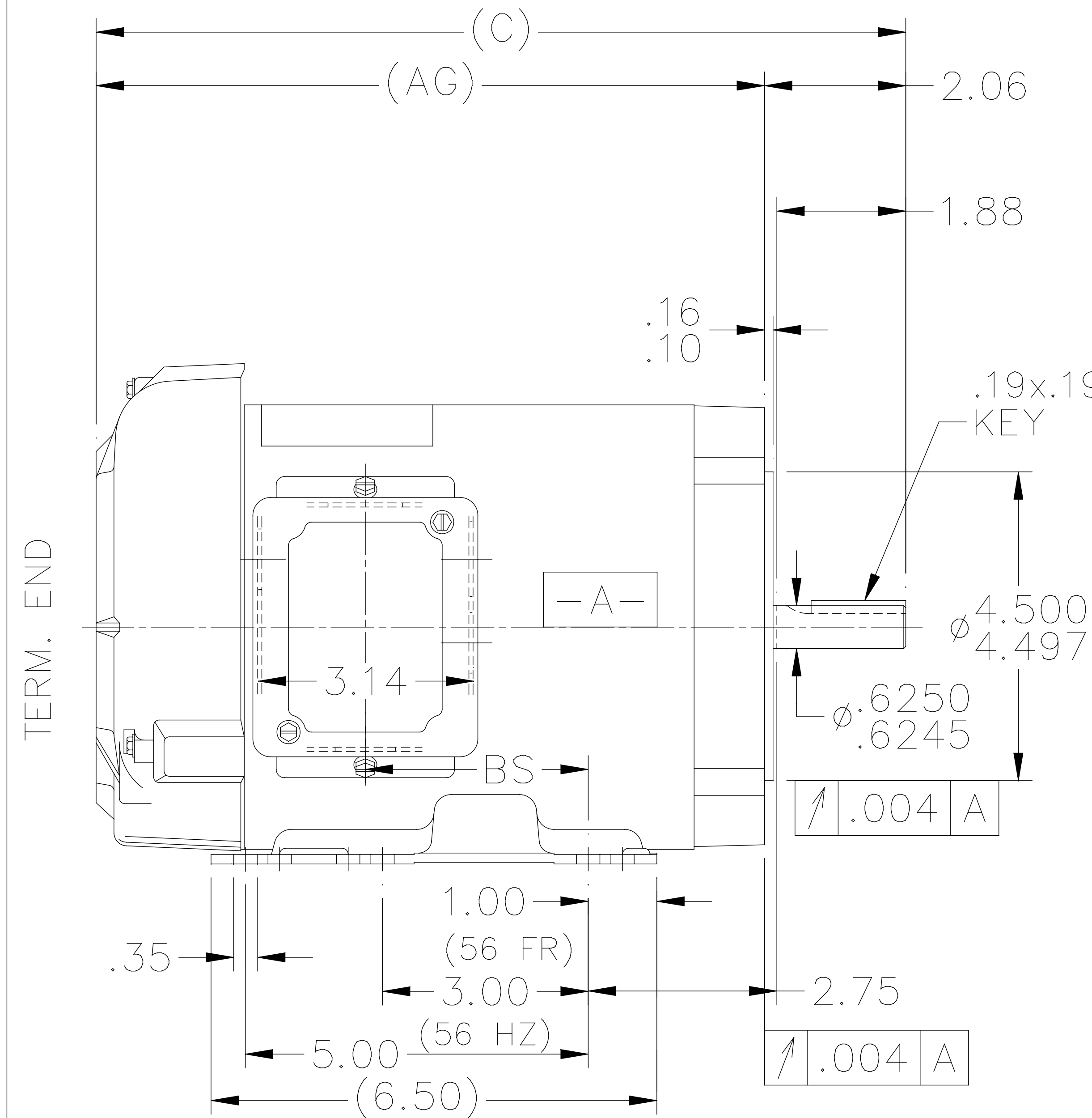
Phase	<b>3</b>	Output HP	<b>1.50 Hp</b>
Output KW	<b>1.1 kW</b>	Voltage	<b>230/460 V</b>
Speed	<b>1740 rpm</b>	Service Factor	<b>1.0</b>
Frame	<b>56HC</b>	Enclosure	<b>Totally Enclosed Fan Cooled</b>
Thermal Protection	<b>Thermostat</b>	Efficiency	<b>78.5 %</b>
Ambient Temperature	<b>40 °C</b>	Frequency	<b>60 Hz</b>
Current	<b>5.0/2.5 A</b>	Power Factor	<b>74.5</b>
Duty	<b>Continuous</b>	Insulation Class	<b>F</b>
Design Code	<b>INV</b>	KVA Code	<b>M</b>
Drive End Bearing Size	<b>6205</b>	Opp Drive End Bearing Size	<b>6203</b>
UL	<b>Recognized</b>	CSA	<b>Y</b>
CE	<b>Y</b>	IP Code	<b>43</b>
Number of Speeds	<b>1</b>		

