

ABB BALDOR RELIANCE III

Customer information packet

M1708T

5/2.5HP, 1740/865RPM, 3PH, 60HZ, 213T, 3742M

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	5.000 HP @ 60 HZ 2.500 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	460.0 V @ 60 HZ
Agency Approvals	UR CSA
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	6.300 A @ 460.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	5.2 a
Insulation Class	F
Inverter Code	Not Inverter
KVA Code	K

Part Detail

Revision	C
Type	AC
Mech. spec.	37T397
Base	
Status	PRD/A
Elec. spec.	37WGZ656
Layout	37LYT397
Eff. date	05-14-2024
CD Diagram	CD0011
Poles	04/08
Leads	6#14
Proprietary	False
Created date	12-11-2020

Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	No Locked Bearing
Motor Lead Quantity/Wire Size	6 @ 14 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3742M
Mounting Arrangement	F1
Number of Poles	4 8
Overall Length	19.01 IN
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	1.375 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	1740 rpm 865 rpm
Speed Code	2S-1W-CT
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

NP1256L									
CAT.NO.	M1708T								
SPEC.	37T397Z656G1								
HP	5/2.5								
VOLTS	460								
AMP	6.3/5.2								
RPM	1740/865								
FRAME	213T		HZ		60		PH		3
SER.F.	1.15	CODE		K	DES	B	CLASS		F
NEMA-NOM-EFF			PF						
RATING	40C AMB-CONT								
CC									
DE	6307		ODE		6206				
ENCL	TEFC	SN							
	SFA 7.2/5.5								

Parts List

Part number	Description	Quantity
SA388840	SA 37T397Z656G1	1.000 ea
RA379204	RA 37T397Z656G1	1.000 ea
HW3200A01	3/8-16X3/4 EYEBOLT WELDED F/S	1.000 ea
37CB3006	37 CB CASTING W/1.38 LEAD HOLE @ 6:00	1.000 ea
37GS1000SP	GASKET, CONDUIT BOX STD., .06 THICK LEXI	1.000 ea
51XW2520A12	.25-20 X .75, TAPTITE II, HEX WSHR SLTD	2.000 ea
11XW1032G06	10-32 X .38, TAPTITE II, HEX WSHR SLTD U	1.000 ea
37EP3101A01	FR ENDPLATE, FOR ROUTING PURPOSES	1.000 ea
HW4500A01	1641B(ALEMITE)400 UNIV, GREASE FITT	1.000 ea
HW5100A06	W2420-025 WVY WSHR (WB)	1.000 ea
37EP3100A01	PUEP ASSEMBLY - ROUTING PUPROSES	1.000 ea
HW4500A01	1641B(ALEMITE)400 UNIV, GREASE FITT	1.000 ea
XY3118A12	5/16-18 HEX NUT DIRECTIONAL SERRATION	4.000 ea
51XB1214A20	12-14X1.25 HXWSSLD SERTYB	1.000 ea
07FH4007SP	PRIMED	1.000 ea
51XW1032A06	10-32 X .38, TAPTITE II, HEX WSHR SLTD S	3.000 ea
37CB4516	LIPPED LID FOR 37 FRAME NEC KOBX	1.000 ea
37GS1008	37 GS FOR CB LID - LEXIDE	1.000 ea
51XW0832A07	8-32 X .44, TAPTITE II, HEX WSHR SLTD SE	4.000 ea
HW2501F21	KEY, 5/16 SQ X 2.375	1.000 ea
HA7000A02	KEY RETAINER RING, 1 1/8 DIA, 1 3/8 DIA	1.000 ea
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	2.000 ea
MJ1000A02	GREASE, POLYREX EM EXXON	0.050 lb
37FN3002A01SP	EXFN, PLASTIC, 9.00 OD, 1.155 ID	1.000 ea
MG1050G01	CELEROL MEDIUM CHARCOAL METALLIC GRAY	0.028 ga
HA3104A17	5/16-18X13.250 T-BLT/OHIO	4.000 ea
LC0032	CONNECTION LABEL	1.000 ea
NP1256L	ALUM UL CC INDUSTRIAL MOTOR A60	1.000 ea
37PA1074	PALLET PACK GRP, PRINT BOX PK1026A06	1.000 ea
MN416A01	TAG-INSTAL-MAINT no wire (2500 bx)11/25	1.000 ea
LB1624	COMBINED WARNING LABEL, ISO/ANSI PICTOGR	1.000 ea

