

PRODUCT INFORMATION PACKET



Model No: LM24165

Catalog No: LM24165

General Purpose Motor, 0.50 & 0.50 HP, 3 Ph, 60 & 50 Hz, 230/460 & 190-208/380-415 V,
3600 & 3000 RPM, 56 Frame, TEFC



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Nameplate Specifications

Phase	3	Output HP	0.50 & 0.50 Hp
Output KW	0.37 & 0.37 kW	Voltage	230/460 & 190-208/380-415 V
Speed	3450 & 2850 rpm	Service Factor	1.15 & 1.0
Frame	56	Enclosure	Totally Enclosed Fan Cooled
Thermal Protection	No Protection	Efficiency	66 %
Ambient Temperature	40 °C	Frequency	60 & 50 Hz
Current	2.2/1.1 & 2.2-2.2/1.1-1.1 A	Power Factor	69.7
Duty	Continuous	Insulation Class	F
Design Code	B	KVA Code	P
Drive End Bearing Size	203	Opp Drive End Bearing Size	203
UL	Recognized	CSA	Y
CE	N	IP Code	43
Number of Speeds	1		

Technical Specifications

Electrical Type	Squirrel Cage Induction Run	Starting Method	Across The Line
Poles	2	Rotation	Reversible
Resistance Main	8.34 Ohms	Mounting	Rigid Base
Motor Orientation	Horizontal	Drive End Bearing	Ball
Opp Drive End Bearing	Ball	Frame Material	Rolled Steel
Shaft Type	NEMA 56	Overall Length	11.82 in
Frame Length	6.56 in	Shaft Diameter	0.625 in
Shaft Extension	1.88 in	Assembly/Box Mounting	F1 ONLY
Outline Drawing	108649-656	Connection Drawing	EE7308-LN

