

ABB BALDOR RELIANCE III

Customer information packet

FDEM3615T-5

5HP, 1750RPM, 3PH, 60HZ, 184T, 3642M, TEFC, F1

Class - None

Division - Not Applicable

Specifications

Enclosure	TEFC
Frame	184T
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	1800 RPM @ 60 HZ
Voltage @ Frequency	575.0 V @ 60 HZ
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	5.300 A @ 575.0 V
Design Code	B
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	5.3 a
Insulation Class	F
Inverter Code	Inverter Ready
KVA Code	J
Lifting Lugs	No Lifting Lugs
Locked Bearing Indicator	No Locked Bearing

Part Detail

Revision	B
Type	AC
Mech. spec.	36Q173
Base	
Status	PRD/A
Elec. spec.	36WGS551
Layout	36LYQ173
Eff. date	11-27-2024
CD Diagram	CD0006
Poles	04
Leads	3#16
Proprietary	False
Created date	05-24-2018

Motor Lead Quantity/Wire Size	3 @ 16 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3642M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	18.05 IN
Power Factor	78
Product Family	General Purpose
Pulley End Bearing Type	Sealed Bearing
Pulley Face Code	Standard
Pulley Shaft Indicator	Standard
Rodent Screen	None
RoHS Status	ROHS COMPLIANT
Service Factor	1.15
Shaft Diameter	1.125 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	Shaft Slinger
Speed	1750 rpm
Speed Code	Single Speed
Starting Method	Direct on line
Thermal Device - Winding	None
Vibration Sensor Indicator	No Vibration Sensor
Winding Thermal 1	None
Winding Thermal 2	None

Nameplate

NP3126L									
CAT.NO.	FDEM3615T-5								
SPEC.	36Q173S551G3								
HP	5								
VOLTS	575								
AMP	5.3								
RPM	1750								
FRAME	184T		HZ	60			PH	3	
SER.F.	1.15	CODE	J	DES	B	CL	F		
NEMA-NOM-EFF	89.5	PF	78						
RATING	40C AMB-CONT								
CC	010A								
DE	6206		ODE	6205					
ENCL	TEFC	SN							
	-								

AC Induction Motor Performance Data

Record # 32022

Typical performance - not guaranteed values

Winding: 36WGS551-R001			Type: 3642M		Enclosure: TEFC		
Nameplate Data			575 V, 60 Hz: Single Voltage Motor				
Rated Output (HP)		5	Full Load Torque		14.9 LB-FT		
Volts		575	Start Configuration		direct on line		
Full Load Amps		5.3	Breakdown Torque		52.2 LB-FT		
R.P.M.		1750	Pull-up Torque		31.6 LB-FT		
Hz	60	Phase	3	Locked-rotor Torque		35 LB-FT	
NEMA Design Code		B	KVA Code	J	Starting Current		39.3 A
Service Factor (S.F.)		1.15	No-load Current		2.6 A		
NEMA Nom. Eff.		89.5	Power Factor	78	Line-line Res. @ 25°C		3.57 Ω
Rating - Duty		40C AMB-CONT		Temp. Rise @ Rated Load		77°C	
S.F. Amps				Temp. Rise @ S.F. Load		94°C	
				Locked-rotor Power Factor		40	
				Rotor inertia		0.391 LB-FT2	

Load Characteristics 575 V, 60 Hz, 5 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	38	60	72	78	83	83	81
Efficiency	84.8	89.6	90.5	89.5	88.5	86.9	88.9
Speed	1789	1776	1762	1750	1733	1714	1740
Line amperes	2.85	3.45	4.35	5.33	6.36	7.72	5.95

