

ABB BALDOR RELIANCE III

Customer information packet

GNEM3309T

5HP//3.7KW, 1160//955RPM, 3PH, 60//50HZ, 215

Class - None

Division - Not Applicable

Specifications

Enclosure	OPSB
Frame	215T
Frame Material	Steel
Frequency	50.00 Hz 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 3.700 KW @ 50 HZ
Phase	3
Synchronous Speed @ Frequency	1200 RPM @ 60 HZ
Voltage @ Frequency	190.0 V @ 50 HZ 208.0 V @ 60 HZ 230.0 V @ 60 HZ 380.0 V @ 50 HZ 460.0 V @ 60 HZ
Agency Approvals	CE WEEE UKCA CURUSEEV IE3 NEMA PREMIUM
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	8.600 A @ 380.0 V 7.400 A @ 460.0 V 17.200 A @ 190.0 V

Part Detail

Revision	C
Type	AC
Mech. spec.	37F614
Base	
Status	PRD/A
Elec. spec.	37WGS521
Layout	37LYF614
Eff. date	05-11-2026
CD Diagram	CD0005
Poles	06
Leads	9#14
Proprietary	False
Created date	09-01-2023

	15.200 A @ 208.0 V
	14.800 A @ 230.0 V
Design Code	A
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	89.5 %
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
Inverter Code	Inverter Duty
KVA Code	K
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	No Locked Bearing
Motor Lead Quantity/Wire Size	9 @ 14 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3744M
Mounting Arrangement	F1
Number of Poles	6
Overall Length	17.45 IN
Power Factor	71
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	1160 rpm 955 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

NP4304L									
CAT.NO.	GNEM3309T								
SPEC.	37F614S521G5								
HP	5HP//3.7KW					PH	3		
VOLTS	208-230/460//190/380								
AMPS	15.2-14.8/7.4//17.2/8.6								
R.P.M. (1/MIN)	1160//955					WT.	63KG		KG
FRAME	215T		HZ	60//50		I.P.	22		
SER.F.	1.15	CODE	K	DES.	A	CLASS	F		
NOM.EFF.	89.5//86.5		% (100%)						
P.F.	71	IC01, 10:1 VT							
RATING	40C AMB-S1 CONT				CC	010A			
DE	6307		ODE	6206					
ENCL	OPSB	SN							
	SFA 15.2-8.6/8.3//20/10								
	IE3-50HZ-88.9(75%),87.8(50%)								
	IE3-60HZ-90.1(75%),89.4(50%)								

AC Induction Motor Performance Data

Record # 100987

Typical performance - not guaranteed values

Winding: 37WGS521-R014		Type: 3744M	Enclosure: OPSB
Nameplate Data		460 V, 60 Hz: High Voltage Connection	
Rated Output (HP)	5	Full Load Torque	22.5 LB-FT
Volts	208-230/460//190/380	Start Configuration	direct on line
Full Load Amps	15.2-14.8/7.4//17.2/8.6	Breakdown Torque	77.9 LB-FT
R.P.M.	1160//955	Pull-up Torque	47.4 LB-FT
Hz	60//50 Phase	Locked-rotor Torque	54.8 LB-FT
NEMA Design Code	A KVA Code	Starting Current	53 A
Service Factor (S.F.)	1.15	No-load Current	3.84 A
NEMA Nom. Eff.	89.5 Power Factor	Line-line Res. @ 25°C	1.7514 Ω
Rating - Duty	40C AMB-CONT	Temp. Rise @ Rated Load	33°C
S.F. Amps	15.2-8.6/8.3//20/10	Temp. Rise @ S.F. Load	41°C
		Locked-rotor Power Factor	22.7
		Rotor inertia	1.09 lb-ft ²

Load Characteristics 460 V, 60 Hz, 5 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	33	53	65	71	74	76	73
Efficiency	84.5	89.4	90.1	89.5	88.3	86.5	88.8
Speed	1191.9	1183.8	1173.7	1164.6	1153.5	1139.2	1158
Line amperes	4.14	4.95	6.08	7.36	8.92	10.7	8.3