Accessories

Part number	Description	Multiplier
37-3301	C FACE KIT	P1

AC Induction Motor Performance Data

Record # 85795

Preliminary Data Sheet

Winding: 37WGZ656-R001			Type: 3742M		Enclosure: TEFC		
Nameplate Data			460 V, 60 Hz: High Speed Connection				
Rated Output (HP)		5/2.5	Full Load Torque		14.96 LB-FT		
Volts		460	Start Configuration		direct on line		
Full Load Amps		6.3/5.2	Breakdown Torque		64.46 LB-FT		
R.P.M.		1740/865	Pull-up Torque		18.85 LB-FT		
Hz	60	Phase	3	Locked-rotor Torque		43.06 LB-FT	
NEMA Design Code		B	KVA Code	K	Starting Current		51.88 A
Service Factor (S.F.)		1.15	No-load Current		2.68 A		
NEMA Nom. Eff.		0	Power Factor	0	Line-line Res. @ 25°C		3.04 Ω
Rating - Duty		40C	AMB-CONT		Temp. Rise @ Rated Load		53°C
S.F. Amps		7.2/5.5	Temp. Rise @ S.F. Load		66°C		
			Locked-rotor Power Factor		57.3		
			Rotor inertia		1.03 lb-ft²		

Load Characteristics 460 V, 60 Hz, 5 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	48	71	81	86	88	90	87
Efficiency	82	86.3	86.2	85.9	84.8	82.3	85.2
Speed	1787	1773	1759	1743	1726	1705	1733
Line amperes	3	3.85	4.99	6.32	7.78	9.5	7.2

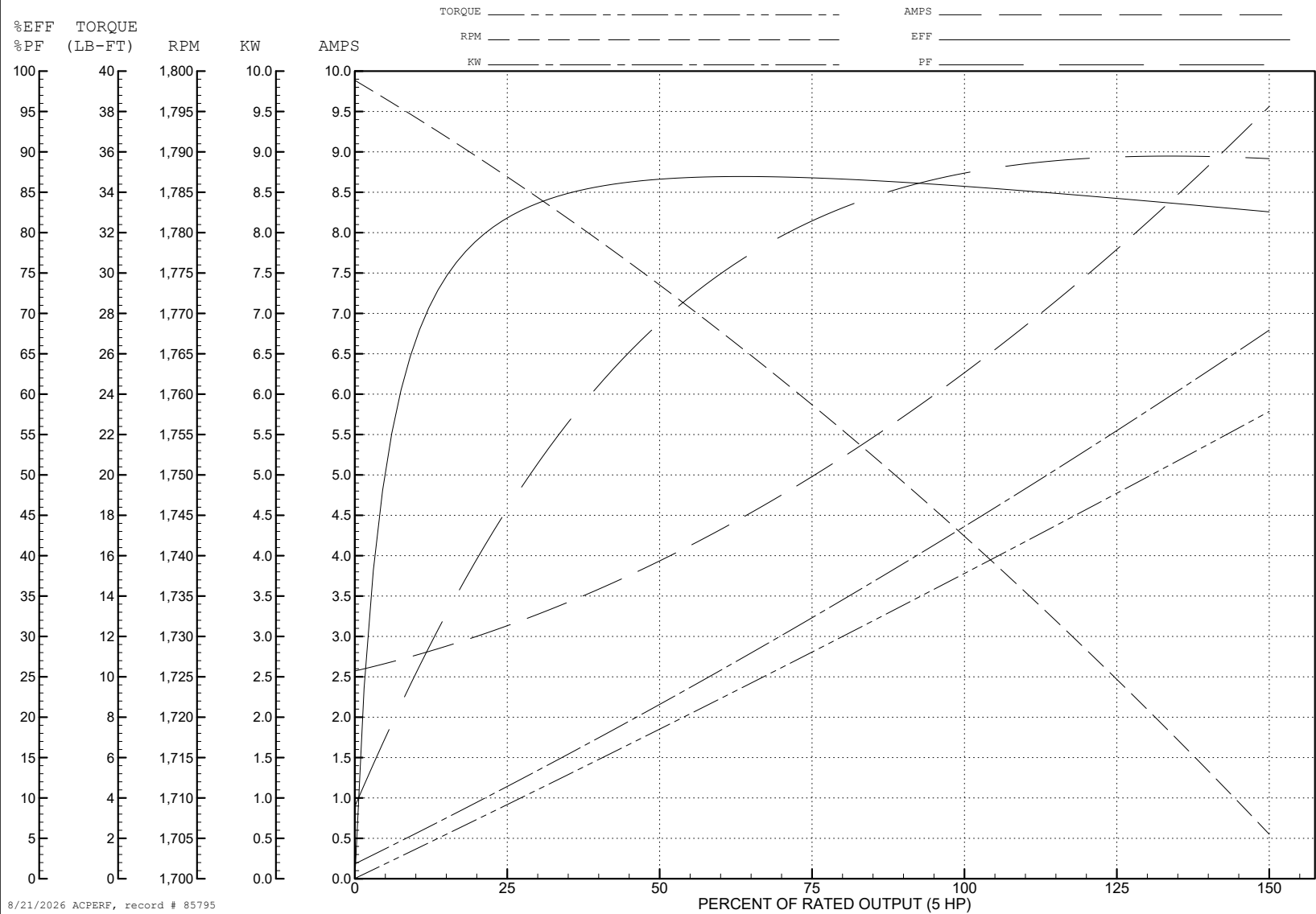
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WINDING # 37WGZ656

