

ABB BALDOR RELIANCE III

Customer information packet

GNEM3710T-G

7.5HP, 1760//1460RPM, 3PH, 60//50HZ, 213T, 37

Class - None

Division - Not Applicable

Specifications

Enclosure	TEFC
Frame	213T
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	7.500 HP @ 50 HZ 7.500 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	460.0 V @ 60 HZ 380.0 V @ 50 HZ 230.0 V @ 60 HZ 208.0 V @ 60 HZ 190.0 V @ 50 HZ
Agency Approvals	CE CSA UR
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	9.800 A @ 460.0 V 22.800 A @ 190.0 V 20.400 A @ 208.0 V 19.600 A @ 230.0 V 11.400 A @ 380.0 V
Design Code	A

Part Detail

Revision	K
Type	AC
Mech. spec.	37J838
Base	
Status	PRD/A
Elec. spec.	37WGZ616
Layout	37LYJ838
Eff. date	09-23-2024
CD Diagram	CD0005
Poles	04
Leads	9#14
Proprietary	False
Created date	02-26-2017

Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	91.7 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Face Code	Standard
Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	9.8 a
Insulation Class	H
Inverter Code	Inverter Ready
KVA Code	K
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	9 @ 14 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3742M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	19.01 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	1.375 IN
Shaft Extension Location	Pulley End
Shaft Ground Indicator	Shaft Grounding
Shaft Rotation	Reversible

Shaft Slinger Indicator	No Slinger
Speed	1460 rpm 1760 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.	GNEM3710T-G								
SPEC.	37J838Z616G1								
HP	7.5/5.5KW						PH	3	
VOLTS	208-230/460//190/380								
AMPS	20.4-19.6/9.8//22.8/11.4								
R.P.M. (1/MIN)	1760//1460						WT.	67KG	KG
FRAME	213T		HZ	60//50			I.P.	44	
SER.F.	1.15	CODE	K	DES.	A	CLASS	H		
NOM.EFF.	91.7//89.6		% (100%)						
P.F.	77	IC411, 10:1 VT							
RATING	40C AMB-S1 CONT				CC	010A			
DE	6307		ODE	6206					
ENCL	TEFC	SN							
IE3-50HZ 91.6(75%),91.4(50%)									
IE3-60HZ 92.0(75%),91.0 (50%)									

AC Induction Motor Performance Data

Record # 62727

Typical performance - not guaranteed values

Winding: 06WGX319			Type: 0632M		Enclosure: TEAO			
Nameplate Data			575 V, 60 Hz: Single Voltage Motor					
Rated Output (HP)		3	Full Load Torque		9.052 LB-FT			
Volts		575	Start Configuration		direct on line			
Full Load Amps		3.3	Breakdown Torque		34.7 LB-FT			
R.P.M.		1755	Pull-up Torque		16.9 LB-FT			
Hz	60	Phase	3	Locked-rotor Torque		21.6 LB-FT		
NEMA Design Code		B	KVA Code	J	Starting Current		24.2 A	
Service Factor (S.F.)		1.15	No-load Current		1.74 A			
NEMA Nom. Eff.		89.5	Power Factor		77	Line-line Res. @ 25°C		6.0388 Ω
Rating - Duty		50C	AMB-CONT		Temp. Rise @ Rated Load		79°C	
S.F. Amps		3.5	Temp. Rise @ S.F. Load		97°C			
			Locked-rotor Power Factor		41.5			

Load Characteristics 575 V, 60 Hz, 3 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	36	57	70	77	80	83	79
Efficiency	84.7	89.4	90.2	89.7	88.6	87	89
Speed	1787.8	1777.4	1765.5	1752.5	1739.1	1722.1	1744
Line amperes	1.88	2.21	2.69	3.28	3.93	4.72	3.67

