PRODUCT INFORMATION PACKET

Model No: 145TTGR16040
Catalog No: I514
Explosion Proof Motor, 2 HP, 3 Ph, 60 Hz, 230/460 V, 1800 RPM, 145T Frame, EPFC

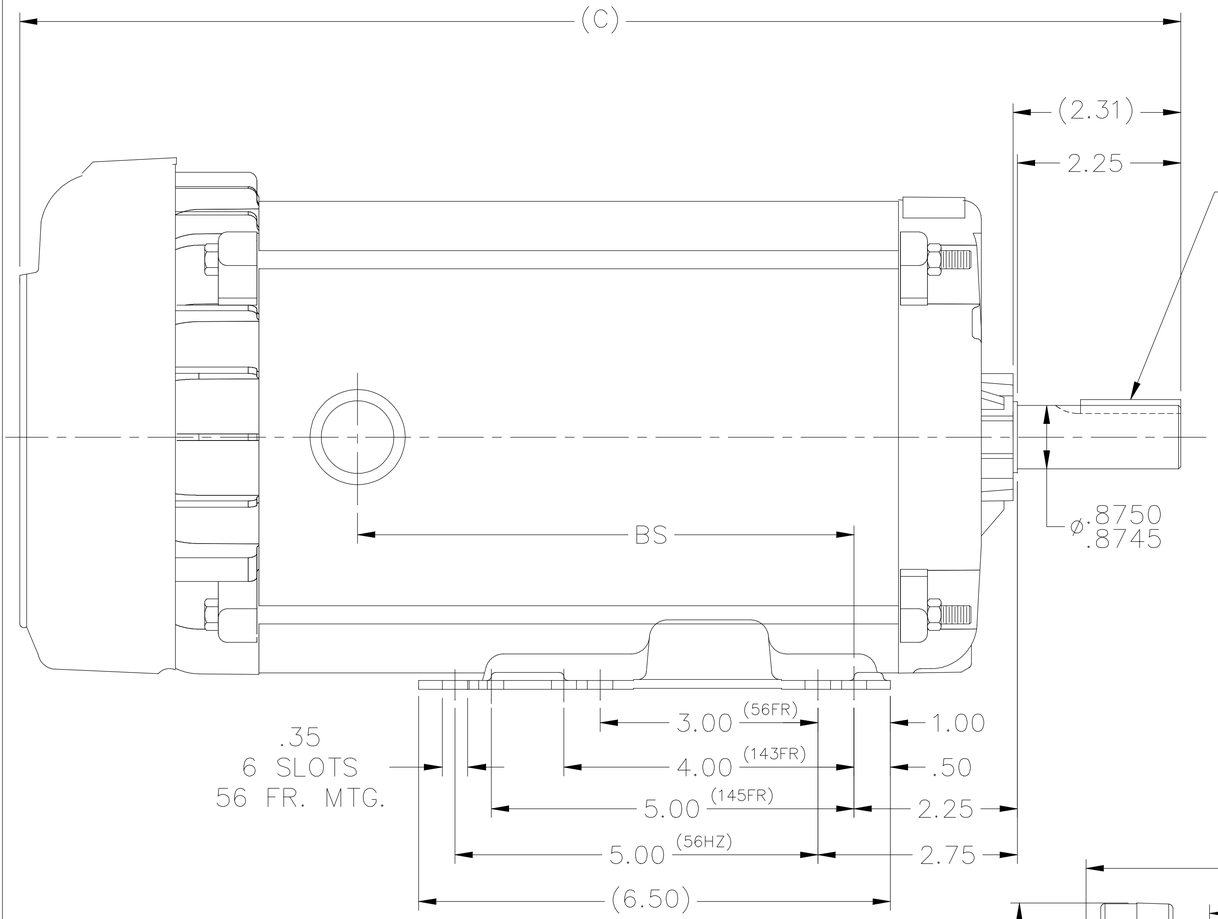
Nameplate Specifications

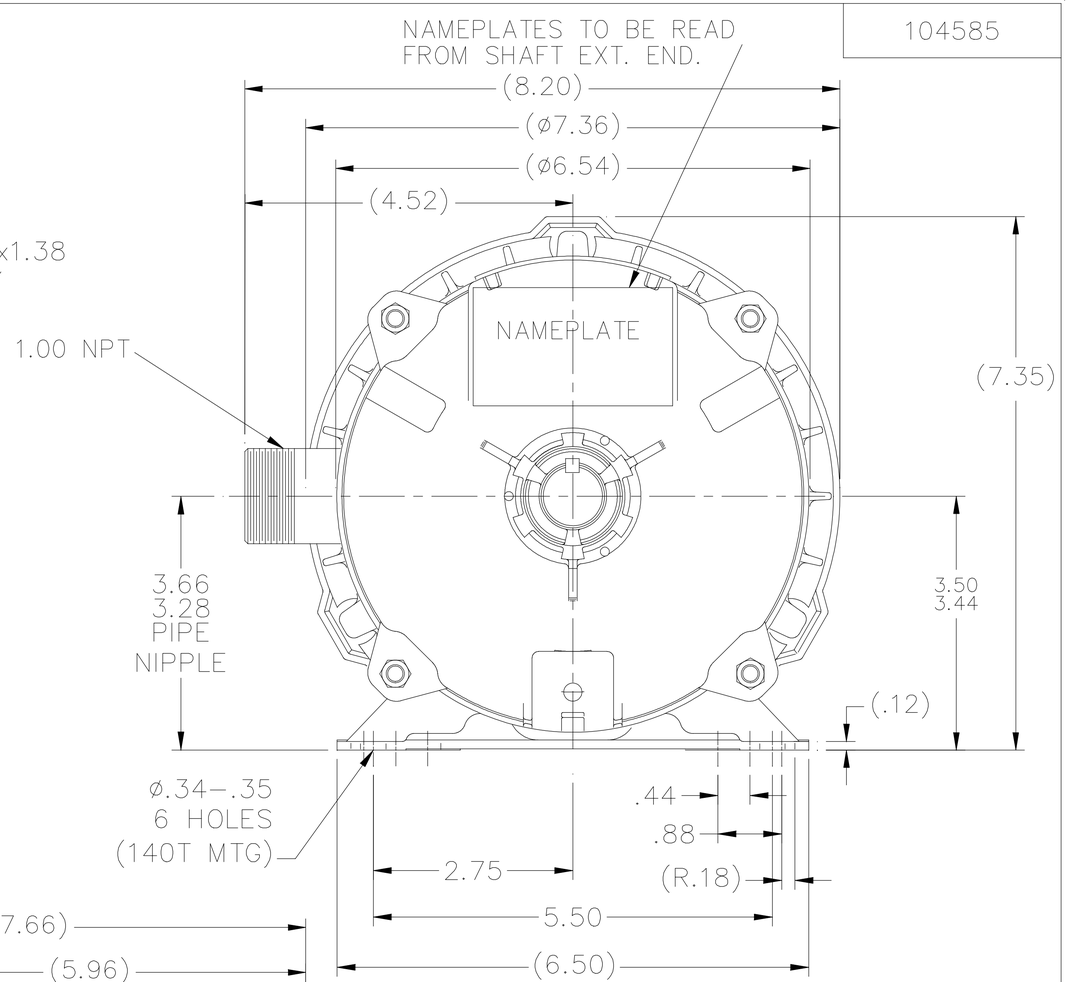
Phase	3	Output HP	2 Hp
Output KW	1.5 kW	Voltage	230/460 V
Speed	1760 rpm	Service Factor	1.15
Frame	145T	Enclosure	Explosion Proof Fan cooled
Thermal Protection	Thermostat	Efficiency	86.5 %
Ambient Temperature	40 °C	Frequency	60 Hz
Current	6.0/3.0 A	Power Factor	71
Duty	Continuous	Insulation Class	F
Design Code	B	KVA Code	N
Drive End Bearing Size	6205	Opp Drive End Bearing Size	6203
UL	UL Listed And CSA Certified	CSA	Y
CE	N	IP Code	54
Number of Speeds	1	Hazardous Location	DIV 1 EXP PROOF CL I GR CD CL II GR EFG T3B