### Technical Specifications

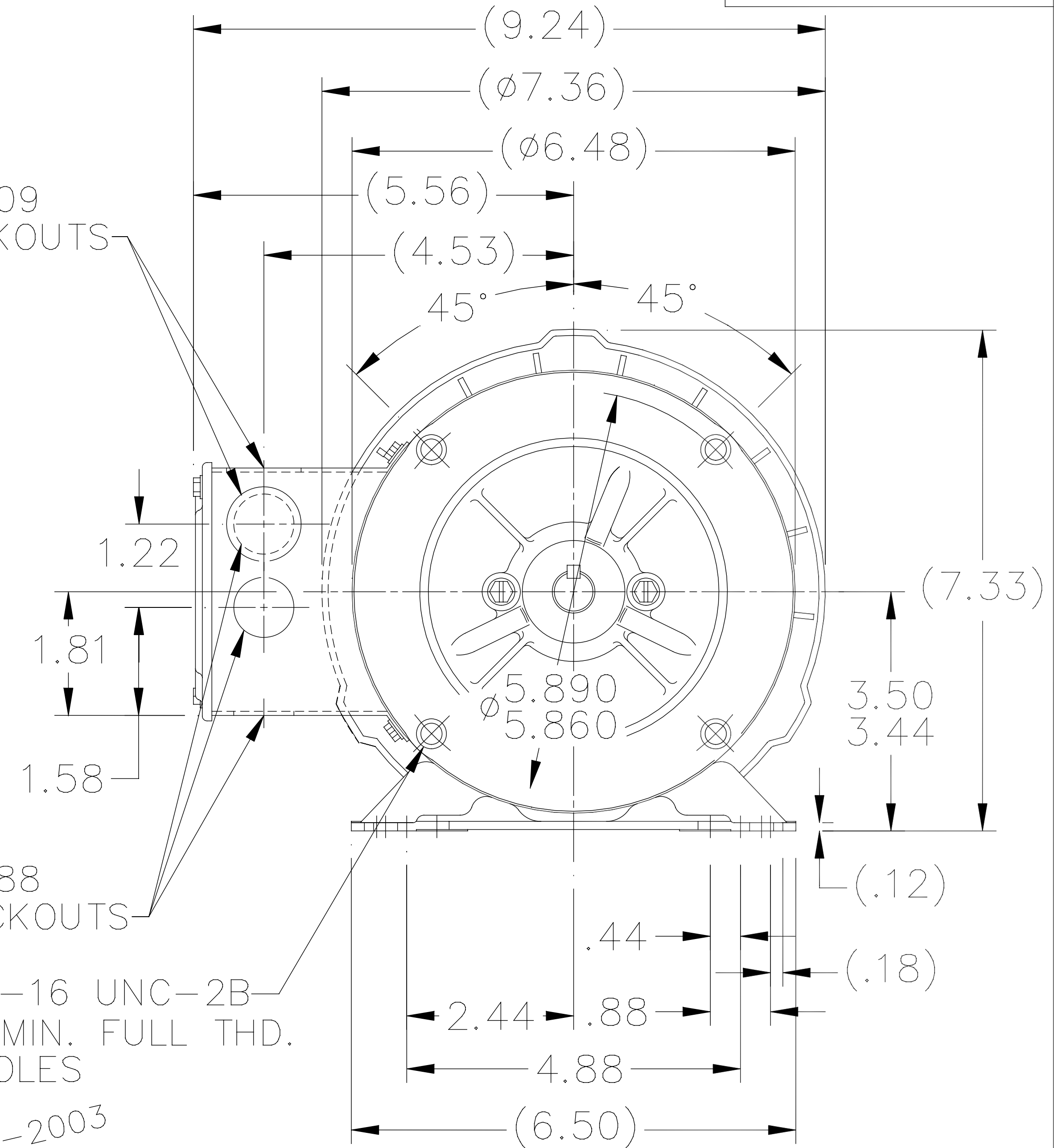
Electrical Type	<b>Squirrel Cage Inverter Duty</b>	Starting Method	<b>Inverter Only</b>
Poles	<b>4</b>	Rotation	<b>Reversible</b>
Resistance Main	<b>10.6 Ohms</b>	Mounting	<b>Rigid Base</b>
Motor Orientation	<b>Horizontal</b>	Drive End Bearing	<b>Ball</b>
Opp Drive End Bearing	<b>Ball</b>	Frame Material	<b>Rolled Steel</b>
Shaft Type	<b>NEMA 56</b>	Overall Length	<b>13.32 in</b>
Frame Length	<b>8.06 in</b>	Shaft Diameter	<b>0.625 in</b>
Shaft Extension	<b>1.88 in</b>	Assembly/Box Mounting	<b>F1 ONLY</b>
Inverter Load	<b>CONSTANT 4:1</b>		
Connection Drawing	<b>EE7308T</b>	Outline Drawing	<b>100109-806</b>