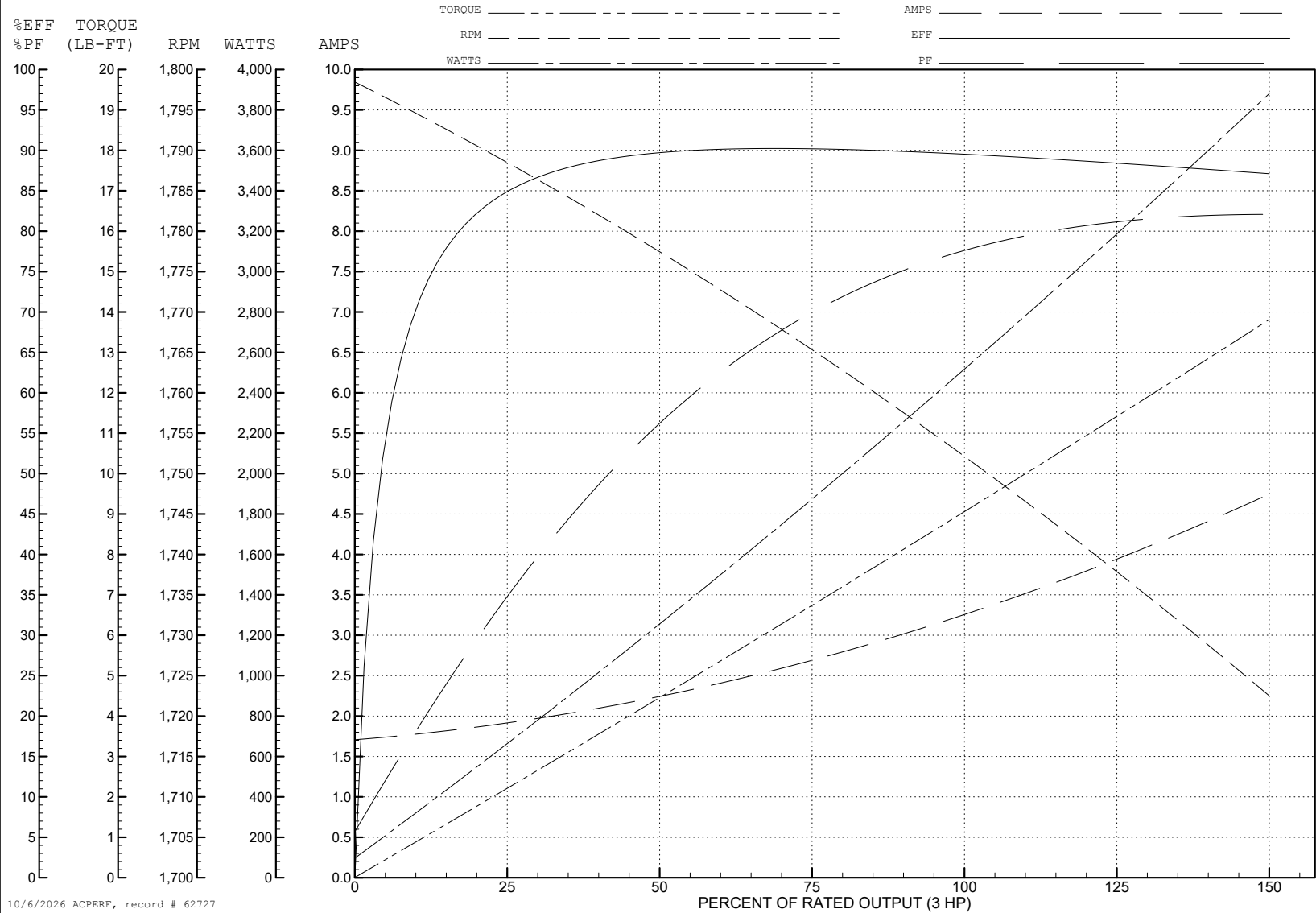
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WINDING # 06WGX319

Typical performance - not guaranteed values.

3 HP 3 PH 60 HZ 1755 RPM 575 V 0632M

TORQUES (LB-FT): PO=34.7 PU=16.9 LR=21.6 LRA=24.2



AC Induction Motor Performance Data

Record # 62748

Typical performance - not guaranteed values

Winding: 37WGZ616-R002		Type: 3742M	Enclosure: TEFC
Nameplate Data		380 V, 50 Hz: High Voltage Connection	
Rated Output (HP)	7.5	Full Load Torque	26.67 LB-FT
Volts	208-230/460//190/380	Start Configuration	direct on line
Full Load Amps	20.4-19.6/9.8//22.8/11.4	Breakdown Torque	78.35 LB-FT
R.P.M.	1760//1460	Pull-up Torque	39.22 LB-FT
Hz	60//50 Phase	Locked-rotor Torque	51.57 LB-FT
NEMA Design Code	A KVA Code	Starting Current	79.58 A
Service Factor (S.F.)	1.15	No-load Current	4.93 A
NEMA Nom. Eff.	91.7 Power Factor	Line-line Res. @ 25°C	1.21 Ω
Rating - Duty	40C AMB-CONT	Temp. Rise @ Rated Load	50°C
S.F. Amps		Temp. Rise @ S.F. Load	63°C
		Locked-rotor Power Factor	41.5
		Rotor inertia	1.03 LB-FT ²

Load Characteristics 380 V, 50 Hz, 7.5 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	43	65	76	81	84	85	83
Efficiency	88.8	91.9	92.1	91.3	90.1	88.6	90.6
Speed	1493	1486	1478	1469	1459	1449	1463
Line amperes	5.58	7.06	9.04	11.4	14.08	16.93	13

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WINDING # 37WGZ616

Typical performance - not guaranteed values.

7.5 HP 3 PH 50 HZ 1469 RPM 380 V 3742M

TORQUES (LB-FT) : PO=78.35 PU=39.22 LR=51.57 LRA=79.58

