

**BALDOR® • RELIANCE** 

**Product Information Packet**

**EM3545-57**

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

Part Detail							
Revision:	C	Status:	PRD/A	Change #:		Proprietary:	No
Type:	AC	Elec. Spec:	35WGL462	CD Diagram:	CD0022	Mfg Plant:	
Mech. Spec:	35E2941	Layout:	35LYE2941	Poles:	02	Created Date:	12-23-2015
Base:	RG	Eff. Date:	03-06-2018	Leads:	6#18		

Specs			
Catalog Number:	EM3545-57	Insulation Class:	B
Enclosure:	TEFC	Inverter Code:	Inverter Ready
Frame:	56	KVA Code:	J
Frame Material:	Steel	Lifting Lugs:	No Lifting Lugs
Output @ Frequency:	1.000 HP @ 50 HZ	Locked Bearing Indicator:	No Locked Bearing
Synchronous Speed @ Frequency:	3000 RPM @ 50 HZ	Motor Lead Quantity/Wire Size:	6 @ 18 AWG
Voltage @ Frequency:	400.0 V @ 50 HZ	Motor Lead Exit:	Ko Box
	230.0 V @ 50 HZ	Motor Lead Termination:	Flying Leads
XP Class and Group:	None	Motor Type:	3516M
XP Division:	Not Applicable	Mounting Arrangement:	F1
Agency Approvals:	CE	Power Factor:	87
	CSA	Product Family:	General Purpose
	UR	Pulley End Bearing Type:	Ball
Auxillary Box:	No Auxillary Box	Pulley Face Code:	Standard
Auxillary Box Lead Termination:	None	Pulley Shaft Indicator:	Standard
Base Indicator:	Rigid	Rodent Screen:	None
Bearing Grease Type:	Polyrex EM (-20F +300F)	RoHS Status:	ROHS COMPLIANT
Blower:	None	Shaft Extension Location:	Pulley End

<b>Current @ Voltage:</b>	1.600 A @ 400.0 V	<b>Shaft Ground Indicator:</b>	No Shaft Grounding
	2.800 A @ 230.0 V	<b>Shaft Rotation:</b>	Reversible
<b>Design Code:</b>	B	<b>Shaft Slinger Indicator:</b>	No Slinger
<b>Drip Cover:</b>	No Drip Cover	<b>Speed Code:</b>	Single Speed
<b>Duty Rating:</b>	CONT	<b>Motor Standards:</b>	NEMA
<b>Electrically Isolated Bearing:</b>	Not Electrically Isolated	<b>Starting Method:</b>	Direct on line
<b>Feedback Device:</b>	NO FEEDBACK	<b>Thermal Device - Bearing:</b>	NONE (OLD)
<b>Front Face Code:</b>	Standard	<b>Thermal Device - Winding:</b>	None
<b>Front Shaft Indicator:</b>	None	<b>Vibration Sensor Indicator:</b>	No Vibration Sensor
<b>Heater Indicator:</b>	No Heater	<b>Winding Thermal 1:</b>	None
		<b>Winding Thermal 2:</b>	None

Nameplate NP2716L											
CAT NO	EM3545-57										
SPEC.	35E2941L462G1										
HP	1							PH	3		
VOLTS	230/400										
AMP	2.8/1.6										
RPM	2850										
FRAME	56				HZ	50			I.P.	54	
SER.F.	1.25			CODE	J		DES	B		CL	B
NOM.EFF.	82.5					% (100%)					
PF	87					USABLE AT 208V					
RATING	40C AMB-CONT						CC				
DE BRG	6205				ODE	6203					
ENCL	TEFC			SN							
BLANK	SFA 3.3/1.9										
	IE3-81.2(75%)77.8(50%)										

