



Customer information packet

EM3704

3HP, 1160RPM, 3PH, 60HZ, 215, 3738M, TEFC, F1, N

Class - None

Division - Not Applicable

Specifications

Enclosure	TEFC
Frame	215
Frame Material	Steel
Frequency	60.00 Hz
Motor Letter Type	Three Phase
Output @ Frequency	3.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1200 RPM @ 60 HZ
Voltage @ Frequency	460.0 V @ 60 HZ 230.0 V @ 60 HZ
XP Class and Group	None
XP Division	Not Applicable
Agency Approvals	CSA CSA EEV UR
Ambient Temperature	40 °C
Auxillary Box	No Auxillary Box
Auxillary Box Lead Termination	None
Base Indicator	Rigid
Bearing Grease Type	Polyrex EM (-20F +300F)
Blower	None
Current @ Voltage	9.200 A @ 230.0 V 9.600 A @ 208.0 V 4.600 A @ 460.0 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

Part detail

Revision	J
Type	AC
Mech. spec.	37A011
Base	
Status	PRD/A
Elec. spec.	37WGS519
Layout	37LYA011
Eff. date	08-15-2022
CD Diagram	CD0005
Poles	06
Leads	9#14
Proprietary	False
Created date	02-23-2015

Heater Indicator	No Heater
High Voltage Full Load Amps	4.6 a
Insulation Class	F
Inverter Code	Inverter Ready
KVA Code	L
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	No Locked Bearing
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	9 @ 14 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3738M
Mounting Arrangement	F1
Number of Poles	6
Overall Length	18.63 IN
Power Factor	68
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	1160 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.	EM3704								
SPEC.	37A011S519G1								
HP	3								
VOLTS	230/460								
AMP	9.2/4.6								
RPM	1160								
FRAME	215		HZ	60		PH	3		
SER.F.	1.15	CODE	L	DES	B	CL	F		
NEMA-NOM-EFF	89.5	PF	68						
RATING	40C AMB-CONT								
CC	010A		USABLE AT 208V				9.6		
DE	6307		ODE	6206					
ENCL	TEFC	SN							

AC Induction Motor Performance Data

Record # 35282

Typical performance - not guaranteed values

Winding: 37WGS519-R002		Type: 3738M	Enclosure: TEFC	
Nameplate Data			460 V, 60 Hz: High Voltage Connection	
Rated Output (HP)		3	Full Load Torque	13.4 LB-FT
Volts		230/460	Start Configuration	direct on line
Full Load Amps		9.2/4.6	Breakdown Torque	50.4 LB-FT
R.P.M.		1160	Pull-up Torque	31.8 LB-FT
Hz	60 Phase	3	Locked-rotor Torque	33.9 LB-FT
NEMA Design Code	B KVA Code	L	Starting Current	34 A
Service Factor (S.F.)		1.15	No-load Current	2.56 A
NEMA Nom. Eff.	89.5 Power Factor	68	Line-line Res. @ 25°C	2.67 Ω
Rating - Duty		40C AMB-CONT	Temp. Rise @ Rated Load	38°C
S.F. Amps			Temp. Rise @ S.F. Load	45°C
			Locked-rotor Power Factor	22.9
			Rotor inertia	0.945 LB-FT ²

Load Characteristics 460 V, 60 Hz, 3 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	30	50	62	69	73	75	70
Efficiency	82.1	88.6	89.5	89.8	89.1	87.6	89.1
Speed	1193	1186	1178	1170	1160	1149	1166
Line amperes	2.74	3.19	3.82	4.53	5.44	6.41	5.14

