ABB BALDOR RELIANCE

Customer information packet

EM3707

5HP, 1750RPM, 3PH, 60HZ, 215, 3642M, TEFC, F1, N
Class - None
Division - Not Applicable

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Specifications

Enclosure	TEFC
Frame	215
Frame Material	Steel
Frequency	60.00 Hz
Haz Area Class and Group	None
Haz Area Division	Not Applicable
Motor Letter Type	Three Phase
Output @ Frequency	5.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	230.0 V @ 60 HZ
	460.0 V @ 60 HZ
Agency Approvals	CURUSEEV
	NEMA PREMIUM
Ambient Temperature	40 °C
Auxiliary Box	NO AUXILLARY BOX
Auxiliary Box Lead Termination	None
Base Indicator	Rigid
Bearing Grease Type	Polyrex EM (-20F +300F)
Blower	None
Current @ Voltage	6.700 A @ 460.0 V
	13.900 A @ 208.0 V
	13.400 A @ 230.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	89.5 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Face Code	Standard
Front Shaft Indicator	None
Heater Indicator	No Heater

Part Detail

Revision	F
Type	AC
Mech. spec.	36G890
Base	
Status	PRD/A
Elec. spec.	36WGS268
Layout	36LYG890
Eff. date	05-01-2024
CD Diagram	CD0005
Poles	04
Leads	9#16
Proprietary	False
Created date	02-27-2015

High Voltage Full Load Amps	6.7 a
Insulation Class	F
Inverter Code	Inverter Ready
KVA Code	J
Lifting Lugs	No Lifting Lugs
Locked Bearing Indicator	No Locked Bearing
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	9 @ 16 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3642M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	18.17 IN
Power Factor	78
Product Family	General Purpose
Pulley End Bearing Type	Ball
Pulley Face Code	Standard
Pulley Shaft Indicator	Standard
Rodent Screen	None
Service Factor	1.15
Shaft Diameter	1.125 IN
Shaft Extension Location	Pulley End
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	1750 rpm
Speed Code	Single Speed
Starting Method	Direct on line
Thermal Device - Bearing	None
Thermal Device - Winding	None
Vibration Sensor Indicator	No Vibration Sensor
Winding Thermal 1	None
Winding Thermal 2	None

Nameplate

NP1259L											
CAT.NO.	EM3707										
SPEC.	36G890S268G1										
HP	5										
VOLTS	230/460										
AMP	13.4/6.7										
RPM	1750										
FRAME	215	**HZ**	60				**PH**	3			
SER.F.	1.15	**CODE**	J	**DES**	B	**CL**	F				
NEMA-NOM-EFF	89.5	**PF**	78								
RATING	40C AMB-CONT										
CC	010A										
DE	6206	**ODE**	6205								
ENCL	TEFC	**SN**									

AC Induction Motor Performance Data
Record # 35063
Typical performance - not guaranteed values

Winding: 36WGS268-R016	**Type:** 3642M	**Enclosure:** TEFC

Nameplate Data				**460 V, 60 Hz: High Voltage Connection**	
Rated Output (HP)			5	**Full Load Torque**	14.9 LB-FT
Volts			230/460	**Start Configuration**	direct on line
Full Load Amps			13.4/6.7	**Breakdown Torque**	52.2 LB-FT
R.P.M.			1750	**Pull-up Torque**	31.5 LB-FT
Hz	60	**Phase**	3	**Locked-rotor Torque**	34.9 LB-FT
NEMA Design Code	B	**KVA Code**	J	**Starting Current**	49.1 A
Service Factor (S.F.)			1.15	**No-load Current**	3.24 A
NEMA Nom. Eff.	89.5	**Power Factor**	78	**Line-line Res. @ 25ºC**	2.27 Ω
Rating - Duty			40C AMB-CONT	**Temp. Rise @ Rated Load**	71°C
S.F. Amps				**Temp. Rise @ S.F. Load**	87°C
				Locked-rotor Power Factor	39.8
				Rotor inertia	0.391 LB-FT2

Load Characteristics 460 V, 60 Hz, 5 HP

% of Rated Load	**25**	**50**	**75**	**100**	**125**	**150**	**S.F.**
Power Factor	39	60	72	78	83	83	81
Efficiency	85	89.7	90.6	89.6	88.6	87	89
Speed	1789	1776	1762	1750	1733	1714	1740
Line amperes	3.55	4.31	5.43	6.65	7.94	9.64	7.42

