

ABB BALDOR RELIANCE III

Customer information packet

SPM3704T

3HP, 1165RPM, 3PH, 60HZ, 213T, 3740M, TEFC, F1

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	230.0 V @ 60 HZ 460.0 V @ 60 HZ
Agency Approvals	NEMA PREMIUM 4 WEEE
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	4.500 A @ 460.0 V 9.000 A @ 230.0 V 9.800 A @ 208.0 V
Design Code	B
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	4.5 a

Part Detail

Revision	A
Type	AC
Mech. spec.	37T646
Base	
Status	PRD/A
Elec. spec.	37WGT976
Layout	37LYT646
Eff. date	05-03-2024
CD Diagram	CD0005
Poles	06
Leads	9#14
Proprietary	False
Created date	09-05-2023

Insulation Class	F
Inverter Code	Inverter Ready
KVA Code	K
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	3740M
Mounting Arrangement	F1
Number of Poles	6
Overall Length	19.02 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 #	SPM3704T					WGT	127	LBS					
SPEC	37T646T976					ENCL	TEFC						
SER #						CC	010A	IP	54				
HP	3	MAG CUR				5/2.5							
VOLTS	230/460					NEMA NOM. EFF				90.2			
AMPS	9/4.5					PF	70						
RATING	40C AMB-CONT												
RPM	1165					MAX RPM		1800					
FRAME	213T	HZ	60		CODE	K	CLASS		F				
SER.F.	1.15	SF AMP	10/5			PH	3	DES	B				
DE	6307		ODE		6206								
LUBRICATION	POLYREX EM												
ID LOGO	INVERTER TYPE			VPWM		CHP	60	TO		90	1.5:1		
ID LOGO	WK2	0.99	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 # 22165

Typical performance - not guaranteed values

Winding: 37WGT976-R001			Type: 3740M		Enclosure: TEFC		
Nameplate Data				460 V, 60 Hz: High Voltage Connection			
Rated Output (HP)		3		Full Load Torque		13.48 LB-FT	
Volts		230/460		Start Configuration		direct on line	
Full Load Amps		9.0/4.5		Breakdown Torque		48.19 LB-FT	
R.P.M.		1165		Pull-up Torque		32.33 LB-FT	
Hz	60	Phase	3	Locked-rotor Torque		39.06 LB-FT	
NEMA Design Code		A	KVA Code	K		Starting Current	33.81 A
Service Factor (S.F.)		1.15		No-load Current		2.48 A	
NEMA Nom. Eff.		90.2	Power Factor	70	Line-line Res. @ 25°C		2.44 Ω
Rating - Duty		40C		AMB-CONT		Temp. Rise @ Rated Load	34°C
S.F. Amps						Temp. Rise @ S.F. Load	40°C
						Locked-rotor Power Factor	22.4
						Rotor inertia	0.995 LB-FT2

Load Characteristics 460 V, 60 Hz, 3 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	32	50	62	69	73	76	72
Efficiency	81.8	88.7	90.4	90.2	89.6	87.7	89.7
Speed	1191	1184	1177	1170	1160	1150	1163
Line amperes	2.69	3.14	3.77	4.5	5.36	6.34	4.99

