

ABB BALDOR RELIANCE III

Customer information packet

VEM3550T-57

1.5HP, 2850RPM, 3PH, 50HZ, 143TC, 3524M, TEFC

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	1.500 HP @ 50 HZ
Phase	3
Synchronous Speed @ Frequency	3000 RPM @ 50 HZ
Voltage @ Frequency	230.0 V @ 50 HZ 400.0 V @ 50 HZ
Agency Approvals	CE CSA IE3 UR 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	4.000 A @ 230.0 V 2.300 A @ 400.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	85.5 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Face Code	Standard

Part Detail

Revision	N
Type	AC
Mech. spec.	35AA003
Base	
Status	PRD/A
Elec. spec.	35WGP217
Layout	35LYAA003
Eff. date	05-07-2024
CD Diagram	CD0022
Poles	02
Leads	6#18
Proprietary	False
Created date	12-22-2015

Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	2.3 a
Insulation Class	B
Inverter Code	Inverter Ready
KVA Code	L
Lifting Lugs	No Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Lead Exit	Ko Box
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	2
Overall Length	13.29 IN
Power Factor	84
Product Family	General Purpose
Pulley End Bearing Type	Ball
Pulley Face Code	C-Face
Pulley Shaft Indicator	Standard
Rodent Screen	None
RoHS Status	ROHS COMPLIANT
Service Factor	1.15
Shaft Diameter	0.875 IN
Shaft Extension Location	Pulley End
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	2850 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

NP2157L									
CAT NO	VEM3550T-57								
SPEC.	35AA003P217G2								
KW	1.2/1.5HP						PH	3	
VOLTS DELTA	230/400								
AMP	4/2.3								
R/MIN	2850				WEIGHT		20 KG		
FRAME	143TC		HZ		50		I.P.		44
SER.F.	1.15	CODE		L	DES	B	CL	B	
IEC EFF	85.5			% (100%)					
COS	84								
RATING	40C AMB-CONT					MTG		F1	
DE BRG	6205		ODE		6203				
ENCL	TEFC	SN							
BLANK	IE3-85.5(75%)84.1(50%)								
	IC411								

AC Induction Motor Performance Data

Record # 54624

Typical performance - not guaranteed values

Winding: 35WGP217-R006			Type: 3524M		Enclosure: TEFC		
Nameplate Data			400 V, 50 Hz: High Voltage Connection				
Rated Output (HP)		1.5	Full Load Torque		2.78 LB-FT		
Volts		230/400	Start Configuration		direct on line		
Full Load Amps		4/2.3	Breakdown Torque		11.3 LB-FT		
R.P.M.		2850	Pull-up Torque		9.61 LB-FT		
Hz	50 Phase	3	Locked-rotor Torque		12.1 LB-FT		
NEMA Design Code		B KVA Code	L		Starting Current		20.2 A
Service Factor (S.F.)		1.15	No-load Current		0.949 A		
NEMA Nom. Eff.		85.5	Power Factor		84		
Rating - Duty		40C AMB-CONT	Line-line Res. @ 25°C		7.48 Ω		
S.F. Amps			Temp. Rise @ Rated Load		43°C		
			Temp. Rise @ S.F. Load		51°C		
			Locked-rotor Power Factor		55.1		
			Rotor inertia		0.0664 LB-FT2		

Load Characteristics 400 V, 50 Hz, 1.5 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	49	70	81	85	88	91	87
Efficiency	76.9	84.5	85.8	85.9	84.7	82.9	85.2
Speed	2969	2943	2916	2888	2856	2823	2869
Line amperes	1.11	1.42	1.79	2.26	2.75	3.24	2.55

