

ABB BALDOR RELIANCE III

Customer information packet

VEM3613T-5

5HP, 3450RPM, 3PH, 60HZ, 184TC, 3630M, TEFC, F1

Class - None

Division - Not Applicable

Specifications

Enclosure	TEFC
Frame	184TC
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	3600 RPM @ 60 HZ
Voltage @ Frequency	575.0 V @ 60 HZ
Agency Approvals	NEMA PREMIUM CURUSEEV NEMA PREMIUM (OLD LOGO)
Ambient Temperature	40 °C
Auxiliary Box	NO AUXILLARY BOX
Auxiliary Box Lead Termination	None
Base Indicator	No Mounting
Bearing Grease Type	Polyrex EM (-20F +300F)
Blower	None
Current @ Voltage	4.700 A @ 575.0 V
Design Code	A
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	88.5 %
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	4.7 a
Insulation Class	F

Part Detail

Revision	R
Type	AC
Mech. spec.	36A003
Base	
Status	PRD/A
Elec. spec.	36WGS505
Layout	36LYA003
Eff. date	05-21-2025
CD Diagram	CD0006
Poles	02
Leads	3#16
Proprietary	False
Created date	04-30-2010

Inverter Code	Inverter Ready
IP Rating	NONE
KVA Code	L
Lifting Lugs	No Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	3 @ 16 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3630M
Mounting Arrangement	F1
Number of Poles	2
Overall Length	16.54 IN
Power Factor	91
Product Family	General Purpose
Pulley End Bearing Type	Ball
Pulley Face Code	C-Face
Pulley Shaft Indicator	Standard
Rodent Screen	None
Service Factor	1.15
Shaft Diameter	1.125 IN
Shaft Extension Location	Pulley End
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	3450 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

NP3441L											
CAT.NO.	VEM3613T-5										
SPEC.	36A003S505G1										
HP	5										
VOLTS	575										
AMP	4.7										
RPM	3450										
FRAME	184TC		HZ	60				PH	3		
SER.F.	1.15	CODE	L	DES	A	CL	F				
NEMA-NOM-EFF	88.5	PF	91								
RATING	40C AMB-CONT										
CC	010A										
DE	6206		ODE	6205							
ENCL	TEFC	SN									
VPWM INVERTER READY											
CT6-60H(10:1)VT3-60H(20:1											

AC Induction Motor Performance Data

Record # 31109

Typical performance - not guaranteed values

Winding: 36WGS505-R001			Type: 3630M		Enclosure: TEFC		
Nameplate Data			575 V, 60 Hz: Single Voltage Motor				
Rated Output (HP)		5	Full Load Torque		7.64 LB-FT		
Volts		575	Start Configuration		direct on line		
Full Load Amps		4.7	Breakdown Torque		33.7 LB-FT		
R.P.M.		3450	Pull-up Torque		23.5 LB-FT		
Hz	60	Phase	3	Locked-rotor Torque		27.5 LB-FT	
NEMA Design Code		A	KVA Code	L	Starting Current		45.7 A
Service Factor (S.F.)		1.15	No-load Current		1.34 A		
NEMA Nom. Eff.		88.5	Power Factor	91	Line-line Res. @ 25°C		3.57 Ω
Rating - Duty		40C AMB-CONT		Temp. Rise @ Rated Load		72°C	
S.F. Amps				Temp. Rise @ S.F. Load		88°C	
				Locked-rotor Power Factor		45	
				Rotor inertia		0.134 LB-FT2	

Load Characteristics 575 V, 60 Hz, 5 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	63	81	88	91	93	93	92
Efficiency	83.2	88.4	89.1	88.5	87	85.7	87.5
Speed	3569	3537	3504	3466	3428	3385	3443
Line amperes	1.79	2.61	3.58	4.68	5.81	7.05	5.36

