ABB BALDOR RELIANCE

Customer information packet

EM3709

7.5HP, 3488RPM, 3PH, 60HZ, 215, 3640M, TEFC, F1
Class - None
Division - Not Applicable

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9/7/2026 10:49:32 AM

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	7.500 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	3600 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	22.600 A @ 230.0 V
	11.300 A @ 460.0 V
Design Code	A
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	89.5 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	11.3 a
Insulation Class	F

Part Detail

Revision	-
Type	AC
Mech. spec.	36G890
Base	
Status	PRD/A
Elec. spec.	36WGZ654
Layout	36LYG890
Eff. date	11-14-2025
CD Diagram	CD0005
Poles	02
Leads	9#16
Proprietary	False
Created date	11-07-2025

Inverter Code	Inverter Ready
KVA Code	L
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	No Locked Bearing
Motor Lead Quantity/Wire Size	9 @ 16 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3640M
Mounting Arrangement	F1
Number of Poles	2
Overall Length	18.17 IN
Power Factor	86
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 Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	3488 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.	EM3709								
SPEC.	36G890Z654								
HP	7.5								
VOLTS	230/460								
AMP	22.6/11.3								
RPM	3488								
FRAME	215	**HZ**	60				**PH**	3	
SER.F.	1.15	**CODE**	L	**DES**	A	**CL**	F		
NEMA-NOM-EFF	89.5	**PF**	86						
RATING	40C AMB-CONT								
CC	010A								
DE	6206		**ODE**	6205					
ENCL	TEFC	**SN**							

AC Induction Motor Performance Data
Record # 115765
Typical performance - not guaranteed values

Winding: 36WGZ654-R001	**Type:** 3640M	**Enclosure:** TEFC

Nameplate Data				**460 V, 60 Hz: High Voltage Connection**	
Rated Output (HP)			7.5	**Full Load Torque**	11.39 LB-FT
Volts			208-230/460	**Start Configuration**	direct on line
Full Load Amps			25-22.6/11.3	**Breakdown Torque**	76.7 LB-FT
R.P.M.			3488	**Pull-up Torque**	45.1 LB-FT
Hz	60	**Phase**	3	**Locked-rotor Torque**	57.2 LB-FT
NEMA Design Code	A	**KVA Code**	L	**Starting Current**	109 A
Service Factor (S.F.)			1.15	**No-load Current**	3.6 A
NEMA Nom. Eff.	89.5	**Power Factor**	86	**Line-line Res. @ 25ºC**	1.4142 Ω
Rating - Duty			40C AMB-CONT	**Temp. Rise @ Rated Load**	75°C
S.F. Amps				**Temp. Rise @ S.F. Load**	93°C
				Locked-rotor Power Factor	50

Load Characteristics 460 V, 60 Hz, 7.5 HP

% of Rated Load	**25**	**50**	**75**	**100**	**125**	**150**	**S.F.**
Power Factor	51	73	83	89	91	92	90
Efficiency	84.8	89.7	90.4	90	88.9	87.5	89.3
Speed	3571.6	3545.5	3517.7	3488.2	3456.6	3423.4	3469
Line amperes	4.17	5.41	7.06	8.89	10.9	13	10.1

