

ABB BALDOR RELIANCE III

Customer information packet

GNEM31157

2/1.5KWHP, 1765//1460RPM, 3PH, 60//50HZ, 56

Class - None

Division - Not Applicable

Specifications

Enclosure	OPSB
Frame	56
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	2.000 HP @ 60 HZ 2.000 HP @ 50 HZ
Phase	3
Synchronous Speed @ Frequency	1800 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	6.400 A @ 190.0 V 5.700 A @ 208.0 V 5.600 A @ 230.0 V

Part Detail

Revision	C
Type	AC
Mech. spec.	35L406
Base	
Status	PRD/A
Elec. spec.	35WGZ806
Layout	35LYL406
Eff. date	04-07-2025
CD Diagram	CD0005
Poles	04
Leads	9#18
Proprietary	False
Created date	08-24-2023

	3.200 A @ 380.0 V
	2.800 A @ 460.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	86.5 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	2.8 a
Insulation Class	F
Inverter Code	Inverter Duty
KVA Code	L
Lifting Lugs	No Lifting Lugs
Locked Bearing Indicator	No Locked Bearing
Motor Lead Quantity/Wire Size	9 @ 18 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3530M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	12.94 IN
Power Factor	77
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	0.625 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible

Shaft Slinger Indicator	No Slinger
Speed	1460 rpm
	1765 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.	GNEM31157								
SPEC.	35L406Z806G1								
HP	2/1.5KW					PH	3		
VOLTS	208-230/460//190/380								
AMPS	5.7-5.6/2.8//6.4/3.2								
R.P.M. (1/MIN)	1765//1460					WT.	19KG		KG
FRAME	56		HZ	60//50		I.P.	22		
SER.F.	1.15	CODE	L	DES.	B	CLASS	F		
NOM.EFF.	86.5//85.3		% (100%)						
P.F.	77	IC01, 10:1 VT							
RATING	40C AMB-S1 CONT				CC	010A			
DE	6205		ODE	6203					
ENCL	OPSB	SN							
	SFA 6.5-6.3/3.15//7.4/3.7								
	IE3-50HZ-86.6(75%),86.0(50%)								
	IE3-60HZ-86.9(75%),85.1(50%)								

AC Induction Motor Performance Data

Record # 100937

Typical performance - not guaranteed values

Winding: 35WGZ806-R024		Type: 3530M	Enclosure: OPEN
Nameplate Data		460 V, 60 Hz: High Voltage Connection	
Rated Output (HP)	2	Full Load Torque	5.94 LB-FT
Volts	208-230/460//190/380	Start Configuration	direct on line
Full Load Amps	5.7-5.6/2.8//6.4/3.2	Breakdown Torque	24.53 LB-FT
R.P.M.	1765//1460	Pull-up Torque	14.6 LB-FT
Hz	60//50 Phase	Locked-rotor Torque	17.66 LB-FT
NEMA Design Code	B KVA Code	Starting Current	25.08 A
Service Factor (S.F.)	1.15	No-load Current	1.76 A
NEMA Nom. Eff.	86.5 Power Factor	Line-line Res. @ 25°C	9.23 Ω
Rating - Duty	40C AMB-CONT	Temp. Rise @ Rated Load	47°C
S.F. Amps	6.5-6.3/3.15//7.4/3.7	Temp. Rise @ S.F. Load	57°C
		Locked-rotor Power Factor	58.4
		Rotor inertia	0.217 lb-ft ²

Load Characteristics 460 V, 60 Hz, 2 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	33	54	67	75	80	84	78
Efficiency	77.3	85	87.3	87.7	87.2	86.1	87.4
Speed	1794	1787	1780	1772	1763	1754	1767
Line amperes	1.84	2.07	2.42	2.85	3.35	3.9	3.15

