

ABB BALDOR RELIANCE III

Customer information packet

EM3154T-57

1.5/1.1KWHP, 1470RPM, 3PH, 50HZ, 145T, 3524M

Class - None

Division - Not Applicable

Specifications

Enclosure	OPEN
Frame	145T
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	1.500 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	Rigid
Bearing Grease Type	Polyrex EM (-20F +300F)
Blower	None
Current @ Voltage	4.500 A @ 230.0 V 2.600 A @ 400.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	84.2 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK

Part Detail

Revision	B
Type	AC
Mech. spec.	35BB001
Base	
Status	PRD/A
Elec. spec.	35WGG296
Layout	35LYBB001
Eff. date	05-07-2024
CD Diagram	CD0022
Poles	04
Leads	6#18 Y
Proprietary	False
Created date	03-11-2022

Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	2.6 a
Insulation Class	F
Inverter Code	Inverter Ready
IP Rating	NONE
KVA Code	L
Lifting Lugs	No Lifting Lugs
Locked Bearing Indicator	No Locked Bearing
Motor Lead Quantity/Wire Size	6 @ 18 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3524M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	12.13 IN
Power Factor	73
Product Family	General Purpose
Pulley End Bearing Type	Ball
Pulley Face Code	Standard
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	EM3154T-57										
SPEC.	35BB001G296G1										
HP	1.5/1.1KW							PH	3		
VOLTS	230/400										
AMP	4.5/2.6										
R.P.M. (1/MIN)	1470										
FRAME	145T		HZ		50			I.P.		23	
SER.F.	1.15	CODE		L	DES		B	CL		F	
NOM.EFF.	84.2		% (100%)								
PF	73										
RATING	40C AMB-S1 CONT					CC					
DE BRG	6205			ODE		6203					
ENCL	OPEN	SN									
BLANK	SFA 4.8/2.8										
	IC01 19KG										

AC Induction Motor Performance Data

Record # 86993

Preliminary Data Sheet

Winding: 35WGG296-R002			Type: 3524M		Enclosure: OPEN		
Nameplate Data			400 V, 50 Hz: High Voltage Connection				
Rated Output (HP)		1.5	Full Load Torque		5.39 LB-FT		
Volts		230/400	Start Configuration		direct on line		
Full Load Amps		4.5/2.6	Breakdown Torque		18.9 LB-FT		
R.P.M.		1470	Pull-up Torque		10.8 LB-FT		
Hz	50 Phase	3	Locked-rotor Torque		13.3 LB-FT		
NEMA Design Code		B	KVA Code		L	Starting Current	20 A
Service Factor (S.F.)		1.15	No-load Current		1.69 A		
NEMA Nom. Eff.		84.2	Power Factor		73	Line-line Res. @ 25°C	12.6 Ω
Rating - Duty		40C AMB-CONT	Temp. Rise @ Rated Load		56°C		
S.F. Amps		5/2.9	Temp. Rise @ S.F. Load		67°C		
			Locked-rotor Power Factor		70		
			Rotor inertia		0.173 lb-ft²		

Load Characteristics 400 V, 50 Hz, 1.5 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	33	51	64	73	79	83	80
Efficiency	72.7	81.7	84	84.3	83.2	81.7	84.2
Speed	1492	1486	1478	1470	1460	1450	1462
Line amperes	1.75	1.94	2.25	2.61	3.07	3.58	2.75

