ABB BALDOR RELIANCE

Customer information packet

SPM3709T

7.5HP, 3520RPM, 3PH, 60HZ, 213T, 3728M, TEFC, F
Class - None
Division - Not Applicable

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11/28/2026 6:25:34 AM

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	7.500 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	3600 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	18.000 A @ 230.0 V
	9.000 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	9.0 a
Insulation Class	F

Part Detail

Revision	A
Type	AC
Mech. spec.	37T646
Base	
Status	PRD/A
Elec. spec.	37WGL869
Layout	37LYT646
Eff. date	05-03-2024
CD Diagram	CD0005
Poles	02
Leads	9#14
Proprietary	False
Created date	09-05-2023

Inverter Code	Inverter Ready
KVA Code	J
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	No Locked Bearing
Max Speed	5400 rpm
Motor Lead Quantity/Wire Size	9 @ 14 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3728M
Mounting Arrangement	F1
Number of Poles	2
Overall Length	17.89 IN
Power Factor	86
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	3520 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 #	SPM3709T			**WGT**	121	**LBS**						
SPEC	37T646L869			**ENCL**	TEFC							
SER #				**CC**	010A	**IP**	54					
HP	7.5			**MAG CUR**	7/3.5							
VOLTS	230/460					**NEMA NOM. EFF**	90.2					
AMPS	18/9					**PF**	86					
RATING	40C AMB-CONT											
RPM	3520				**MAX RPM**	5400						
FRAME	213T	**HZ**	60	**CODE**	J	**CLASS**	F					
SER.F.	1.15	**SF AMP**	20/10			**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**	0.255	**CT**	6	**TO**	60		10:1				
ID LOGO	**SL HZ**	1.3	**VT**	3	**TO**	60		20:1				
						QR						
YR												

AC Induction Motor Performance Data
Record # 100959
Typical performance - not guaranteed values

Winding: 37WGL869-R011	**Type:** 3728M	**Enclosure:** TEFC

Nameplate Data				**460 V, 60 Hz: High Voltage Connection**	
Rated Output (HP)			7.5	**Full Load Torque**	11.2 LB-FT
Volts			230/460	**Start Configuration**	direct on line
Full Load Amps			18/9	**Breakdown Torque**	40.3 LB-FT
R.P.M.			3520	**Pull-up Torque**	19.7 LB-FT
Hz	60	**Phase**	3	**Locked-rotor Torque**	21.8 LB-FT
NEMA Design Code	A	**KVA Code**	J	**Starting Current**	68.4 A
Service Factor (S.F.)			1.15	**No-load Current**	3.52 A
NEMA Nom. Eff.	90.2	**Power Factor**	86	**Line-line Res. @ 25ºC**	1.16 Ω
Rating - Duty			40C AMB-CONT	**Temp. Rise @ Rated Load**	50°C
S.F. Amps			20/10	**Temp. Rise @ S.F. Load**	61°C
				Locked-rotor Power Factor	33.7
				Rotor inertia	0.255 lb-ft²

Load Characteristics 460 V, 60 Hz, 7.5 HP

% of Rated Load	**25**	**50**	**75**	**100**	**125**	**150**	**S.F.**
Power Factor	49	71	81	86	88	89	87
Efficiency	87.4	91.5	92.1	91.6	90.8	89.4	91.1
Speed	3580	3560	3540	3518	3494	3468	3504
Line amperes	4.1	5.4	7.06	8.96	11	13.2	10.2

