

ABB BALDOR RELIANCE III

Customer information packet

EBM3707Y

5HP, 1750RPM, 3PH, 60HZ, 215, 3644M, TEFC, F1, B

Class - None

Division - Not Applicable

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	460.0 V @ 60 HZ 230.0 V @ 60 HZ
Agency Approvals	CSA CSA EEV UR
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	14.200 A @ 208.0 V 6.900 A @ 460.0 V 13.800 A @ 230.0 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 Face Code	Brake Mounting
Front Shaft Indicator	None

Part Detail

Revision	M
Type	AC
Mech. spec.	36K140
Base	
Status	PRD/A
Elec. spec.	36WGR639
Layout	36LYK140
Eff. date	05-01-2024
CD Diagram	CD0005
Poles	04
Leads	9#16
Proprietary	False
Created date	03-24-2015

Heater Indicator	No Heater
High Voltage Full Load Amps	6.9 a
Insulation Class	F
Inverter Code	Inverter Ready
KVA Code	K
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	4
Overall Length	22.87 IN
Power Factor	76
Product Family	General Purpose
Pulley End Bearing Type	Ball
Pulley Face Code	Standard
Pulley Shaft Indicator	Standard
Rodent Screen	None
RoHS Status	ROHS COMPLIANT
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.	EBM3707Y										
SPEC.	36K140R639G1										
HP	5										
VOLTS	230/460										
AMP	13.8/6.9										
RPM	1750										
FRAME	215		HZ	60				PH	3		
SER.F.	1.15		CODE	K	DES	A		CL	F		
NEMA-NOM-EFF	89.5		PF	76							
RATING	40C AMB-CONT										
CC	010A										
DE	6206		ODE	6205							
ENCL	TEFC		SN								

AC Induction Motor Performance Data

Record # 53352

Typical performance - not guaranteed values

Winding: 36WGR639-R004			Type: 3644M		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		13.8/6.9	Breakdown Torque		57 LB-FT			
R.P.M.		1750	Pull-up Torque		34.6 LB-FT			
Hz	60	Phase	3	Locked-rotor Torque		38.3 LB-FT		
NEMA Design Code		A	KVA Code	K	Starting Current		53.8 A	
Service Factor (S.F.)		1.15	No-load Current		3.62 A			
NEMA Nom. Eff.		89.5	Power Factor		76	Line-line Res. @ 25°C		2.12 Ω
Rating - Duty		40C	AMB-CONT		Temp. Rise @ Rated Load		71°C	
S.F. Amps					Temp. Rise @ S.F. Load		85°C	
					Rotor inertia		0.41 LB-FT2	

Load Characteristics 460 V, 60 Hz, 5 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	36	57	69	76	81	82	79
Efficiency	83.9	89.2	90.3	89.7	89	87.3	89.3
Speed	1790	1778	1765	1753	1737	1720	1743
Line amperes	3.91	4.62	5.69	6.86	8.09	9.73	7.6