4

3

Uncontrolled Copy

2

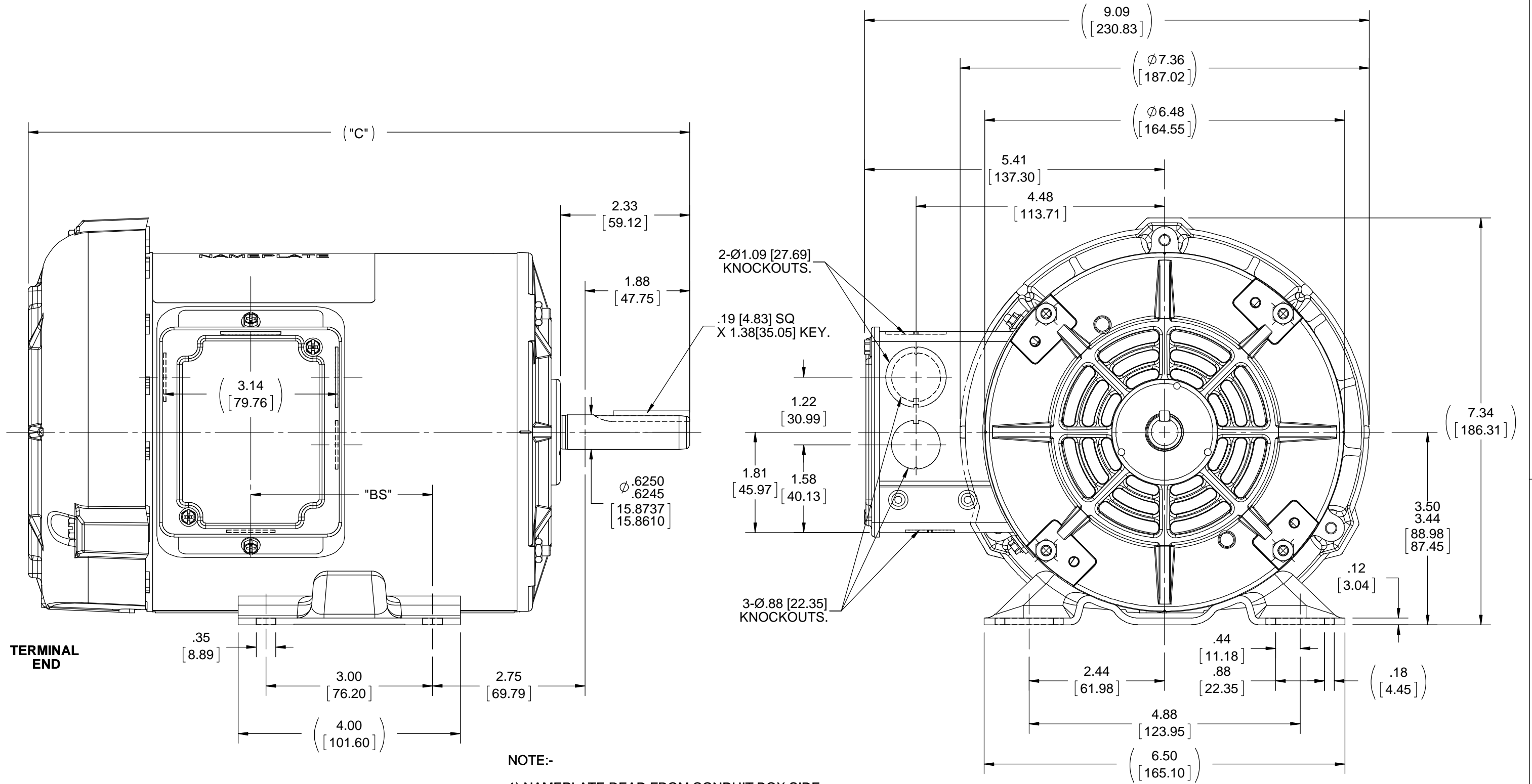
1

B

B

A

A



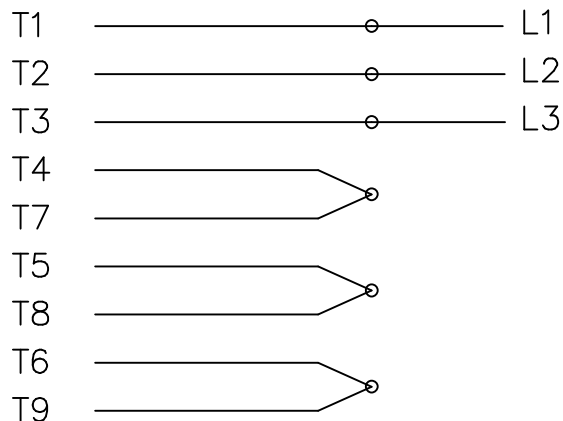
NOTE:-
 1) NAMEPLATE READ FROM CONDUIT BOX SIDE.
 2) CONDUIT BOX CAN BE ROTATED IN 180° STEPS.

DRAWING REVISION A		REVISION BY	DATE	TOLERANCES UNLESS OTHERWISE SPECIFIED: DEC. INCH mm ANGLE .X ±0.1 [±2.5] ±7° 30" .XX ±0.03 [±0.76] .XXX ±0.005 [±0.127] .XXXX ±0.0005 [±0.0127] REMOVE BURRS & BREAK SHARP EDGES: .003/.015 [.076/.381] X 45° CORNER FILLETS: R.02 [.51] MACHINED SURFACES: 200 INCH/mm 5.1 mm SHOWN IN [BRACKETS]	DRAWN BY A.SUPPANAVAR	Regal Beloit America, Inc.
ECO ECO-0136109		APPROVED BY	DATE		DATE 03/29/2018	
ECO DESCRIPTION OUTLINE CONVERSION PROJECT <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>				APPROVED BY PST	DESCRIPTION OUTLINE 56 FR.-TEFC	
DASH	FR.	"C"	"BS"	DATE 05/18/2018	MATERIAL	PROCESS/FINISH
656	56-65	11.91 [302.51]	3.28 [83.31]	REFERENCE 100086LN	SIZE B	DRAWING NUMBER 108649
				THIRD ANGLE PROJECTION	SHEET 1 OF 1	