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100109



2- $\phi$ 1.09  
KNOCKOUTS



3- $\phi$ .88  
KNOCKOUTS

3/8-16 UNC-2B  
.56 MIN. FULL THD.  
4 HOLES

NOTES:

1. CONDUIT BOX CAN BE ROTATED 180°
2. NAMEPLATE READ FROM CONDUIT BOX SIDE OF MOTOR.

DASH	FR.	C	AG	BS	DASH	FR.	C	AG	BS
656	56-65	11.82	9.75	3.25	906	56-90	14.32	12.25	5.75
706	56-70	12.32	10.25	3.75	956	56-95	14.82	12.75	6.25
756	56-85	12.82	10.75	4.25					
856	56-85	13.82	11.75	5.25					

11-20-2003

TOLERANCES UNLESS SPECIFIED	
DEC.	INCHES
.X	$\pm$ .1
.XX	$\pm$ .03
.XXX	$\pm$ .005
.XXXX	$\pm$ .0005
ANG	$\pm$ 7'30"



Regal Beloit America, Inc.

NO.	REVISION	BY & DATE	CHK	ANG
5	ADDED DASH # 756 PER ECO-0045171	UD 02/11/14	PI	.XX $\pm$ .03
4	AD'D NAMEPLATE LOC. CN 27400-296	BLR 08-05-1999		.XXX $\pm$ .005
3	REDRAWN ON CADD - NO CHANGE	MRB 04-01-1998		.XXXX $\pm$ .0005

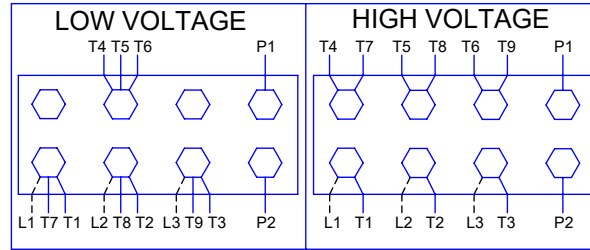
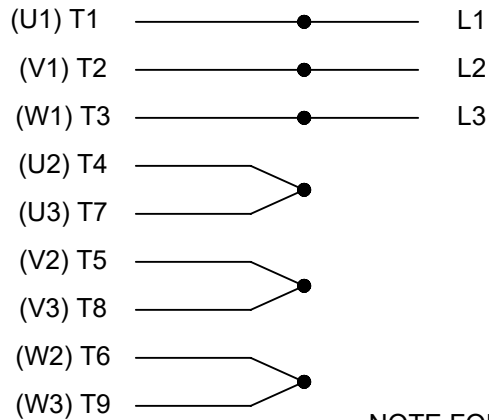
TITLE OUTLINE  
56 FR. - TEFC - 3 - 'C' FACE