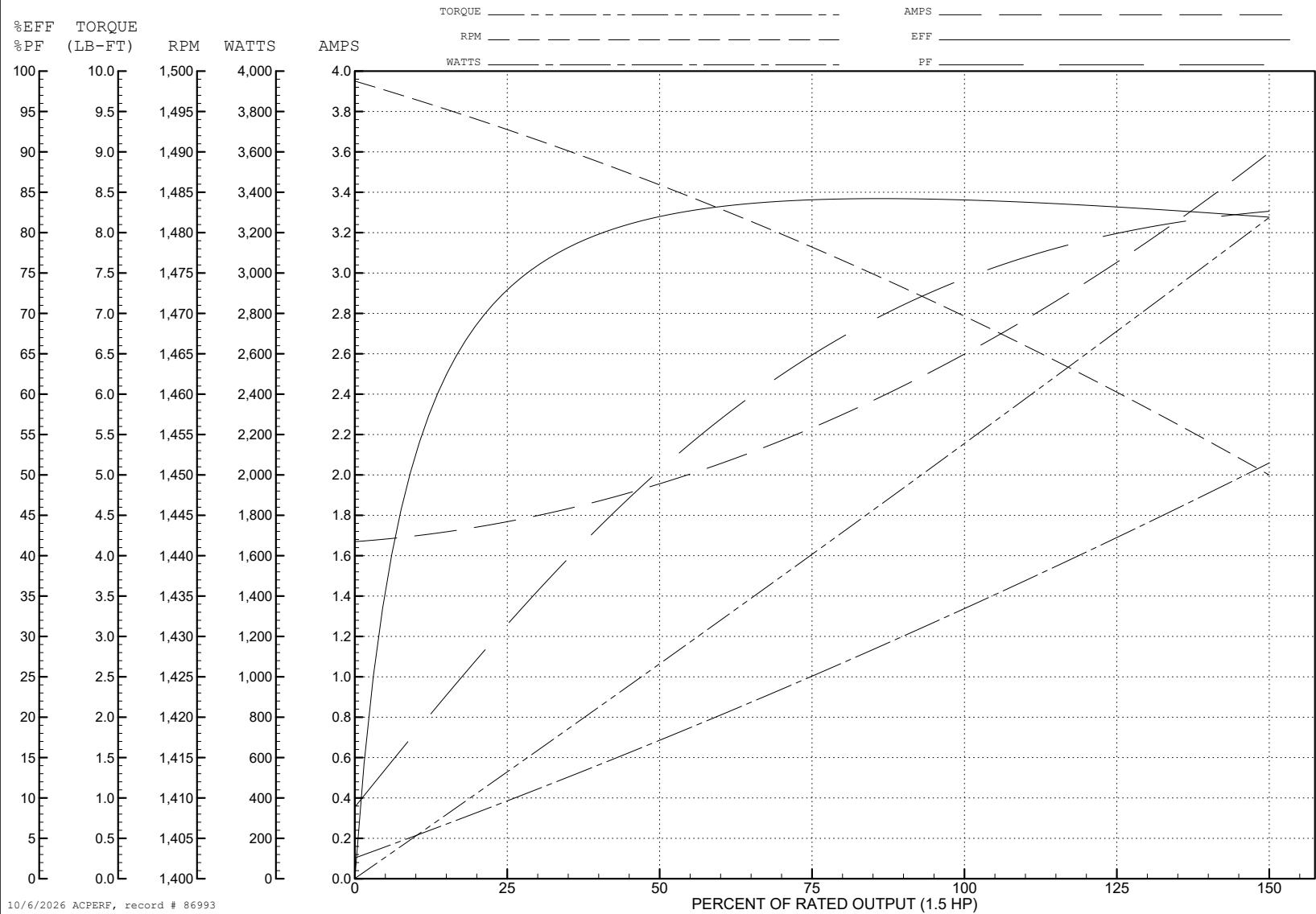
ABB Motors and Mechanical Inc.

