

ABB BALDOR RELIANCE III

Customer information packet

SPM3708T

5HP, 1165RPM, 3PH, 60HZ, 215T, 3754M, TEFC, F1

Class - None

Division - Not Applicable

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. @ 25°C		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

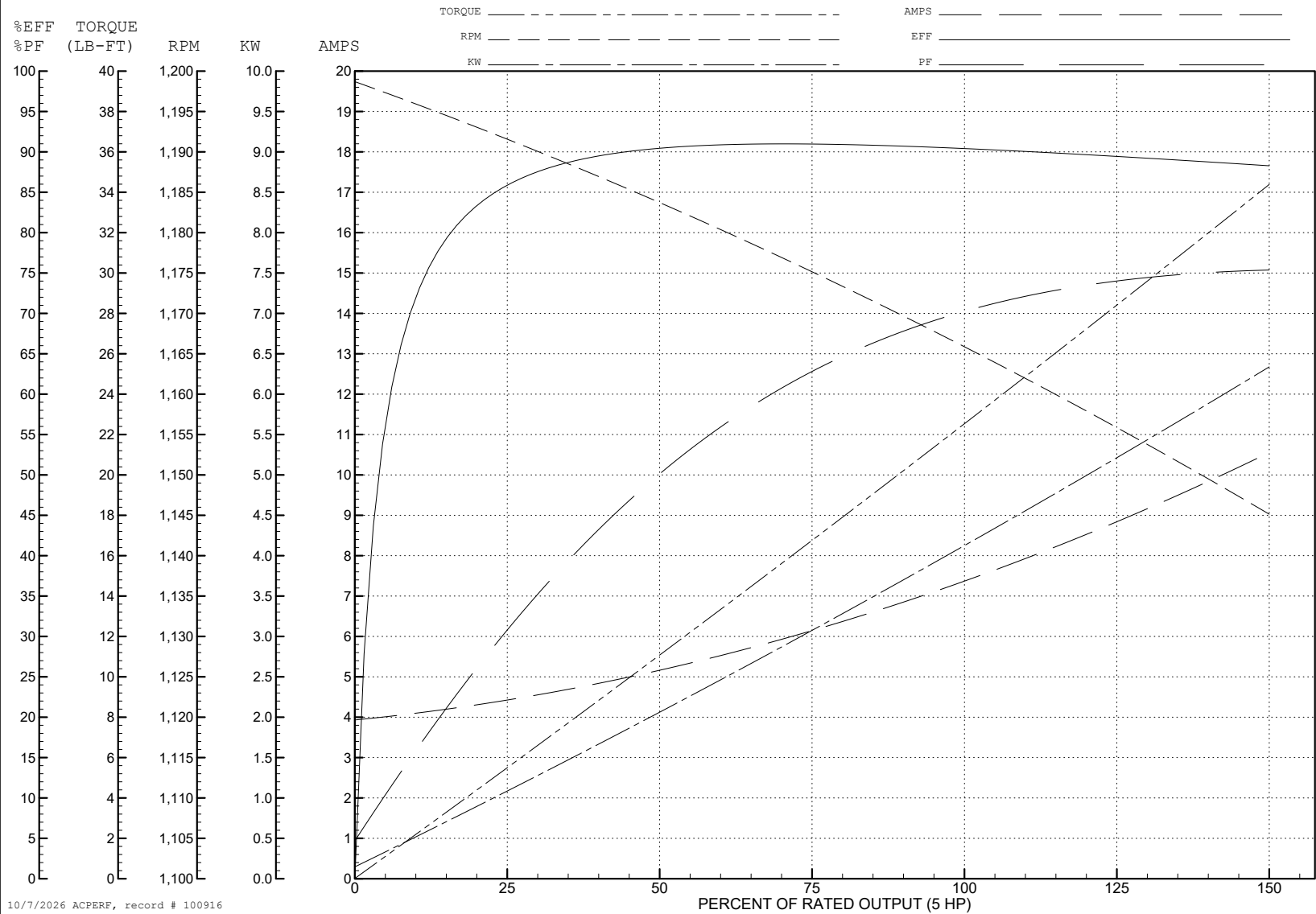
ABB Motors and Mechanical Inc.

WINDING # 37WGS405

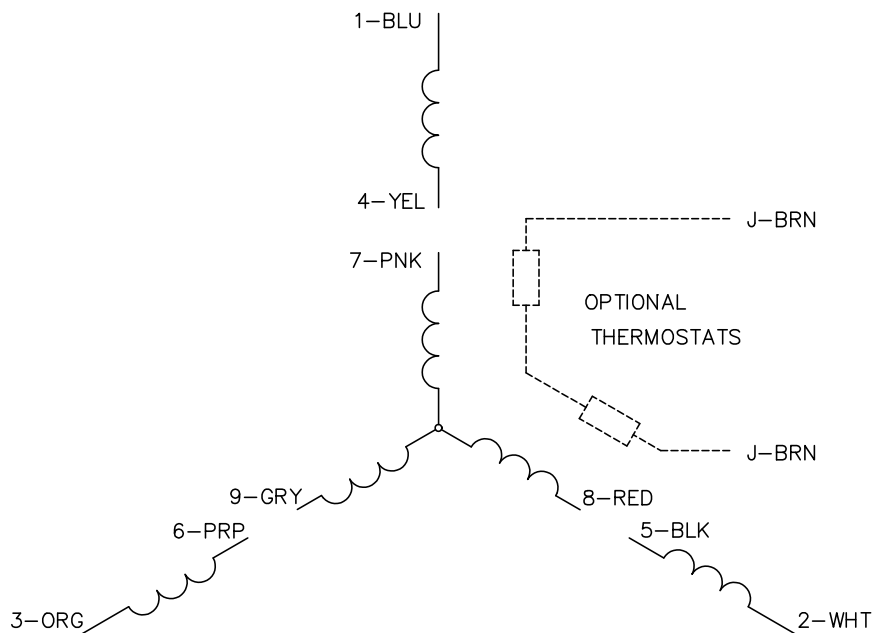
Typical performance - not guaranteed values.

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

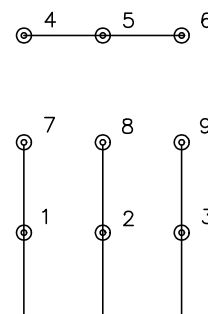
TORQUES (LB-FT): PO=86.3 PU=46.4 LR=58.5 LRA=57.8



CD0005

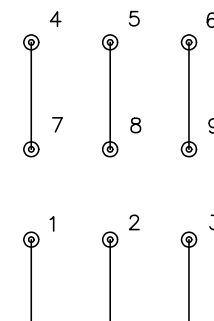


LOW VOLTAGE
(2Y)



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.

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