BALDOR • RELIANCE

Product Information Packet

EFM3613T

5HP,3450RPM,3PH,60HZ,184T,3630M,TEFC,F2

Part Detail

Revision:	C	**Status:**	PRD/A	**Change #:**		**Proprietary:**	No
Type:	AC	**Elec. Spec:**	36WGS042	**CD Diagram:**	CD0005	**Mfg Plant:**	
Mech. Spec:	36A006	**Layout:**	36LYA006	**Poles:**	02	**Created Date:**	04-22-2013
Base:	RG	**Eff. Date:**	10-23-2017	**Leads:**	9#16		

Specs

Catalog Number:	EFM3613T	**Insulation Class:**	F
Enclosure:	TEFC	**Inverter Code:**	Inverter Ready
Frame:	184T	**KVA Code:**	L
Frame Material:	Steel	**Lifting Lugs:**	No Lifting Lugs
Output @ Frequency:	5.000 HP @ 60 HZ	**Locked Bearing Indicator:**	No Locked Bearing
Synchronous Speed @ Frequency:	3600 RPM @ 60 HZ	**Motor Lead Quantity/Wire Size:**	9 @ 16 AWG
Voltage @ Frequency:	460.0 V @ 60 HZ	**Motor Lead Exit:**	Ko Box
	230.0 V @ 60 HZ	**Motor Lead Termination:**	Flying Leads
XP Class and Group:	None	**Motor Type:**	3630M
XP Division:	Not Applicable	**Mounting Arrangement:**	F2
Agency Approvals:	CSA	**Power Factor:**	91
	CSA EEV	**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)	**Shaft Extension Location:**	Pulley End
Blower:	None	**Shaft Ground Indicator:**	No Shaft Grounding

Current @ Voltage:	11.800 A @ 230.0 V	**Shaft Rotation:**	Reversible
	5.900 A @ 460.0 V	**Shaft Slinger Indicator:**	No Slinger
Design Code:	A	**Speed Code:**	Single Speed
Drip Cover:	No Drip Cover	**Motor Standards:**	NEMA
Duty Rating:	CONT	**Starting Method:**	Direct on line
Electrically Isolated Bearing:	Not Electrically Isolated	**Thermal Device - Bearing:**	None
Feedback Device:	NO FEEDBACK	**Thermal Device - Winding:**	None
Front Face Code:	Standard	**Vibration Sensor Indicator:**	No Vibration Sensor
Front Shaft Indicator:	None	**Winding Thermal 1:**	None
Heater Indicator:	No Heater	**Winding Thermal 2:**	None

Nameplate NP3441L

CAT.NO.	EFM3613T								
SPEC.	36A006S042G2								
HP	5								
VOLTS	230/460								
AMP	11.8/5.9								
RPM	3450								
FRAME	184T	**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**							
VPWM INVERTER READY									
CT6-60H(10:1)VT3-60H(20:1									

Parts List

Part Number	Description	Quantity
SA262268	SA 36A006S042G2	1.000 EA
RA249000	RA 36A006S042G2	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
36EP3100A01SP	PUEP ASSEMBLY FOR ROUTING PURPOSES	1.000 EA
HW4500A01	1641B(ALEMITE)400 UNIV, GREASE FITT	1.000 EA
XY2520A12	1/4-20 HEX NUT, DIRECTIONAL SERRATIONS	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
37GS1001	GASKET, CONDUIT BOX LID, .06 THICK LEXID	1.000 EA
51XW0832A07	8-32 X .44, TAPTITE II, HEX WSHR SLTD SE	4.000 EA
HW2501E16	KEY, 1/4 SQ X 1.750	1.000 EA
HA7000A02	KEY RETAINER RING, 1 1/8 DIA, 1 3/8 DIA	1.000 EA
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	2.000 EA
MJ1000A02	GREASE, MOBIL POLYREX EM - 124047	0.050 LB

Parts List (continued)