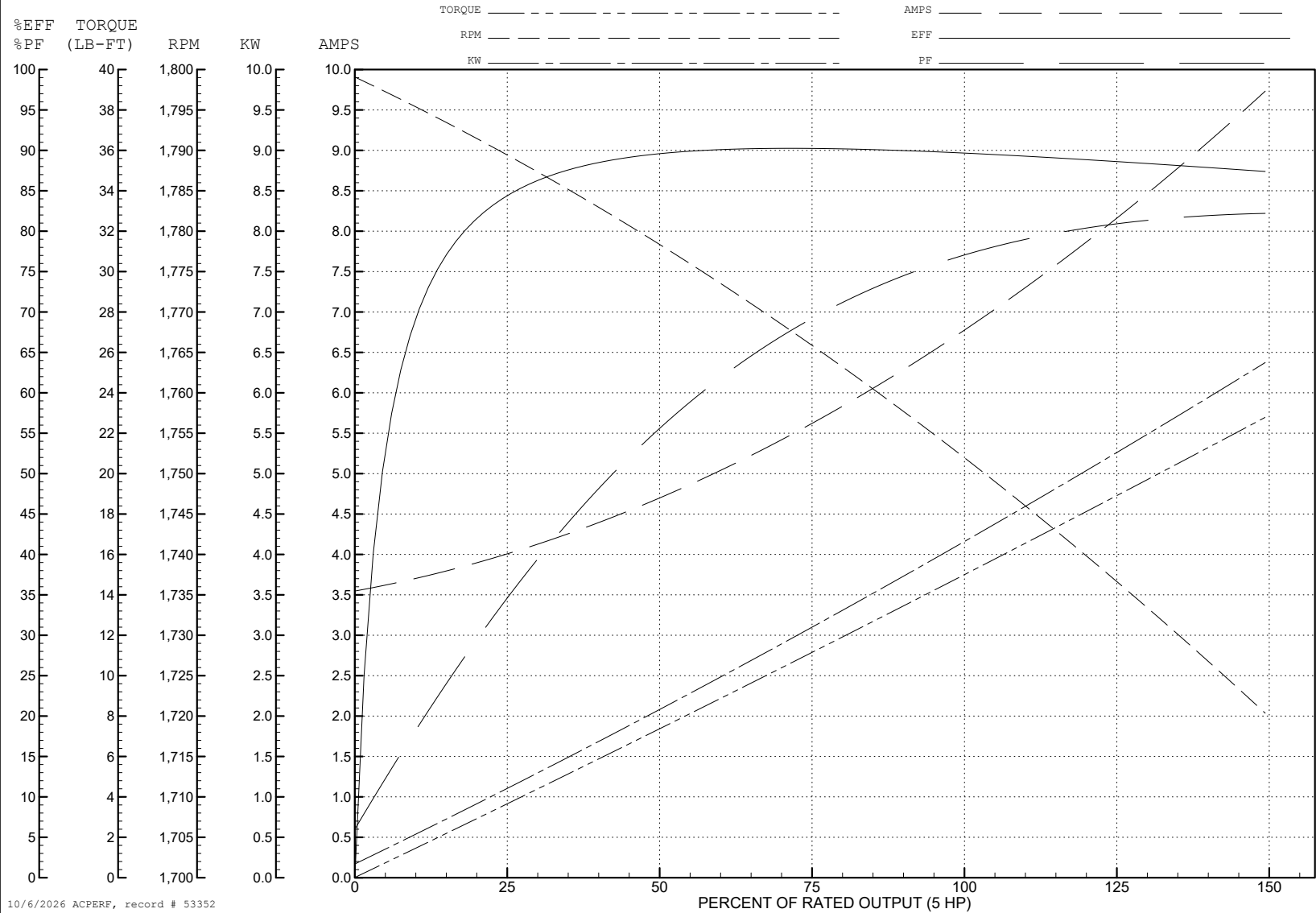
ABB Motors and Mechanical Inc.

