

BALDOR® • RELIANCE™

Customer information packet

VEM3545-57

1HP, 2850RPM, 3PH, 50HZ, 56C, 3516M, TEFC, F1, N

Class - None

Division - Not Applicable

Specifications

Enclosure	TEFC
Frame	56C
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	3000 RPM @ 50 HZ
Voltage @ Frequency	230.0 V @ 50 HZ 400.0 V @ 50 HZ
Agency Approvals	C UR US CE CURUS IE3 UKCA WEEE
Ambient Temperature	40 °C
Auxillary Box	No Auxillary Box
Auxillary Box Lead Termination	None
Base Indicator	No Mounting
Bearing Grease Type	Polyrex EM (-20F +300F)
Blower	None
Current @ Voltage	1.600 A @ 400.0 V 2.800 A @ 230.0 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	N
Type	AC
Mech. spec.	35A013
Base	
Status	PRD/A
Elec. spec.	35WGL462
Layout	35LYA013
Eff. date	05-07-2024
CD Diagram	CD0022
Poles	02
Leads	6#18
Proprietary	False
Created date	12-23-2015

Front Face Code	Standard
Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	1.6 a
Insulation Class	B
Inverter Code	Inverter Ready
KVA Code	J
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	3516M
Mounting Arrangement	F1
Number of Poles	2
Overall Length	12.23 IN
Power Factor	87
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	1.25
Shaft Diameter	0.625 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

NP2716L	
CAT NO	VEM3545-57
SPEC.	35A013L462G1
HP	1/.75KW PH 3
VOLTS	230/400
AMP	2.8/1.6
R.P.M. (1/MIN)	2850
FRAME	56C HZ 50 I.P. 44
SER.F.	1.25 CODE J DES B CL B
NOM.EFF.	82.5 % (100%)
PF	87
RATING	40C AMB-S1 CONT CC
DE BRG	6205 ODE 6203
ENCL	TEFC SN
BLANK	IE3-81.2(75%)77.8(50%) SFA 3.3/1.9 IC411 16KG

AC Induction Motor Performance Data

Record # 54628

Typical performance - not guaranteed values

Winding: 35WGL462-R001		Type: 3516M	Enclosure: TEFC	
Nameplate Data			400 V, 50 Hz: High Voltage Connection	
Rated Output (HP)	1	Full Load Torque	1.9 LB-FT	
Volts	230/400	Start Configuration	direct on line	
Full Load Amps	2.8/1.6	Breakdown Torque	6.33 LB-FT	
R.P.M.	2850	Pull-up Torque	5.05 LB-FT	
Hz	50 Phase	Locked-rotor Torque	5.67 LB-FT	
NEMA Design Code	B KVA Code	Starting Current	11.3 A	
Service Factor (S.F.)	1.25	No-load Current	0.718 A	
NEMA Nom. Eff.	82.5 Power Factor	Line-line Res. @ 25°C	15.2 Ω	
Rating - Duty	40C AMB-CONT	Temp. Rise @ Rated Load	39°C	
S.F. Amps	3.3/1.9	Temp. Rise @ S.F. Load	52°C	
		Locked-rotor Power Factor	63.4	
		Rotor inertia	0.0443 LB-FT ²	

Load Characteristics 400 V, 50 Hz, 1 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	52	72	82	87	91	92	91
Efficiency	74.5	81.7	83	83	81.9	79.9	81.9
Speed	2963	2937	2906	2873	2836	2795	2836
Line amperes	0.825	1.01	1.28	1.55	1.89	2.27	1.89