Part Number	Description	Quantity
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
NP3441L	ALUM SUPER-E VPWM INVERTER READY UL	1.000 EA
36PA1000	PKG GRP, PRINT PK1016A06	1.000 EA
MN416A01	TAG-INSTAL-MAINT no wire (2100/bx) 4/22	1.000 EA

AC Induction Motor Performance Data
Record # 32158
Typical performance - not guaranteed values

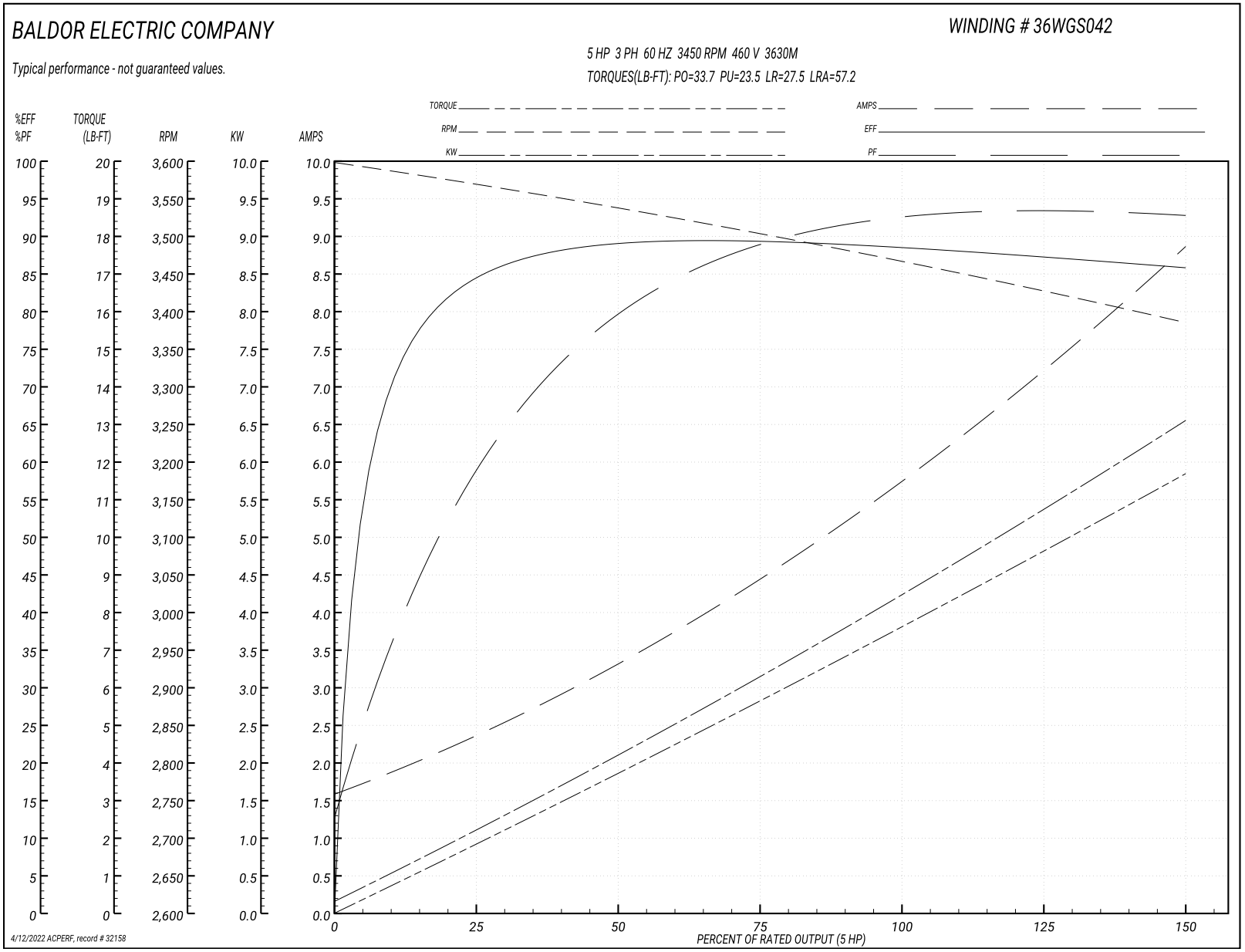
Winding: 36WGS042-R002	**Type:** 3630M	**Enclosure:** TEFC