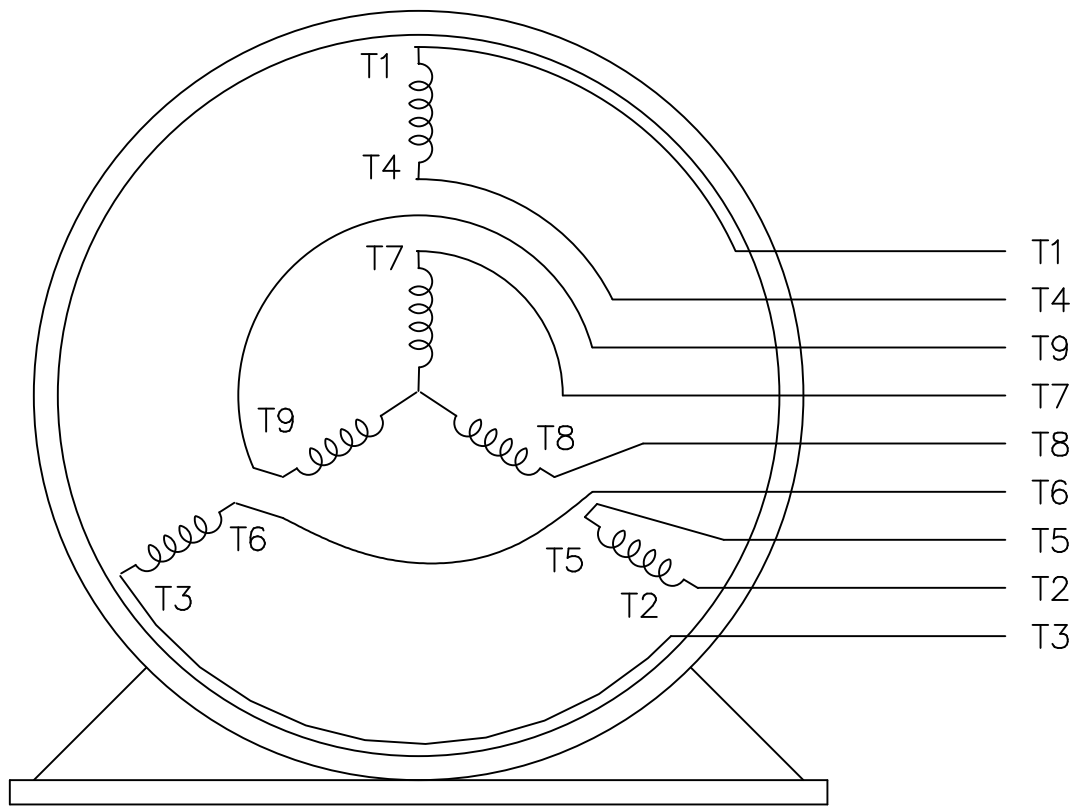
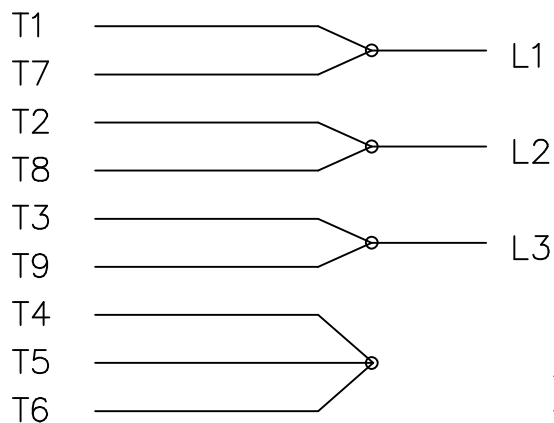
DASH	FR.	"C"	"BS"
656	56-65	11.91 [302.51]	3.28 [83.31]

