



Customer information packet

VEM3613

5HP, 3450RPM, 3PH, 60HZ, 184C, 3630M, TEFC, F1

ELECTRIC MOTOR WHOLESALE.COM

Class - None

Division - Not Applicable

Specifications

Enclosure	TEFC
Frame	184C
Frame Material	Steel
Frequency	60.00 Hz
Output @ Frequency	5.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	3600 RPM @ 60 HZ
Voltage @ Frequency	230.0 V @ 60 HZ 460.0 V @ 60 HZ
XP Class and Group	None
XP Division	Not Applicable
Agency Approvals	UR CSA CSA EEV
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	5.900 A @ 460.0 V 11.800 A @ 230.0 V
Design Code	A
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	88.5 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Face Code	Standard
Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	5.9 a

Part detail

Revision	C
Type	AC
Mech. spec.	36A013
Base	
Status	PRD/A
Elec. spec.	36WGS042
Layout	36LYA013
Eff. date	10-23-2017
CD Diagram	CD0005
Poles	02
Leads	9#16
Proprietary	False
Created date	02-27-2015

Insulation Class	F
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	9 @ 16 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3630M
Mounting Arrangement	F1
Number of Poles	2
Overall Length	15.68 IN
Power Factor	91
Product Family	General Purpose
Pulley End Bearing Type	Ball
Pulley Face Code	C-Face
Pulley Shaft Indicator	Standard
Rodent Screen	None
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	3450 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

NP1259L									
CAT.NO.	VEM3613								
SPEC.	36A013S042G1								
HP	5								
VOLTS	230/460								
AMP	11.8/5.9								
RPM	3450								
FRAME	184C		HZ	60		PH	3		
SER.F.	1.15	CODE	L	DES	A	CL	F		
NEMA-NOM-EFF	88.5	PF	91						
RATING	40C AMB-CONT								
CC	010A		USABLE AT 208V						
DE	6206		ODE	6205					
ENCL	TEFC	SN							

Parts list

Part number	Description	Quantity
SA294543	SA 36A013S042G1	1.000 ea
RA280622	RA 36A013S042G1	1.000 ea
34FN3002B02	EXTERNAL FAN, PLASTIC, .905/.907 HUB W/	1.000 ea
36CB3004	36 CB CASTING W/1.09 DIA LEAD HOLE @ 6:0	1.000 ea
36GS1000SP	GASKET-CONDUIT BOX, .06 THICK #SV-330 LE	1.000 ea
51XB1016A08	10-16X 1/2HXWSSLD SERTYB	2.000 ea
11XW1032G06	10-32 X .38, TAPTITE II, HEX WSHR SLTD U	1.000 ea
HW3001B01	BRASS CUP WASHER, FOR #10 SCREW	1.000 ea
36EP3104A01	FREP MACH ASSEMBLY FOR ROUTING	1.000 ea
HW4500A01	1641B(ALEMITE)400 UNIV, GREASE FITT	1.000 ea
HW5100A05	WVY WSHR F/205 & 304 BRGS	1.000 ea
36EP3303A03	STD PU ENDPLATE -ENCL- 206 BRG W/OUT T-S	1.000 ea
HW4500A01	1641B(ALEMITE)400 UNIV, GREASE FITT	1.000 ea
10XN2520A24	1/4-20X 1 1/2 HEX HD X	4.000 ea
HW1001A25	LOCKWASHER 1/4, ZINC PLT .493 OD, .255 I	4.000 ea
51XB1214A16	12-14X1.00 HXWSSLD SERTYB	1.000 ea
36FH4009A102	IEC FH GREASER PRIMED	1.000 ea
51XW1032A06	10-32 X .38, TAPTITE II, HEX WSHR SLTD S	3.000 ea
36CB4516	750LIPPED CB LID - GALVANNEAL	1.000 ea
37GS1001SP	GASKET, CONDUIT BOX LID, .06 THICK LEXID	1.000 ea
51XW0832A07	8-32 X .44, TAPTITE II, HEX WSHR SLTD SE	4.000 ea
HW2501D13	KEY, 3/16 SQ X 1.375	1.000 ea
HA7000A01	KEY RETAINER 7/8" DIA SHAFT	1.000 ea
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	2.000 ea
MJ1000A02	GREASE, MOBIL POLYREX EM - 124047	0.050 lb
MG1000Y03	MUNSELL 2.53Y 6.70/ 4.60, GLOSS 20,	0.022 ga
HA3101A25	THRUBOLT 1/4-20 X 11.000 OHIO ROD	4.000 ea
LC0005E01	CONN.DIA./WARNING LABEL (LC0005/LB1119N)	1.000 ea
NP1259L	ALUM SUPER-E UL CSA-EEV CC NEMA PREMIUM	1.000 ea
36PA1001	PKG GRP, PRINT PK1017A06	1.000 ea
PK3082	STYROFOAM CRADLE	1.000 ea

