

ABB BALDOR RELIANCE III

Customer information packet

GNEM31116

1//.75KWHP, 1770//1470RPM, 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	1.000 HP @ 60 HZ 1.000 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	3.700 A @ 190.0 V 3.400 A @ 230.0 V 3.300 A @ 208.0 V

Part Detail

Revision	C
Type	AC
Mech. spec.	35L406
Base	
Status	PRD/A
Elec. spec.	35WGZ805
Layout	35LYL406
Eff. date	04-07-2025
CD Diagram	CD0005
Poles	04
Leads	9#18 Y
Proprietary	False
Created date	08-23-2023

	1.850 A @ 380.0 V
	1.700 A @ 460.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	85.5 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	1.7 a
Insulation Class	F
Inverter Code	Inverter Duty
KVA Code	N
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	3522M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	11.13 IN
Power Factor	66
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	1470 rpm
	1770 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.	GNEM31116								
SPEC.	35L406Z805G1								
HP	1//.75KW					PH	3		
VOLTS	208-230/460//190/380								
AMPS	3.3-3.4/1.7//3.7/1.85								
R.P.M. (1/MIN)	1770//1470					WT.	17KG		KG
FRAME	56		HZ	60//50		I.P.	22		
SER.F.	1.15	CODE	N	DES.	B	CLASS	F		
NOM.EFF.	85.5//84.0		% (100%)						
P.F.	66	IC01, 10:1 VT							
RATING	40C AMB-S1 CONT				CC	010A			
DE	6205		ODE	6203					
ENCL	OPSB	SN							
	SFA 3.6/1.8//4/2								
	IE3-60HZ-84.5(75%),81.0(50%)								
	IE3-50HZ-84.6(75%),82.3(50%)								

AC Induction Motor Performance Data

Record # 100947

Preliminary Data Sheet

Winding: 35WGZ805-R025		Type: 3522M	Enclosure: OPEN
Nameplate Data		460 V, 60 Hz: High Voltage Connection	
Rated Output (HP)	1	Full Load Torque	2.97 LB-FT
Volts	208-230/460//190/380	Start Configuration	direct on line
Full Load Amps	3.3-3.4/1.7//3.7/1.85	Breakdown Torque	15.85 LB-FT
R.P.M.	1770//1470	Pull-up Torque	9.1 LB-FT
Hz	60//50 Phase	Locked-rotor Torque	10.45 LB-FT
NEMA Design Code	B KVA Code	Starting Current	15.67 A
Service Factor (S.F.)	1.15	No-load Current	1.21 A
NEMA Nom. Eff.	85.5 Power Factor	Line-line Res. @ 25°C	14.1 Ω
Rating - Duty	40C AMB-CONT	Temp. Rise @ Rated Load	24°C
S.F. Amps	3.6/1.8//4/2	Temp. Rise @ S.F. Load	27°C
		Locked-rotor Power Factor	60.1
		Rotor inertia	0.159 lb-ft ²

Load Characteristics 460 V, 60 Hz, 1 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	27	43	56	65	72	76	69
Efficiency	70.7	81	84.4	85.8	85.9	85.5	85.9
Speed	1792	1785	1778	1771	1763	1755	1766
Line amperes	1.23	1.34	1.49	1.68	1.89	2.15	1.81

