

**BALDOR • RELIANCE**

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# Customer information packet

## EFM3613T

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

Class - None

Division - Not Applicable

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## Specifications

Enclosure	TEFC
Frame	184T
Frame Material	Steel
Frequency	60.00 Hz
Haz Area Class and Group	None
Haz Area Division	Not Applicable
Motor Letter Type	Three Phase
Output @ Frequency	5.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	3600 RPM @ 60 HZ
Voltage @ Frequency	460.0 V @ 60 HZ 230.0 V @ 60 HZ
Agency Approvals	CURUSEEV NEMA PREMIUM NEMA_PREMIUM UR CSA EEV
Ambient Temperature	40 °C
Auxillary Box	No Auxillary Box
Auxillary Box Lead Termination	None
Base Indicator	Rigid
Bearing Grease Type	Polyrex EM (-20F +300F)
Blower	None
Current @ Voltage	11.800 A @ 230.0 V 5.900 A @ 460.0 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

## Part detail

Revision	F
Type	AC
Mech. spec.	36A006
Base	
Status	PRD/A
Elec. spec.	36WGS042
Layout	36LYA006
Eff. date	10-02-2024
CD Diagram	CD0005
Poles	02
Leads	9#16
Proprietary	False
Created date	04-22-2013

Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	5.9 a
Insulation Class	F
Inverter Code	Inverter Ready
KVA Code	L
Lifting Lugs	No Lifting Lugs
Locked Bearing Indicator	No 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	F2
Number of Poles	2
Overall Length	16.54 IN
Power Factor	91
Product Family	General Purpose
Pulley End Bearing Type	Ball
Pulley Face Code	Standard
Pulley Shaft Indicator	Standard
Rodent Screen	None
Service Factor	1.15
Shaft Diameter	1.125 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

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Winding Thermal 2

None

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**Nameplate****NP3441L**

<b>CAT.NO.</b>	EFM3613T						
<b>SPEC.</b>	36A006S042G2						
<b>HP</b>	5						
<b>VOLTS</b>	230/460						
<b>AMP</b>	11.8/5.9						
<b>RPM</b>	3450						
<b>FRAME</b>	184T		<b>HZ</b>	60		<b>PH</b>	3
<b>SER.F.</b>	1.15	<b>CODE</b>	L	<b>DES</b>	A	<b>CL</b>	F
<b>NEMA-NOM-EFF</b>	88.5	<b>PF</b>	91				
<b>RATING</b>	40C AMB-CONT						
<b>CC</b>	010A						
<b>DE</b>	6206		<b>ODE</b>	6205			
<b>ENCL</b>	TEFC	<b>SN</b>					

**VPWM INVERTER READY****CT6-60H(10:1)VT3-60H(20:1)**

**AC Induction Motor Performance Data**

Record # 32158

Typical performance - not guaranteed values

Winding: 36WGS042-R002		Type: 3630M	Enclosure: TEFC	
<b>Nameplate Data</b>			<b>460 V, 60 Hz: High Voltage Connection</b>	
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 <sup>2</sup>	