MN416A01

TAG-INSTAL-MAINT no wire (1200/bx) 3/19

1.000 ea

AC Induction Motor Performance Data

Record # 32158

Typical performance - not guaranteed values

Winding: 36WGS042-R002		Type: 3630M	Enclosure: TEFC	
Nameplate Data			460 V, 60 Hz: High Voltage Connection	
Rated Output (HP)	5	Full Load Torque	7.67 LB-FT	
Volts	230/460	Start Configuration	direct on line	
Full Load Amps	11.8/5.9	Breakdown Torque	33.7 LB-FT	
R.P.M.	3450	Pull-up Torque	23.5 LB-FT	
Hz	60 Phase	Locked-rotor Torque	27.5 LB-FT	
NEMA Design Code	A KVA Code	Starting Current	57.2 A	
Service Factor (S.F.)	1.15	No-load Current	1.68 A	
NEMA Nom. Eff.	88.5 Power Factor	Line-line Res. @ 25°C	2.3313 Ω	
Rating - Duty	40C AMB-CONT	Temp. Rise @ Rated Load	72°C	
S.F. Amps		Temp. Rise @ S.F. Load	89°C	
		Locked-rotor Power Factor	45	
		Rotor inertia	0.134 LB-FT ²	

Load Characteristics 460 V, 60 Hz, 5 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	62	81	88	91	93	93	92
Efficiency	84.1	88.9	89.4	88.7	87.3	85.8	87.9
Speed	3568.7	3537.4	3504.2	3465.8	3428.2	3385	3443
Line amperes	2.24	3.26	4.47	5.85	7.26	8.8	6.7

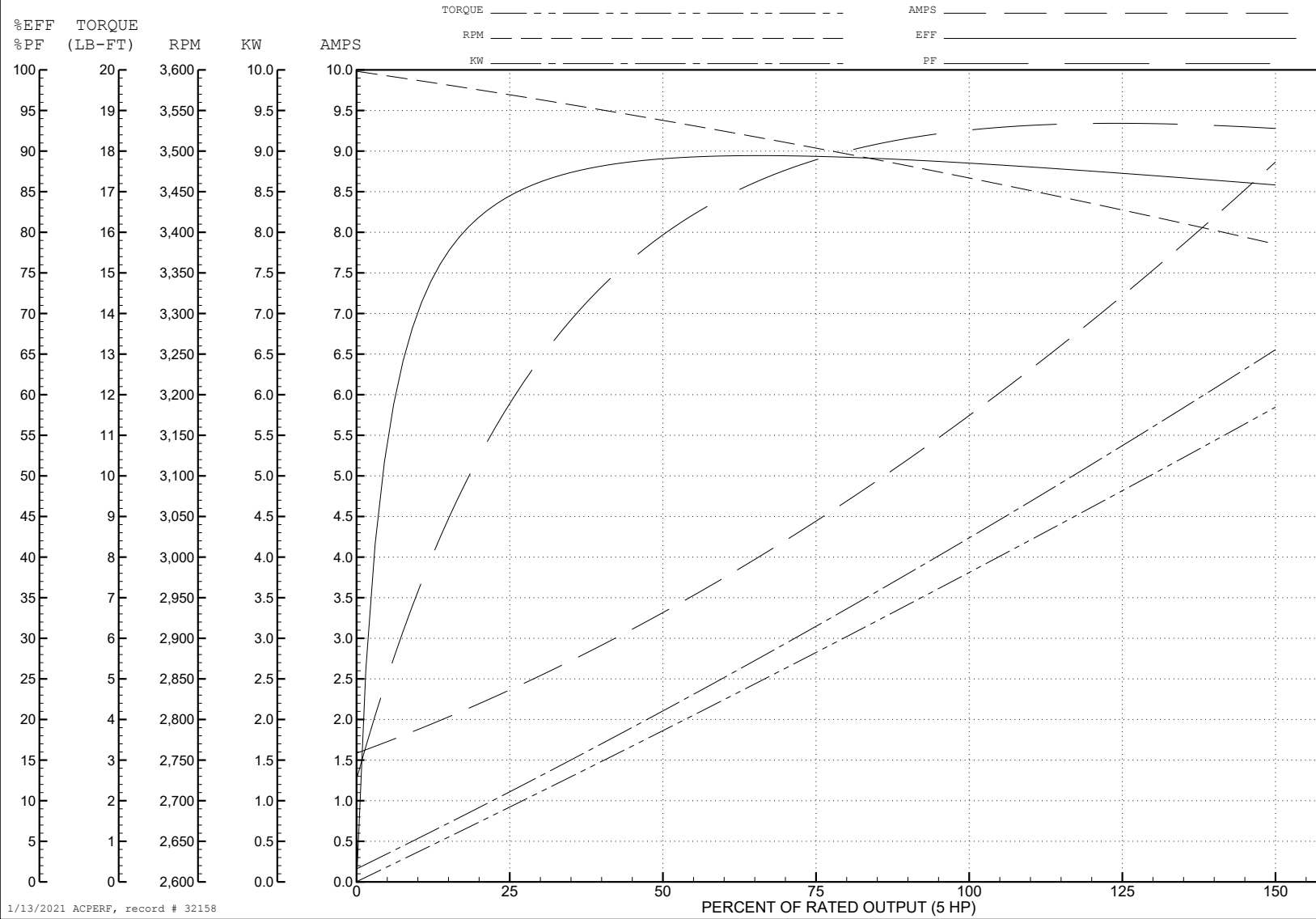
ABB Motors and Mechanical Inc.