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**	3	**Locked-rotor Torque**	27.5 LB-FT
NEMA Design Code	A **KVA Code**	L	**Starting Current**	57.2 A
Service Factor (S.F.)		1.15	**No-load Current**	1.68 A
NEMA Nom. Eff.	88.5 **Power Factor**	91	**Line-line Res. @ 25ºC**	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-FT2

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

Performance Graph at 460V, 60Hz, 5.0HP Typical performance - Not guaranteed values



AC Induction Motor Performance Data
Record # 50850
Typical performance - not guaranteed values

Winding: 36WGS042-R002 **Type:** 3630M **Enclosure:** TEFC

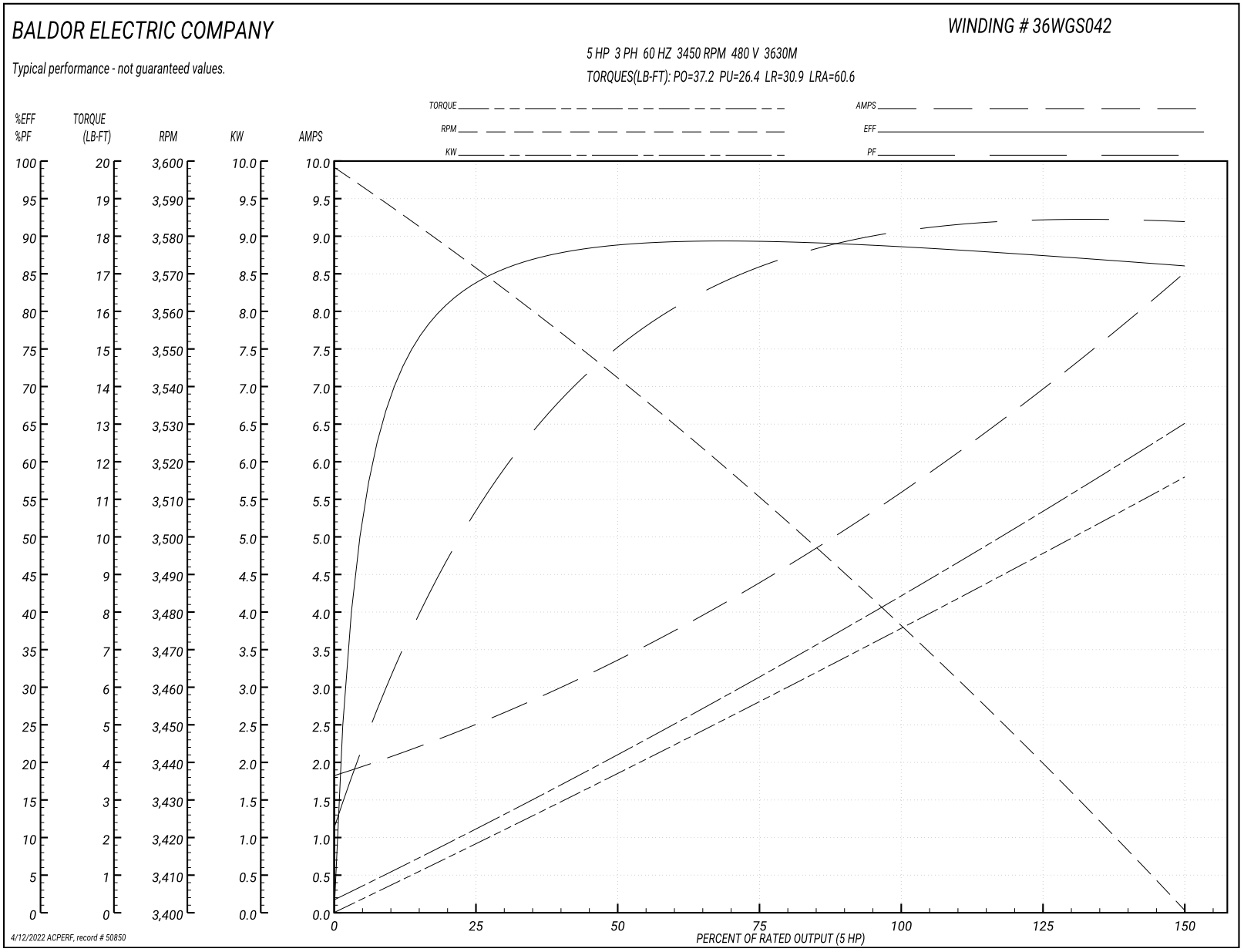
Nameplate Data		
Rated Output (HP)		5
Volts		230/460
Full Load Amps		11.8/5.9
R.P.M.		3450
Hz	60 **Phase**	3
NEMA Design Code	A **KVA Code**	L
Service Factor (S.F.)		1.15
NEMA Nom. Eff.	88.5 **Power Factor**	91
Rating - Duty		40C AMB-CONT
S.F. Amps		