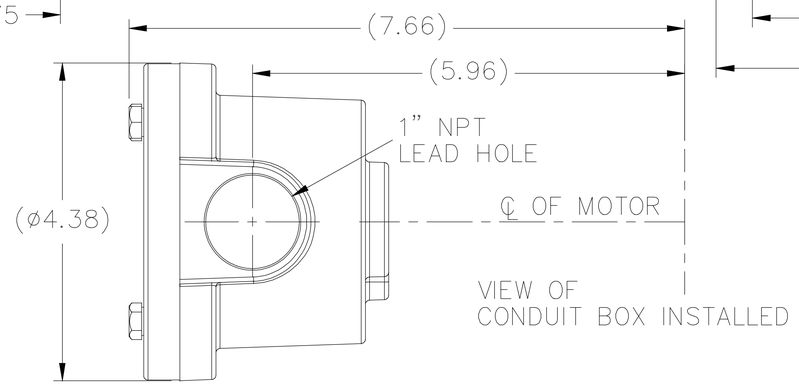
Technical Specifications

Electrical Type	Squirrel Cage Inverter Rated	Starting Method	Line Or Inverter
Poles	4	Rotation	Reversible
Resistance Main	6.58 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	16.50 in
Frame Length	9.31 in	Shaft Diameter	0.875 in
Shaft Extension	2.31 in	Assembly/Box Mounting	F1 ONLY
Inverter Load	CONSTANT 2:1/VARIABLE 10:1		
Outline Drawing	B-104585-931	Connection Drawing	A-EE7308T

104585







CONDUIT BOX NEEDED FOR MODELS
GREATER THAN $1\frac{1}{2}$ H.P.

DASH	(C)	BS			
681	14.00	4.84			
731	14.50	5.34			
781	15.00	5.84			
831	15.50	6.34			
881	16.00	6.84	SHOWN		
931	16.50	7.34			
981	17.00	7.84			

NO.	REVISION	BY & DATE	CHK
4	UPDATED LOGO	SG 08/07/2020	PVR
3	REVISED C'BOX PER CN40784A	JJB 02/23/2007	ML
2	REDRAWN IN AUTOCAD, REMOVED –631 CN 46098	MJK 06/17/2005	
1	NEW DRAWING MU 24921	BLR 05-12-1999	

TOLERANCES UNLESS SPECIFIED

DEC.	INCHES
.X	±.1
.XX	±.03
.XXX	±.005
.XXXX	±.0005
ANG	±7'30"

REGAL™ Regal Beloit America, Inc.