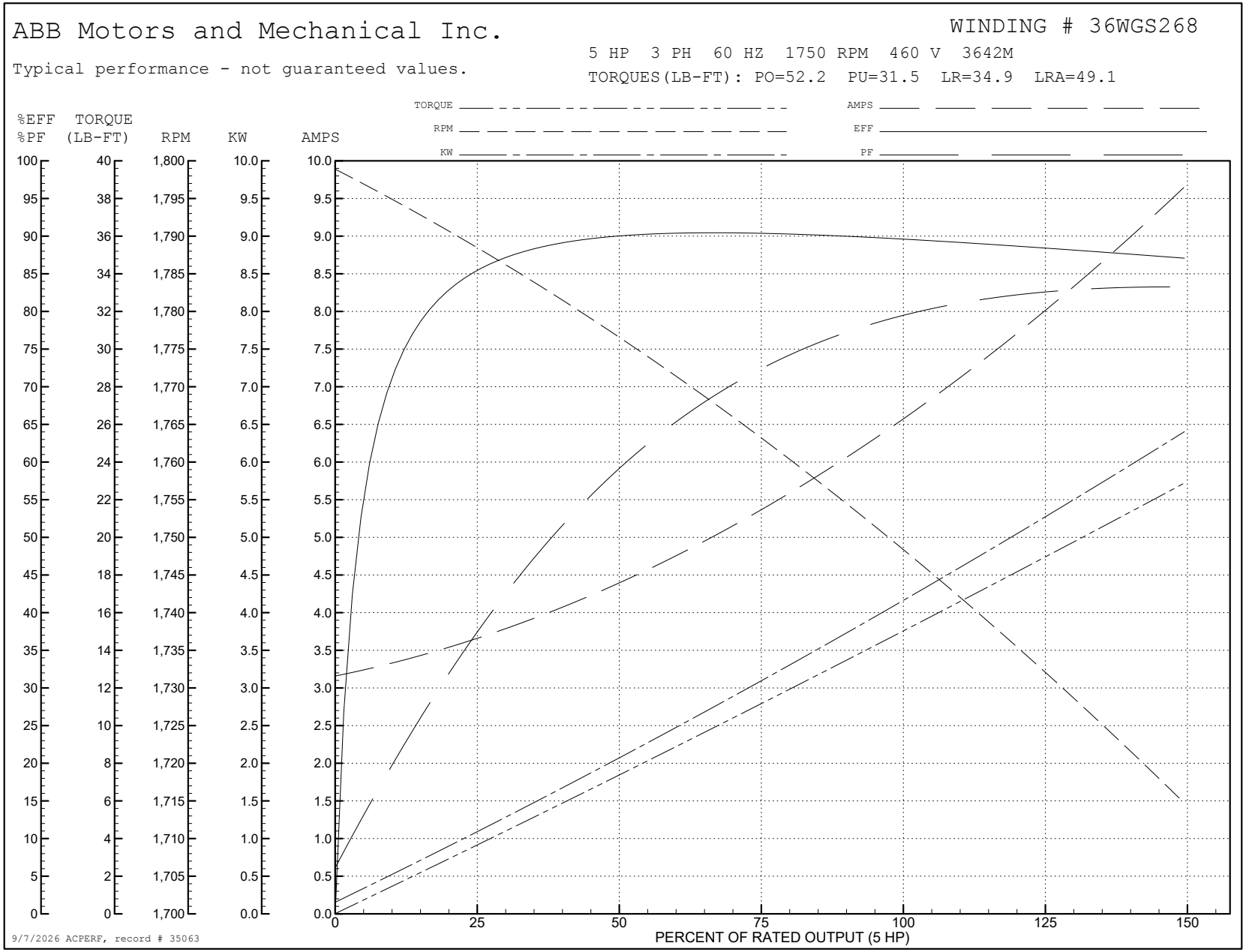


ABB Motors and Mechanical Inc.
WINDING # 36WGS268
5 HP 3 PH 60 HZ 1750 RPM 460 V 3642M
Typical performance - not guaranteed values.
TORQUES(LB-FT): PO=52.2 PU=31.5 LR=34.9 LRA=49.1
TORQUE
RPM
KW
AMPS
EFF
PF
%EFF %PF
TORQUE (LB-FT)
RPM
KW
AMPS
PERCENT OF RATED OUTPUT (5 HP)
9/7/2026 ACPERF, record # 35063

AC Induction Motor Performance Data
Record # 93277
Typical performance - not guaranteed values