**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

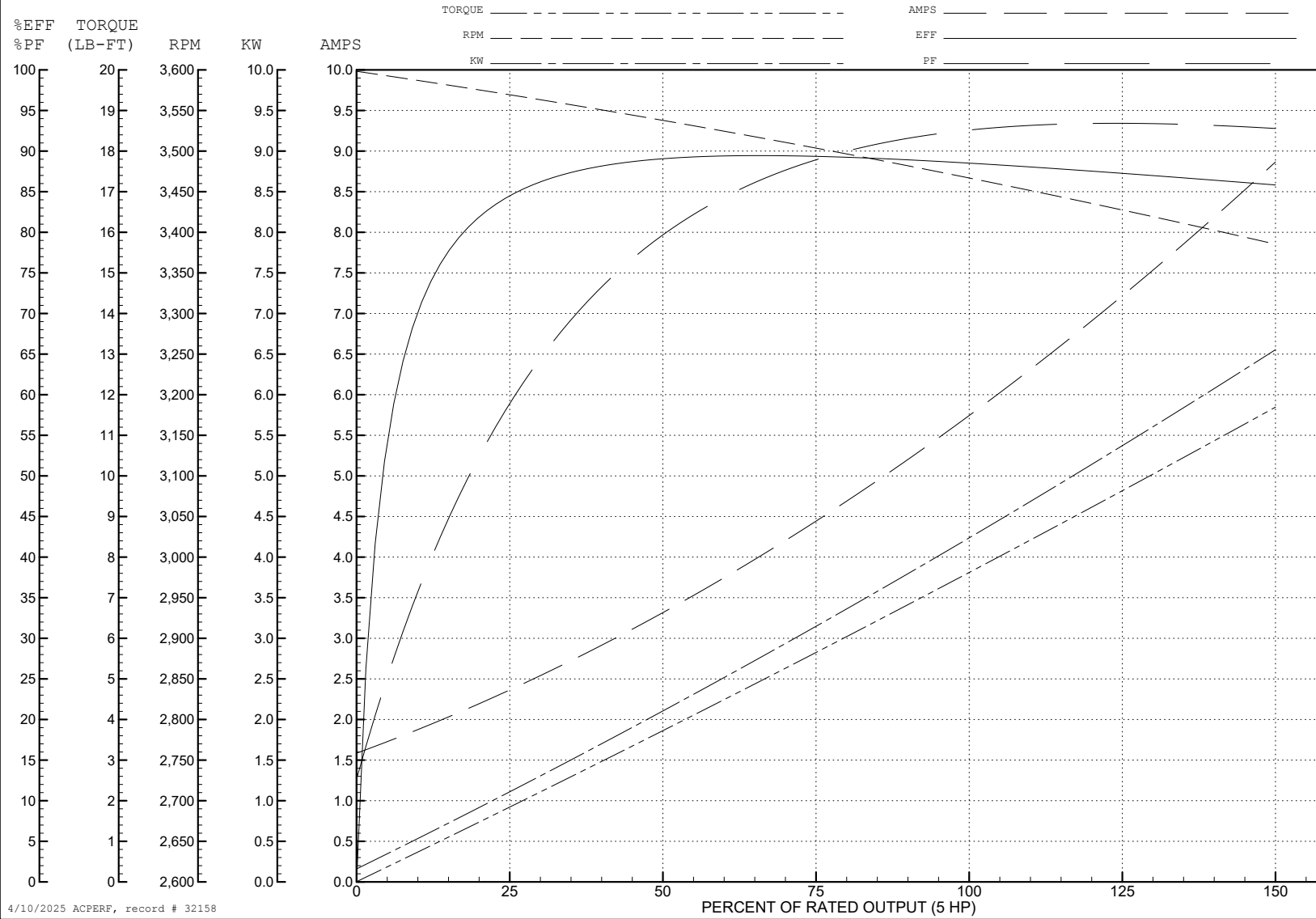
ABB Motors and Mechanical Inc.