MAT'L.  
FINISH

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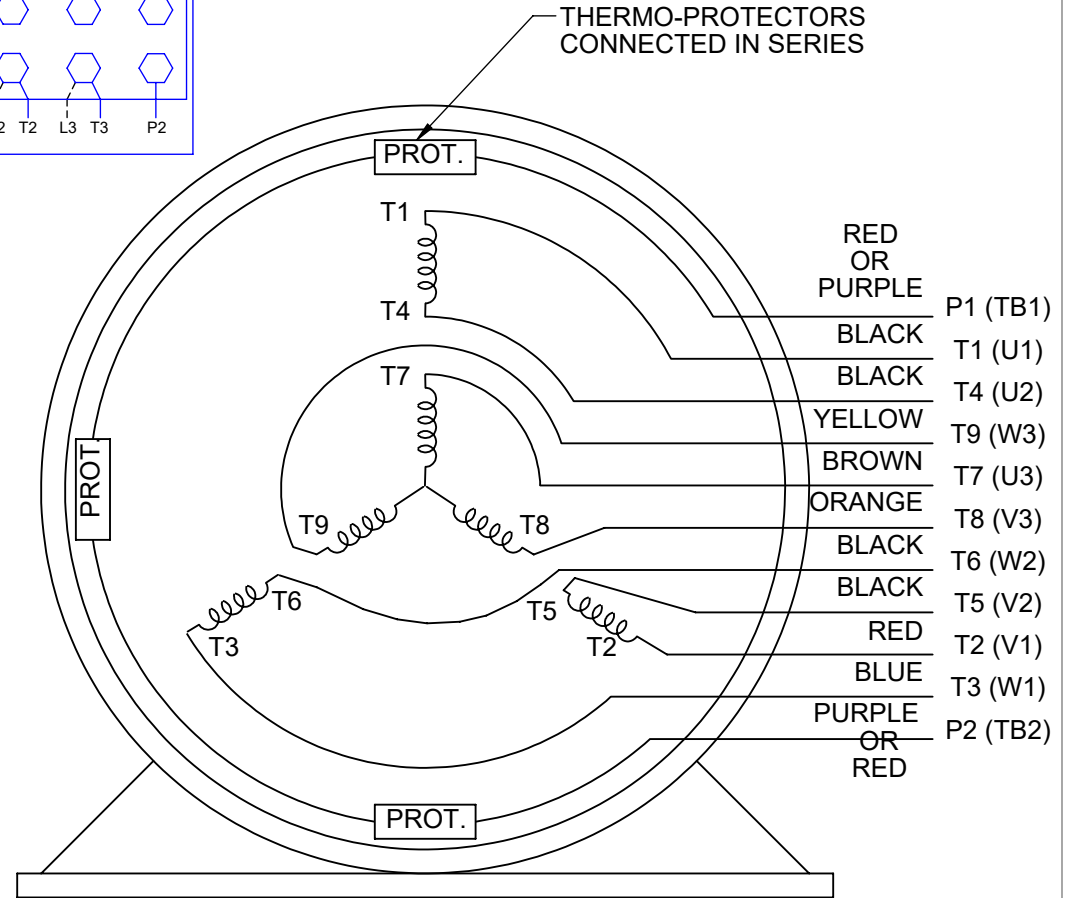
RFP	CAD FILE 100109	SIZE A	DRAWING NO. 100109	PAGE OF	REV. 5
DIST					