Winding: 36WGS268-R016	**Type:** 3642M	**Enclosure:** TEFC

Nameplate Data				**230 V, 60 Hz: Low Voltage Connection**	
Rated Output (HP)			5	**Full Load Torque**	14.9 LB-FT
Volts			230/460	**Start Configuration**	direct on line
Full Load Amps			13.4/6.7	**Breakdown Torque**	52.2 LB-FT
R.P.M.			1750	**Pull-up Torque**	31.5 LB-FT
Hz	60	**Phase**	3	**Locked-rotor Torque**	34.9 LB-FT
NEMA Design Code	B	**KVA Code**	J	**Starting Current**	98.2 A
Service Factor (S.F.)			1.15	**No-load Current**	6.48 A
NEMA Nom. Eff.	89.5	**Power Factor**	78	**Line-line Res. @ 25ºC**	0.567 Ω
Rating - Duty			40C AMB-CONT	**Temp. Rise @ Rated Load**	71°C
S.F. Amps				**Temp. Rise @ S.F. Load**	86°C
				Locked-rotor Power Factor	39.8
				Rotor inertia	0.391 lb-ft²

Load Characteristics 230 V, 60 Hz, 5 HP

% of Rated Load	**25**	**50**	**75**	**100**	**125**	**150**	**S.F.**
Power Factor	38	60	72	78	83	83	81
Efficiency	84.9	89.6	90.5	89.6	88.5	87	88.9
Speed	1789	1776	1762	1750	1733	1714	1740
Line amperes	7.1	8.62	10.86	13.3	15.88	19.28	14.8

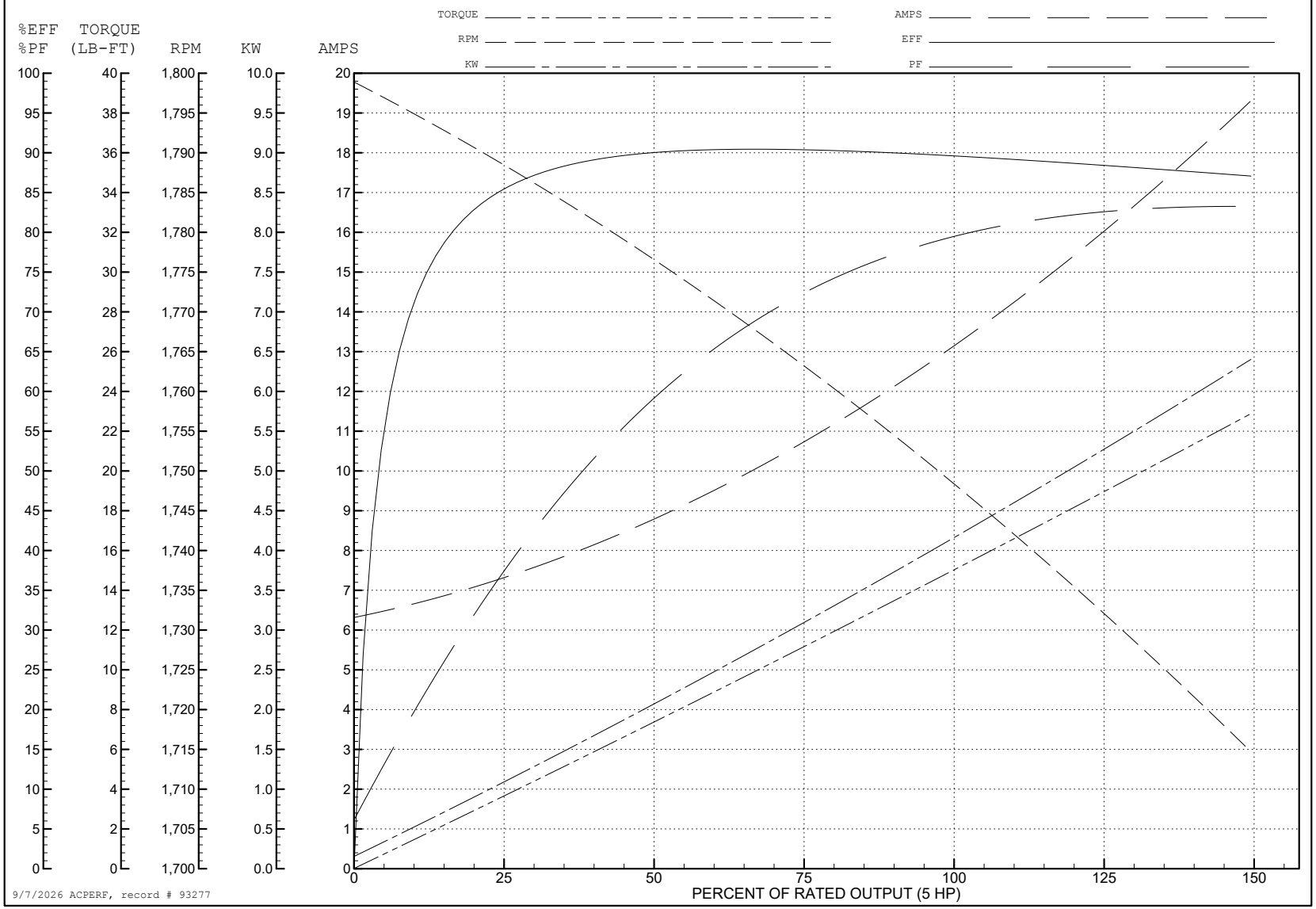
ABB Motors and Mechanical Inc.