THREE PHASE
DUAL VOLTAGE MOTOR

HIGH VOLTAGE



LOW VOLTAGE



VIEW OF TERMINAL END

REF.
WINDING DIAGRAM

T8Y, T2Y, T2BL, T4BX, T2EC, T2G
T6BZ, T2B, T6BL, T4AV, T6B, T4B

OPTIONAL CORD
CONNECTION

L1 — WHITE
L2 — RED
L3 — BLACK

NO.	REVISION	BY & DATE	CHK	TOLERANCES UNLESS SPECIFIED		FINISH	DRAWN	ML	GK	SCALE	PAGE	OF	REV.
				DEC.	INCHES								
				.X	±.1		BLR	ML	GK	1=1			
3	ADDED THE OPTIONAL CORD CONNECTION MU46318	RDH 04/24/2003	DRS	.XX	±.02	TITLE CONNECTION DIAGRAM							
2	RE-ISSUE, ADDED '-' TO PART NUMBER	BLR 08/09/1999	GK	.XXX	±.005	3∅ - DUAL VOLTAGE MOTOR							
1	NEW DRAWING	BLR 06/18/1999	GK	.XXXX	±.0005	MAT'L.							
				ANG	±7'30"								
			RFP			CAD FILE EE7308LN	SIZE	DRAWING NO.	PAGE	OF			
			DIST	WP			A	EE7308-LN					3



DRAWN BLR 06/11/1999
CHK ML 06/18/1999
APPD GK 06/18/1999
SCALE 1=1
REF
FMF
PREV

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**2100 WASHINGTON ST.
GRAFTON, WI
PH. 262-277-8810**

CERTIFICATION DATA SHEET

CONN. DIAGRAM: A-EE7308-LN

CATALOG #: LM24165

OUTLINE: A-108649-656

WINDING #: ZT206 FR 3

MOUNTING: F1 ONLY

TYPICAL MOTOR PERFORMANCE DATA

HP	kW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
1/2&1/2	0.37&0.37	3600	3450&2850	56	TEFC	P	B

PH	Hz	VOLTS	AMPS	START TYPE	DUTY	INSL	S.F.	AMB°C
3	60/50	230/460&190-208/380-415	2.2/1.1&2.2-2.2/1.1-1.1	ACROSS THE LINE	CONTINUOUS	F3	1.15/1.0	40

FULL LOAD EFF:	66	3/4 LOAD EFF:	64.5	1/2 LOAD EFF:	56.5	GTD. EFF	62	ELEC. TYPE	SQ CAGE IND RUN
FULL LOAD PF:	69.7	3/4 LOAD PF:	63.5	1/2 LOAD PF:	53				

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
0.76 LB-FT	16 / 8	3 LB-FT 395 %	3.8 LB-FT 500 %	35

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS / HOUR	APPROX. MOTOR WGT
68 dBA	78 dBA	0.02 LB-FT^2	1.5 LB-FT^2	10 SEC.	2	22 LBS.

***** SUPPLEMENTAL INFORMATION *****

DE BRACKET TYPE	ODE BRACKET TYPE	MOUNT TYPE	ORIENTATION	SEVERE DUTY	HAZARDOUS LOCATION	DRIP COVER	SCREENS	PAINT
STANDARD HUBLESS	STANDARD HUBLESS	RIGID	HORIZONTAL	FALSE	NONE	FALSE	NONE	GRAY (POWDER)

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

THERMO-PROTECTORS				THERMISTORS	CONTROL	SPACE HEATERS
THERMOSTATS	PROTECTORS	WDG RTDs	BRG RTDs			
NONE	NOT	NONE	NONE	NONE	FALSE	NONE VOLTS

*
N
O
T
E
S

INVERTER TORQUE: NONE
INV. HP SPEED RANGE: NONE
ENCODER: NONE
NONE NONE
NONE NONE PPR
BRAKE: NONE NONE
NONE P/N NONE
NONE NONE
NONE FT-LB NONE V NONE HZ