**HIGH VOLTAGE**



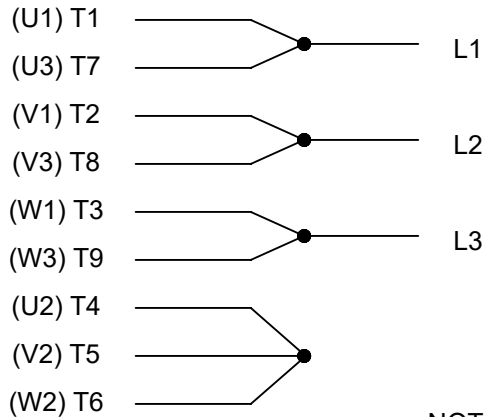
**THREE PHASE  
DUAL VOLTAGE MOTOR**

THERMO-PROTECTORS  
CONNECTED IN SERIES



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**



**VIEW OF TERMINAL END**

NOTE: LEAD'S COLOR CAN BE YELLOW OR WHITE FOR MT2 PLANT

DRAWING REVISION T	REVISION BY ZR	DATE 01-14-2019		DRAWN BY SMC	Regal Beloit America, Inc.
ECO ECO-0159915	APPROVED BY DR	DATE 01-15-2019		DATE 05-13-1992	
ECO DESCRIPTION <b>ADDED TERMINAL CONNECTION DIAGRAM</b>				APPROVED BY TB	DESCRIPTION <b>CONN DIAGRAM-INTERNAL</b> 3 PHASE - DUAL VOLTAGE MOTOR
<small>COPYRIGHT REGAL BELOIT AMERICA, INC. ALL RIGHTS RESERVED. PROPRIETARY AND CONFIDENTIAL INFORMATION - THIS DOCUMENT IS THE PROPERTY OF REGAL BELOIT AMERICA, INC. ("OWNER") AND CONTAINS OWNER'S PROPRIETARY INFORMATION. ANY PERSON, CORPORATION OR OTHER FIRM RECEIVING IT IS DEEMED, BY RECEIVING IT, TO AGREE THAT IT, AND/OR ANY PART OF IT, SHALL NOT BE DISCLOSED TO ANY PERSON, CORPORATION OR OTHER ENTITY, DUPLICATED, AND/OR USED, EXCEPT AS EXPRESSLY APPROVED IN WRITING IN ADVANCE BY OWNER. THIS DOCUMENT SHALL BE RETURNED TO OWNER UPON REQUEST. IT MAY BE SUBJECT TO CERTAIN RESTRICTIONS UNDER APPLICABLE EXPORT CONTROL LAWS AND REGULATIONS.</small>				DATE 05-13-1992	MATERIAL
			REFERENCE EE7308/EE7300	THIRD ANGLE PROJECTION	SIZE A

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



DATA VOLTS: 460

**CERTIFICATION DATA SHEET**

CONN. DIAGRAM: A-EE7308T-LN  
 OUTLINE: A-100109LN-806  
 WINDING: ZT4137

CAT #: LM22665

R1 3

**TYPICAL MOTOR PERFORMANCE DATA**

HP	KW	SYNC RPM	FL RPM	FRAME	ENCLOSURE	TYPE	KVA CODE	DESIGN
1.5	1.1	1800	1740	56HC	TEFC	TFR	M	INC

PH	HZ	VOLTS	AMPS	START TYPE	DUTY	INSL	S.F.	AMB	ELEV.
3	60	230/460	5/2.5	INVERTER ONLY	CONT	F	1.15	40	3300

F.L. EFF	78.5	3/4 LD EFF	76.5	1/2 LD EFF	71.5	GTD EFF	ELECT. TYPE
F.L. PF	74.5	3/4 LD PF	66.0	1/2 LD PF	54.4	75.5	SQ CAGE INV DUTY

F.L. TORQUE	LR AMPS @ 460 V	L.R. TORQUE	B.D. TORQUE	F.L. RISE (°C)
4.5 LB-FT	19.0	17.8 LB-FT 396%	19.5 LB-FT 433%	60

PRESSURE @ 3	POWER	ROTOR WK²	MAX. LOAD WK²	SAFE STALL TIME	STARTS/HOUR	MOTOR WGT
62 dBA	71 dBA	0.09 LB-FT²	0 LB-FT²	0 SEC.	0	40 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	GRAY (POWDER)

