Customer information packet

SPM3708T

5HP, 1165RPM, 3PH, 60HZ, 215T, 3754M, TEFC, F1
Class - None
Division - Not Applicable

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Specifications

Enclosure	TEFC
Frame	215T
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	1200 RPM @ 60 HZ
Voltage @ Frequency	230.0 V @ 60 HZ
	460.0 V @ 60 HZ
Agency Approvals	WEEE
	NEMA PREMIUM 4
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	14.800 A @ 230.0 V
	7.400 A @ 460.0 V
Design Code	A
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	90.2 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	7.4 a
Insulation Class	F

Part Detail

Revision	A
Type	AC
Mech. spec.	37T646
Base	
Status	PRD/A
Elec. spec.	37WGS405
Layout	37LYT646
Eff. date	05-03-2024
CD Diagram	CD0005
Poles	06
Leads	9#14
Proprietary	False
Created date	09-05-2023

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	3754M
Mounting Arrangement	F1
Number of Poles	6
Overall Length	20.52 IN
Power Factor	70
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	1.375 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	1165 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

NP4423A01A01L												
CAT #	SPM3708T			**WGT**	149	**LBS**						
SPEC	37T646S405			**ENCL**	TEFC							
SER #				**CC**	010A	**IP**	54					
HP	5			**MAG CUR**	8/4							
VOLTS	230/460					**NEMA NOM. EFF**	90.2					
AMPS	14.8/7.4					**PF**	70					
RATING	40C AMB-CONT											
RPM	1165					**MAX RPM**	1800					
FRAME	215T	**HZ**	60	**CODE**	L	**CLASS**	F					
SER.F.	1.15	**SF AMP**	16.6/8.3			**PH**	3	**DES**	A			
DE	6307			**ODE**	6206							
LUBRICATION	POLYREX EM											
ID LOGO	**INVERTER TYPE**			**VPWM**		**CHP**	60	**TO**	90	1.5:1		
ID LOGO	**WK2**	1.34	**CT**	6	**TO**	60		10:1				
ID LOGO	**SL HZ**	1.75	**VT**	3	**TO**	60		20:1				
						QR						
YR												

AC Induction Motor Performance Data
Record # 100916
Typical performance - not guaranteed values

Winding: 37WGS405-R005	**Type:** 3754M	**Enclosure:** TEFC

Nameplate Data				**460 V, 60 Hz: High Voltage Connection**	
Rated Output (HP)			5	**Full Load Torque**	22.5 LB-FT
Volts			230/460	**Start Configuration**	direct on line
Full Load Amps			14.8/7.4	**Breakdown Torque**	86.3 LB-FT
R.P.M.			1165	**Pull-up Torque**	46.4 LB-FT
Hz	60	**Phase**	3	**Locked-rotor Torque**	58.5 LB-FT
NEMA Design Code	A	**KVA Code**	L	**Starting Current**	57.8 A
Service Factor (S.F.)			1.15	**No-load Current**	4.01 A
NEMA Nom. Eff.	90.2	**Power Factor**	70	**Line-line Res. @ 25ºC**	1.4 Ω
Rating - Duty			40C AMB-CONT	**Temp. Rise @ Rated Load**	55°C
S.F. Amps			16.6/8.3	**Temp. Rise @ S.F. Load**	66°C
				Locked-rotor Power Factor	21.4
				Rotor inertia	1.34 lb-ft²

Load Characteristics 460 V, 60 Hz, 5 HP

% of Rated Load	**25**	**50**	**75**	**100**	**125**	**150**	**S.F.**
Power Factor	31	51	63	70	73	76	72
Efficiency	85.5	89.9	91	90.3	89.7	88.1	89.9
Speed	1191	1184	1175	1166	1156	1145	1160
Line amperes	4.32	5.12	6.16	7.44	8.88	10.5	8.3