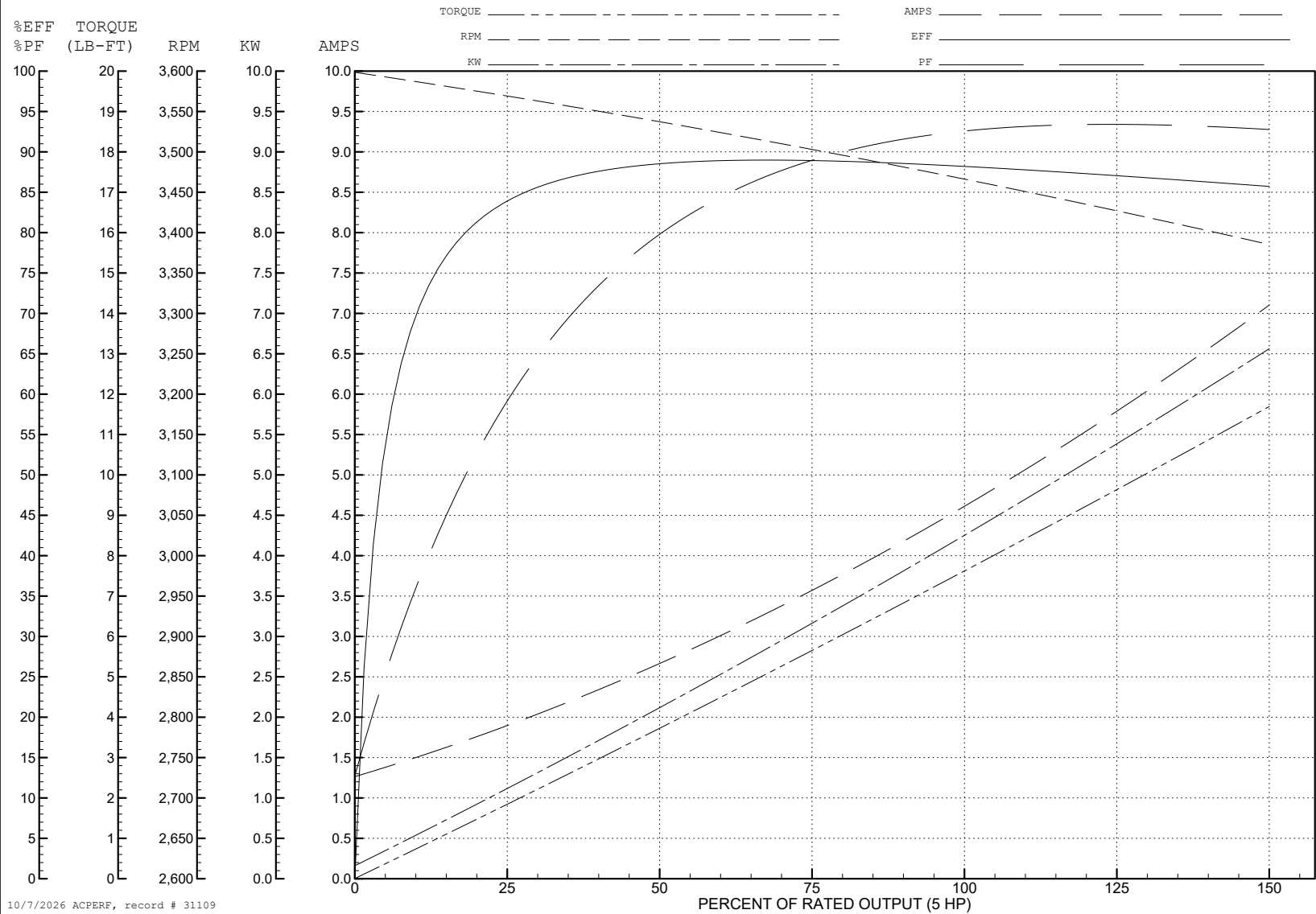
ABB Motors and Mechanical Inc.

WINDING # 36WGS505

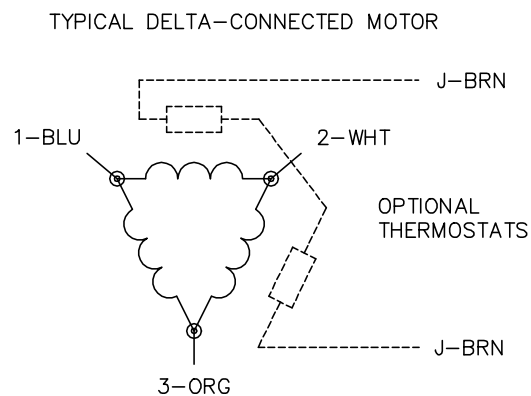
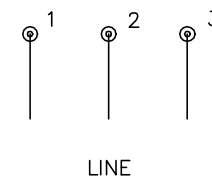
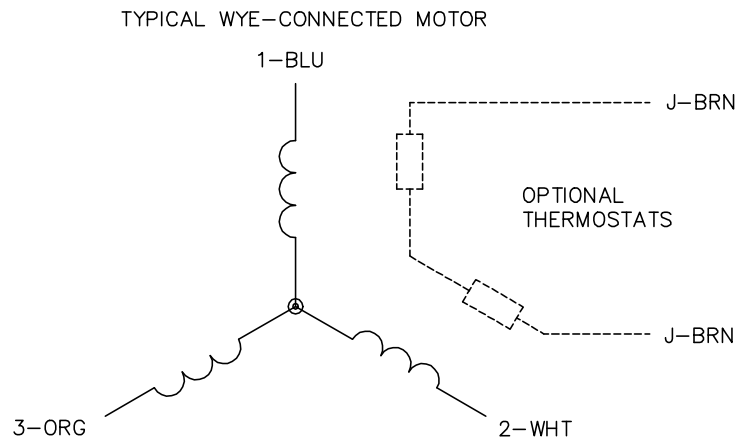
Typical performance - not guaranteed values.

5 HP 3 PH 60 HZ 3450 RPM 575 V 3630M

TORQUES (LB-FT): PO=33.7 PU=23.5 LR=27.5 LRA=45.7



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

SH 1 of 1