

BALDOR • RELIANCE

Customer information packet

HBEM3704T

38M 6P TEFC HOR 213T

Class - None

Division - Not Applicable

Specifications

Enclosure	TEFC
Frame	213T
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	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
Agency Approvals	CURUSEEV NEMA PREMIUM WEEE
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	Electrically Isolated Bearings
Feedback Device	NO FEEDBACK
Front Shaft Indicator	None
Heater Indicator	No Heater

Part detail

Revision	E
Type	AC
Mech. spec.	37T556
Base	
Status	PRD/A
Elec. spec.	37WGS519
Layout	37LYT556
Eff. date	06-14-2024
CD Diagram	CD0005
Poles	06
Leads	9#14
Proprietary	False
Created date	01-05-2022

High Voltage Full Load Amps	4.6 a
Insulation Class	H
Inverter Code	Inverter Ready
KVA Code	L
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	No Locked Bearing
Max Speed	1800 rpm
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	19.02 IN
Power Factor	68
Product Family	General Purpose
Pulley End Bearing Type	Sealed Bearing
Pulley Face Code	Standard
Pulley Shaft Indicator	Standard
Rodent Screen	None
RoHS Status	ROHS COMPLIANT
Service Factor	1.15
Shaft Diameter	1.375 IN
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

NP4246A01A01												
CAT #	HBEM3704T					WGT	138		LBS			
SPEC	37T556S519G1					ENCL	TEFC					
SER #						CC	010A		IP	54		
HP	3		MAG CUR		5.1/2.55							
VOLTS	230/460					NEMA NOM. EFF			89.5			
AMPS	9.2/4.6					PF	68					
RATING	40C AMB-CONT											
RPM	1160					MAX RPM			1800			
FRAME	213T		HZ	60		CODE	L		CLASS	H		
SER.F.	1.15		SF AMP	10.2/5.1			PH	3		DES	B	
DE	6307		ODE			6206						
LUBRICATION	POLYREX EM											
ID LOGO	INV TYPE:		VPWM	CHP	60		TO	90		1.5:1		
ID LOGO	WK2	0.945		CT	6		TO	60		10:1		
ID LOGO	SL HZ	1.5		VT	3		TO	60		20:1		
YR						ID.ABB/BALDOR/						

AC Induction Motor Performance Data

Record # 57247

Typical performance - not guaranteed values

Winding: 37WGS519-R037		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	Locked-rotor Torque	33.9 LB-FT
NEMA Design Code	B KVA Code	Starting Current	34 A
Service Factor (S.F.)	1.15	No-load Current	2.56 A
NEMA Nom. Eff.	89.5 Power Factor	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

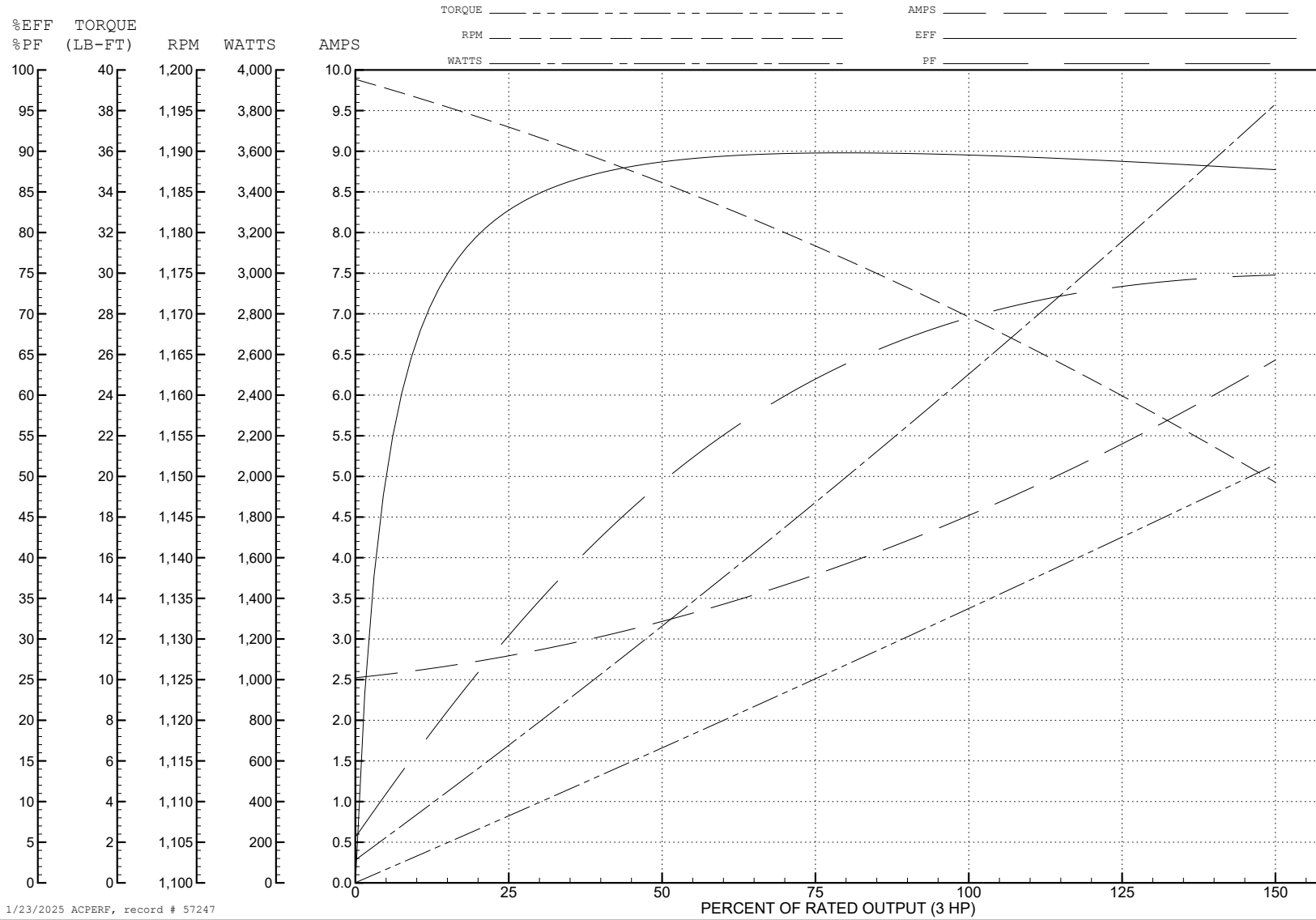
ABB Motors and Mechanical Inc.