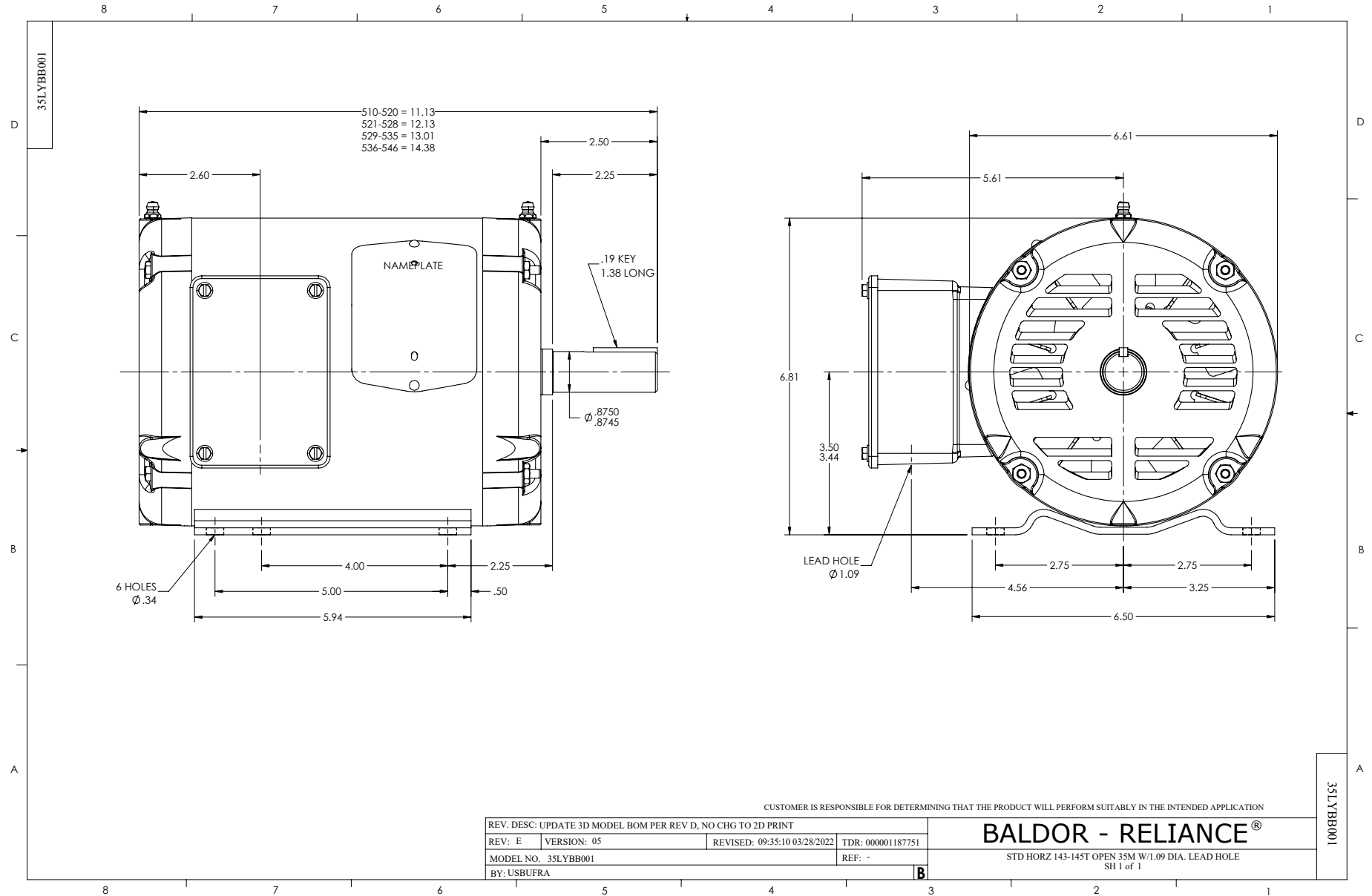
WINDING # 35WGG296

Typical performance - not guaranteed values.

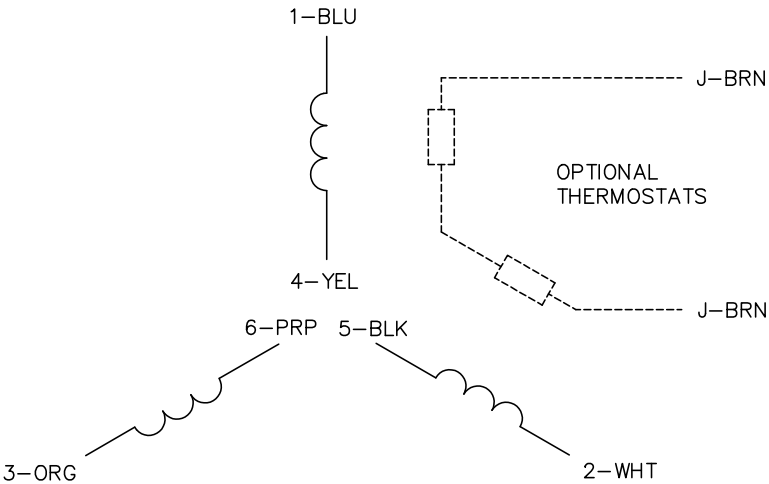
1.5 HP 3 PH 50 HZ 1470 RPM 400 V 3524M

TORQUES (LB-FT): PO=18.9 PU=10.8 LR=13.3 LRA=20

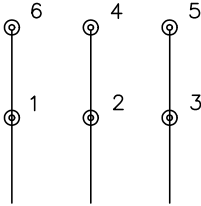




CD0022

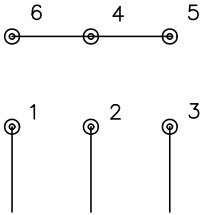


LOW VOLTAGE
(1D)



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