

ABB BALDOR RELIANCE III

Customer information packet

VEM3546T-57

1/.75KWHP, 1470RPM, 3PH, 50HZ, 143TC, 3520M, T

Class - None

Division - Not Applicable

Specifications

Enclosure	TEFC
Frame	143TC
Frame Material	Steel
Frequency	50.00 Hz
Haz Area Class and Group	None
Haz Area Division	Not Applicable
Motor Letter Type	Three Phase
Output @ Frequency	1.000 HP @ 50 HZ
Phase	3
Synchronous Speed @ Frequency	1500 RPM @ 50 HZ
Voltage @ Frequency	400.0 V @ 50 HZ 230.0 V @ 50 HZ
Agency Approvals	C UR US CE CURUS IE3 UKCA WEEE
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	3.450 A @ 230.0 V 2.000 A @ 400.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	82.5 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK

Part Detail

Revision	C
Type	AC
Mech. spec.	35AA003
Base	
Status	PRD/A
Elec. spec.	35WGZ921
Layout	35LYAA003
Eff. date	05-07-2024
CD Diagram	CD0022
Poles	04
Leads	6#18
Proprietary	False
Created date	03-11-2022

Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	2.0 a
Insulation Class	F
Inverter Code	Not Inverter
KVA Code	N
Lifting Lugs	No Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Lead Quantity/Wire Size	6 @ 18 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3520M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	12.29 IN
Power Factor	65
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	1470 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

NP2716L									
CAT NO	VEM3546T-57								
SPEC.	35AA003Z921G1								
HP	1/.75KW					PH	3		
VOLTS	230/400								
AMP	3.45/2								
R.P.M. (1/MIN)	1470								
FRAME	143TC		HZ		50		I.P.		44
SER.F.	1.15	CODE	N	DES	B	CL	F		
NOM.EFF.	82.5		% (100%)						
PF	65								
RATING	40C AMB-S1 CONT				CC				
DE BRG	6205		ODE		6203				
ENCL	TEFC	SN							
BLANK	SFA 3.7/2.15								
	IC411 15KG								

AC Induction Motor Performance Data

Record # 88662

Typical performance - not guaranteed values

Winding: 35WGZ921-R001			Type: 3520M		Enclosure: TEFC		
Nameplate Data			400 V, 50 Hz: High Voltage Connection				
Rated Output (HP)		1	Full Load Torque		3.56 LB-FT		
Volts		230/400	Start Configuration		direct on line		
Full Load Amps		3.45/2	Breakdown Torque		17.3 LB-FT		
R.P.M.		1470	Pull-up Torque		11 LB-FT		
Hz	50	Phase	3	Locked-rotor Torque		12.7 LB-FT	
NEMA Design Code		B	KVA Code	N	Starting Current		18.2 A
Service Factor (S.F.)		1.15	No-load Current		1.65 A		
NEMA Nom. Eff.		82.5	Power Factor	65	Line-line Res. @ 25°C		13.5 Ω
Rating - Duty		40C	AMB-CONT		Temp. Rise @ Rated Load		32°C
S.F. Amps		3.7/2.15	Temp. Rise @ S.F. Load		36°C		
			Locked-rotor Power Factor		68		
			Rotor inertia		0.144 lb-ft²		

Load Characteristics 400 V, 50 Hz, 1 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	26	40	53	62	70	75	67
Efficiency	62.7	75.6	80.6	82.5	83.1	82.9	82.6
Speed	1494	1488	1483	1477	1470	1463	1473
Line amperes	1.67	1.77	1.9	2.09	2.32	2.59	2.23