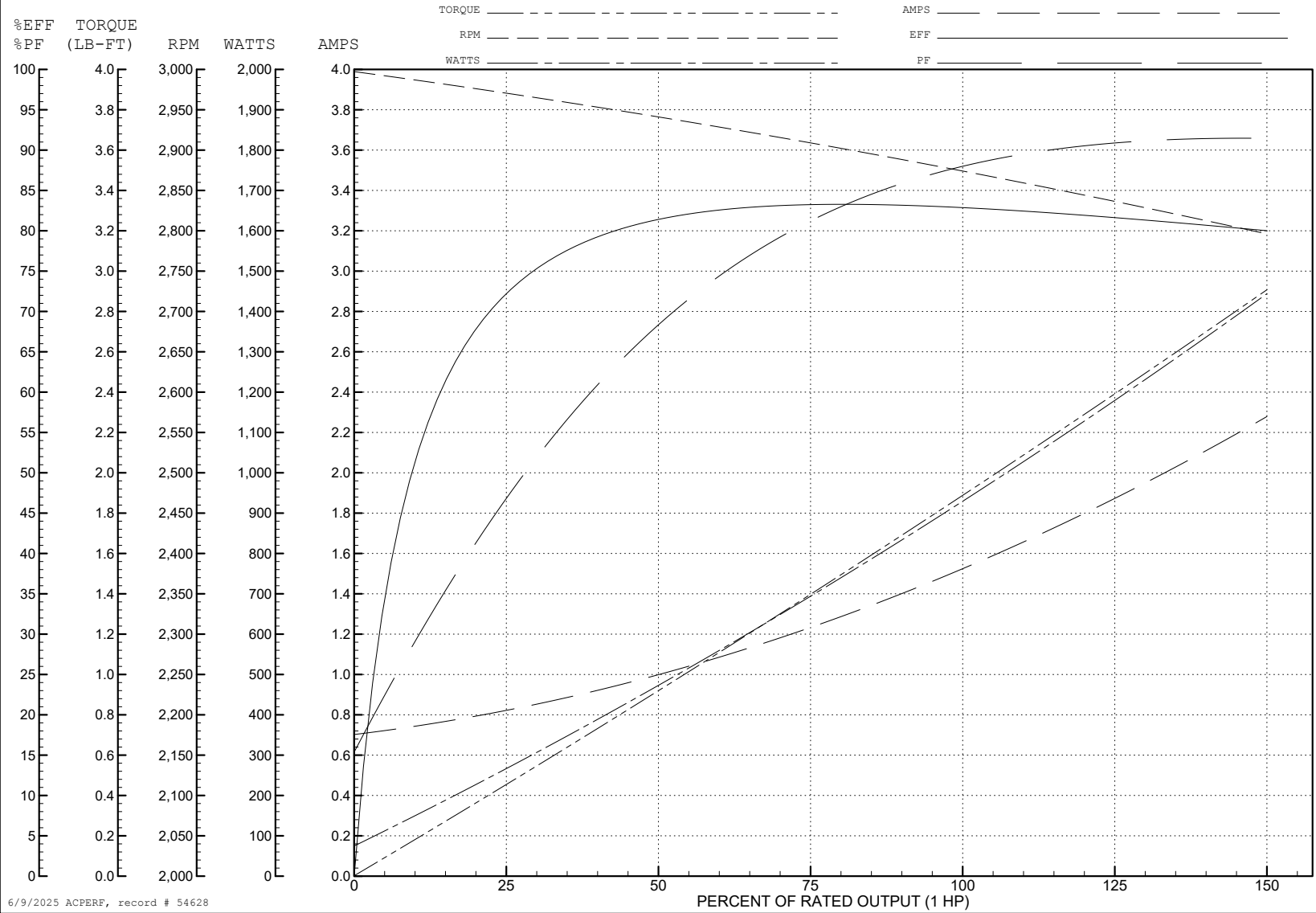
ABB Motors and Mechanical Inc.