Parts List		
Part Number	Description	Quantity
SA312708	SA 35E2941L462G1	1.000 EA
RA300147	RA 35E2941L462G1	1.000 EA
NS2512A01	INSULATOR, CONDUIT BOX X	1.000 EA
35CB3007	35 CB CASTING W/.88 DIA. LEAD HOLE	1.000 EA
36GS1000SP	GASKET-CONDUIT BOX, .06 THICK #SV-330 LE	1.000 EA
51XB1016A07	10-16 X 7/16 HXWSSLD SERTYB	2.000 EA
11XW1032G06	10-32 X .38, TAPTITE II, HEX WSHR SLTD U	1.000 EA
35EP3122K00	MASTER ODE,203 BRG,.683SH,#26 DRN,FH MTG	1.000 EA
HW5100A03	WAVY WASHER (W1543-017)	1.000 EA
35EP3123A00	MASTER DE,205 BRG,.998SH,#26 DRN	1.000 EA
XY1032A02	10-32 HEX NUT DIRECTIONAL SERRATION	4.000 EA
35FH4005A32SP	IEC FH NO GRSR W/3 HOLES - PRIMED	1.000 EA
51XW1032A06	10-32 X .38, TAPTITE II, HEX WSHR SLTD S	3.000 EA
35CB4521	35 LIPPED CB LID (GALV & PHOSPH)	1.000 EA
35GS1030	35 GS FOR CB LID - LEXIDE	1.000 EA
51XW0832A07	8-32 X .44, TAPTITE II, HEX WSHR SLTD SE	4.000 EA
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	2.000 EA
MJ1000A02	GREASE, POLYREX EM EXXON (USe 4824-15A)	0.050 LB
34FN3002B01	EXTERNAL FAN, PLASTIC, .637/.639 HUB W/	1.000 EA
MG1000G27	MED CHARCOAL METALLIC GREY 400-0096	0.017 GA
HW2501D13	KEY, 3/16 SQ X 1.375	1.000 EA
HA7000A04	KEY RETAINER 0.625 DIA SHAFTS	1.000 EA
HA3100A15	THRUBOLT 10-32 X 8.375	4.000 EA
LC0034	CONNECTION LABEL	1.000 EA

<b>Parts List (continued)</b>		
<b>Part Number</b>	<b>Description</b>	<b>Quantity</b>
LB1119N	WARNING LABEL	1.000 EA
NP2716L	ALUM SUPER-E NEMA IE3 UL CSA CC CE	1.000 EA
MN416A01	TAG-INSTAL-MAINT no wire (1100/bx) 11/14	1.000 EA
35PA1000	PKG GRP, PRINT PK1008A06	1.000 EA

**AC Induction Motor Performance Data**

Record # 54628 - Typical performance - not guaranteed values

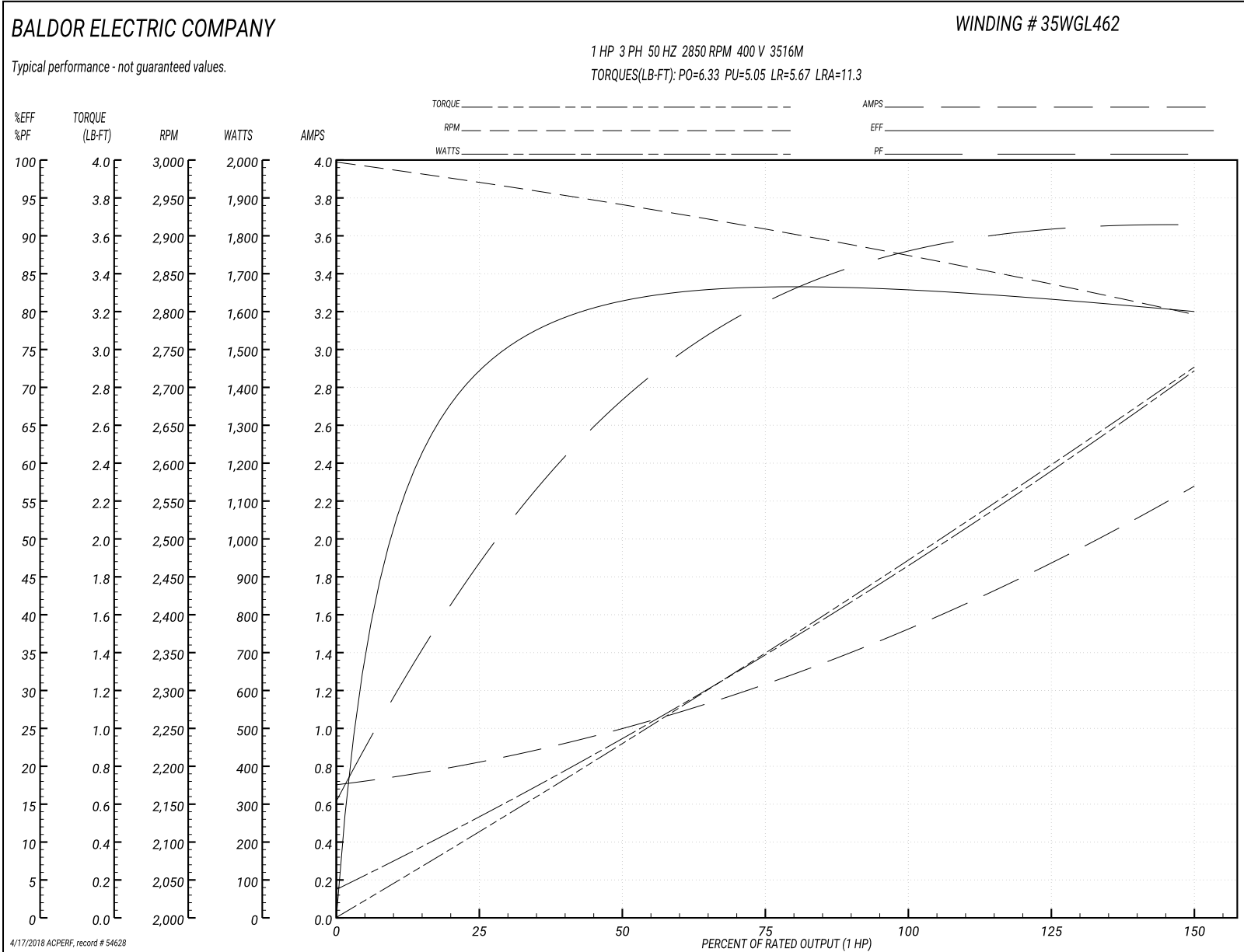
<b>Winding:</b> 35WGL462-R001	<b>Type:</b> 3516M	<b>Enclosure:</b> TEFC
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Nameplate Data				400 V, 50 Hz: High Voltage Connection	
Rated Output (HP)	1			Full Load Torque	1.9 LB-FT
Volts	230/400			Start Configuration	direct on line
Full Load Amps	2.8/1.6			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-FT <sup>2</sup>