Typical performance - not guaranteed values.

5 HP 3 PH 60 HZ 1743 RPM 460 V 3742M

TORQUES (LB-FT) : PO=64.46 PU=18.85 LR=43.06 LRA=51.88



AC Induction Motor Performance Data

Record # 85796

Preliminary Data Sheet

Winding: 37WGZ656-R001			Type: 3742M		Enclosure: TEFC		
Nameplate Data			460 V, 60 Hz: Low Speed Connection				
Rated Output (HP)		5/2.5	Full Load Torque		15 LB-FT		
Volts		460	Start Configuration		direct on line		
Full Load Amps		6.3/5.2	Breakdown Torque		62.8 LB-FT		
R.P.M.		1740/865	Pull-up Torque		24.2 LB-FT		
Hz	60	Phase	3	Locked-rotor Torque		37.1 LB-FT	
NEMA Design Code		B	KVA Code	K	Starting Current		27 A
Service Factor (S.F.)		1.15	No-load Current		4.96 A		
NEMA Nom. Eff.		0	Power Factor	0	Line-line Res. @ 25°C		4.14 Ω
Rating - Duty		40C	AMB-CONT		Temp. Rise @ Rated Load		55°C
S.F. Amps		7.2/5.5	Temp. Rise @ S.F. Load		62°C		
			Locked-rotor Power Factor		57.3		
			Rotor inertia		1.03 lb-ft²		

Load Characteristics 460 V, 60 Hz, 2.5 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	18	29	40	49	56	62	53
Efficiency	66	77.8	82.2	83.9	84.5	84.4	84.3
Speed	894.1	888.6	882.8	876.7	870.3	863.4	873
Line amperes	5	5.14	5.39	5.73	6.17	6.7	5.99