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



4/10/2025 ACPERF, record # 32158

**AC Induction Motor Performance Data**

Record # 50850

Typical performance - not guaranteed values

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

**Load Characteristics 480 V, 60 Hz, 5 HP**

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

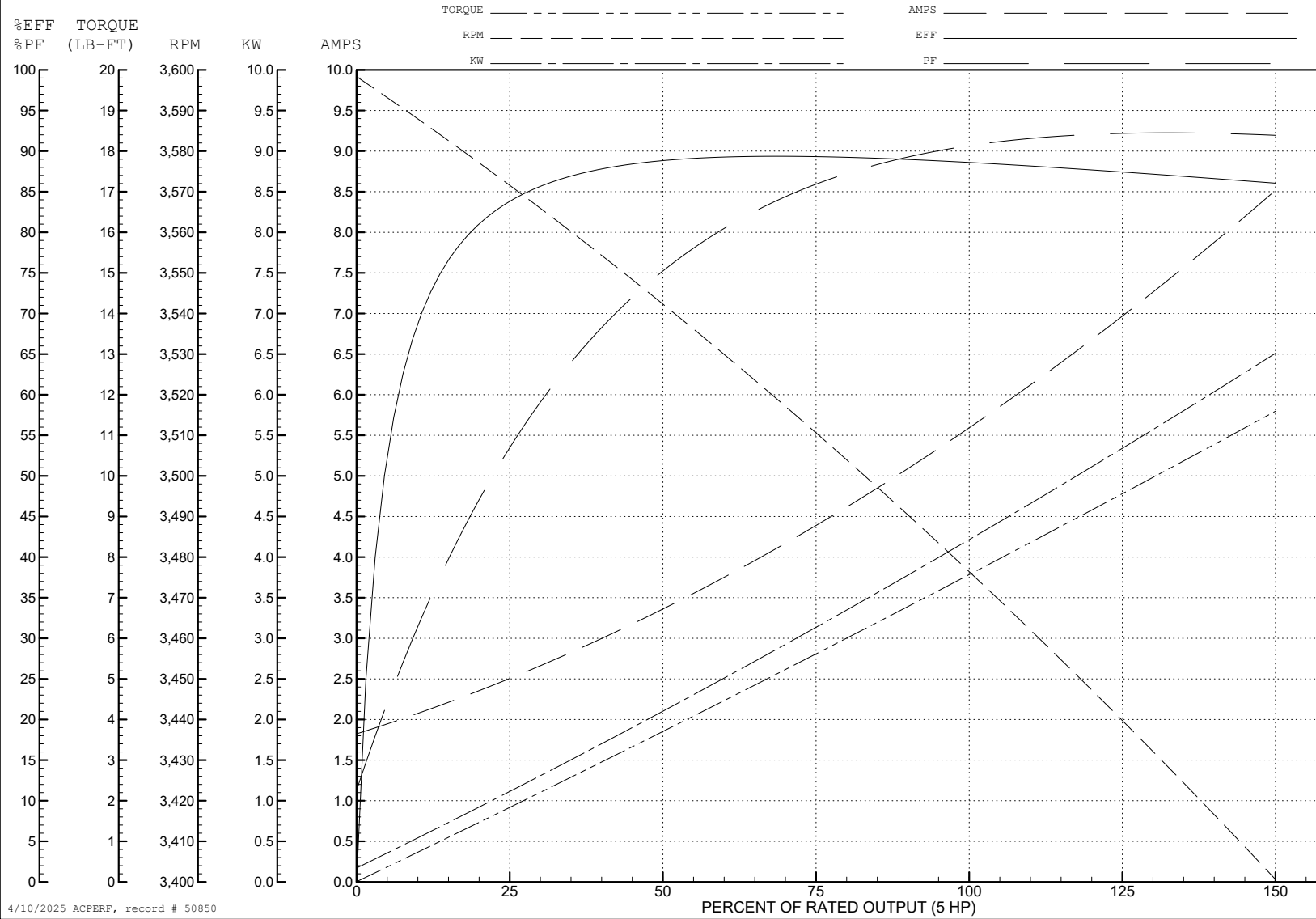
ABB Motors and Mechanical Inc.