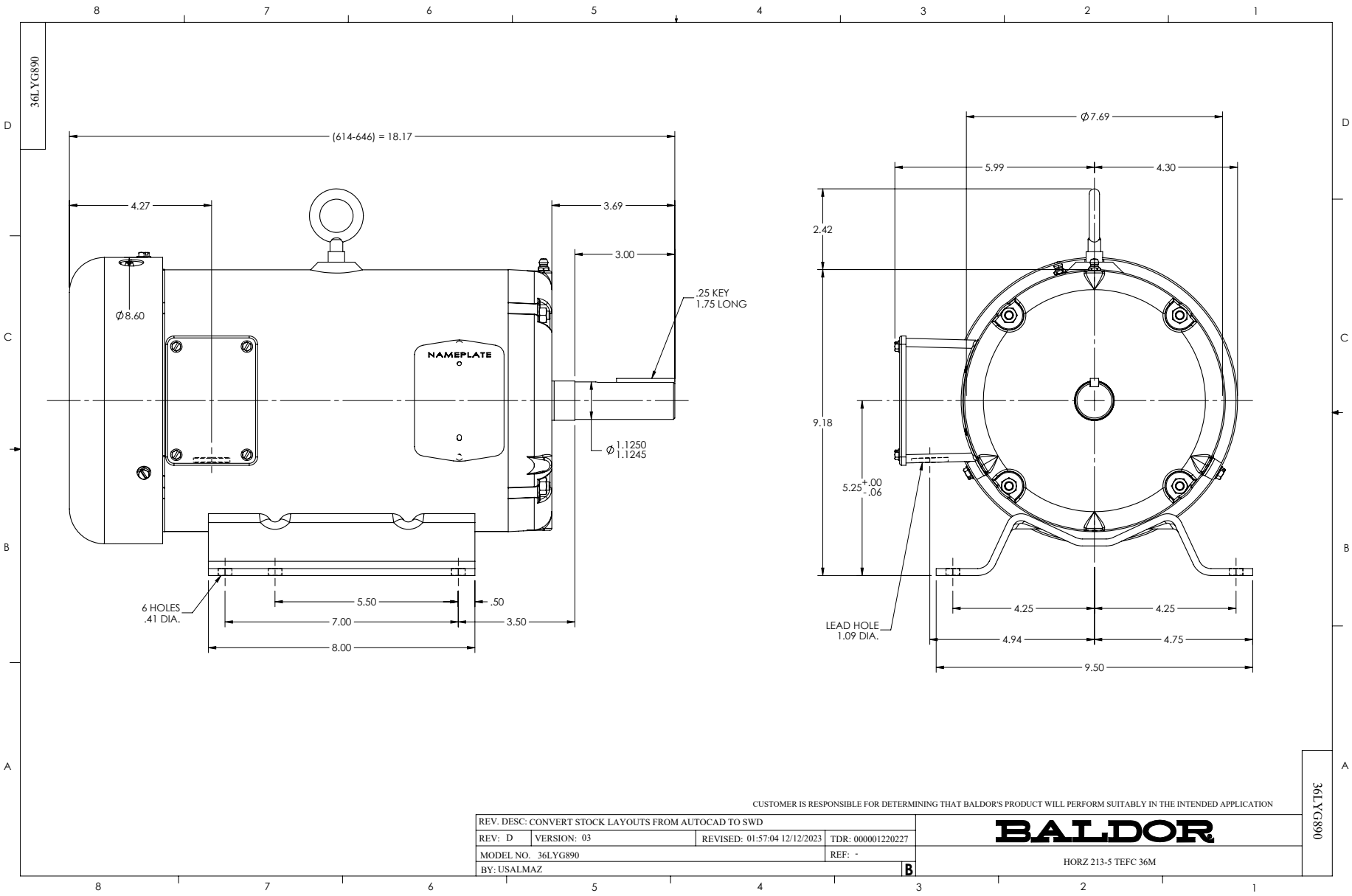
WINDING # 36WGS268

5 HP 3 PH 60 HZ 1750 RPM 230 V 3642M

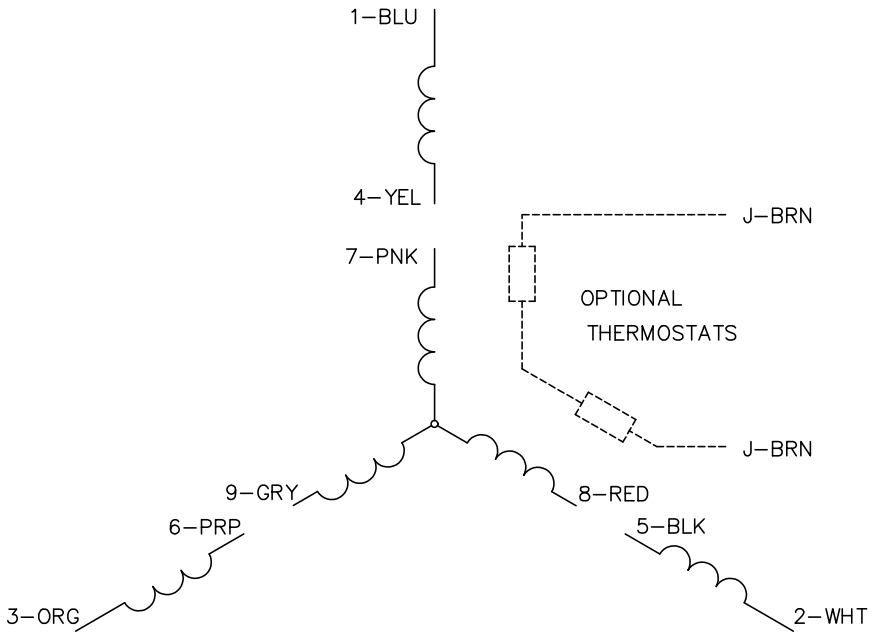
Typical performance - not guaranteed values.

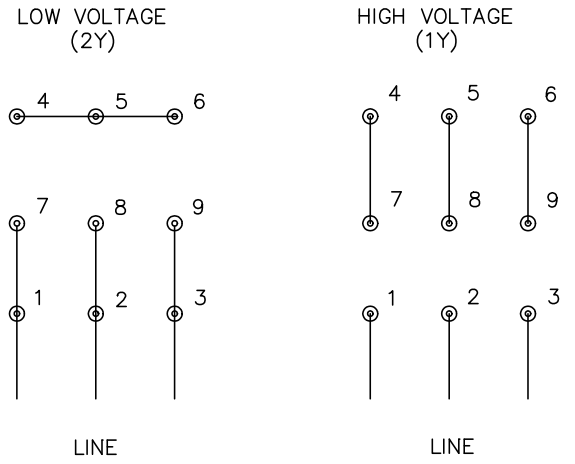
TORQUES(LB-FT): PO=52.2 PU=31.5 LR=34.9 LRA=98.2




36LYG890
(614-646) = 18.17
4.27
3.69
3.00
.25 KEY
1.75 LONG
Ø8.60
NAMEPLATE
Ø1.1250
1.1245
6 HOLES
.41 DIA.
5.50
.50
7.00
3.50
8.00
Ø7.69
5.99
4.30
2.42
9.18
5.25 +.00 -.06
LEAD HOLE
1.09 DIA.
4.25
4.25
4.94
4.75
9.50
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT BALDOR'S PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION
REV. DESC: CONVERT STOCK LAYOUTS FROM AUTOCAD TO SWD
REV: D
VERSION: 03
REVISED: 01:57:04 12/12/2023
TDR: 000001220227
MODEL NO. 36LYG890
REF: -
BY: USALMAZ
B
BALDOR
HORZ 213-5 TEFC 36M
36LYG890

CD0005





NOTES:

1. INTERCHANGE ANY TWO LINE LEADS TO REVERSE ROTATION.
2. OPTIONAL THERMOSTATS ARE PROVIDED WHEN SPECIFIED.
3. ACTUAL NUMBER OF INTERNAL PARALLEL CIRCUITS MAY BE A MULTIPLE OF THOSE SHOWN ABOVE.
4. LEAD COLORS ARE OPTIONAL. LEADS MUST ALWAYS BE NUMBERED AS SHOWN.

CD0005

REV. DESC: REVISE TO SHOW OPTIONAL COLORS			BALDOR ELECTRIC Co.
REV. LTR: E	BY: JLP	REVISED: 01/19/99 10:15	TDR: 0171435
CD0005		FILE: AAA00005140	MDL: –
		MTL: –	3PH, DV, 9 LEADS