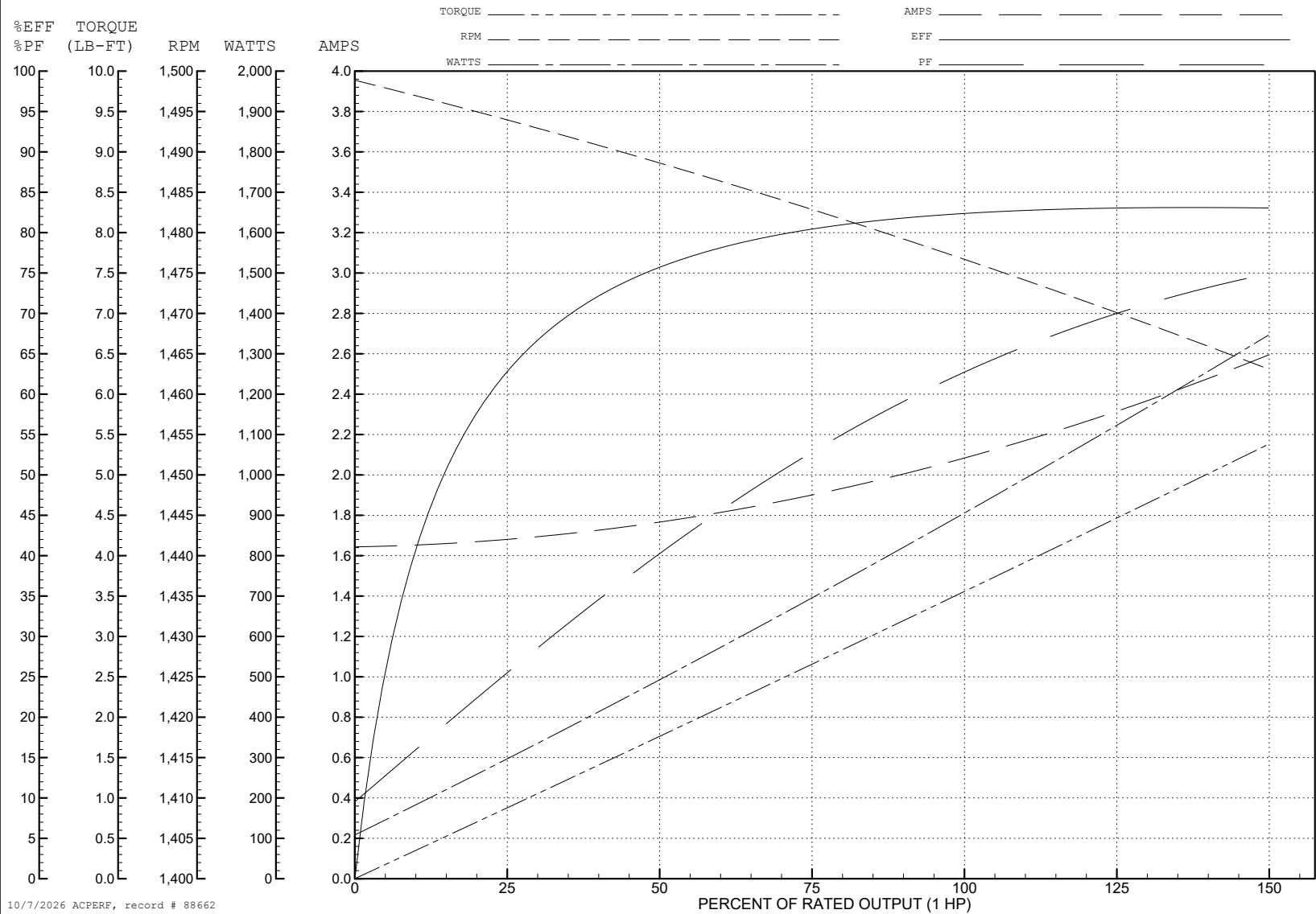
ABB Motors and Mechanical Inc.

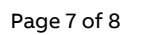
WINDING # 35WGZ921

Typical performance - not guaranteed values.

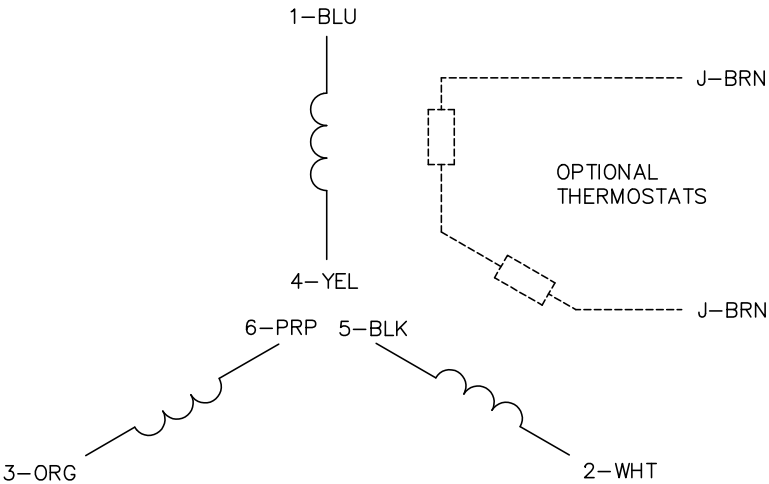
1 HP 3 PH 50 HZ 1470 RPM 400 V 3520M

TORQUES (LB-FT): PO=17.3 PU=11 LR=12.7 LRA=18.2

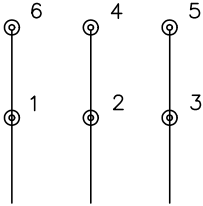




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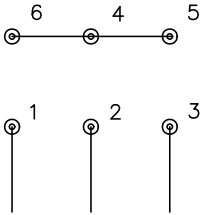


LOW VOLTAGE
(1D)



LINE

HIGH VOLTAGE
(1Y)



LINE

- NOTES:
- 1. INTERCHANGE ANY TWO LINE LEADS TO REVERSE ROTATION.
 - 2. OPTIONAL THERMOSTATS ARE PROVIDED WHEN SPECIFIED.
 - 3. ACTUAL NUMBER OF INTERNAL PARALLEL CIRCUITS MAY BE A MULTIPLE OF THOSE SHOWN ABOVE.
 - 4. LEAD COLORS ARE OPTIONAL. LEADS MUST ALWAYS BE NUMBERED AS SHOWN.

REV. DESC: REVISE TO SHOW OPTIONAL COLORS

REV. LTR: F

BY: JLP

REVISED: 01/21/99 3:54

TDR: 0171435

CD0022

FILE: AAA00005144

MDL: -

MTL: -

BALDOR ELECTRIC Co.

3PH, DV, 6 LEADS, DELTA/WYE CONNECTION

CD0022