BEARINGS		GREASE	SHAFT TYPE	SPECIAL DE	SPECIAL ODE	SHAFT MATERIAL	FRAME MATERIAL
DE	ODE	POLYREX EM	STANDARD 56	NONE	NONE	1144 STRESSPROOF (C-223)	ROLLED STEEL
BALL	BALL						
205	203						

THERMOSTATS	PROTECTORS	WDG RTD's	BRG RTD's	THERMISTORS	CONTROL	SPACE HEATERS
TSTATS (N/C)	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
6.539	4.782	7.768	7.277	188.055	0.080	ODE

<b>* N O T E S *</b>	<b>INVERTER TORQUE: CONSTANT 4:1</b>					
	<b>INV. HP SPEED RANGE: NONE</b>					
	ENCODER: NONE					
	NONE					
	NONE					

<b>DATE:</b> 1/19/2018	BRAKE: NONE					
	NONE					
	FT-LB: NA					
	VOLTAGE: NONE					
<b>HZ:</b>						
<b>UL: V-OVER TEMP PROT 3, P1-P2</b>						

Data Sheet

Date: 1/19/2018

LM22665



Data @ **460 V**

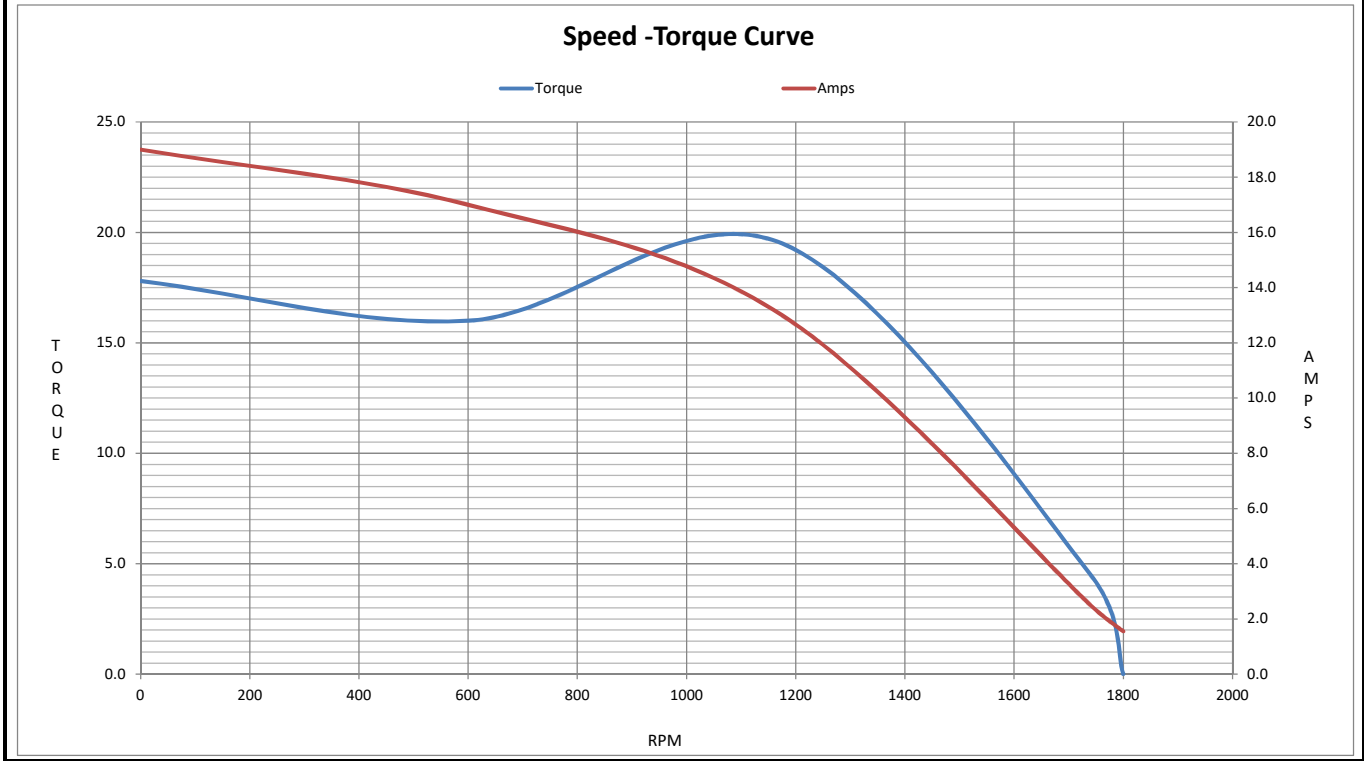
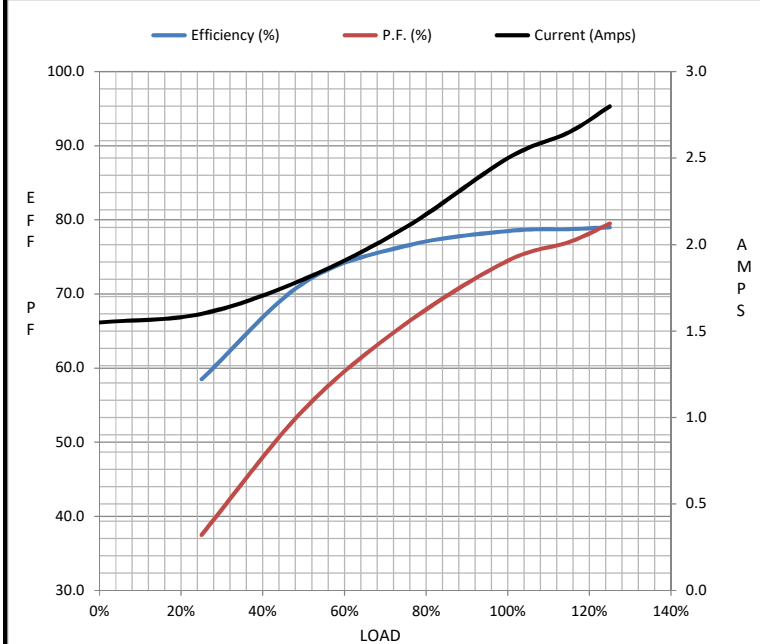
Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR
Current (Amps)	1.55	1.60	1.80	2.10	2.50	2.65	2.80	19.0
Torque (ft-lb)	0.00	1.10	2.20	3.4	4.5	5.1	5.7	17.8
RPM	1800	1785	1770	1760	1740	1.736	1730	0
Efficiency (%)		58.5	71.5	76.5	78.5	78.8	79.0	
P.F. (%)	16.0	37.5	54.4	66.0	74.5	77.0	79.5	73.0