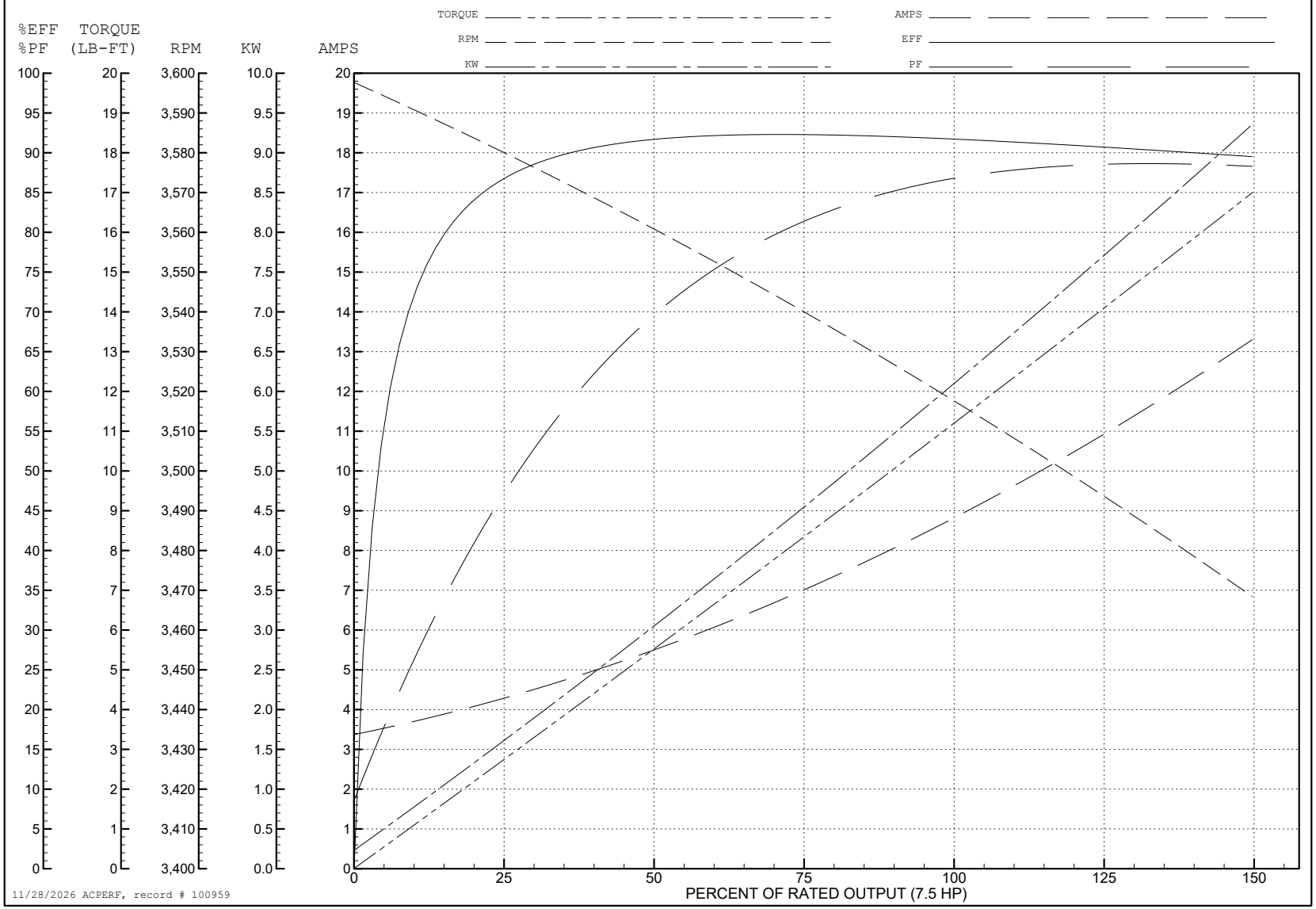
ABB Motors and Mechanical Inc.