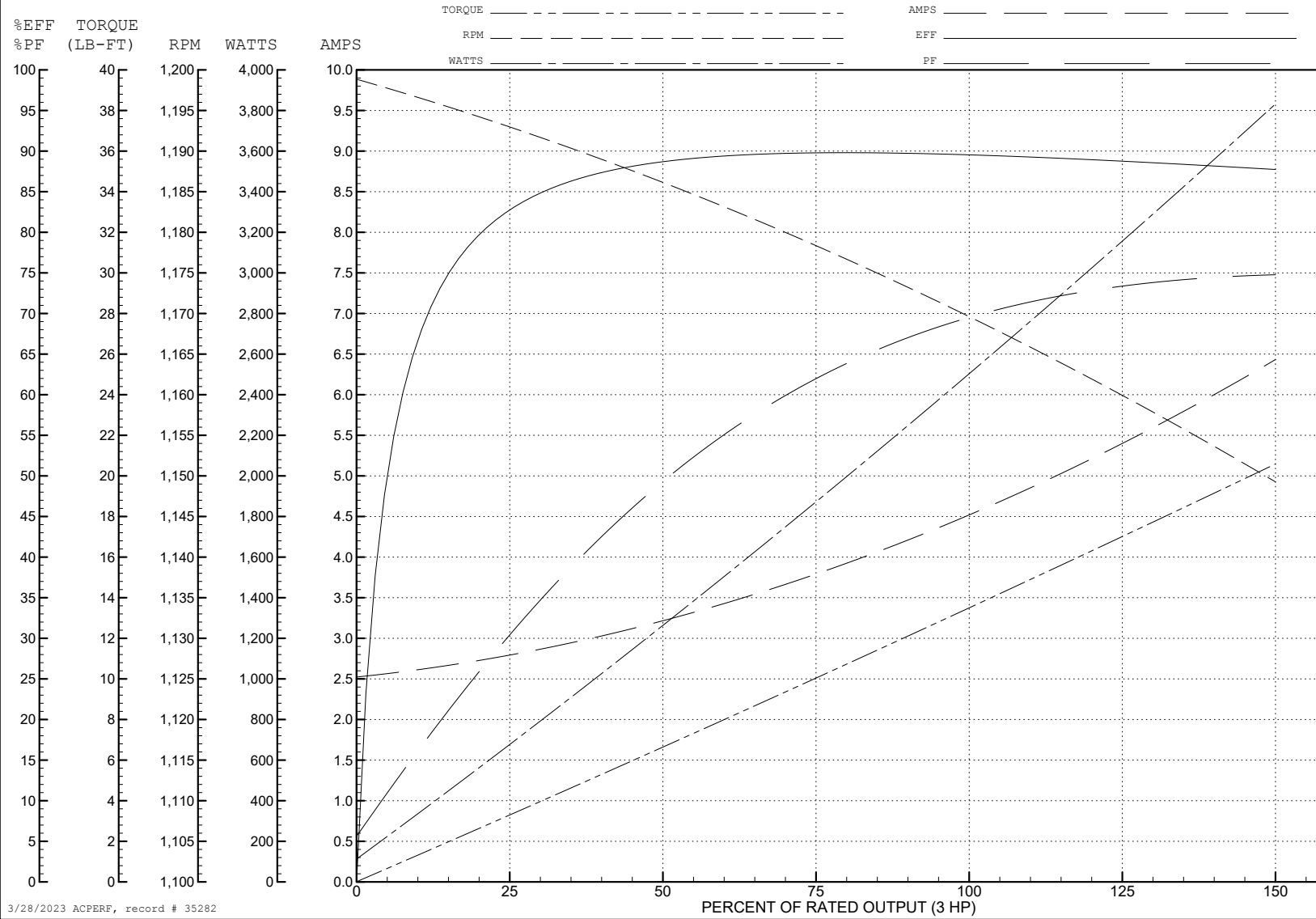
ABB Motors and Mechanical Inc.

