

ABB BALDOR RELIANCE III

Customer information packet

EM3712

2HP, 1175RPM, 3PH, 60HZ, 213, 3644M, TEFC, F1, N

Class - None

Division - Not Applicable

Specifications

Enclosure	TEFC
Frame	213
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	2.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1200 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	7.000 A @ 230.0 V 7.000 A @ 208.0 V 3.500 A @ 460.0 V
Design Code	A
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	88.5 %
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	E
Type	AC
Mech. spec.	36G890
Base	
Status	PRD/A
Elec. spec.	36WGS917
Layout	36LYG890
Eff. date	05-01-2024
CD Diagram	CD0005
Poles	06
Leads	9#16
Proprietary	False
Created date	02-27-2015

High Voltage Full Load Amps	3.5 a
Insulation Class	F
Inverter Code	Inverter Ready
KVA Code	M
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	3644M
Mounting Arrangement	F1
Number of Poles	6
Overall Length	18.17 IN
Power Factor	60
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	1175 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.	EM3712								
SPEC.	36G890S917G1								
HP	2								
VOLTS	230/460								
AMP	7/3.5								
RPM	1175								
FRAME	213		HZ	60			PH	3	
SER.F.	1.15	CODE	M	DES	A	CL	F		
NEMA-NOM-EFF	88.5	PF	60						
RATING	40C AMB-CONT								
CC	010A								
DE	6206		ODE	6205					
ENCL	TEFC	SN							

AC Induction Motor Performance Data

Record # 53367

Typical performance - not guaranteed values

Winding: 36WGS917-R019			Type: 3644M		Enclosure: TEFC		
Nameplate Data			460 V, 60 Hz: High Voltage Connection				
Rated Output (HP)		2	Full Load Torque		8.91 LB-FT		
Volts		230/460	Start Configuration		direct on line		
Full Load Amps		7/3.5	Breakdown Torque		40.2 LB-FT		
R.P.M.		1175	Pull-up Torque		21.6 LB-FT		
Hz	60	Phase	3	Locked-rotor Torque		28.2 LB-FT	
NEMA Design Code		A	KVA Code	M	Starting Current		27.5 A
Service Factor (S.F.)		1.15	No-load Current		2.45 A		
NEMA Nom. Eff.		88.5	Power Factor	60	Line-line Res. @ 25°C		4.02 Ω
Rating - Duty		40C	AMB-CONT		Temp. Rise @ Rated Load		34°C
S.F. Amps					Temp. Rise @ S.F. Load		39°C
					Locked-rotor Power Factor		28.7
					Rotor inertia		0.413 LB-FT2

Load Characteristics 460 V, 60 Hz, 2 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	24	40	52	60	66	70	64
Efficiency	76.4	85.3	87.9	88.8	88.9	88.2	88.8
Speed	1197	1191	1186	1179	1173	1166	1175
Line amperes	2.53	2.76	3.09	3.49	3.97	4.52	3.78