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



4/10/2025 ACPERF, record # 50850

**AC Induction Motor Performance Data**

Record # 51386

Typical performance - not guaranteed values

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

**Load Characteristics 207 V, 60 Hz, 5 HP**

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

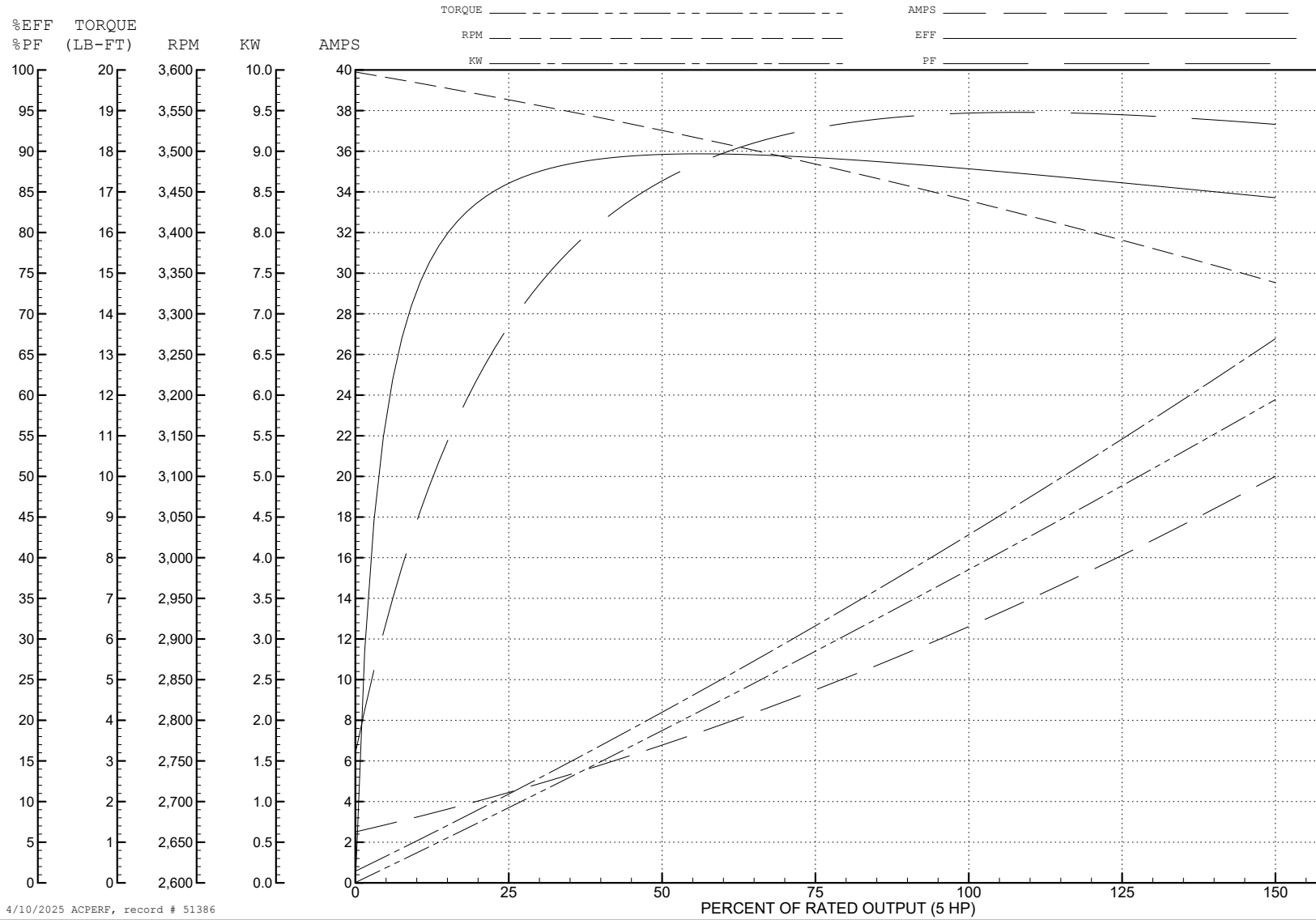
ABB Motors and Mechanical Inc.