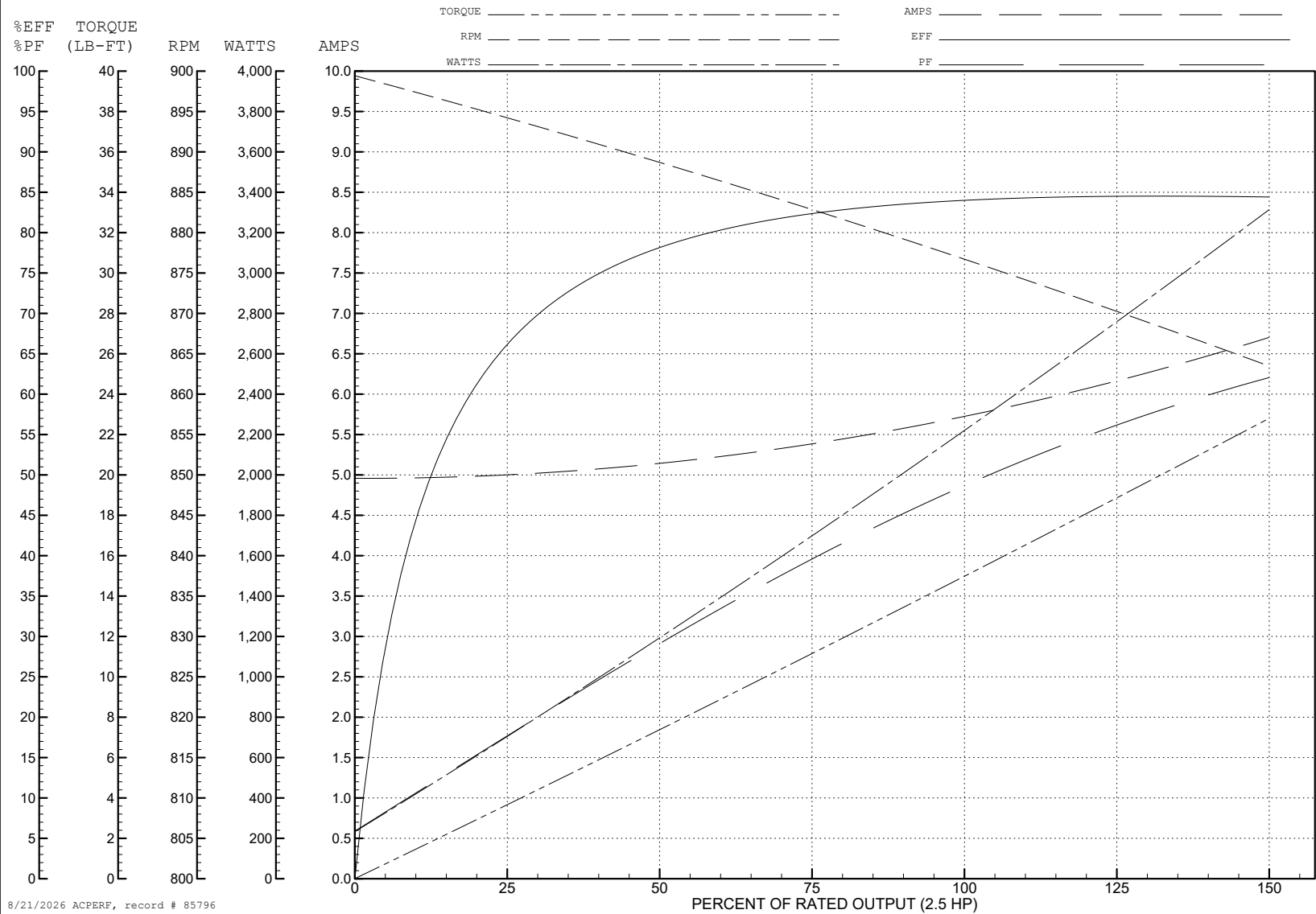
ABB Motors and Mechanical Inc.