480 V, 60 Hz: High Voltage Connection	
Full Load Torque	7.64 LB-FT
Start Configuration	direct on line
Breakdown Torque	37.2 LB-FT
Pull-up Torque	26.4 LB-FT
Locked-rotor Torque	30.9 LB-FT
Starting Current	60.6 A
No-load Current	1.91 A
Line-line Res. @ 25ºC	2.26 Ω
Temp. Rise @ Rated Load	71°C
Temp. Rise @ S.F. Load	85°C
Locked-rotor Power Factor	45.7
Rotor inertia	0.134 LB-FT2

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

Performance Graph at 480V, 60Hz, 5.0HP Typical performance - Not guaranteed values



AC Induction Motor Performance Data
Record # 51386
Typical performance - not guaranteed values

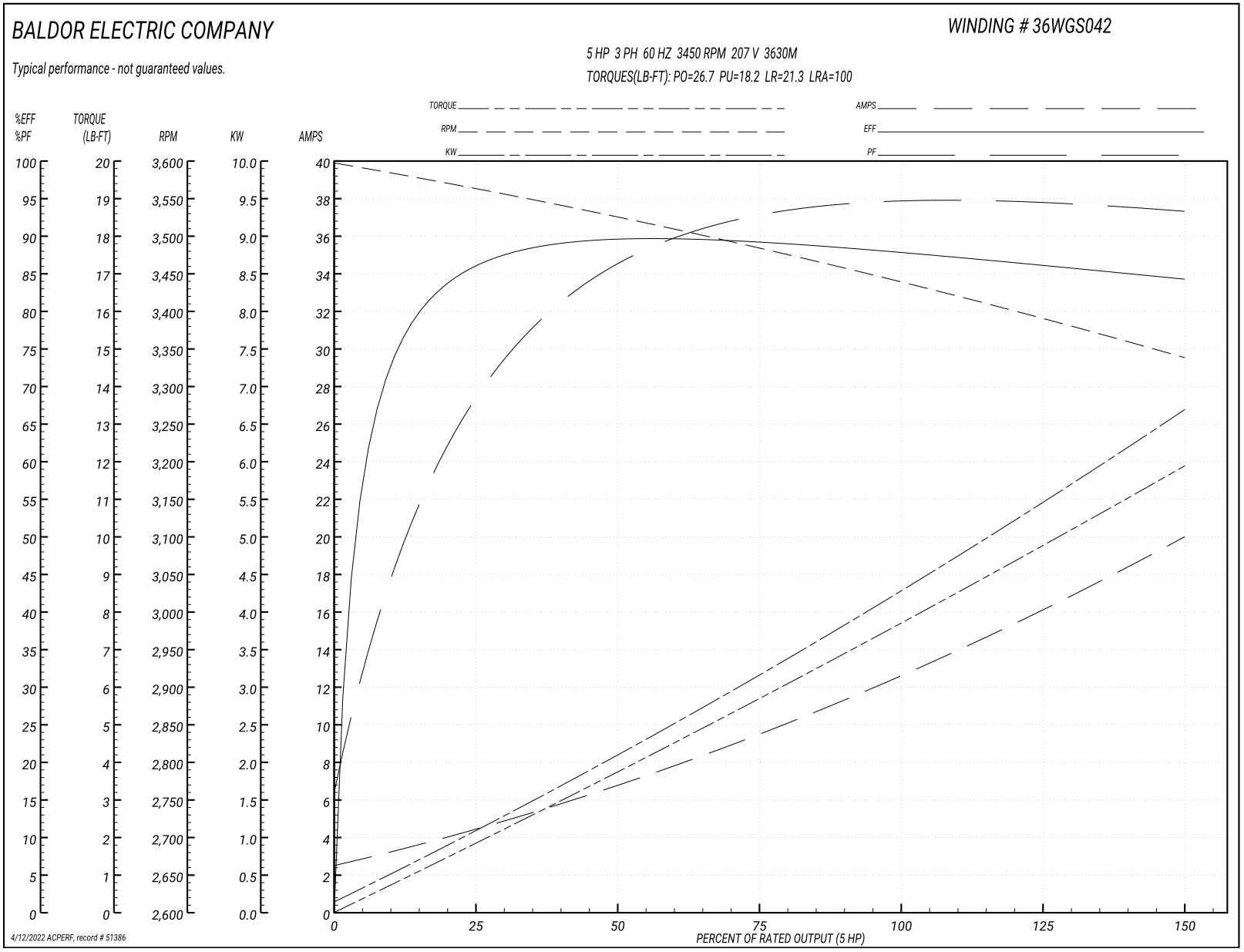
Winding: 36WGS042-R002	**Type:** 3630M	**Enclosure:** TEFC

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. @ 25ºC**	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-FT2

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

Performance Graph at 207V, 60Hz, 5.0HP Typical performance - Not guaranteed values



AC Induction Motor Performance Data
Record # 59341
Typical performance - not guaranteed values