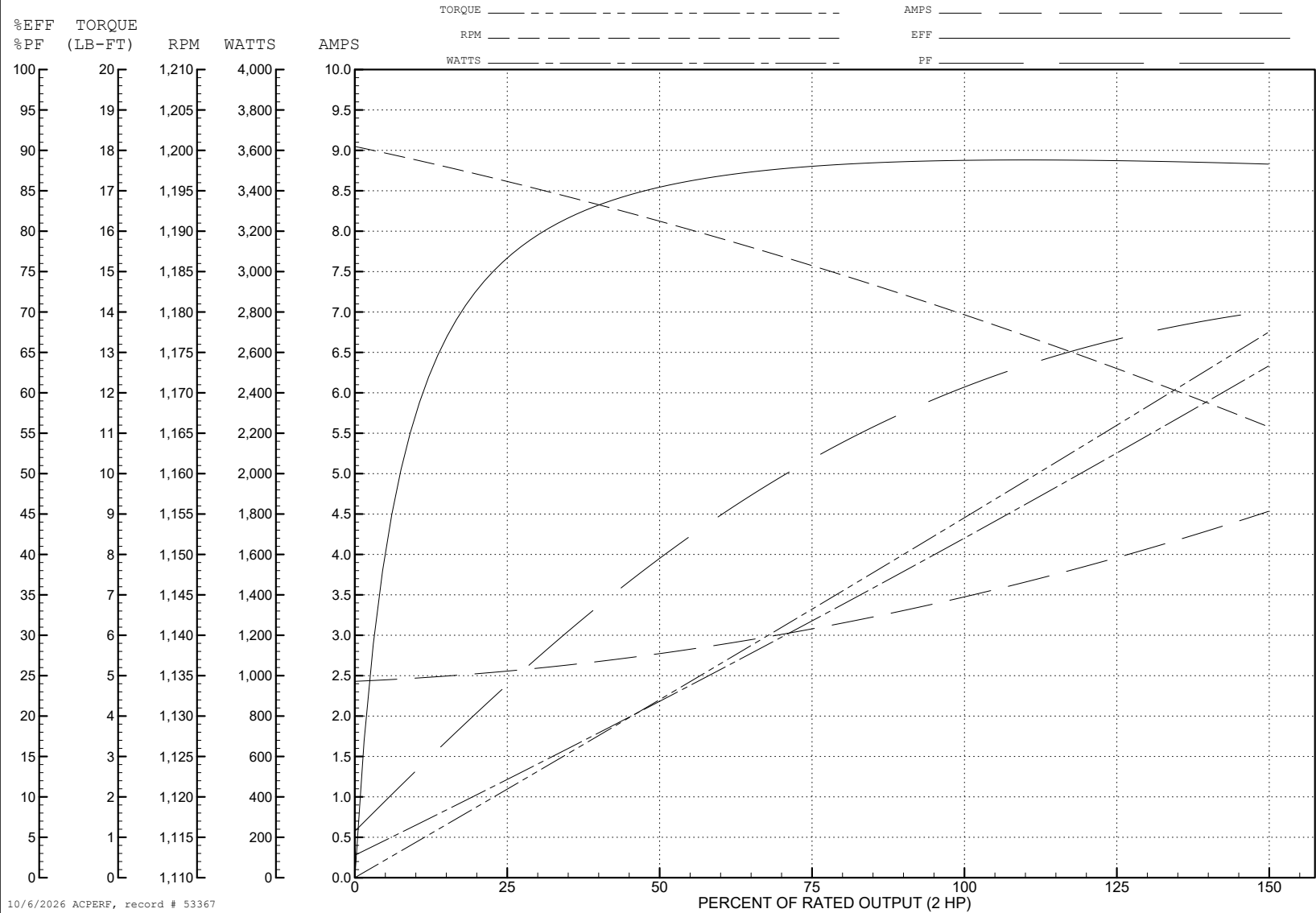
ABB Motors and Mechanical Inc.