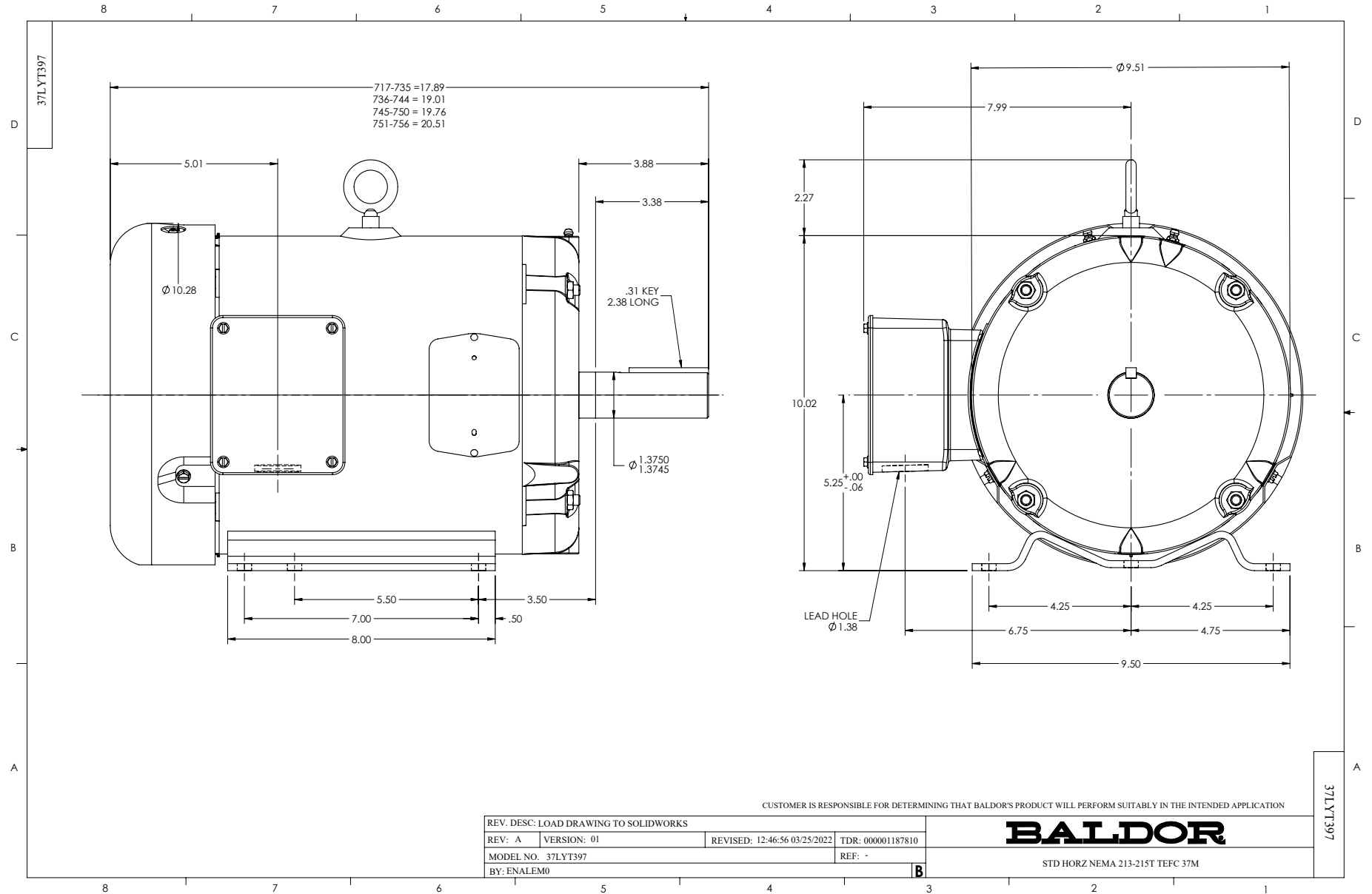
WINDING # 37WGZ656

Typical performance - not guaranteed values.

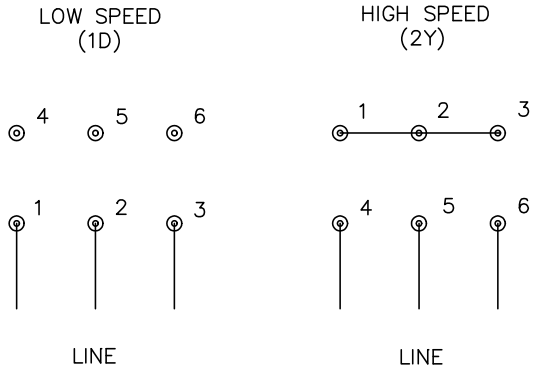
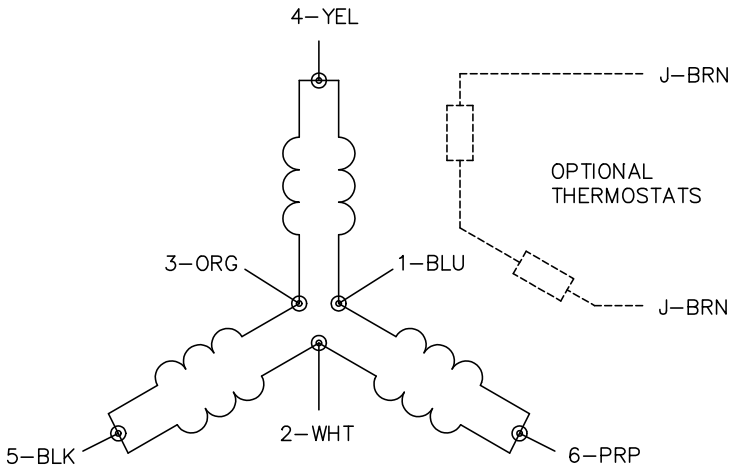
2.5 HP 3 PH 60 HZ 876.7 RPM 460 V 3742M

TORQUES (LB-FT): PO=62.8 PU=24.2 LR=37.1 LRA=27





CD0011



- 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			
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BALDOR ELECTRIC Co.

3PH, SV, 6 LEADS, 2-SPEED 1-WINDING CONSTANT TORQUE

CD0011