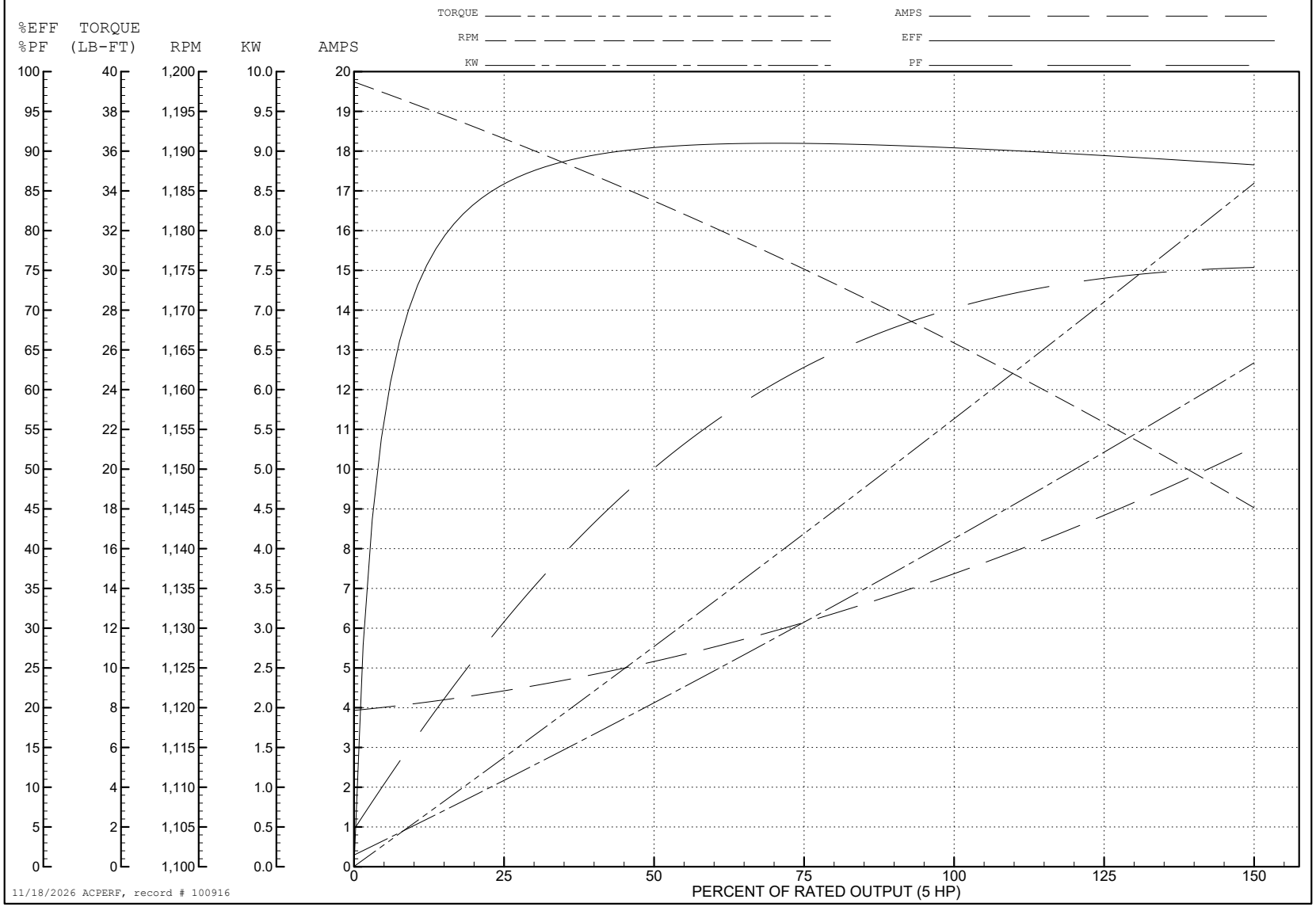
ABB Motors and Mechanical Inc.