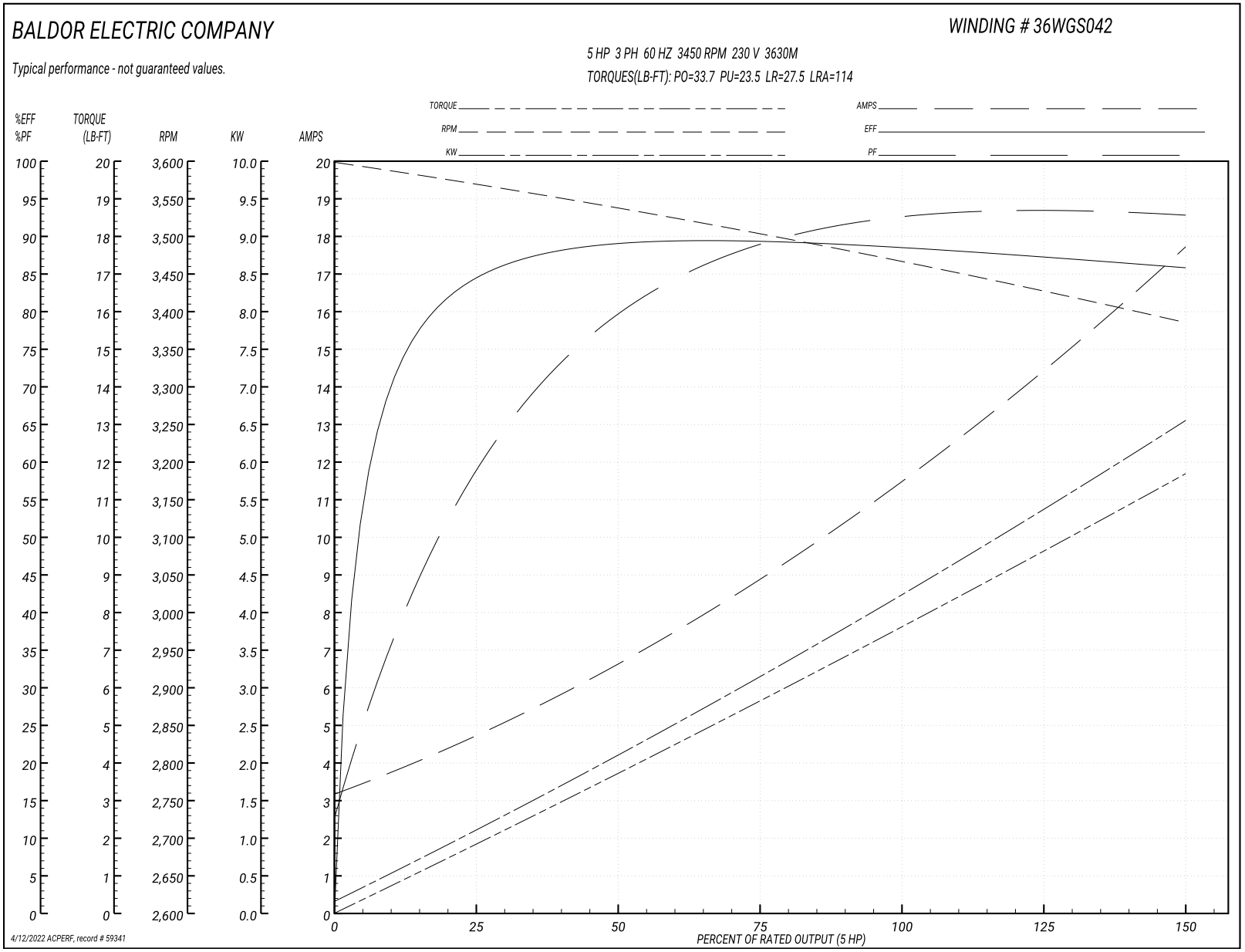
Winding: 36WGS042-R002	**Type:** 3630M	**Enclosure:** TEFC