WINDING # 36WGS042

5 HP 3 PH 60 HZ 3450 RPM 460 V 3630M

Typical performance - not guaranteed values.

TORQUES (LB-FT): PO=33.7 PU=23.5 LR=27.5 LRA=57.2



1/13/2021 ACPERF, record # 32158

AC Induction Motor Performance Data

Record # 50850

Typical performance - not guaranteed values

Winding: 36WGS042-R002		Type: 3630M	Enclosure: TEFC	
Nameplate Data			480 V, 60 Hz: High Voltage Connection	
Rated Output (HP)		5	Full Load Torque	7.64 LB-FT
Volts		230/460	Start Configuration	direct on line
Full Load Amps		11.8/5.9	Breakdown Torque	37.2 LB-FT
R.P.M.		3450	Pull-up Torque	26.4 LB-FT
Hz	60 Phase	3	Locked-rotor Torque	30.9 LB-FT
NEMA Design Code	A KVA Code	L	Starting Current	60.6 A
Service Factor (S.F.)		1.15	No-load Current	1.91 A
NEMA Nom. Eff.	88.5 Power Factor	91	Line-line Res. @ 25°C	2.26 Ω
Rating - Duty		40C AMB-CONT	Temp. Rise @ Rated Load	71°C
S.F. Amps			Temp. Rise @ S.F. Load	85°C
			Locked-rotor Power Factor	45.7
			Rotor inertia	0.134 LB-FT ²

Load Characteristics 480 V, 60 Hz, 5 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	56	77	86	90	92	93	91
Efficiency	83.3	88.5	89.4	88.7	87.6	86	88
Speed	3571	3541	3511	3475	3440	3400	3454
Line amperes	2.39	3.32	4.43	5.71	7.03	8.46	6.5