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	600	1175	1740	1800
Current (Amps)	19.0	17.0	13.0	2.50	1.55
Torque (ft-lb)	17.8	16.0	19.5	4.5	0.00

Information Block				
HP	1.5			
Sync. RPM	1800			
Frame	56			
Enclosure	TEFC			
Construction	TFR			
Voltage	230/460 V			
Frequency	60 Hz			
Design	B			
LR Code letter	M			
Service Factor	1.0			
Temp Rise @ FL	60 °C			
Duty	CONT			
Ambient	40 °C			
Elevation	1,000 feet			
Rotor/Shaft wk <sup>2</sup>	0.09 Lb-Ft <sup>2</sup>			
Ref Wdg	ZT4137 R1			
Sound Pressure @ 1M	62 dBA			
VFD Rating	CONSTANT 4:1			
Outline Dwg	A-100109LN-806			
Conn. Diag	A-EE7308T-LN			
Additional Specifications:				
0				
0				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
6.5390	4.7820	7.7680	7.2770	188.0550



## 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 : LM22665

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

Catalog No : LM22665

Rework No : N/A

Directives :

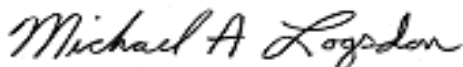
Low Voltage Directive 2014/35/EU

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**