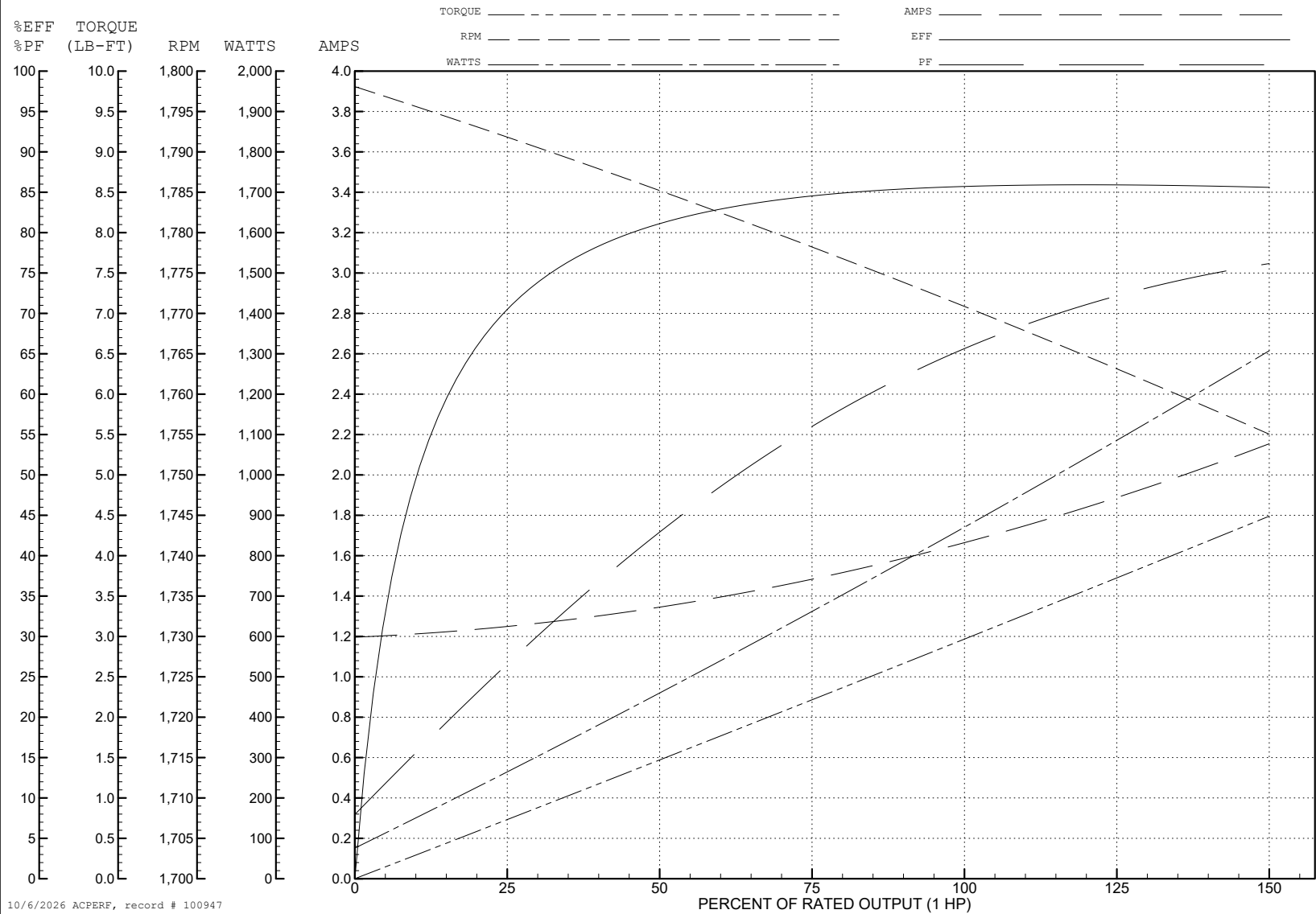
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WINDING # 35WGZ805

Typical performance - not guaranteed values.

1 HP 3 PH 60 HZ 1771 RPM 460 V 3522M

TORQUES (LB-FT): PO=15.85 PU=9.1 LR=10.45 LRA=15.67



10/6/2026 ACPERF, record # 100947

AC Induction Motor Performance Data

Record # 100948

Preliminary Data Sheet

Winding: 35WZ805-R025		Type: 3522M	Enclosure: OPEN
Nameplate Data		380 V, 50 Hz: High Voltage Connection	
Rated Output (HP)	1	Full Load Torque	3.58 LB-FT
Volts	208-230/460//190/380	Start Configuration	direct on line
Full Load Amps	3.3-3.4/1.7//3.7/1.85	Breakdown Torque	14.3 LB-FT
R.P.M.	1770//1470	Pull-up Torque	8.7 LB-FT
Hz	60//50 Phase	Locked-rotor Torque	10 LB-FT
NEMA Design Code	B KVA Code	Starting Current	14.6 A
Service Factor (S.F.)	1.15	No-load Current	1.19 A
NEMA Nom. Eff.	85.5 Power Factor	Line-line Res. @ 25°C	14.1 Ω
Rating - Duty	40C AMB-CONT	Temp. Rise @ Rated Load	28°C
S.F. Amps	3.6/1.8//4/2	Temp. Rise @ S.F. Load	33°C
		Locked-rotor Power Factor	65.6
		Rotor inertia	0.159 lb-ft ²

Load Characteristics 380 V, 50 Hz, 1 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	32	50	63	72	79	81	69
Efficiency	74.5	83.1	85.1	85.7	84.8	83.6	85.9
Speed	1491	1484	1476	1467	1458	1448	1766
Line amperes	1.22	1.37	1.57	1.84	2.13	2.49	1.81

ABB Motors and Mechanical Inc.

WINDING # 35WGZ805

Typical performance - not guaranteed values.

1 HP 3 PH 50 HZ 1467 RPM 380 V 3522M

TORQUES (LB-FT): PO=14.3 PU=8.7 LR=10 LRA=14.6