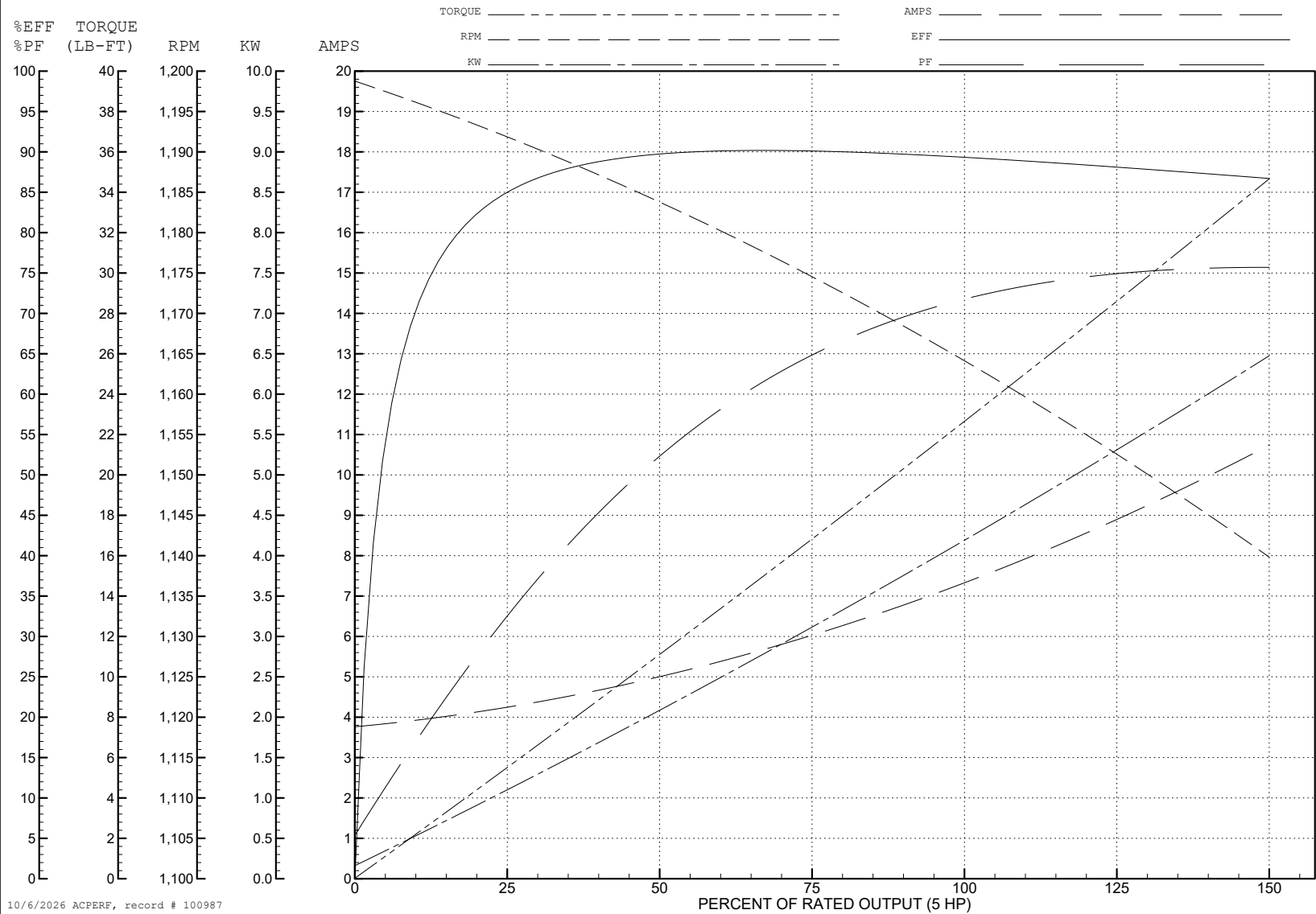
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WINDING # 37WGS521

Typical performance - not guaranteed values.

5 HP 3 PH 60 HZ 1164.6 RPM 460 V 3744M

TORQUES (LB-FT): PO=77.9 PU=47.4 LR=54.8 LRA=53



AC Induction Motor Performance Data

Record # 100988

Typical performance - not guaranteed values

Winding: 37WGS521-R014		Type: 3744M	Enclosure: OPSB	
Nameplate Data		380 V, 50 Hz: High Voltage Connection		
Rated Output (HP)	5	Full Load Torque	27.43 LB-FT	
Volts	208-230/460//190/380	Start Configuration	direct on line	
Full Load Amps	15.2-14.8/7.4//17.2/8.6	Breakdown Torque	75.1 LB-FT	
R.P.M.	1160//955	Pull-up Torque	52.1 LB-FT	
Hz	60//50 Phase	Locked-rotor Torque	60.2 LB-FT	
NEMA Design Code	A KVA Code	Starting Current	51.8 A	
Service Factor (S.F.)	1.15	No-load Current	3.76 A	
NEMA Nom. Eff.	89.5 Power Factor	Line-line Res. @ 25°C	1.74 Ω	
Rating - Duty	40C AMB-CONT	Temp. Rise @ Rated Load	44°C	
S.F. Amps	15.2-8.6/8.3//20/10	Temp. Rise @ S.F. Load	58°C	
		Locked-rotor Power Factor	26.3	
		Rotor inertia	1.09 lb-ft²	

Load Characteristics 380 V, 50 Hz, 5 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	39	60	71	75	76	75	76
Efficiency	86.8	87.8	88.9	87.9	85.5	81.4	86.5
Speed	990	980	968	956	939	915	946
Line amperes	4.17	5.25	6.8	8.61	10.89	13.9	9.98

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WINDING # 37WGS521

Typical performance - not guaranteed values.

5 HP 3 PH 50 HZ 956 RPM 380 V 3744M

TORQUES (LB-FT) : PO=75.1 PU=52.1 LR=60.2 LRA=51.8