WINDING # 37WGL869

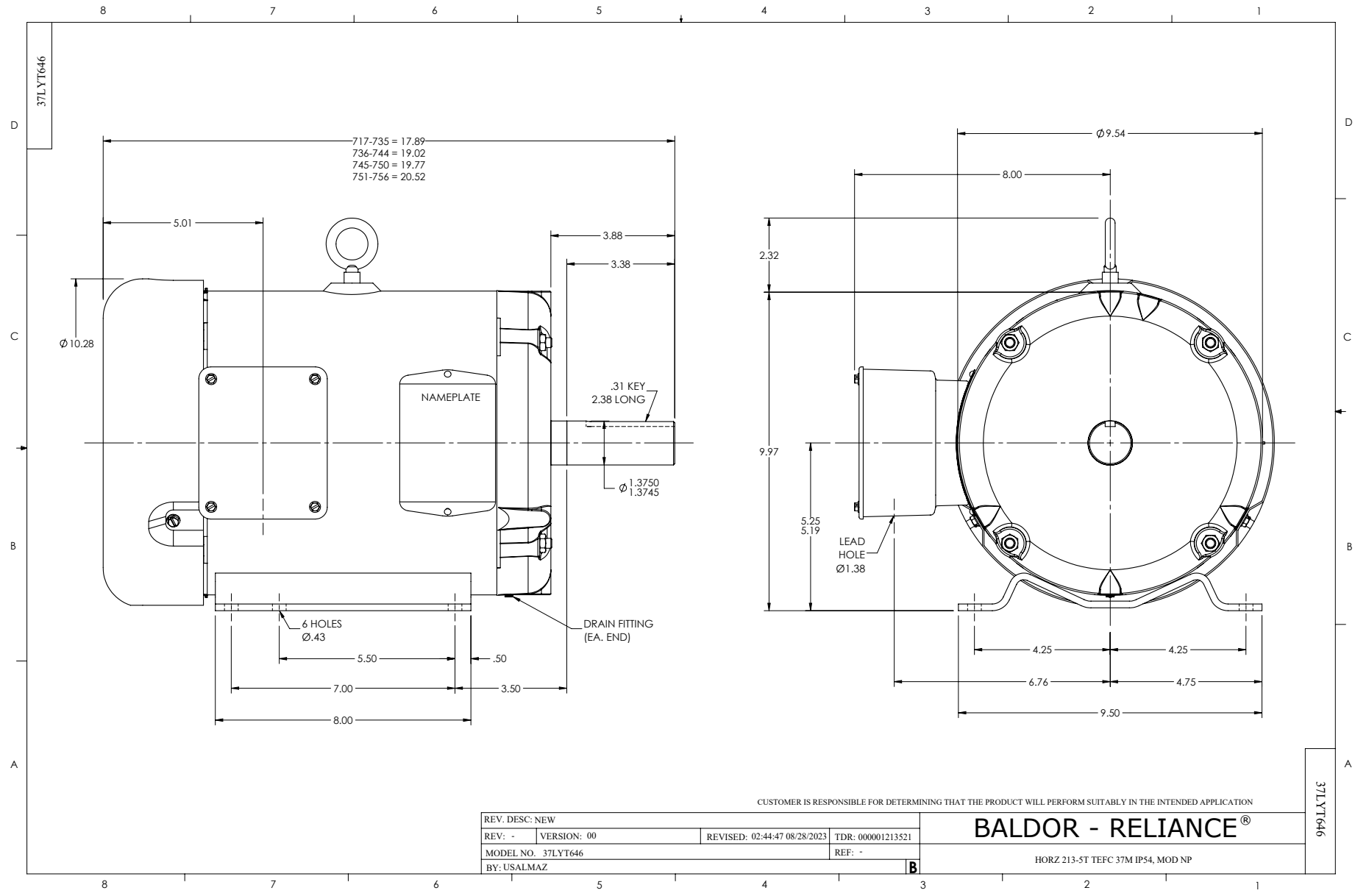
7.5 HP 3 PH 60 HZ 3520 RPM 460 V 3728M

Typical performance - not guaranteed values.

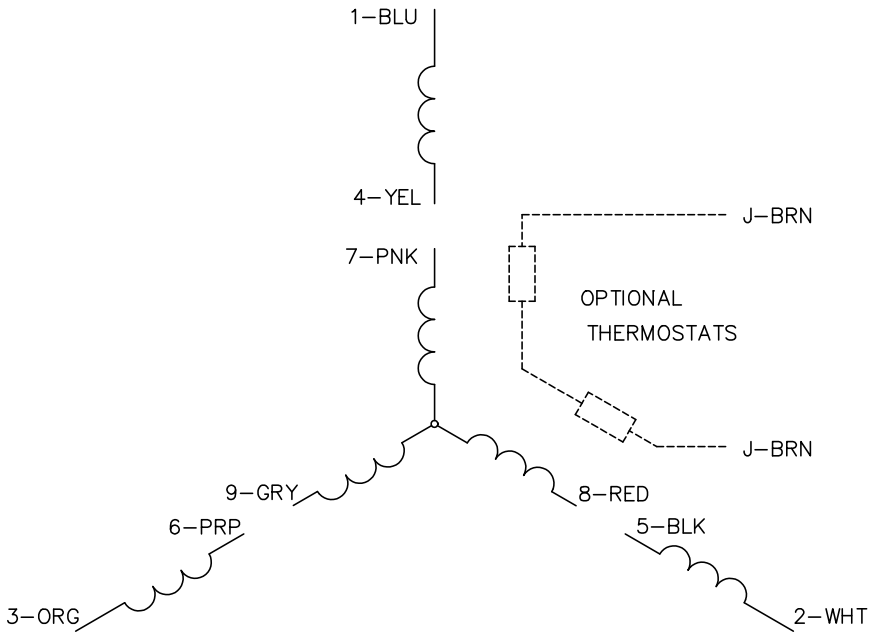
TORQUES(LB-FT): PO=40.3 PU=19.7 LR=21.8 LRA=68.4

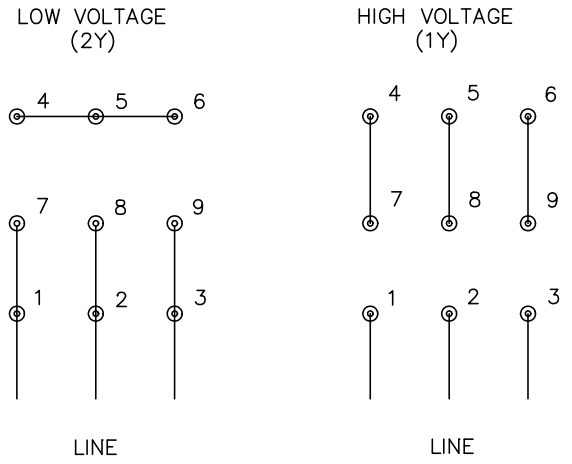


11/28/2026 ACPERF, record # 100959


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