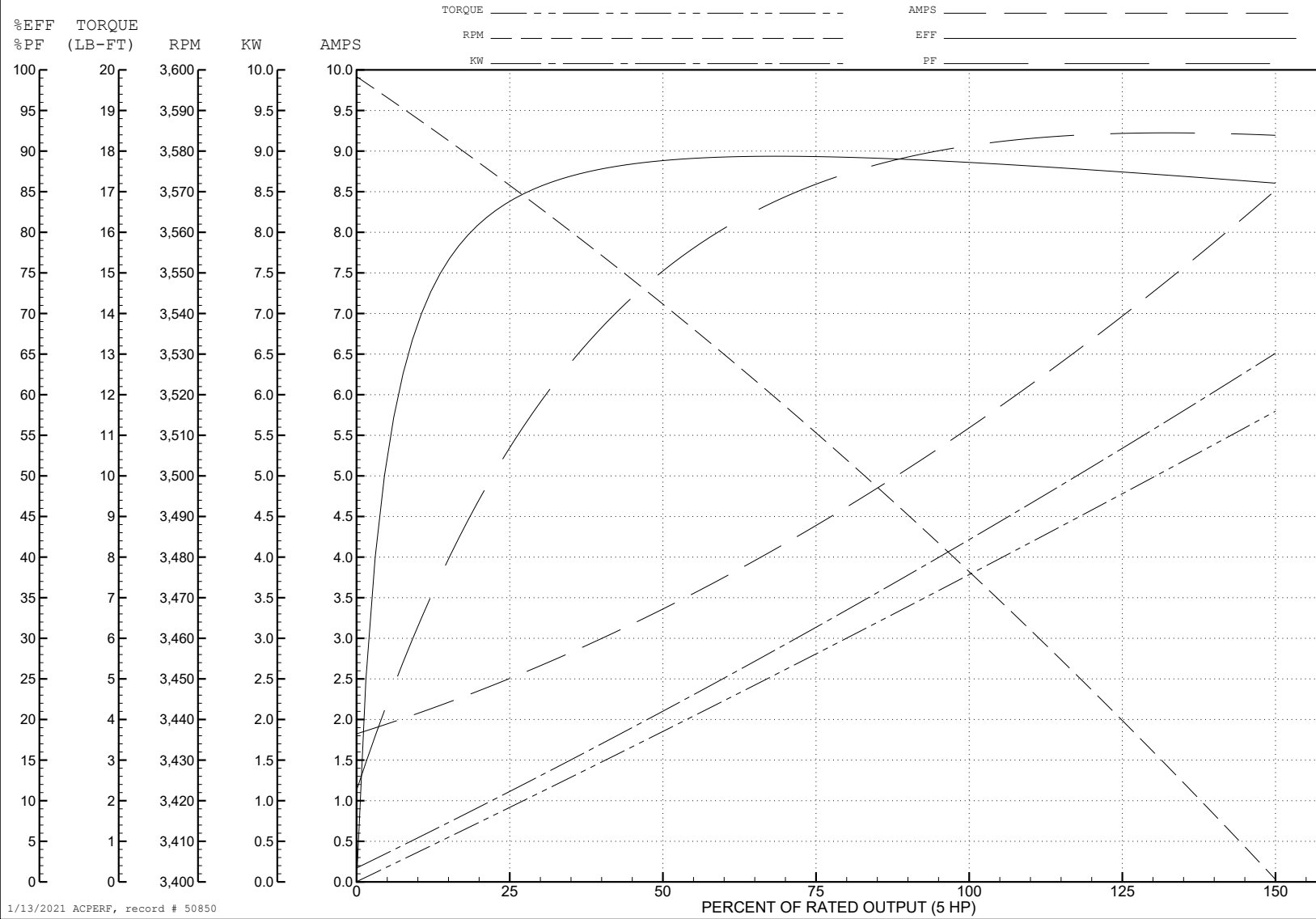
ABB Motors and Mechanical Inc.

WINDING # 36WGS042

Typical performance - not guaranteed values.

5 HP 3 PH 60 HZ 3450 RPM 480 V 3630M

TORQUES (LB-FT): PO=37.2 PU=26.4 LR=30.9 LRA=60.6



1/13/2021 ACPERF, record # 50850

AC Induction Motor Performance Data

Record # 51386

Typical performance - not guaranteed values

Winding: 36WGS042-R002		Type: 3630M		Enclosure: TEFC	
Nameplate Data			207 V, 60 Hz: Low Voltage Connection		
Rated Output (HP)	5	Full Load Torque	7.73 LB-FT		
Volts	230/460	Start Configuration	direct on line		
Full Load Amps	11.8/5.9	Breakdown Torque	26.7 LB-FT		
R.P.M.	3450	Pull-up Torque	18.2 LB-FT		
Hz	60 Phase	3	Locked-rotor Torque	21.3 LB-FT	
NEMA Design Code	A KVA Code	L	Starting Current	100 A	
Service Factor (S.F.)	1.15	No-load Current	2.7 A		
NEMA Nom. Eff.	88.5 Power Factor	91	Line-line Res. @ 25°C	0.566 Ω	
Rating - Duty	40C AMB-CONT		Temp. Rise @ Rated Load	78°C	
S.F. Amps			Temp. Rise @ S.F. Load	99°C	
			Locked-rotor Power Factor	44	
			Rotor inertia	0.134 LB-FT ²	

