

ABB BALDOR RELIANCE III

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
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	1.600 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	P
Type	AC
Mech. spec.	35A013
Base	
Status	PRD/A
Elec. spec.	35WGL462
Layout	35LYA013
Eff. date	09-21-2026
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	3	Locked-rotor Torque		5.67 LB-FT	
NEMA Design Code	B	KVA Code	J	Starting Current	11.3 A	
Service Factor (S.F.)		1.25	No-load Current		0.718 A	
NEMA Nom. Eff.	82.5	Power Factor	87	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-FT2	

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

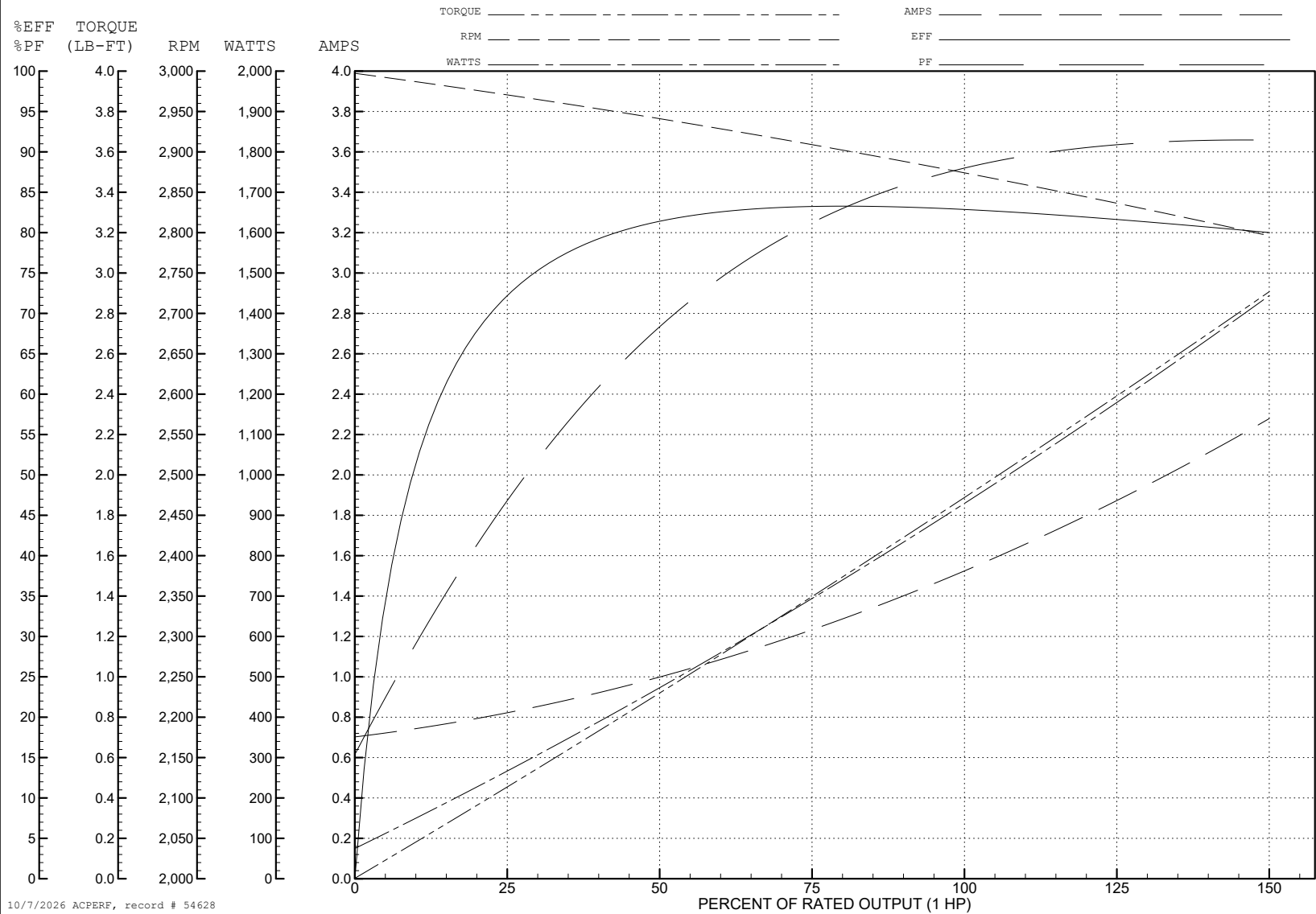
ABB Motors and Mechanical Inc.

WINDING # 35WGL462

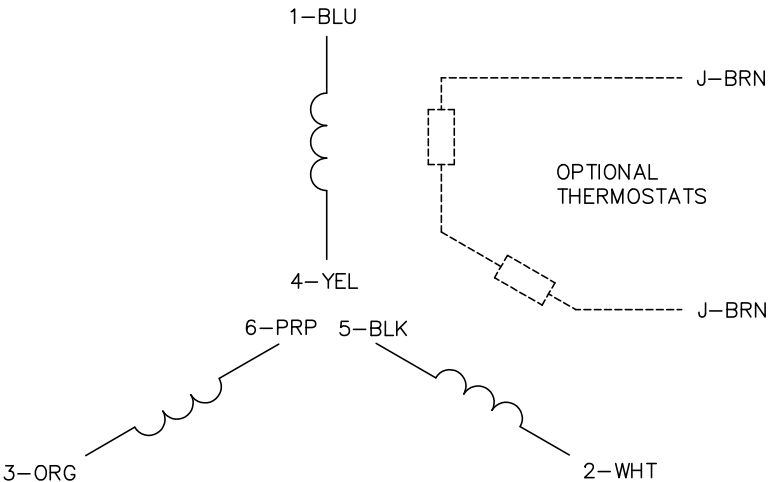
Typical performance - not guaranteed values.

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

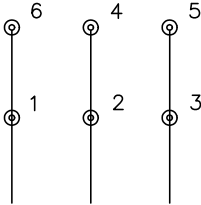
TORQUES (LB-FT): PO=6.33 PU=5.05 LR=5.67 LRA=11.3



CD0022

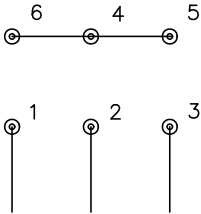


LOW VOLTAGE
(1D)



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