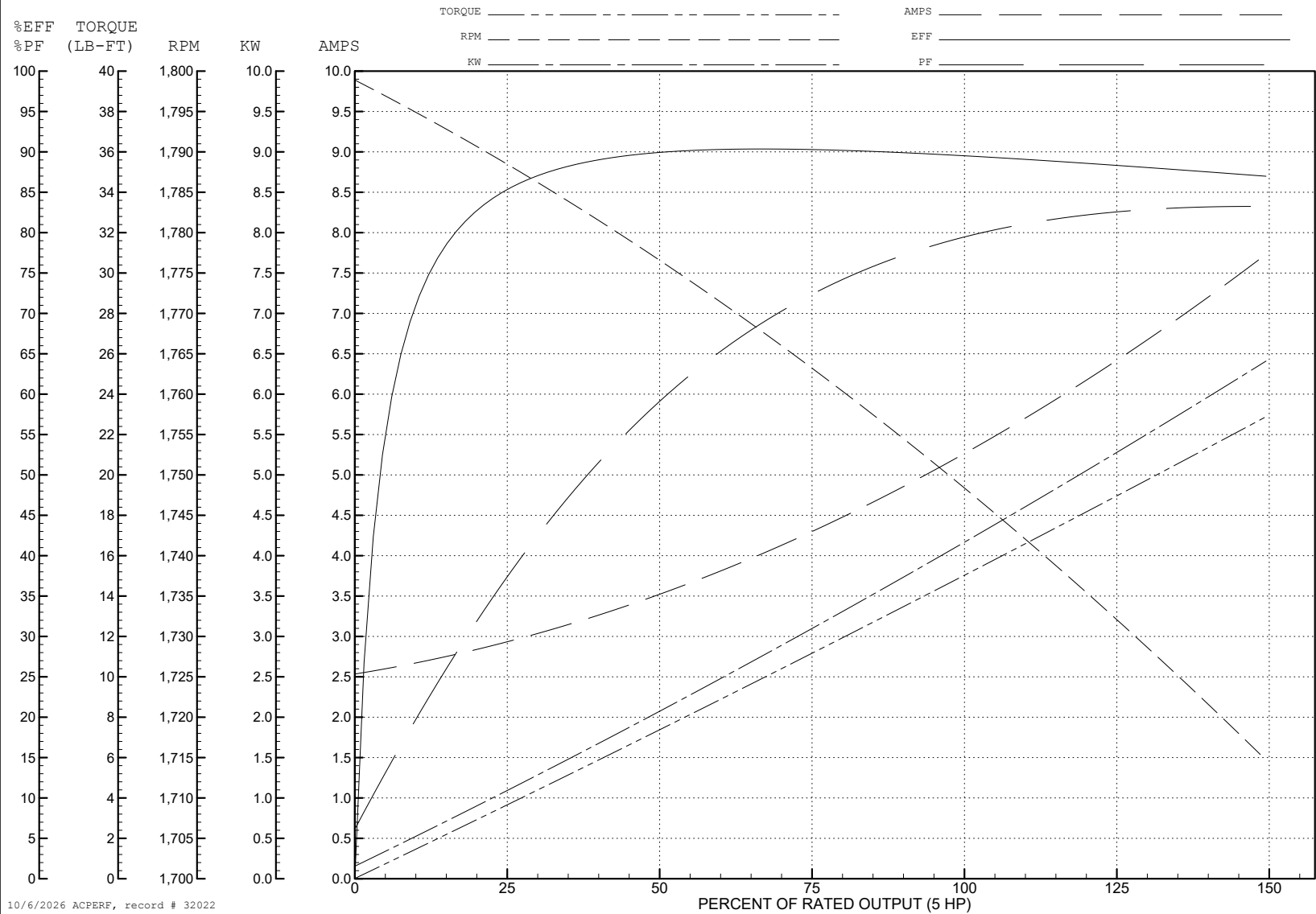
ABB Motors and Mechanical Inc.