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



4/10/2025 ACPERF, record # 51386

**AC Induction Motor Performance Data**

Record # 59341

Typical performance - not guaranteed values

Winding: 36WGS042-R002		Type: 3630M	Enclosure: TEFC	
<b>Nameplate Data</b>			<b>230 V, 60 Hz: Low Voltage Connection</b>	
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 <sup>2</sup>	

**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

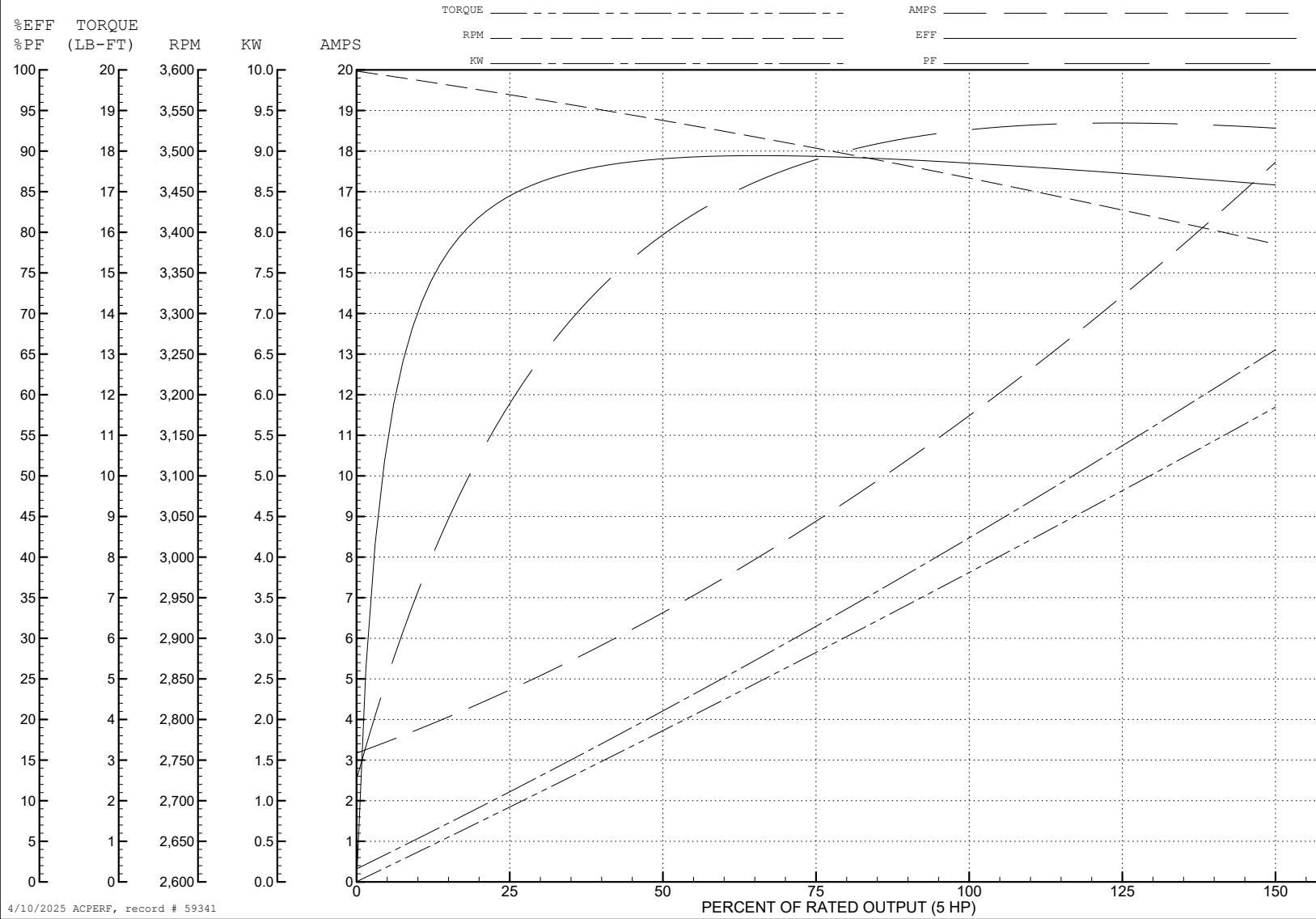
ABB Motors and Mechanical Inc.