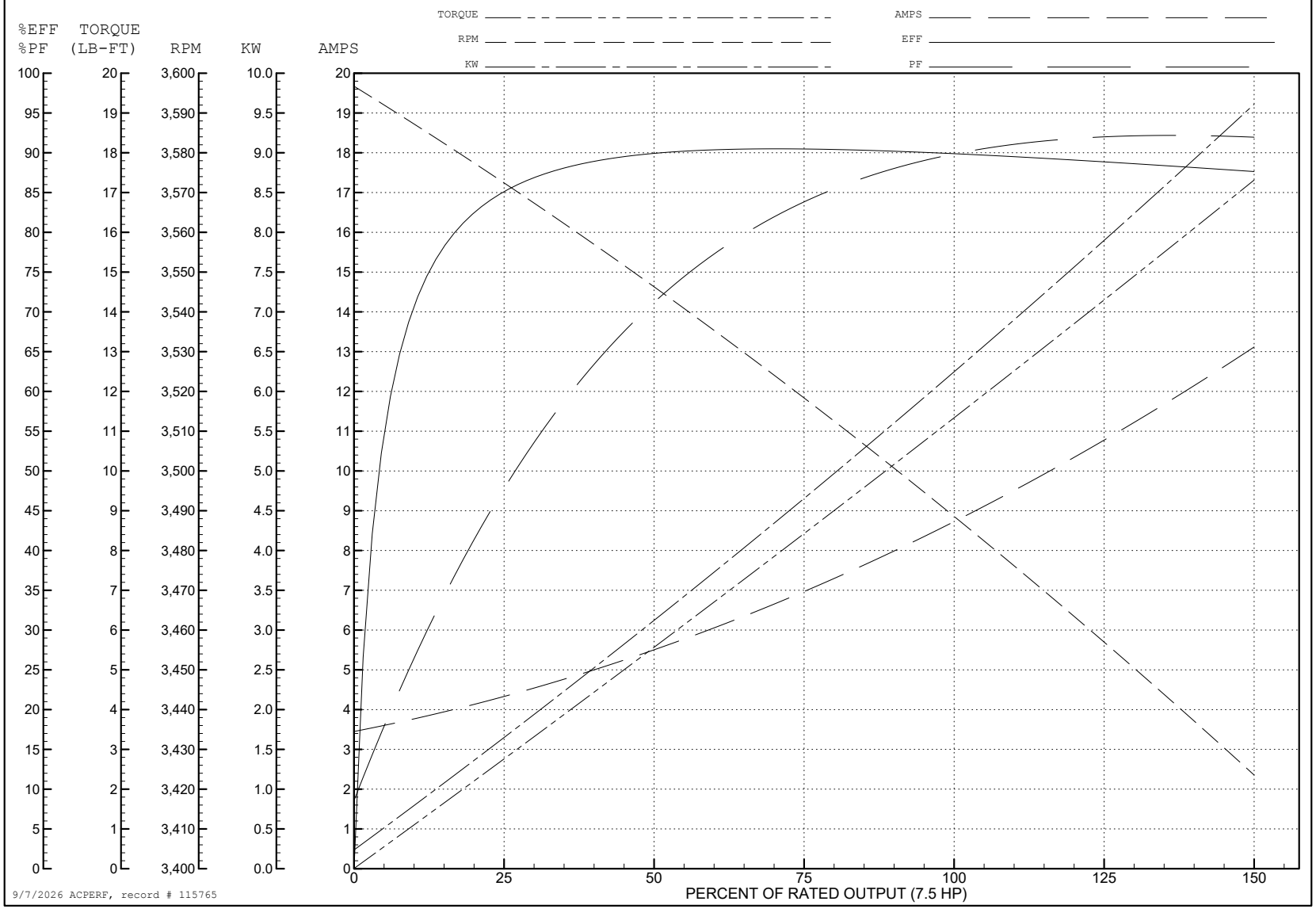
ABB Motors and Mechanical Inc.

