

ABB BALDOR RELIANCE III

Customer information packet

VEM3554T-5

1.5HP, 1770RPM, 3PH, 60HZ, 145TC, 3524M, TEFC

Class - None

Division - Not Applicable

Specifications

Enclosure	TEFC
Frame	145TC
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	1.500 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	575.0 V @ 60 HZ
Agency Approvals	NEMA PREMIUM CURUSEEV
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	1.700 A @ 575.0 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	1.7 a
Insulation Class	F
Inverter Code	Inverter Ready
IP Rating	NONE

Part Detail

Revision	C
Type	AC
Mech. spec.	35AA003
Base	
Status	PRD/A
Elec. spec.	35WGG122
Layout	35LYAA003
Eff. date	04-29-2024
CD Diagram	CD0006
Poles	04
Leads	3#18
Proprietary	False
Created date	03-11-2022

KVA Code	M
Lifting Lugs	No Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Lead Quantity/Wire Size	3 @ 18 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3524M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	13.29 IN
Power Factor	74
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	0.875 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	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

NP3441L									
CAT.NO.	VEM3554T-5								
SPEC.	35AA003G122G1								
HP	1.5								
VOLTS	575								
AMP	1.7								
RPM	1770								
FRAME	145TC		HZ	60			PH	3	
SER.F.	1.15	CODE	M	DES	B	CL	F		
NEMA-NOM-EFF	86.5	PF	74						
RATING	40C AMB-CONT								
CC	010A								
DE	6205		ODE	6203					
ENCL	TEFC	SN							
VPWM INVERTER READY									
CT6-60H(10:1)VT3-60H(20:1									
	SFA 1.9								

AC Induction Motor Performance Data

Record # 87553

Typical performance - not guaranteed values

Winding: 35WGG122-R001				Type: 3524M		Enclosure: TEFC					
Nameplate Data				575 V, 60 Hz: High Voltage Connection							
Rated Output (HP)		1.5		Full Load Torque		4.46 LB-FT					
Volts		575		Start Configuration		direct on line					
Full Load Amps		1.7		Breakdown Torque		17.4 LB-FT					
R.P.M.		1770		Pull-up Torque		9.2 LB-FT					
Hz		60 Phase		3		Locked-rotor Torque		11.3 LB-FT			
NEMA Design Code		B		KVA Code		L		Starting Current		14.8 A	
Service Factor (S.F.)		1.15		No-load Current		1 A					
NEMA Nom. Eff.		86.5		Power Factor		77		Line-line Res. @ 25°C		18.8 Ω	
Rating - Duty		40C AMB-CONT		Temp. Rise @ Rated Load		41°C					
S.F. Amps		1.9		Temp. Rise @ S.F. Load		49°C					
				Locked-rotor Power Factor		58.3					
				Rotor inertia		0.173 lb-ft²					

Load Characteristics 575 V, 60 Hz, 1.5 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	36	56	69	77	82	85	81
Efficiency	76.7	84.6	86.5	86.7	85.9	84.7	86.1
Speed	1792	1786	1779	1770	1762	1753	1762
Line amperes	1.06	1.2	1.42	1.7	2.01	2.36	1.85