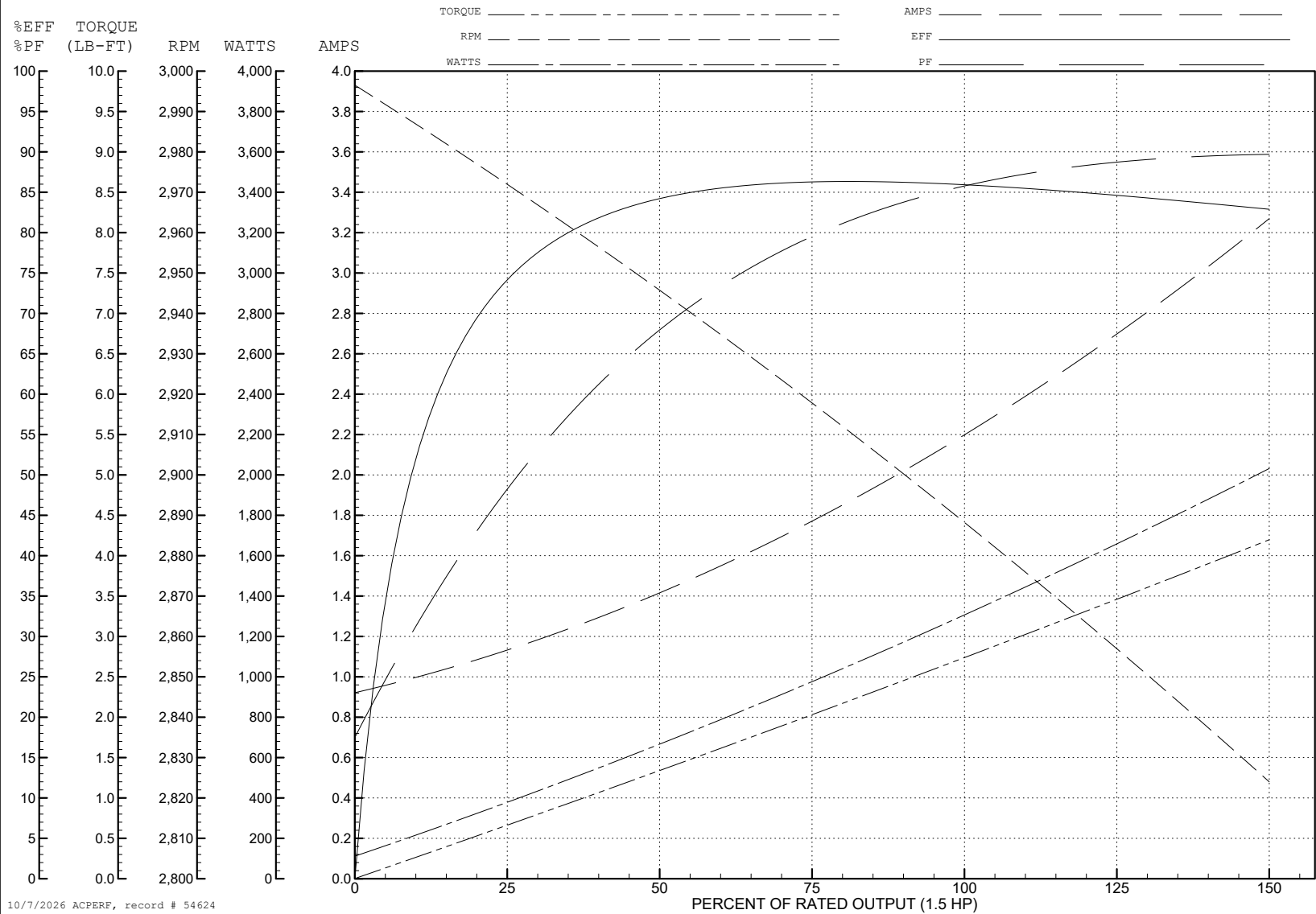
ABB Motors and Mechanical Inc.