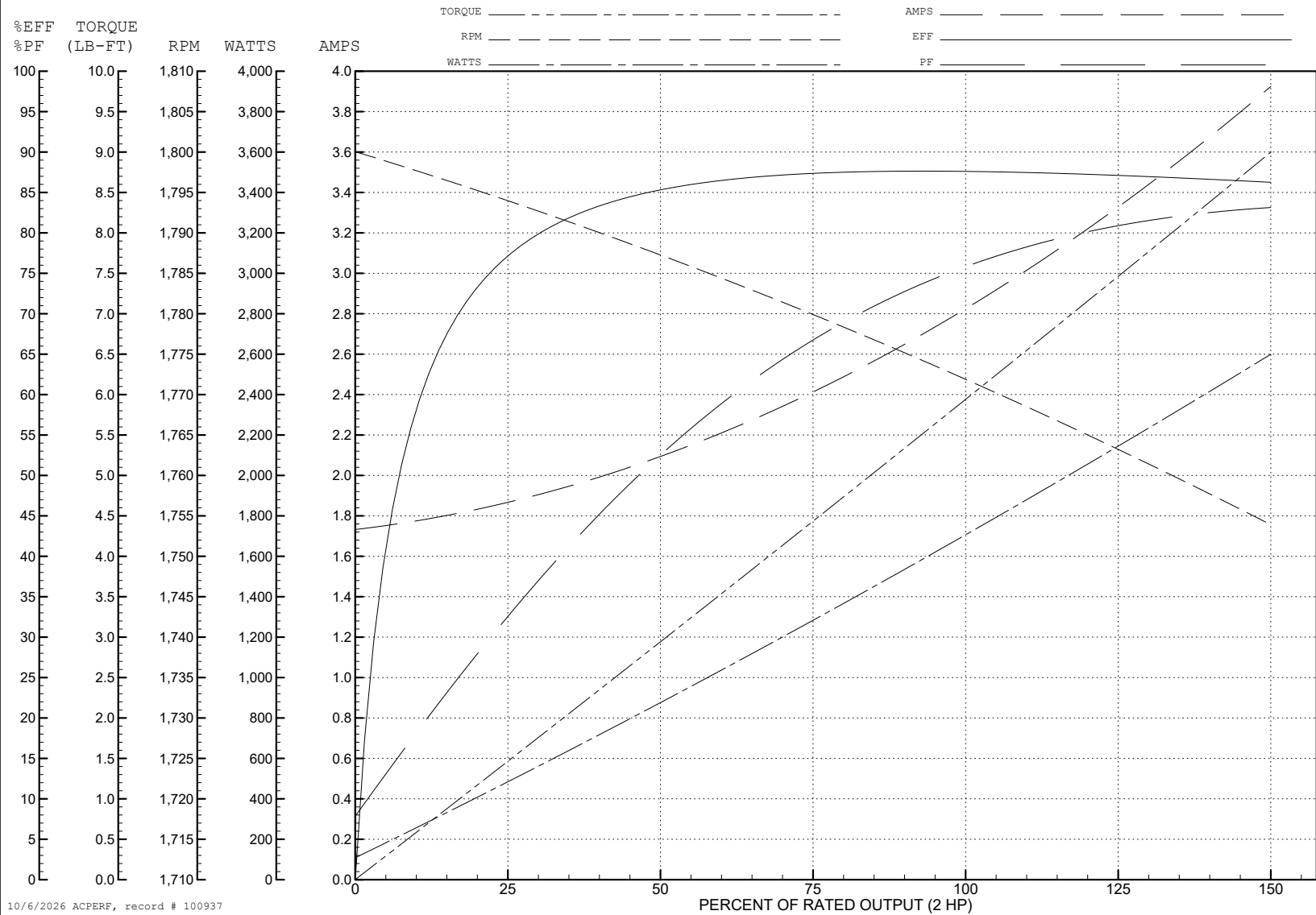
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WINDING # 35WGZ806

Typical performance - not guaranteed values.

2 HP 3 PH 60 HZ 1772 RPM 460 V 3530M

TORQUES (LB-FT): PO=24.53 PU=14.6 LR=17.66 LRA=25.08



AC Induction Motor Performance Data

Record # 100938

Typical performance - not guaranteed values

Winding: 35WZ806-R024		Type: 3530M	Enclosure: OPEN
Nameplate Data		380 V, 50 Hz: High Voltage Connection	
Rated Output (HP)	2	Full Load Torque	7.19 LB-FT
Volts	208-230/460//190/380	Start Configuration	direct on line
Full Load Amps	5.7-5.6/2.8//6.4/3.2	Breakdown Torque	22.3 LB-FT
R.P.M.	1765//1460	Pull-up Torque	14 LB-FT
Hz	60//50 Phase	Locked-rotor Torque	16.9 LB-FT
NEMA Design Code	B KVA Code	Starting Current	23.4 A
Service Factor (S.F.)	1.15	No-load Current	1.61 A
NEMA Nom. Eff.	86.5 Power Factor	Line-line Res. @ 25°C	9.23 Ω
Rating - Duty	40C AMB-CONT	Temp. Rise @ Rated Load	72°C
S.F. Amps	6.5-6.3/3.15//7.4/3.7	Temp. Rise @ S.F. Load	90°C
		Locked-rotor Power Factor	63.9
		Rotor inertia	0.217 lb-ft ²

Load Characteristics 380 V, 50 Hz, 2 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	41	63	76	82	86	88	84
Efficiency	80.6	86	86.6	85.3	83.1	80.4	84
Speed	1491	1482	1472	1461	1450	1435	1454
Line amperes	1.74	2.09	2.59	3.23	4	4.79	3.69

ABB Motors and Mechanical Inc.

WINDING # 35WGZ806

Typical performance - not guaranteed values.

2 HP 3 PH 50 HZ 1461 RPM 380 V 3530M

TORQUES (LB-FT): PO=22.3 PU=14 LR=16.9 LRA=23.4