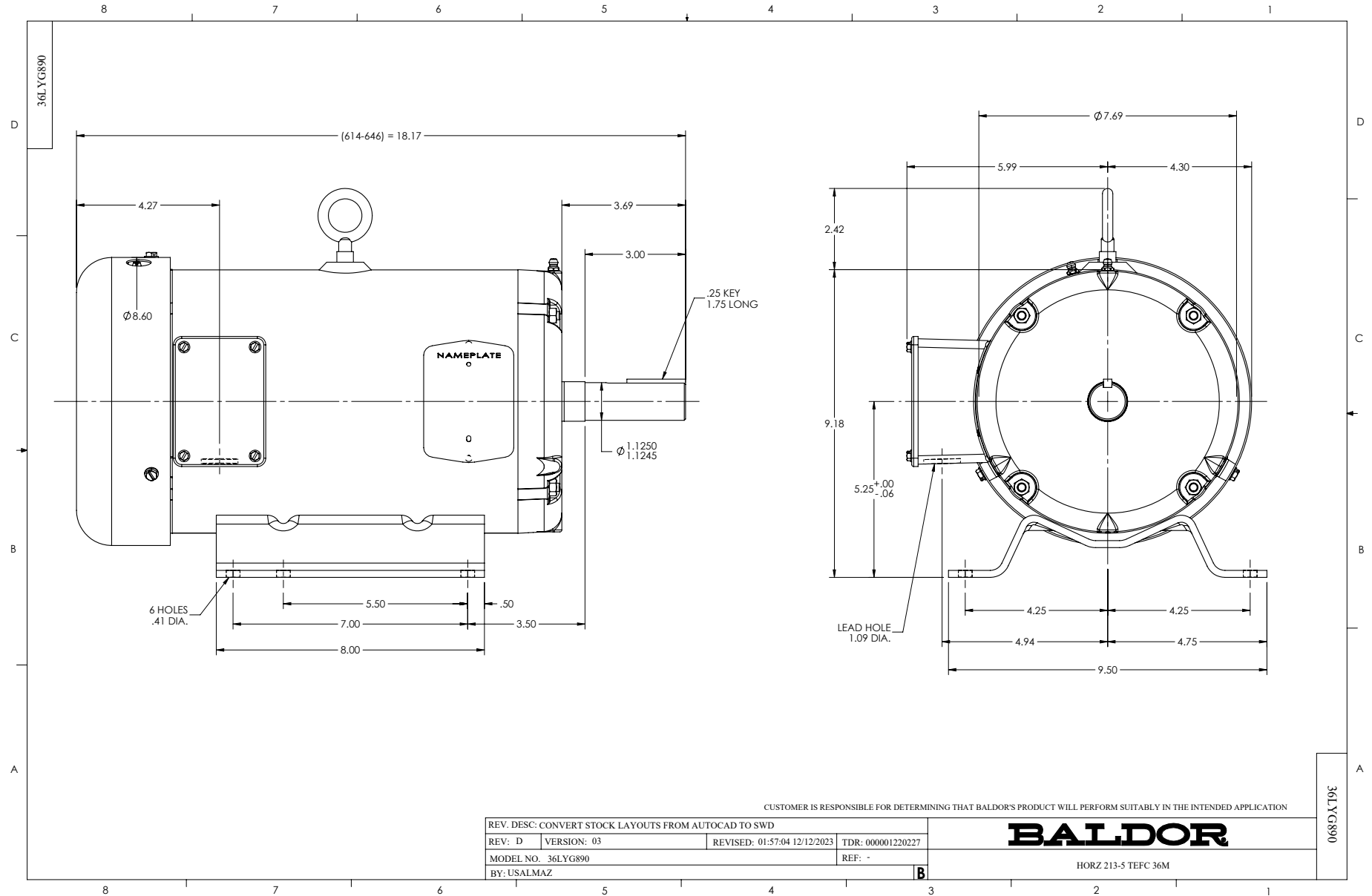
WINDING # 36WGS917

Typical performance - not guaranteed values.

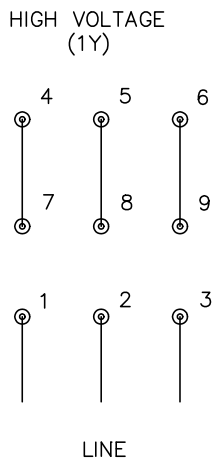
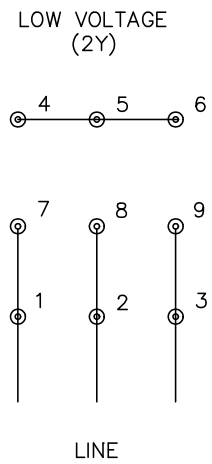
2 HP 3 PH 60 HZ 1175 RPM 460 V 3644M

TORQUES (LB-FT) : PO=40.2 PU=21.6 LR=28.2 LRA=27.5





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.

REV. DESC: REVISE TO SHOW OPTIONAL COLORS			
REV. LTR: E	BY: JLP	REVISED: 01/19/99 10:15	TDR: 0171435
S00000		FILE: AAA00005140	MDL: -
		MTL: -	

BALDOR ELECTRIC Co.

3PH, DV, 9 LEADS

CD0005