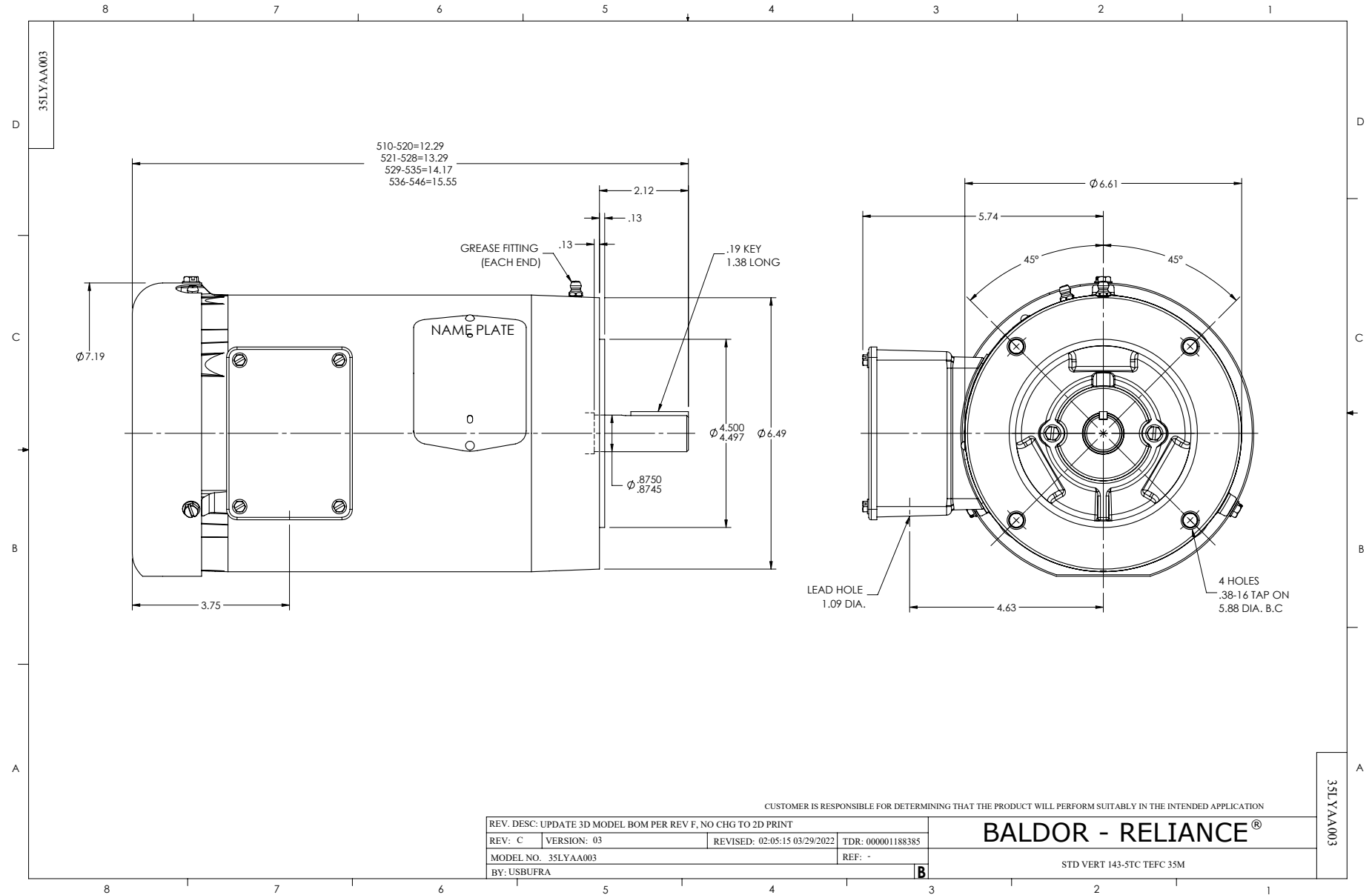
WINDING # 35WGP217

Typical performance - not guaranteed values.

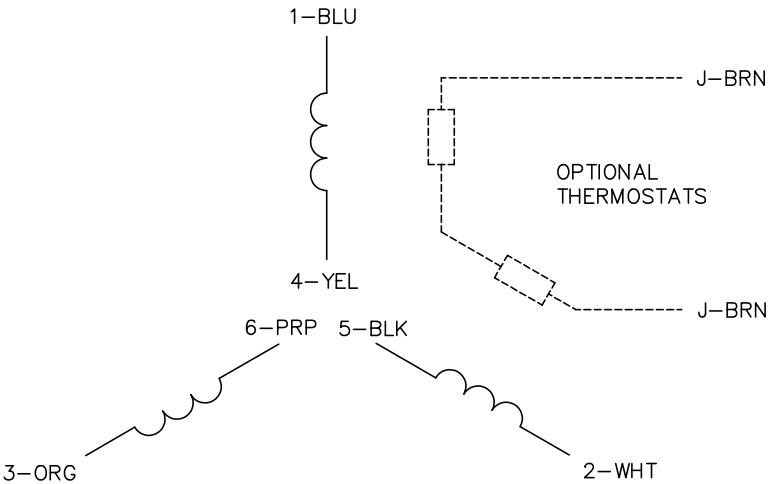
1.5 HP 3 PH 50 HZ 2850 RPM 400 V 3524M

TORQUES (LB-FT): PO=11.3 PU=9.61 LR=12.1 LRA=20.2

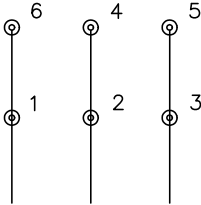




CD0022

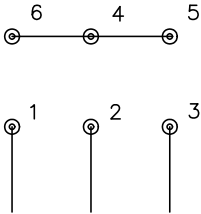


LOW VOLTAGE
(1D)



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