Load Characteristics 207 V, 60 Hz, 5 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	73	87	92	94	94	94	94
Efficiency	85.8	89.5	89.3	88	86.1	84.3	86.9
Speed	3563	3525	3485	3439	3392	3338	3411
Line amperes	4.17	6.68	9.54	12.8	16.1	19.9	14.8

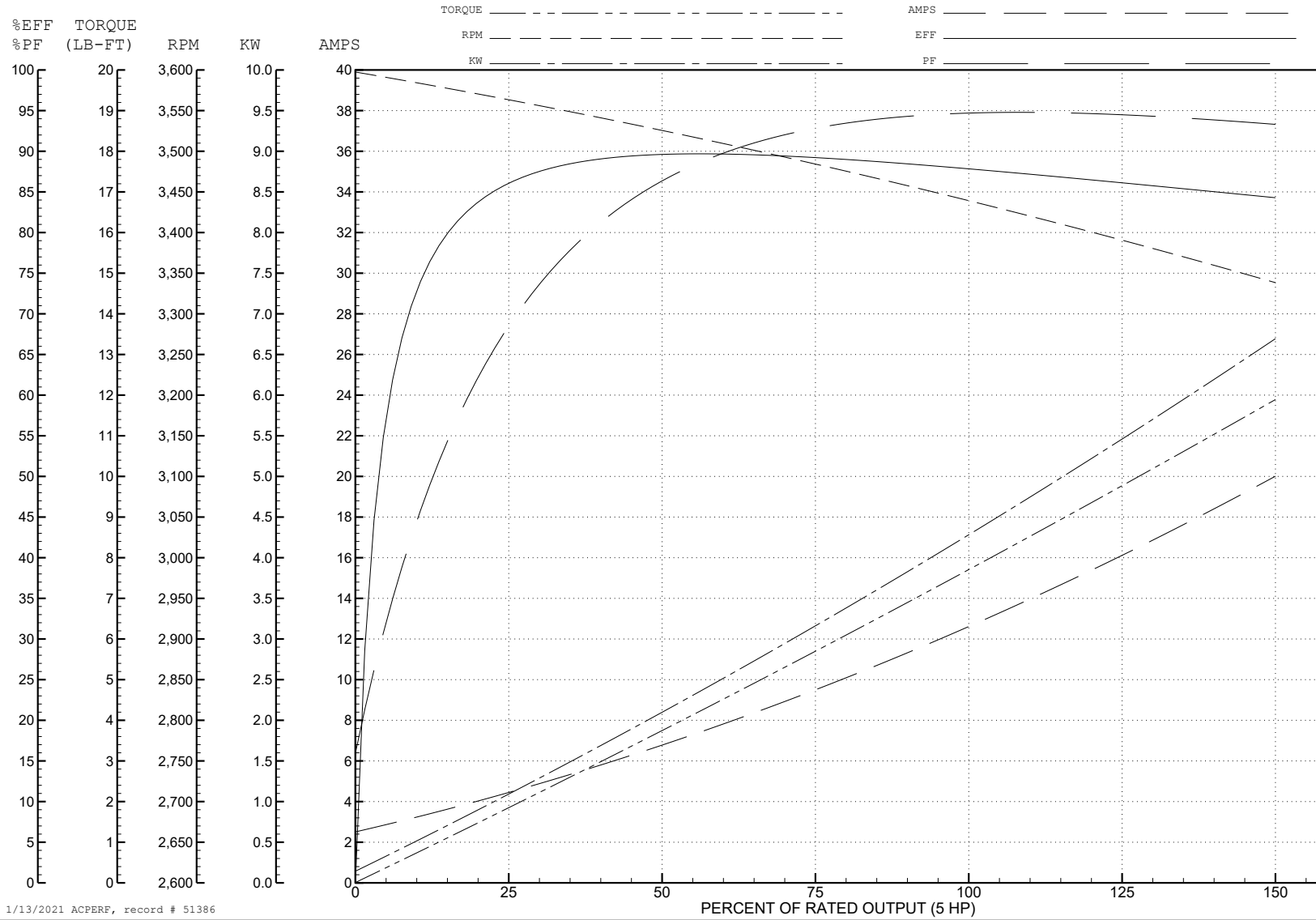
ABB Motors and Mechanical Inc.