WINDING # 35WGL462

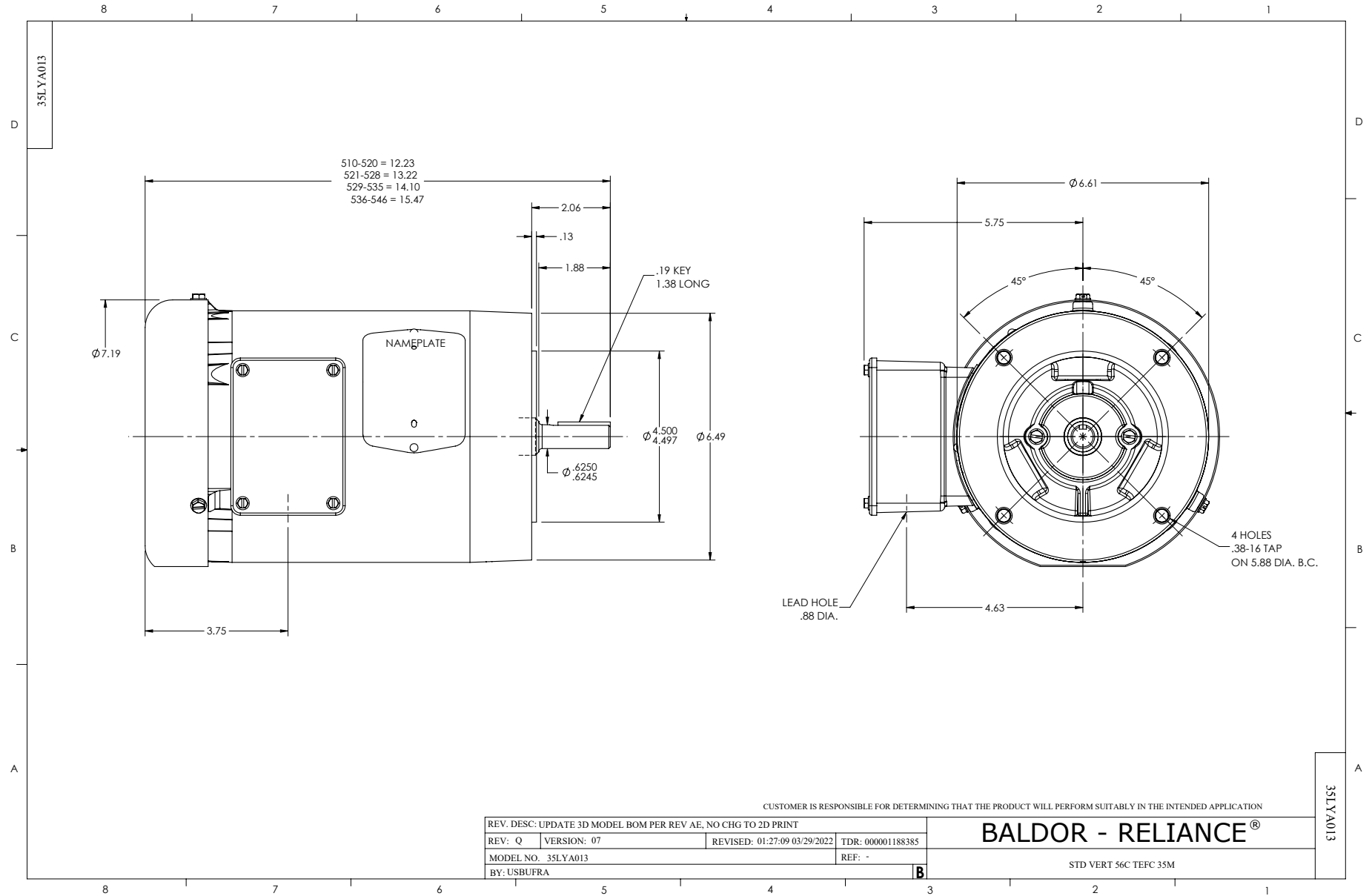
Typical performance - not guaranteed values.

1 HP 3 PH 50 HZ 2850 RPM 400 V 3516M

TORQUES (LB-FT): PO=6.33 PU=5.05 LR=5.67 LRA=11.3



6/9/2025 ACPERF, record # 54628



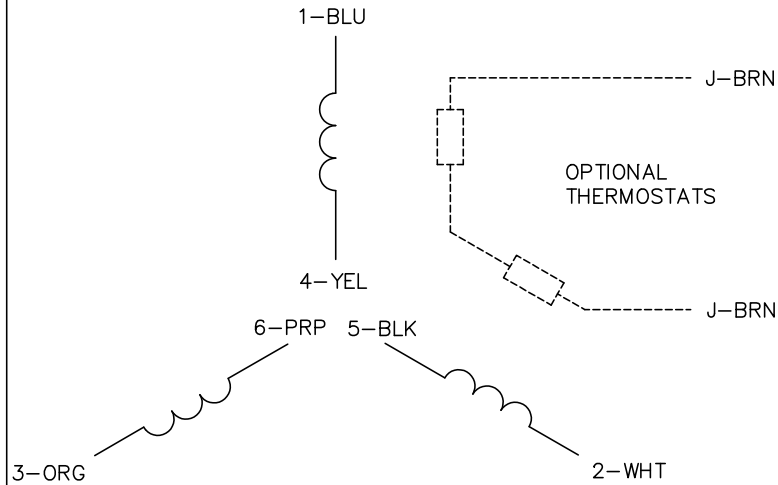
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT THE PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION

REV. DESC: UPDATE 3D MODEL BOM PER REV AE, NO CHG TO 2D PRINT			
REV: Q	VERSION: 07	REVISED: 01:27:09 03/29/2022	TDR: 000001188385
MODEL NO. 35LYA013		REF: -	
BY: USBUFRA		B	

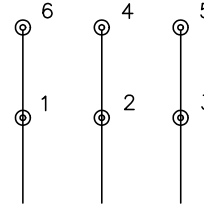
BALDOR - RELIANCE®

STD VERT 56C TEFC 35M

CD0022

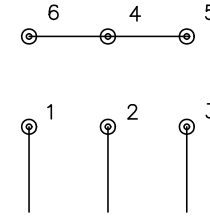


LOW VOLTAGE
(1D)



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