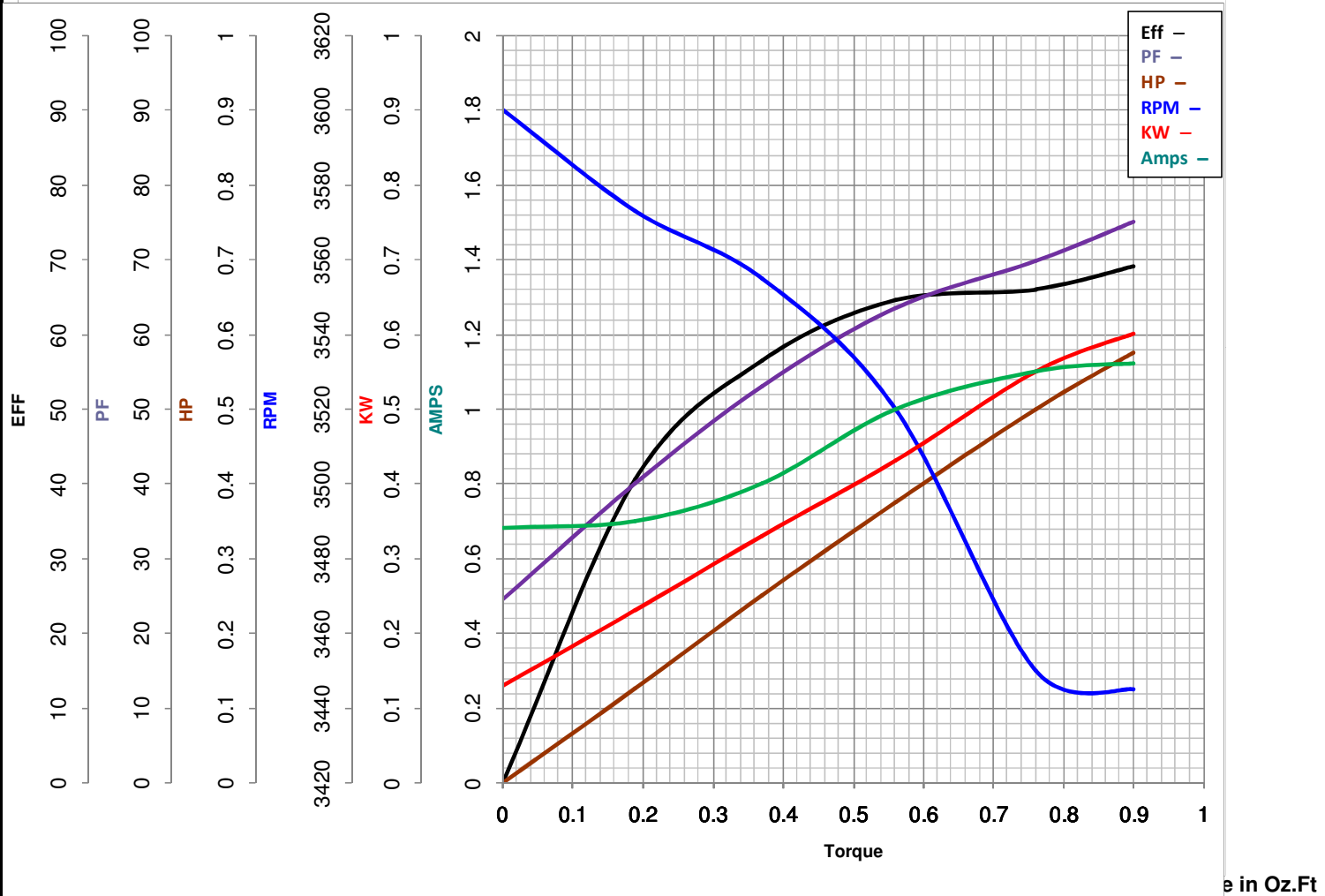
LEESON ELECTRIC CORPORATION
TYPICAL PERFORMANCE CURVE for AC MOTOR

Model No LM24165

Curve at 460 Volts HP 0.5&0.5 PHASE 3
60 HZ
0.5 HP VOLTS 230/460&190-208/380-415

Catalog No LM24165A

HZ 60&50 RPM 3450&2850



FL TORQUE 12.16 Oz.Ft
BD TORQUE 60.8 Oz.Ft
LR TORQUE 48 Oz.Ft

FL AMPS 2.2/1.1
PU TORQUE 43.2 Oz.Ft
LR AMPS 8

WINDING ZT206-3

Date 5/23/2018