DRAWN BLR 05–10–1999
CHK ML 05–11–1999
APPD JM 05–12–1999
SCALE 1=2
REF
FMF
PREV

TITLE OUTLINE
140 FR. – EXP. PR. – TEFC – 1ø & 3ø

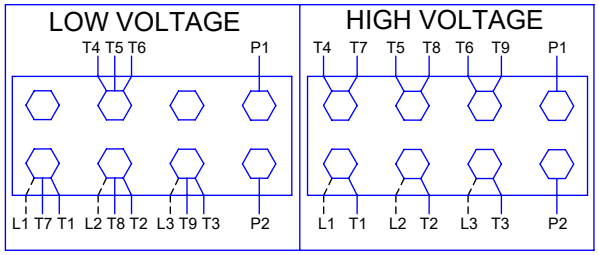
MAT'L.
FINISH

RFP
DIST WP
CAD FILE 104585

SIZE	DRAWING NO.	PAGE OF	REV.
B	104585		4

HIGH VOLTAGE

(U1) T1 — L1
(V1) T2 — L2
(W1) T3 — L3
(U2) T4
(U3) T7
(V2) T5
(V3) T8
(W2) T6
(W3) T9

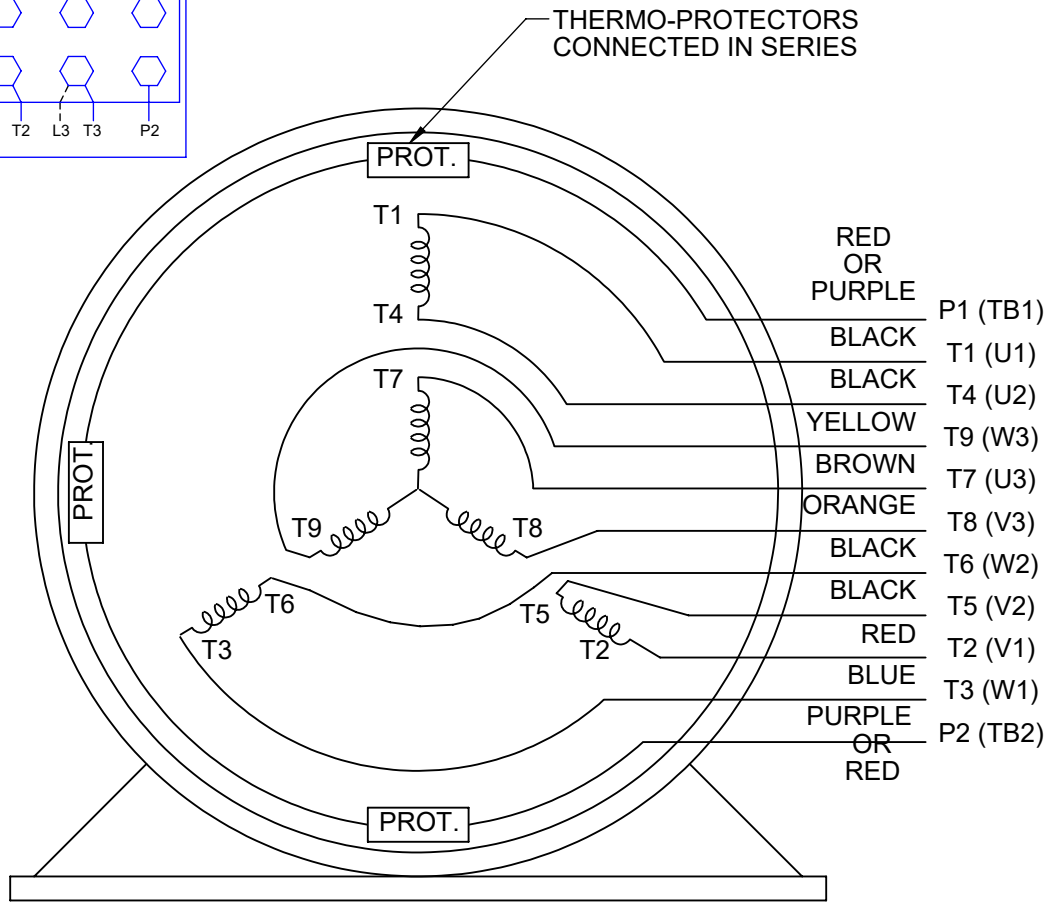


NOTE FOR FACTORY USE ONLY:
TO SURGE TEST FOR COMMON CONNECT:
HIGH VOLT: CONNECT P1 TO T1
THEN P2 TO L1
LOW VOLT: CONNECT P1 TO T1 & T7,
THEN P2 TO L1

LOW VOLTAGE

(U1) T1
(U3) T7 — L1
(V1) T2
(V3) T8 — L2
(W1) T3
(W3) T9 — L3
(U2) T4
(V2) T5
(W2) T6

THREE PHASE DUAL VOLTAGE MOTOR



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: ADDED TERMINAL CONNECTION DIAGRAM				APPROVED BY: TB	DESCRIPTION: CONN DIAGRAM-INTERNAL
				DATE: 05-13-1992	3 PHASE - DUAL VOLTAGE MOTOR
				REFERENCE: EE7308/EE7300	MATERIAL / PROCESS/FINISH
				THIRD ANGLE PROJECTION	SIZE: A — DRAWING NUMBER: EE7308T — SHEET: 1 OF 1

CERTIFICATION DATA SHEET

Model#:	145TTGR16040 AA	**WINDING#:**	ZT4255 FR 3
CONN. DIAGRAM:	A-EE7308T	**ASSEMBLY:**	F1 ONLY
OUTLINE:	B-104585-931		

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
2	1.49	1800	1760	145T	EPFC	N	B

PH	Hz	VOLTS	FL AMPS	START TYPE	DUTY	INSL	S.F	AMB°C	ELEVATION
3	60	230/460	6/3	ACROSS THE LINE	CONTINUOUS	F3	1.15	40	3300

FULL LOAD EFF: 86.5	3/4 LOAD EFF: 86.5	1/2 LOAD EFF: 85.5	GTD. EFF	ELEC. TYPE	NO LOAD AMPS
FULL LOAD PF: 71	3/4 LOAD PF: 62	1/2 LOAD PF: 49	84	SQ CAGE IND RUN	3.8 / 1.9

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
6 LB-FT	61 / 30.5	24.5 LB-FT 408	33.2 LB-FT 553	45

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS /HOUR	APPROX. MOTOR WGT
62 dBA	72 dBA	0.14 LB-FT^2	12 LB-FT^2	15 SEC.	2	65 LBS.