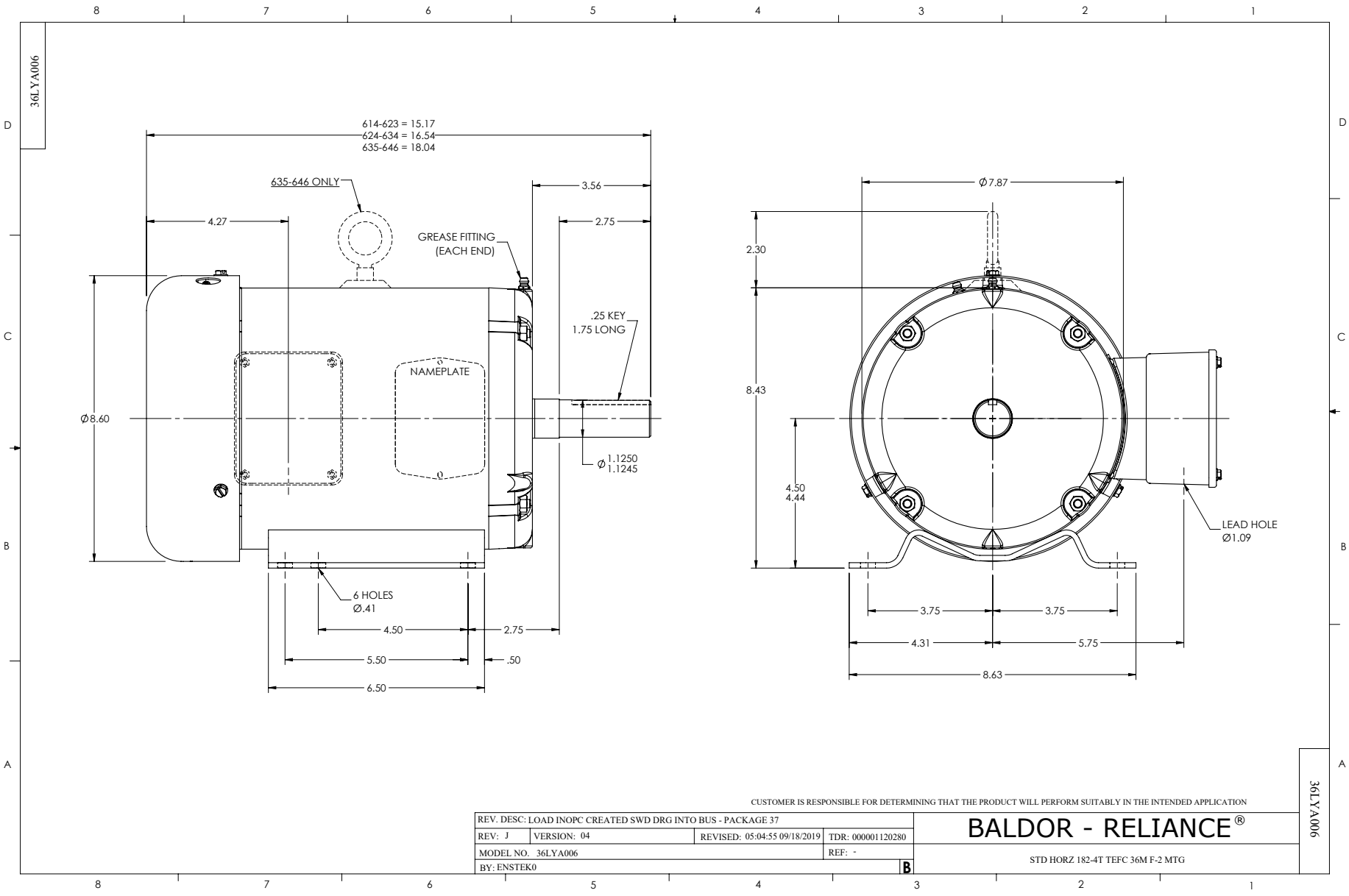
Nameplate Data			**230 V, 60 Hz: Low Voltage Connection**	
Rated Output (HP)		5	**Full Load Torque**	7.67 LB-FT
Volts		230/460	**Start Configuration**	direct on line
Full Load Amps		11.8/5.9	**Breakdown Torque**	33.7 LB-FT
R.P.M.		3450	**Pull-up Torque**	23.5 LB-FT
Hz	60 **Phase**	3	**Locked-rotor Torque**	27.5 LB-FT
NEMA Design Code	A **KVA Code**	L	**Starting Current**	114 A
Service Factor (S.F.)		1.15	**No-load Current**	3.36 A
NEMA Nom. Eff.	88.5 **Power Factor**	91	**Line-line Res. @ 25ºC**	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-FT2