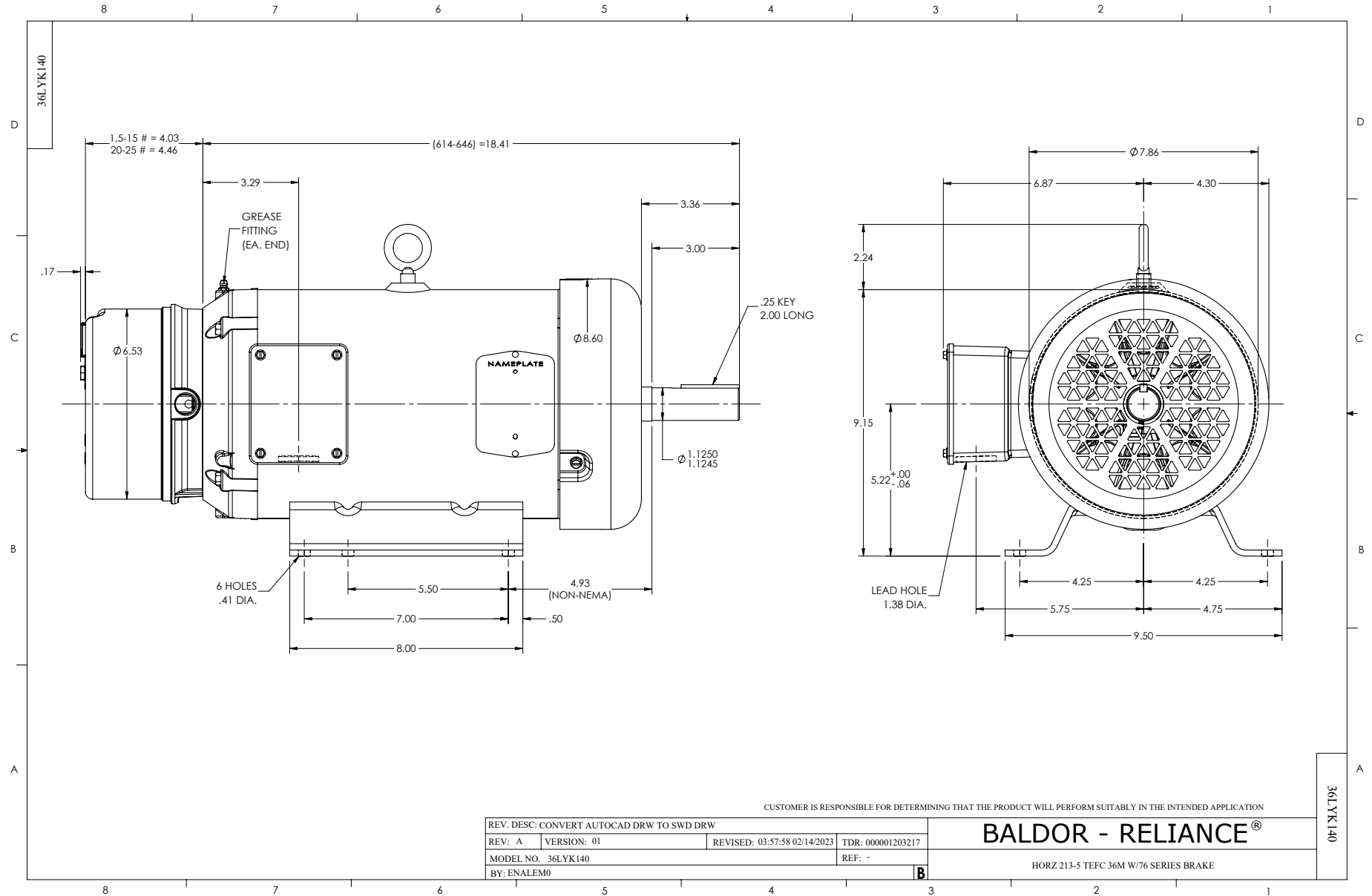
WINDING # 36WGR639

Typical performance - not guaranteed values.

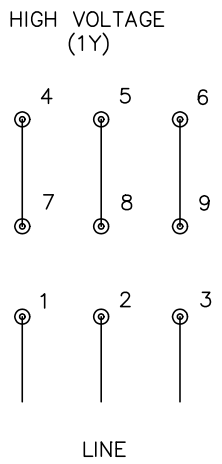
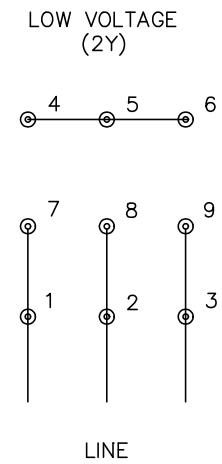
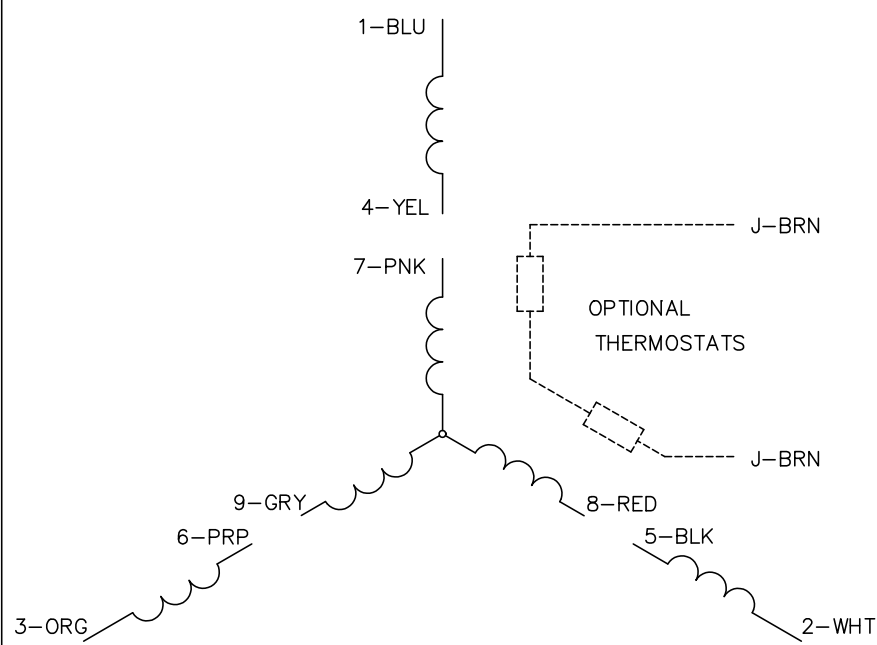
5 HP 3 PH 60 HZ 1750 RPM 460 V 3644M

TORQUES (LB-FT): PO=57 PU=34.6 LR=38.3 LRA=53.8





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
900000		FILE: AAA00005140	MDL: -
		MTL: -	

BALDOR ELECTRIC Co.

3PH, DV, 9 LEADS

CD0005