WINDING # 37WGS519

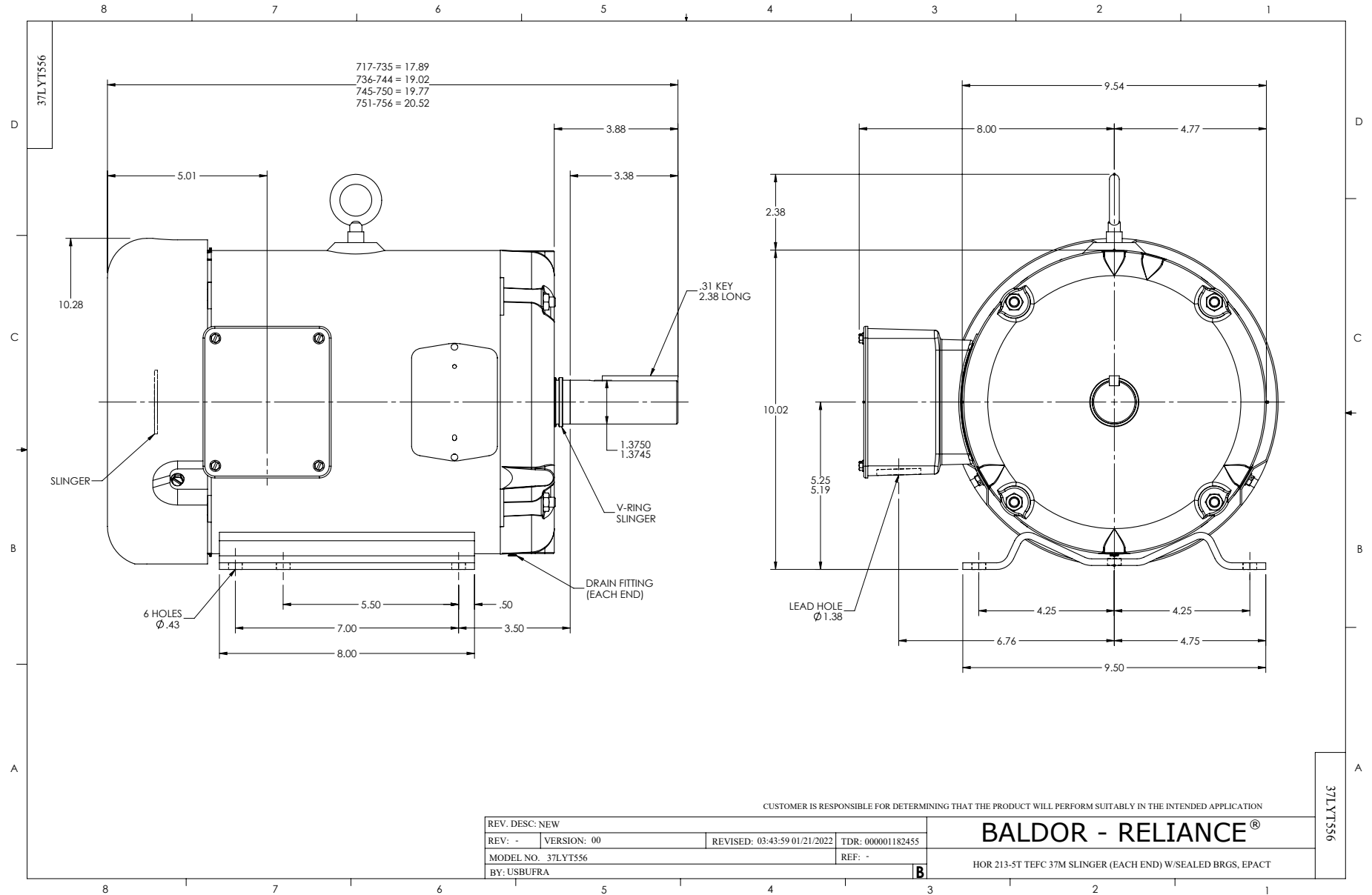
3 HP 3 PH 60 HZ 1160 RPM 460 V 3738M

Typical performance - not guaranteed values.

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



1/23/2025 ACPERF, record # 57247



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