WINDING # 36WGS042

Typical performance - not guaranteed values.

5 HP 3 PH 60 HZ 3450 RPM 207 V 3630M

TORQUES (LB-FT): PO=26.7 PU=18.2 LR=21.3 LRA=100



1/13/2021 ACPERF, record # 51386

AC Induction Motor Performance Data

Record # 59341

Typical performance - not guaranteed values

Winding: 36WGS042-R002		Type: 3630M	Enclosure: TEFC	
Nameplate Data			230 V, 60 Hz: Low Voltage Connection	
Rated Output (HP)	5	Full Load Torque	7.67 LB-FT	
Volts	230/460	Start Configuration	direct on line	
Full Load Amps	11.8/5.9	Breakdown Torque	33.7 LB-FT	
R.P.M.	3450	Pull-up Torque	23.5 LB-FT	
Hz	60 Phase	Locked-rotor Torque	27.5 LB-FT	
NEMA Design Code	A KVA Code	Starting Current	114 A	
Service Factor (S.F.)	1.15	No-load Current	3.36 A	
NEMA Nom. Eff.	88.5 Power Factor	Line-line Res. @ 25°C	0.576 Ω	
Rating - Duty	40C AMB-CONT	Temp. Rise @ Rated Load	72°C	
S.F. Amps		Temp. Rise @ S.F. Load	88°C	
		Locked-rotor Power Factor	45.4	
		Rotor inertia	0.134 LB-FT ²	

Load Characteristics 230 V, 60 Hz, 5 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	62	81	88	91	93	94	92
Efficiency	84.1	88.9	89.4	88.7	87.3	85.8	87.9
Speed	3569	3537	3504	3466	3428	3385	3443
Line amperes	4.48	6.52	8.94	11.7	14.5	17.6	13.4