WINDING # 37WGS519

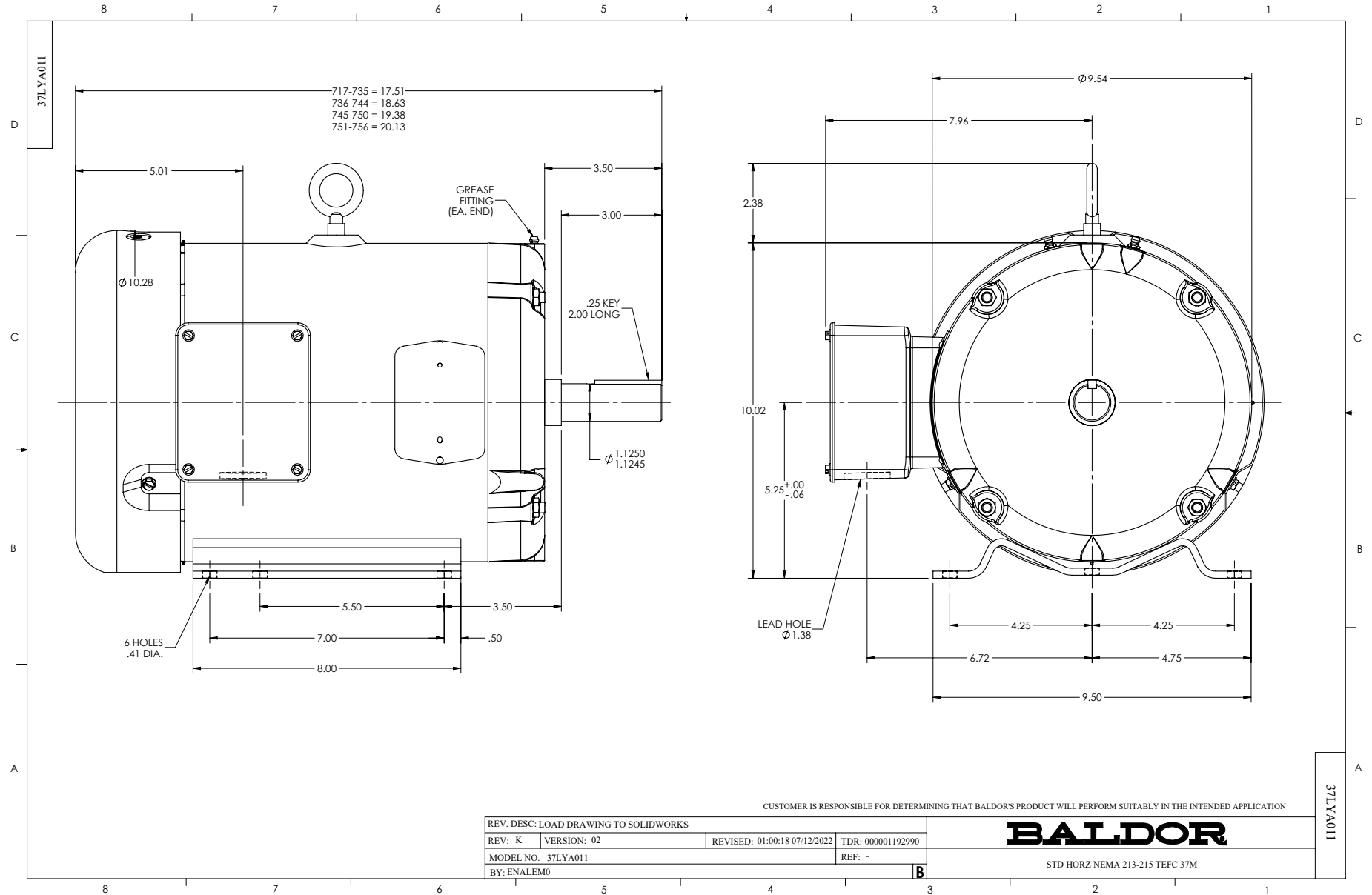
3 HP 3 PH 60 HZ 1160 RPM 460 V 3738M

Typical performance - not guaranteed values.

TORQUES (LB-FT): PO=50.4 PU=31.8 LR=33.9 LRA=34



3/28/2023 ACPERF, record # 35282



CD0005



LOW VOLTAGE
(2Y)



LINE

HIGH VOLTAGE
(1Y)



LINE

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			
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