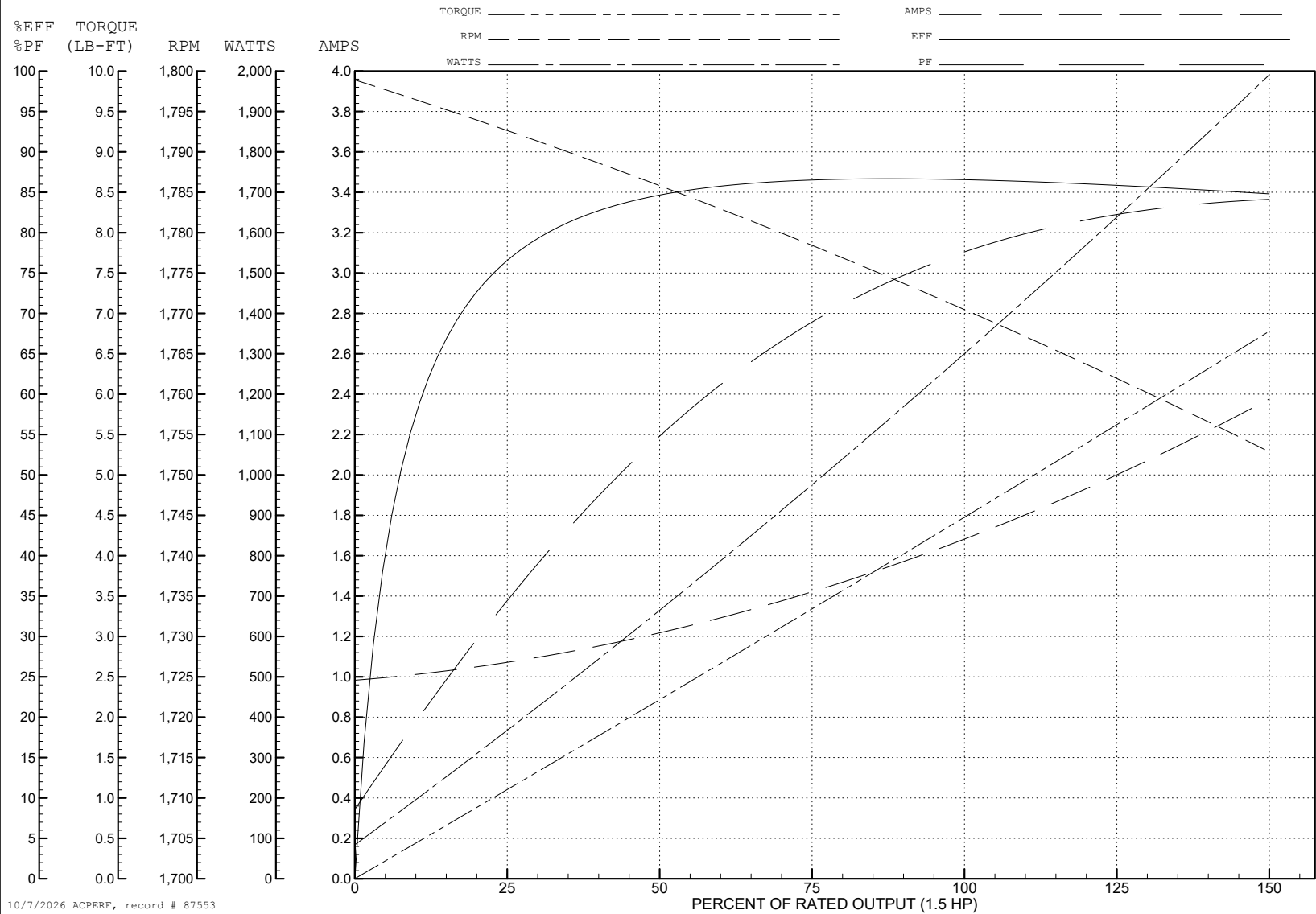
ABB Motors and Mechanical Inc.

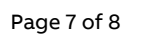
WINDING # 35WGG122

Typical performance - not guaranteed values.

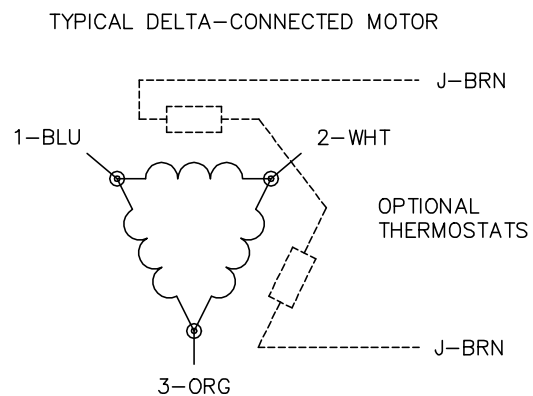
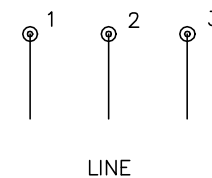
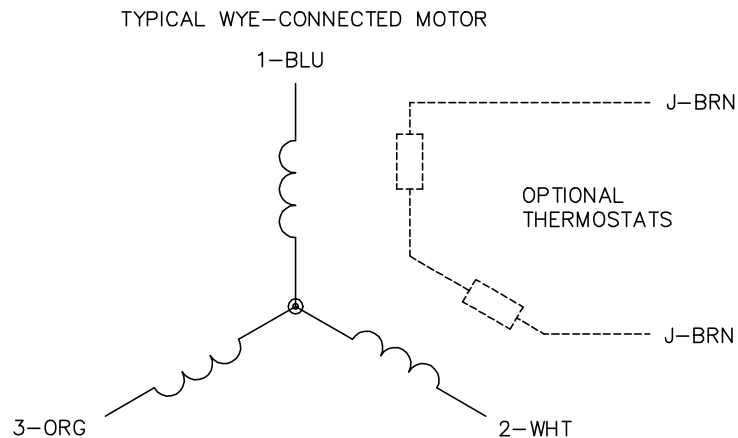
1.5 HP 3 PH 60 HZ 1770 RPM 575 V 3524M

TORQUES (LB-FT): PO=17.4 PU=9.2 LR=11.3 LRA=14.8





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