Load Characteristics 400 V, 50 Hz, 1 HP

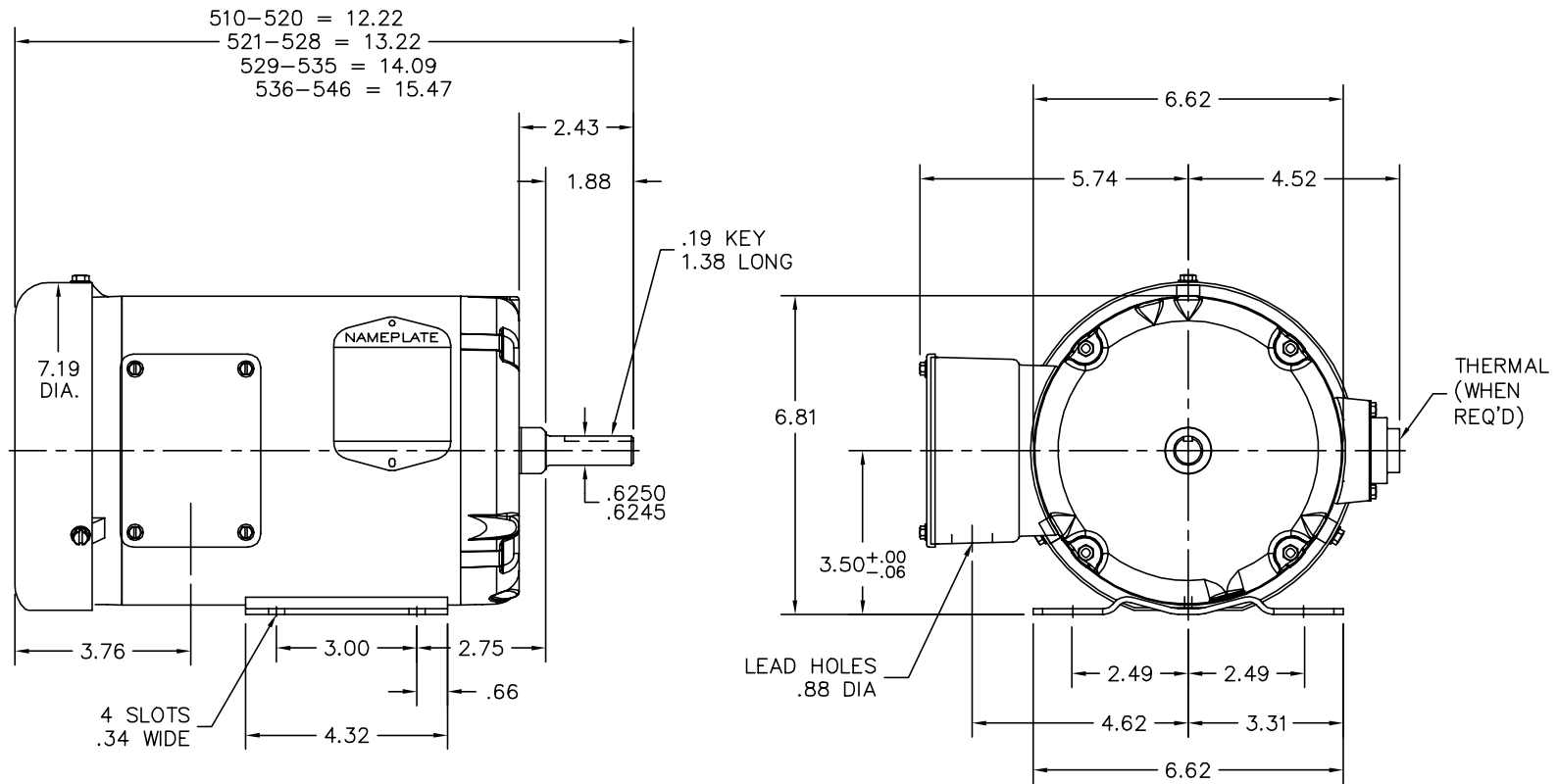
% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	52	72	82	87	91	92	91
Efficiency	74.5	81.7	83	83	81.9	79.9	81.9
Speed	2963	2937	2906	2873	2836	2795	2836
Line amperes	0.825	1.01	1.28	1.55	1.89	2.27	1.89