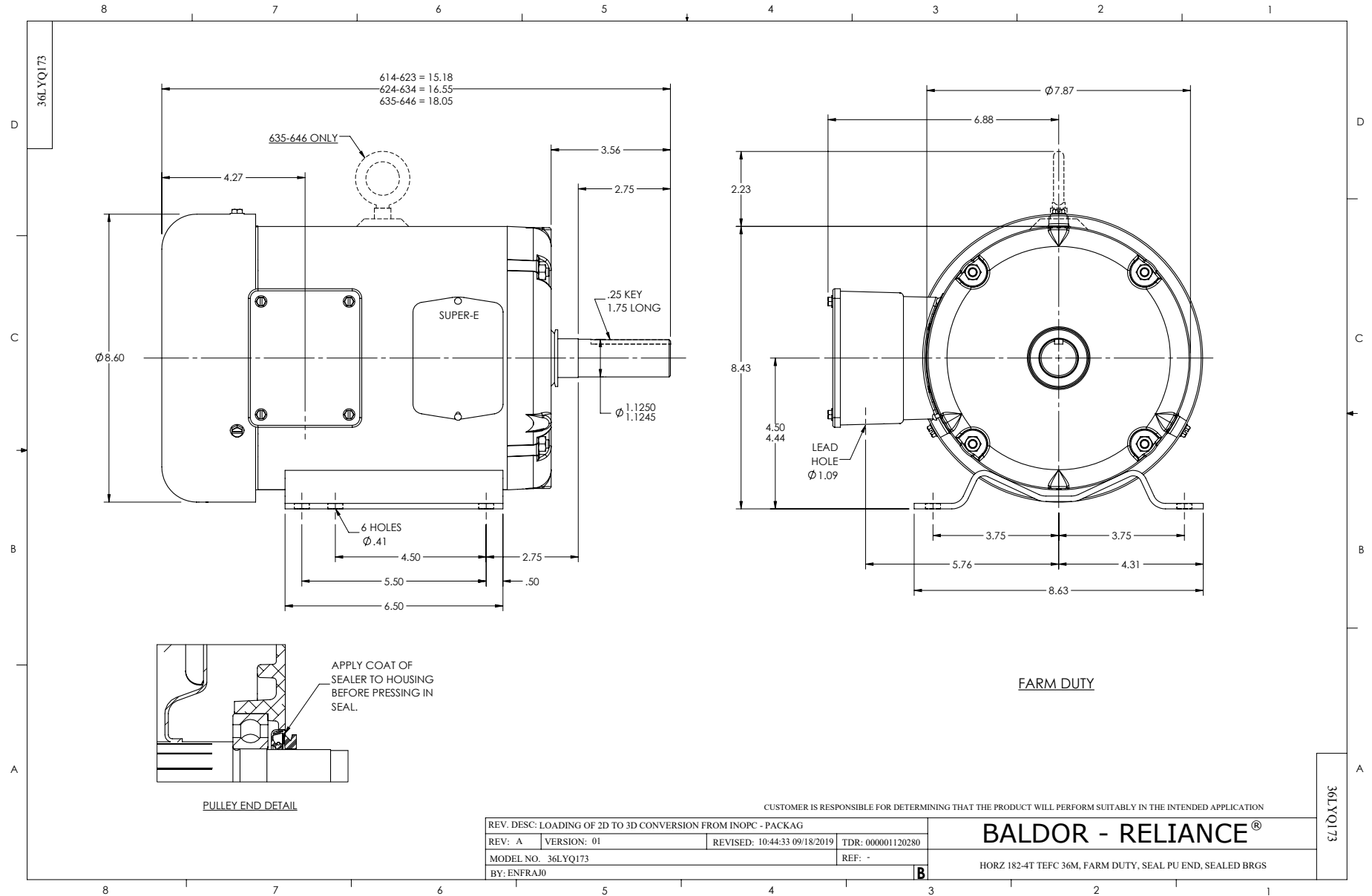
WINDING # 36WGS551

Typical performance - not guaranteed values.

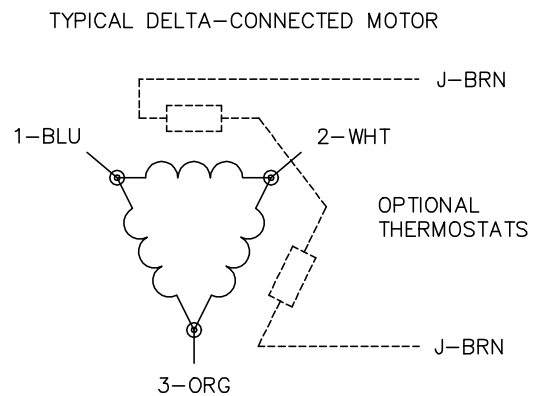
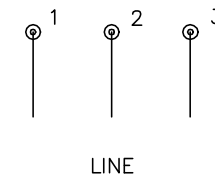
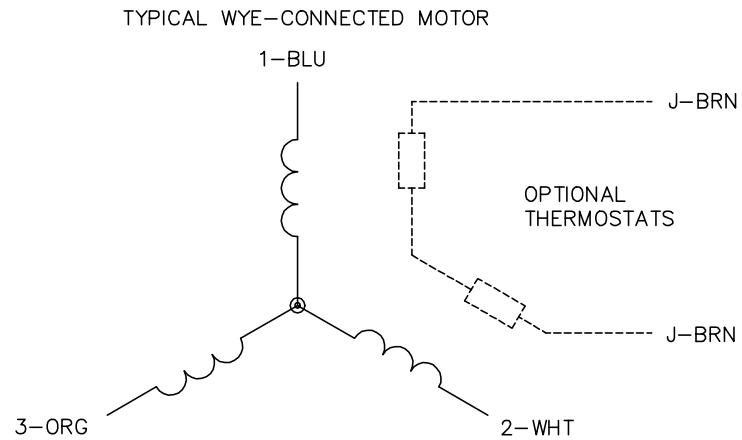
5 HP 3 PH 60 HZ 1750 RPM 575 V 3642M

TORQUES (LB-FT) : PO=52.2 PU=31.6 LR=35 LRA=39.3





CD0006


NOTES:

1. THREE LEAD MOTOR MAY BE EITHER WYE CONNECTED OR DELTA CONNECTED.
2. INTERCHANGE ANY TWO LINE LEADS TO REVERSE ROTATION.
3. OPTIONAL THERMOSTATS ARE PROVIDED WHEN SPECIFIED.
4. ACTUAL NUMBER OF INTERNAL PARALLEL CIRCUITS MAY VARY.
5. LEAD COLORS ARE OPTIONAL. LEADS MUST BE NUMBERED AS SHOWN.

CD0006

REV. DESC: ADD CLASS CONN00000007

REV. LTR: E

VERSION: 01

TDR: 000001099922

FILE: \AAA\00005\141

REVISED: 10:24:49 02/19/2019

BY: ENBRIRO

MTL: -


BALDOR - RELIANCE®

3PH, SV, 3 LEADS, WYE OR DELTA CONNECTED

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