*** SUPPLEMENTAL INFORMATION ***

DE BRACKET TYPE	ODE BRACKET TYPE	MOUNT TYPE	ORIENTATION	SEVERE DUTY	HAZARDOUS LOCATION	DRIP COVER	SCREENS	PAINT
STANDARD	STANDARD	RIGID	HORIZONTAL	FALSE	EXP PROOF CL I GR C&D CL II GR E,F,G T3B	FALSE	NONE	BLUE (POWDER)

BEARINGS		GREASE	SHAFT TYPE	SPECIAL DE	SPECIAL ODE	SHAFT MATERIAL	FRAME MATERIAL
DE	OPE						
BALL 6205	BALL 6203	POLYREX EM	T	NONE	NONE	1144 STRESSPROOF (C-223)	ROLLED STEEL

THERMO-PROTECTORS				THERMISTORS	CONTROL	SPACE /n HEATERS
THERMOSTATS	PROTECTORS	WDG RTDs	BRG RTDs			
TSTATS (N/C)	NOT	NONE	NONE	NONE	FALSE	NONE VOLTS

If Inverter equals NONE, contact factory for further information

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

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DATE: 06/27/2017 12:18:27 AM
FORM 3531 REV.3 02/07/99
** Subject to change without notice.

Data Sheet

Date: 29-06-2017
Customer:
Attention:
Submitted by: FAREEDA DUDEKULA

LEESON™

145TTGR16040

Submittal

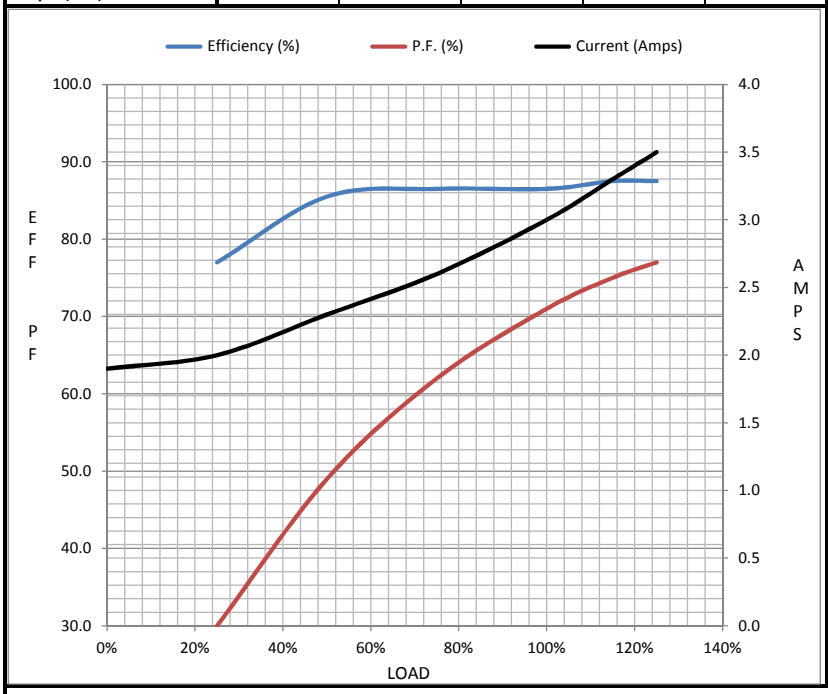
Data @ 460 V

Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR	
Current (Amps)	1.90	2.00	2.30	2.60	3.0	3.3	3.5	30.5	
Torque (ft-lb)	0.00	1.50	3.0	4.5	6.0	6.9	7.5	24.5	
RPM	1800	1790	1780	1770	1760	1,755	1750	0	
Efficiency (%)		77.0	85.5	86.5	86.5	87.5	87.5		
P.F. (%)	7.0	30.0	49.0	62.0	71.0	75.0	77.0	71.0	

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	115	1200	1760	1800
Current (Amps)	30.5	29.5	19.5	3.0	1.90
Torque (ft-lb)	24.5	23.7	33.2	6.0	0.00