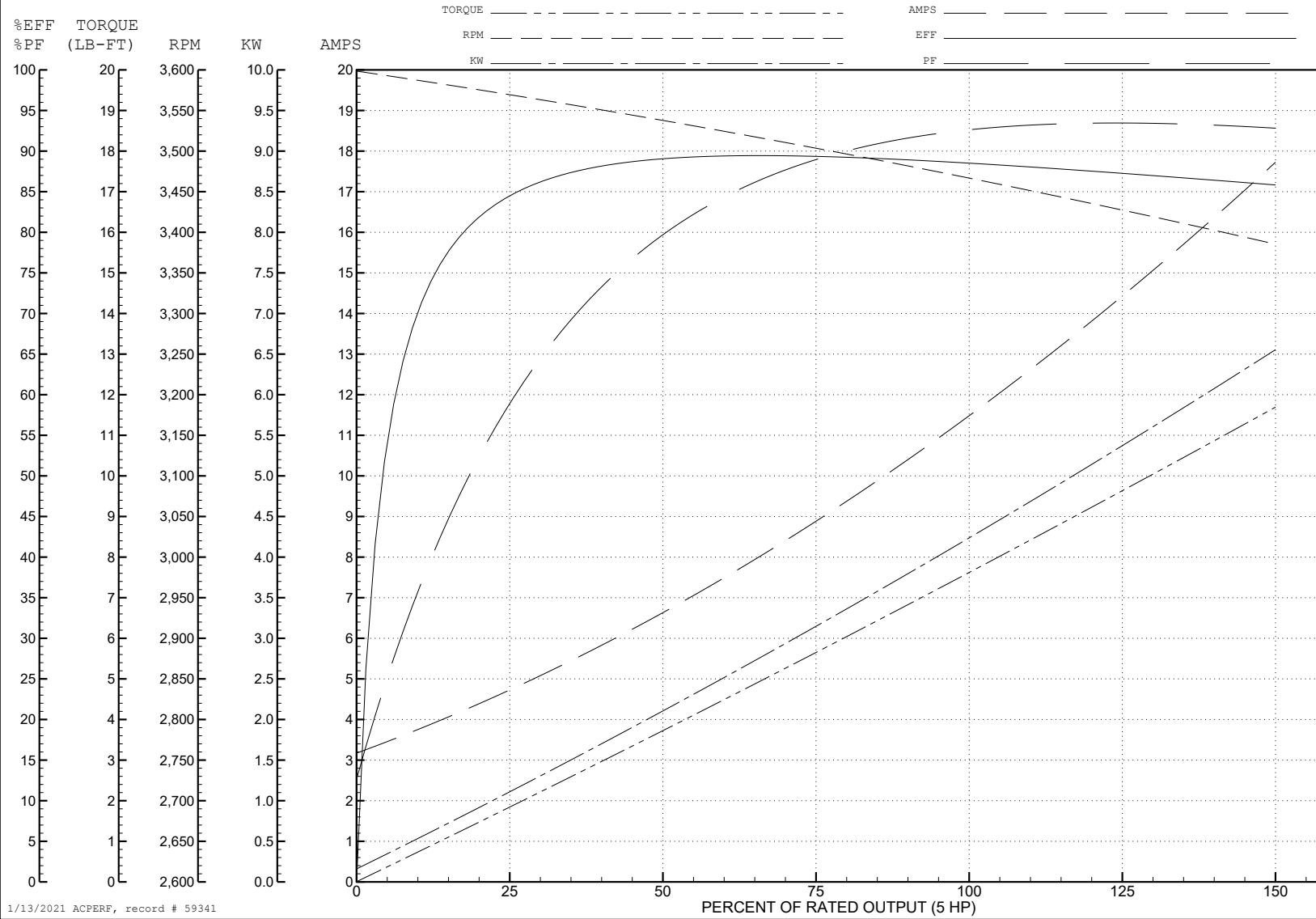
ABB Motors and Mechanical Inc.