WINDING # 36WGZ654

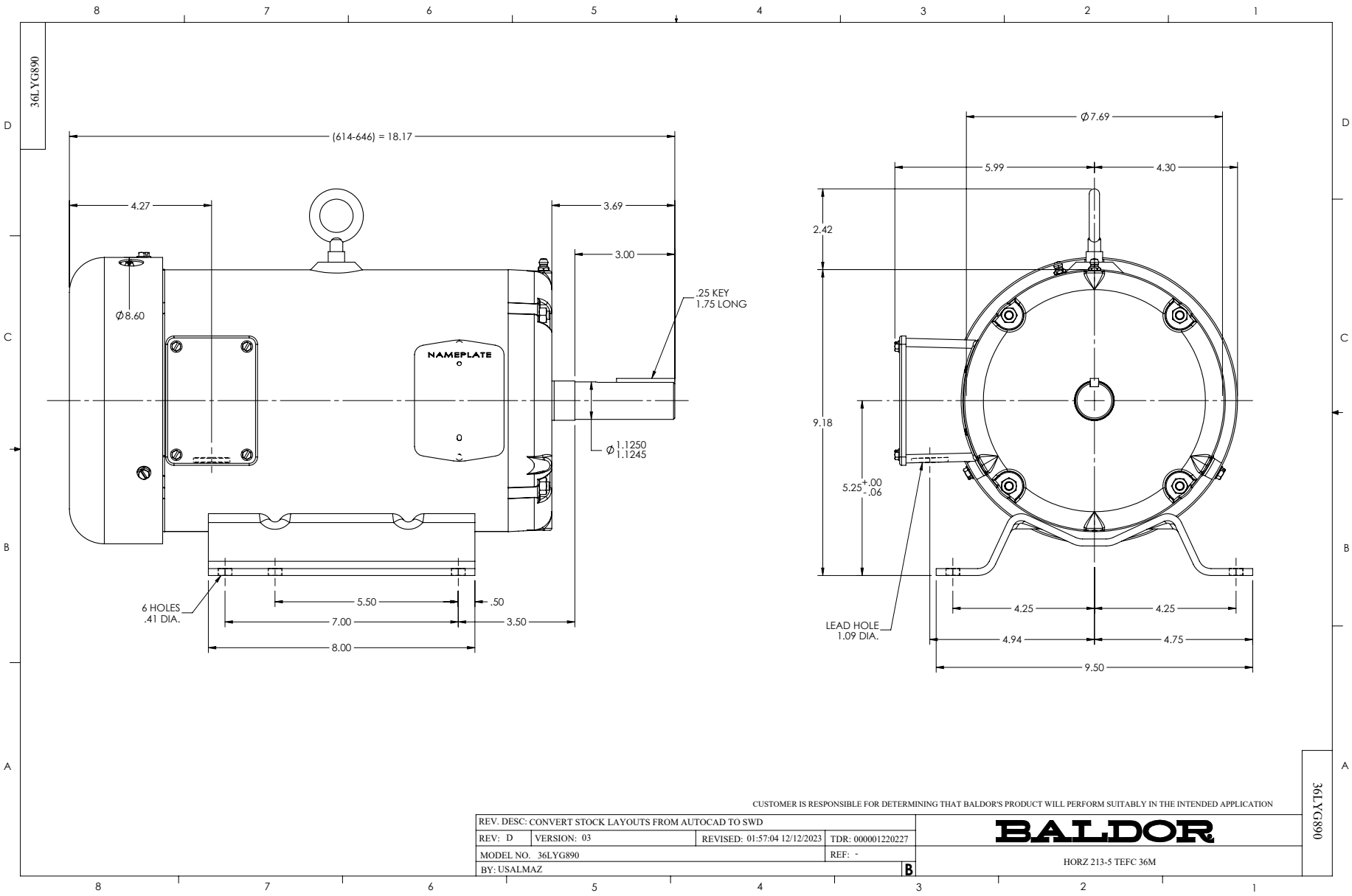
7.5 HP 3 PH 60 HZ 3488 RPM 460 V 3640M

Typical performance - not guaranteed values.

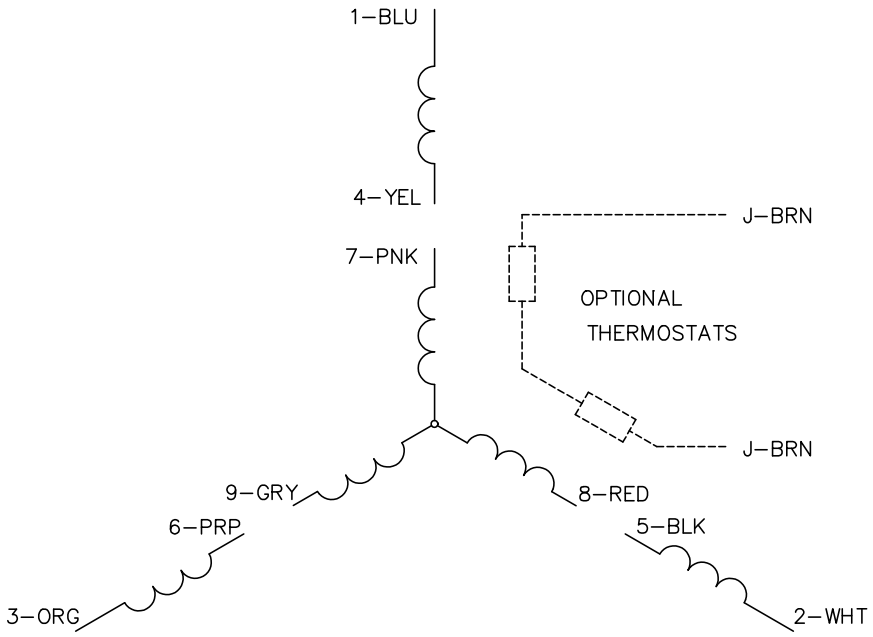
TORQUES(LB-FT): PO=76.7 PU=45.1 LR=57.2 LRA=109

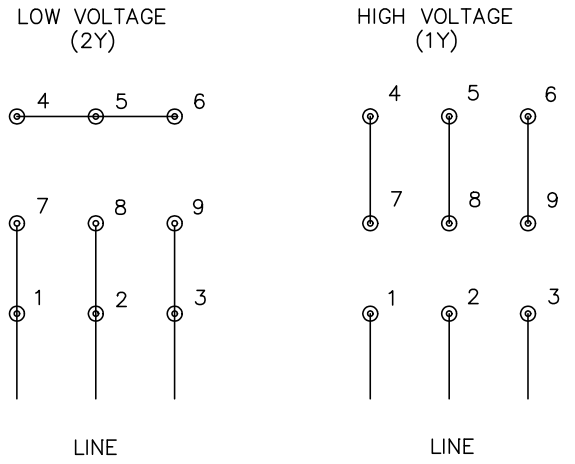


9/7/2026 ACPERF, record # 115765


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