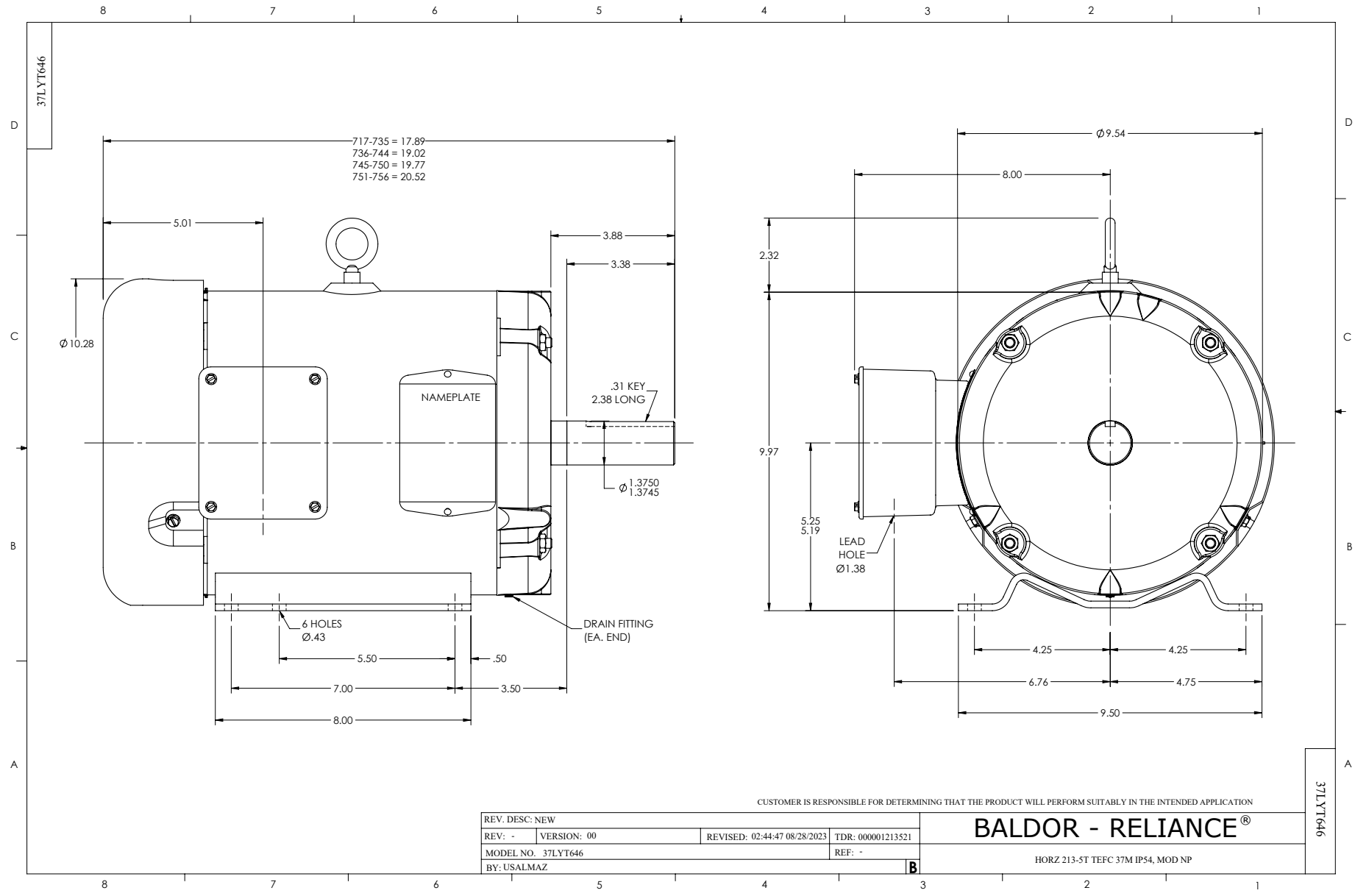
WINDING # 37WGS405

5 HP 3 PH 60 HZ 1165 RPM 460 V 3754M

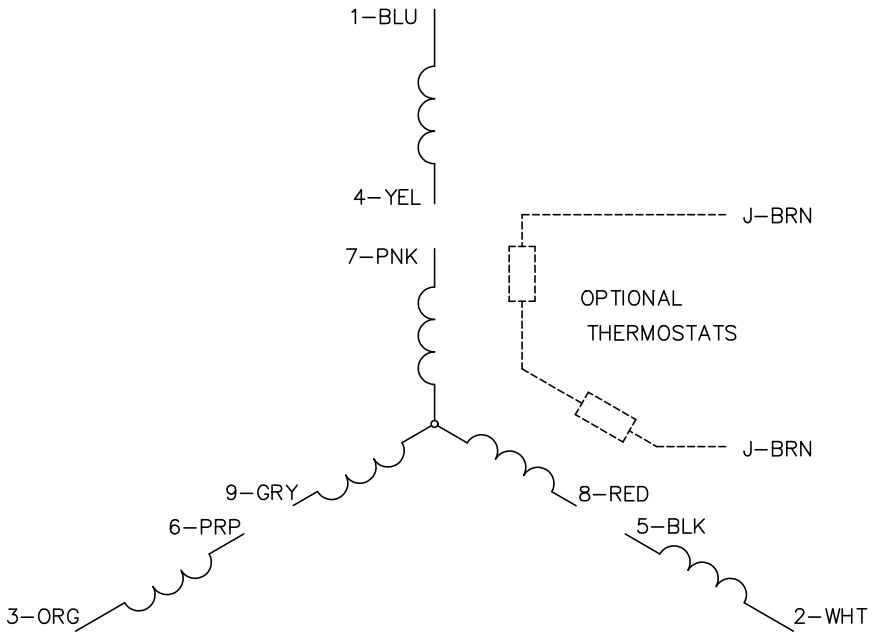
Typical performance - not guaranteed values.

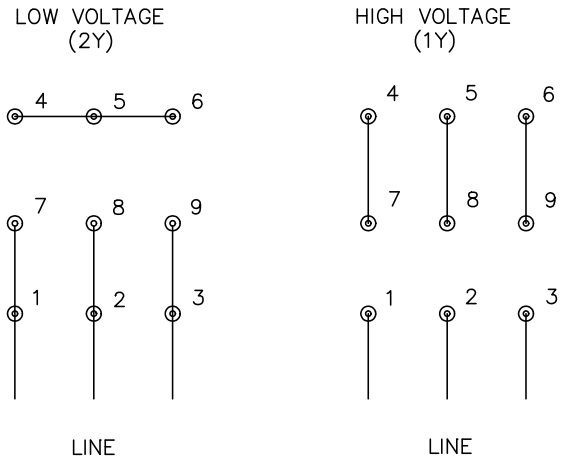
TORQUES(LB-FT): PO=86.3 PU=46.4 LR=58.5 LRA=57.8




37LYT646
717-735 = 17.89
736-744 = 19.02
745-750 = 19.77
751-756 = 20.52
5.01
3.88
3.38
Ø 10.28
NAMEPLATE
.31 KEY
2.38 LONG
Ø 1.3750
1.3745
6 HOLES
Ø.43
DRAIN FITTING
(EA. END)
5.50
.50
7.00
3.50
8.00
Ø 9.54
8.00
2.32
9.97
5.25
5.19
LEAD
HOLE
Ø1.38
4.25
4.25
6.76
4.75
9.50
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT THE PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION
REV. DESC: NEW
REV: - VERSION: 00 REVISED: 02:44:47 08/28/2023 TDR: 000001213521
MODEL NO. 37LYT646 REF: -
BY: USALMAZ B
BALDOR - RELIANCE®
HORZ 213-5T TEFC 37M IP54, MOD NP
37LYT646

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.

CD0005

REV. DESC: REVISE TO SHOW OPTIONAL COLORS			BALDOR ELECTRIC Co.
REV. LTR: E	BY: JLP	REVISED: 01/19/99 10:15	TDR: 0171435
CD0005		FILE: AAA00005140	MDL: –
		MTL: –	3PH, DV, 9 LEADS