Performance Graph at 400V, 50Hz, 1.0HP Typical performance - Not guaranteed values





35LYE2941



CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT BALDOR'S PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION.

REV. DESC: REPLACE ENDPLATES		
REV. LTR: B	VERSION: 02	TDR: 000001063223
FILE: \AAA\00213\303	REVISED: 03:42:19 03/07/2018	BY: FGCHAH1
MTL: -	©	

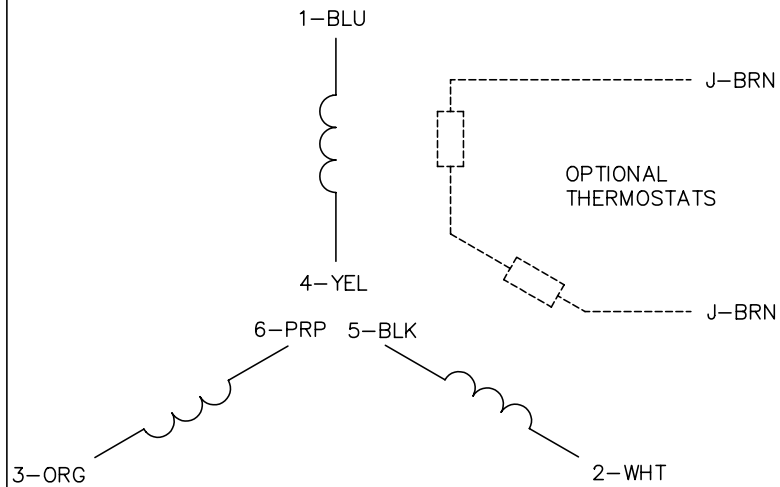
**BALDOR**

HORZ 56 TEFC 35M W/35BA4010 (2PL), STD NON-FR & FR WELD SH

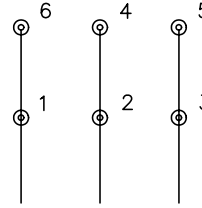
SH 1 of 1

35LYE2941

CD0022

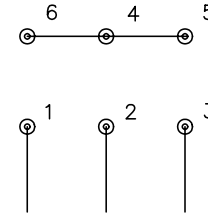


LOW VOLTAGE  
(1D)



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