WINDING # 36WGS042

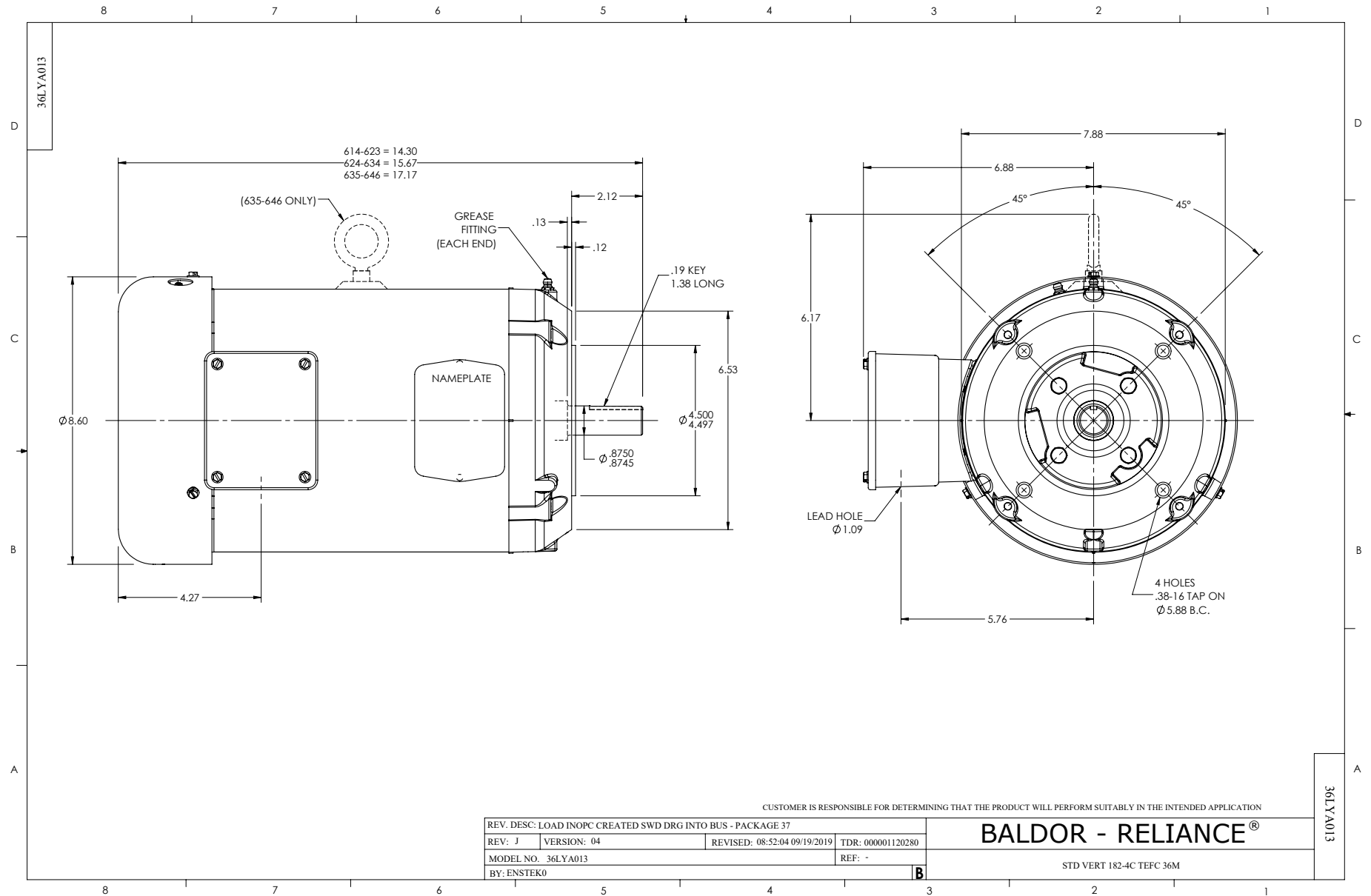
5 HP 3 PH 60 HZ 3450 RPM 230 V 3630M

Typical performance - not guaranteed values.

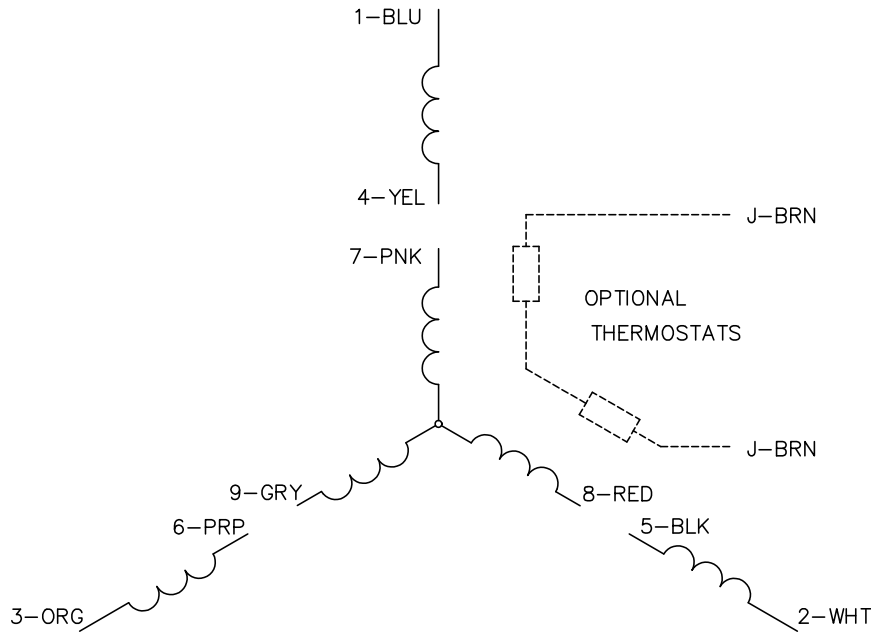
TORQUES (LB-FT): PO=33.7 PU=23.5 LR=27.5 LRA=114



1/13/2021 ACPERF, record # 59341



CD0005



LOW VOLTAGE
(2Y)



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: E	BY: JLP	REVISED: 01/19/99 10:15	TDR: 0171435
S00000		FILE: AAA00005140	MDL: -
		MTL: -	

BALDOR ELECTRIC Co.

3PH, DV, 9 LEADS

CD0005