Load Characteristics 230 V, 60 Hz, 5 HP

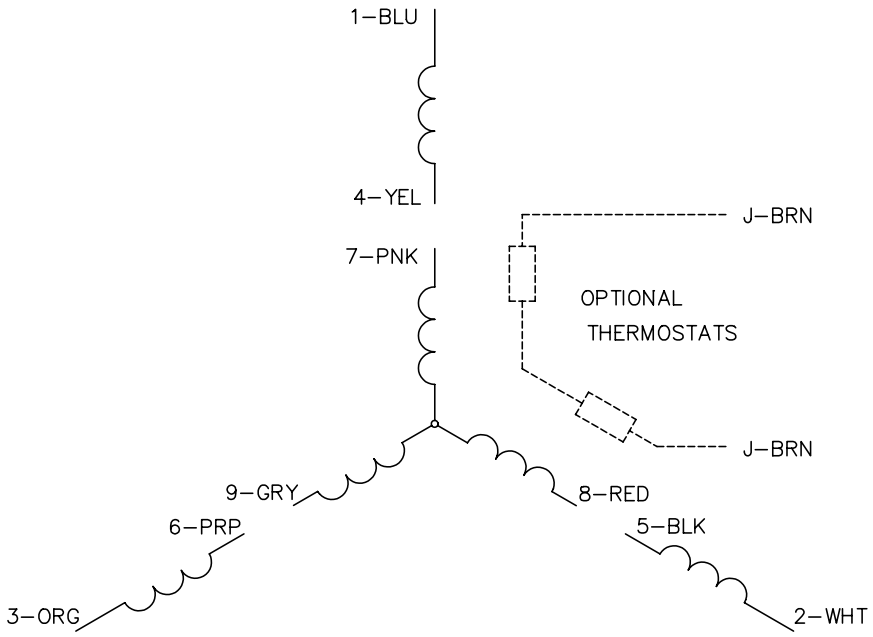
% of Rated Load	**25**	**50**	**75**	**100**	**125**	**150**	**S.F.**
Power Factor	62	81	88	91	93	94	92
Efficiency	84.1	88.9	89.4	88.7	87.3	85.8	87.9
Speed	3569	3537	3504	3466	3428	3385	3443
Line amperes	4.48	6.52	8.94	11.7	14.5	17.6	13.4

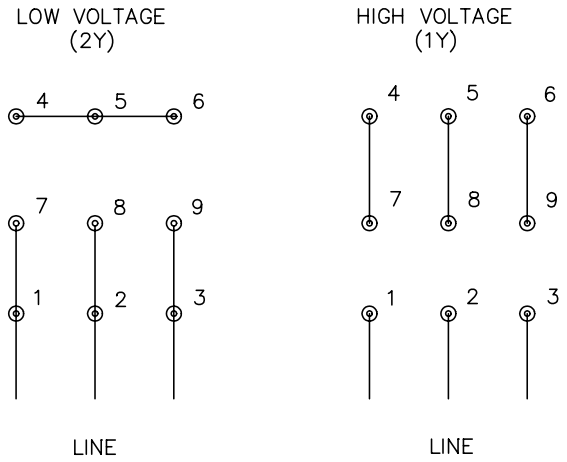
Performance Graph at 230V, 60Hz, 5.0HP Typical performance - Not guaranteed values




36LYA006
614-623 = 15.17
624-634 = 16.54
635-646 = 18.04
635-646 ONLY
3.56
4.27
2.75
GREASE FITTING
(EACH END)
.25 KEY
1.75 LONG
NAMEPLATE
Ø8.60
Ø 1.1250
1.1245
6 HOLES
Ø.41
4.50
2.75
5.50
.50
6.50
Ø7.87
2.30
8.43
4.50
4.44
LEAD HOLE
Ø1.09
3.75
3.75
4.31
5.75
8.63
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT THE PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION
REV. DESC: LOAD INOPC CREATED SWD DRG INTO BUS - PACKAGE 37
REV: J
VERSION: 04
REVISED: 05:04:55 09/18/2019
TDR: 000001120280
MODEL NO. 36LYA006
REF: -
BY: ENSTEK0
B
BALDOR - RELIANCE®
STD HORZ 182-4T TEFC 36M F-2 MTG
36LYA006

CD0005





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.

CD0005

REV. DESC: REVISE TO SHOW OPTIONAL COLORS			BALDOR ELECTRIC Co.
REV. LTR: E	BY: JLP	REVISED: 01/19/99 10:15	TDR: 0171435
CD0005		FILE: AAA00005140	MDL: –
		MTL: –	3PH, DV, 9 LEADS