Information Block

HP	2.0
Sync. RPM	1800
Frame	145
Enclosure	TEFC
Construction	TFR
Voltage	230/460 V
Frequency	60 Hz
Design	A
LR Code letter	N
Service Factor	1.15
Temp Rise @ FL	45 ° C
Duty	CONT
Ambient	40 ° C
Elevation	1,000 feet
Rotor/Shaft wk²	0.14 Lb-Ft²
Ref Wdg	ZT4255 FR
Sound Pressure @ 1M	62 dBA
VFD Rating	NONE
Outline Dwg	B-104585-931
Conn. Diag	A-EE7308T

Additional Specifications:

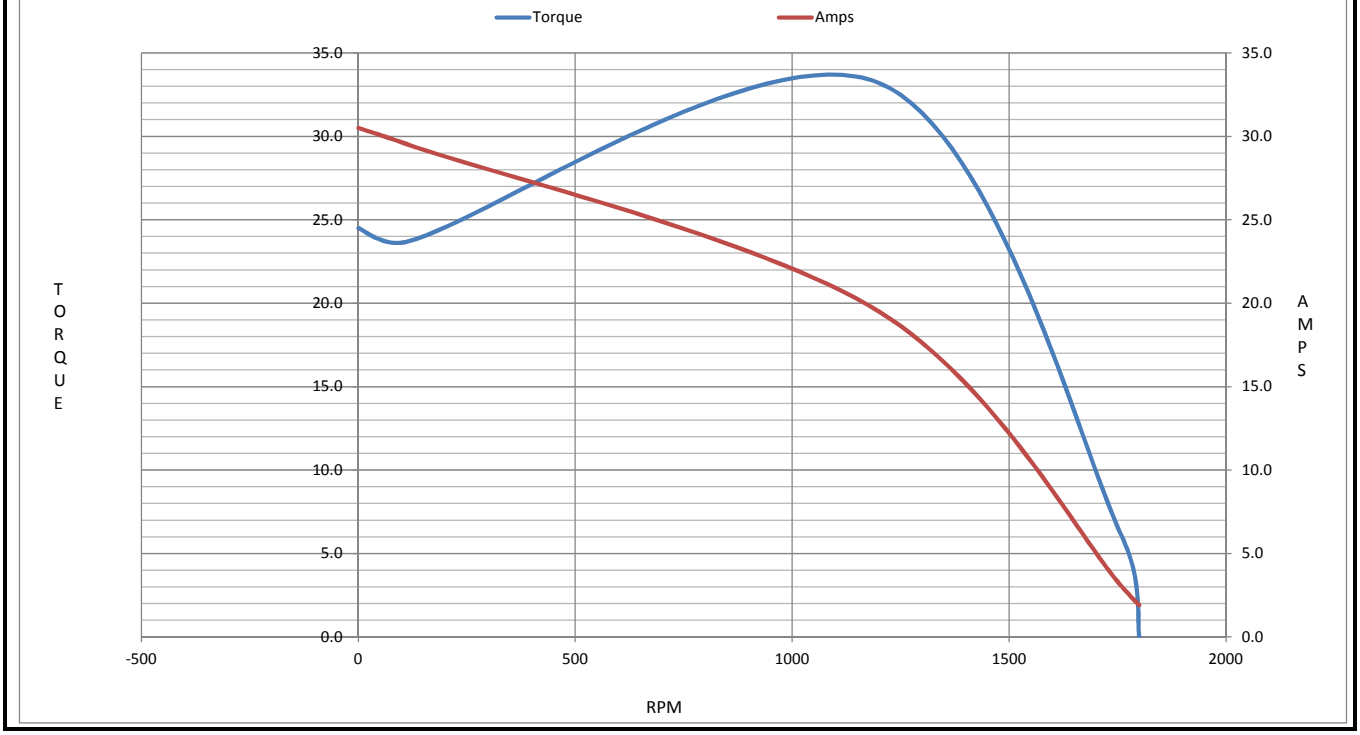
0

365THFS8036

EQUIV CKT (OHMS / PHASE)

R1	R2	X1	X2	Xm
3.9620	3.0100	5.7510	5.9360	160.3460

Speed -Torque Curve



REV 1 - CHANGED LOGO FROM MARATHON TO LEESON - 3/25/2025