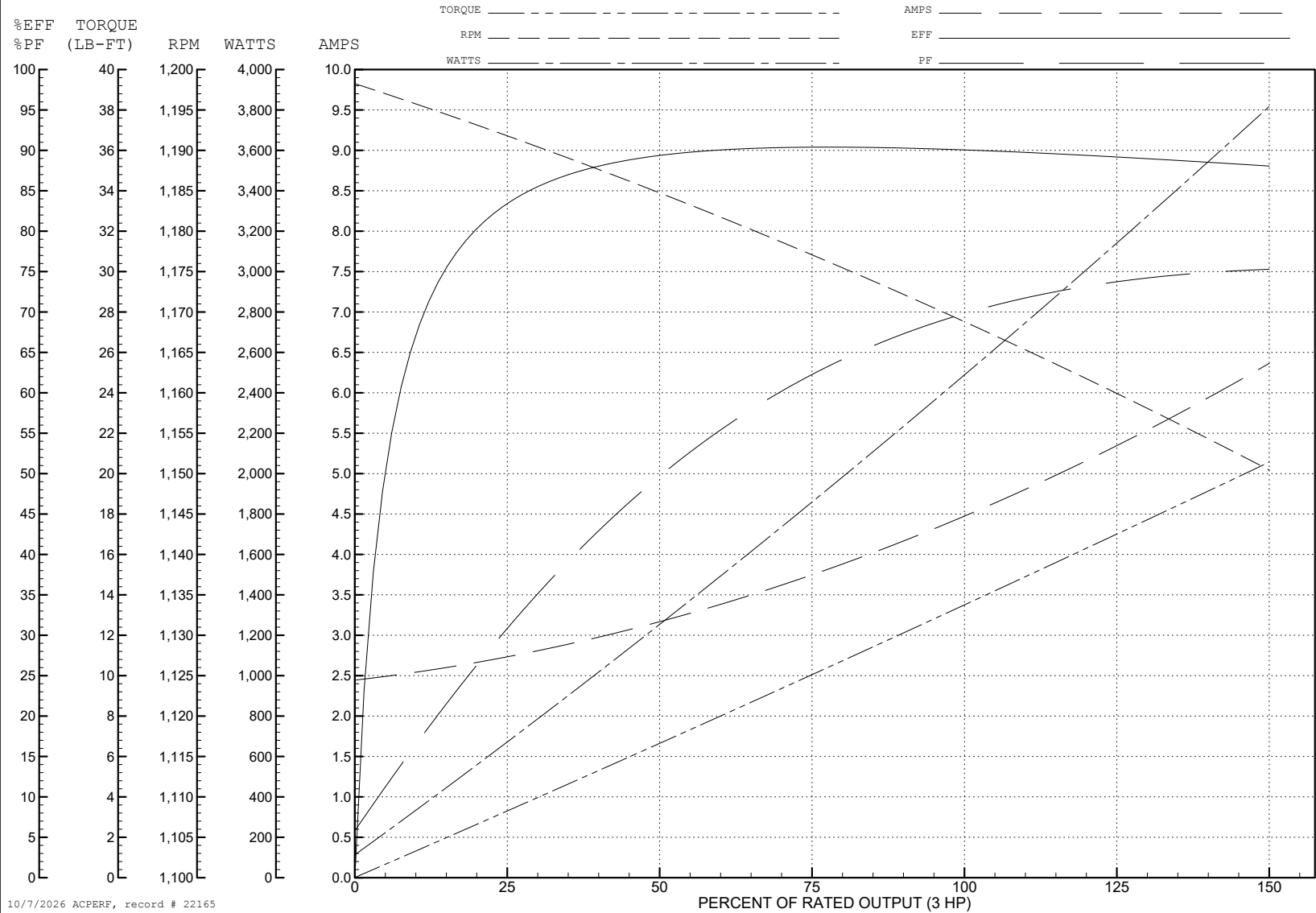
ABB Motors and Mechanical Inc.

WINDING # 37WGT976

Typical performance - not guaranteed values.

3 HP 3 PH 60 HZ 1165 RPM 460 V 3740M

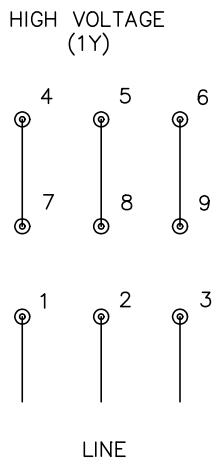
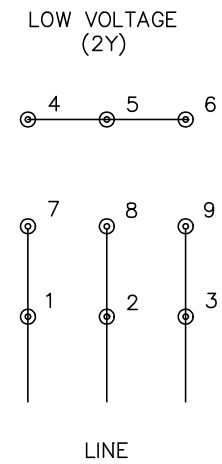
TORQUES (LB-FT) : PO=48.19 PU=32.33 LR=39.06 LRA=33.81



REV. DESC: NEW			
REV: -	VERSION: 00	REVISED: 02:44:47 08/28/2023	TDR: 00000121352
MODEL NO. 37LYT646			REF: -
BY: USALMAZ			

HORZ 213-5T TEFC 37M IP54, MOD NP

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.

REV. DESC: REVISE TO SHOW OPTIONAL COLORS			
REV. LTR: E	BY: JLP	REVISED: 01/19/99 10:15	TDR: 0171435
900000		FILE: AAA00005140	MDL: -
		MTL: -	

BALDOR ELECTRIC Co.

3PH, DV, 9 LEADS

CD0005