WINDING # 36WGS042

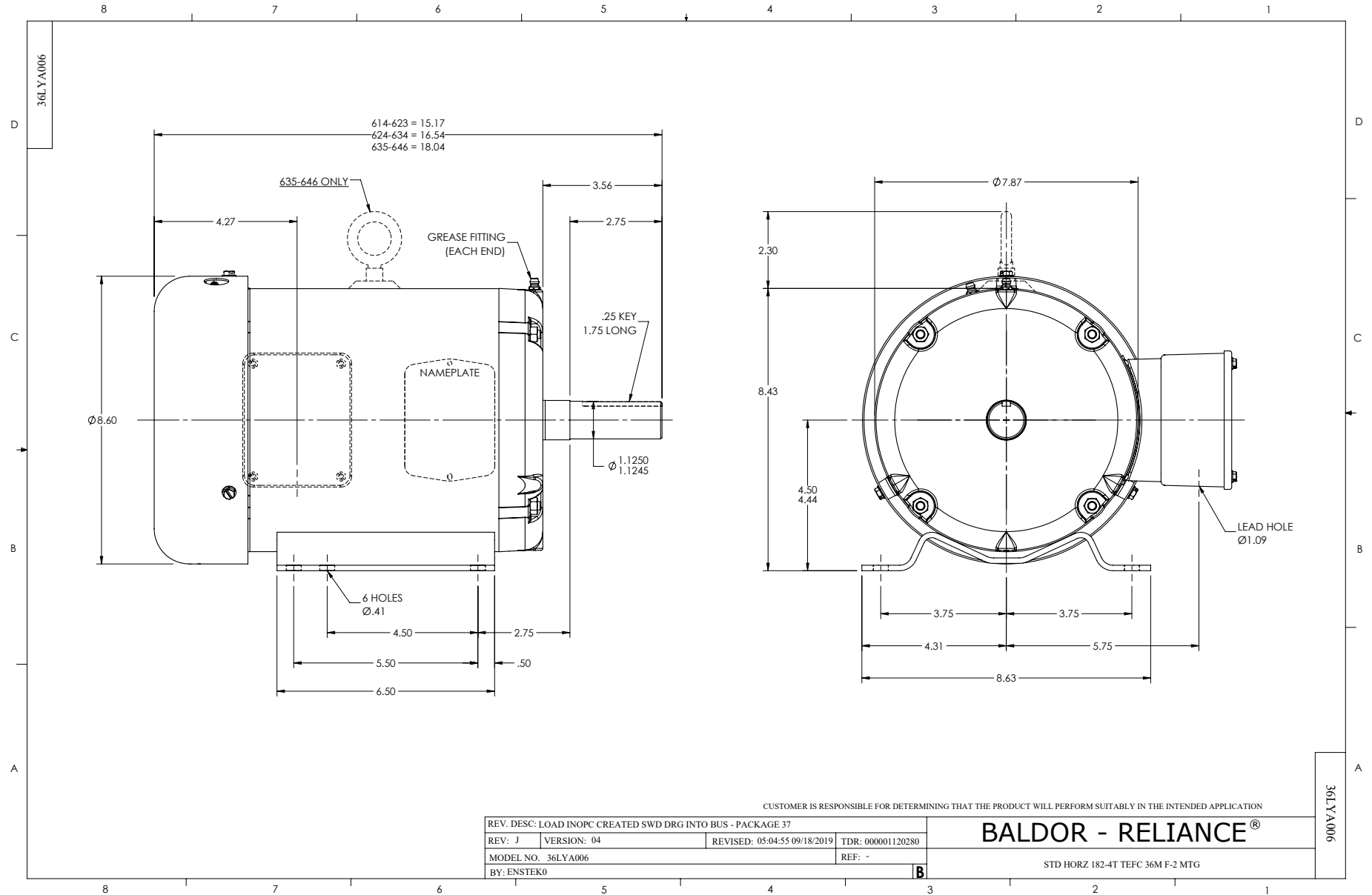
5 HP 3 PH 60 HZ 3450 RPM 230 V 3630M

Typical performance - not guaranteed values.

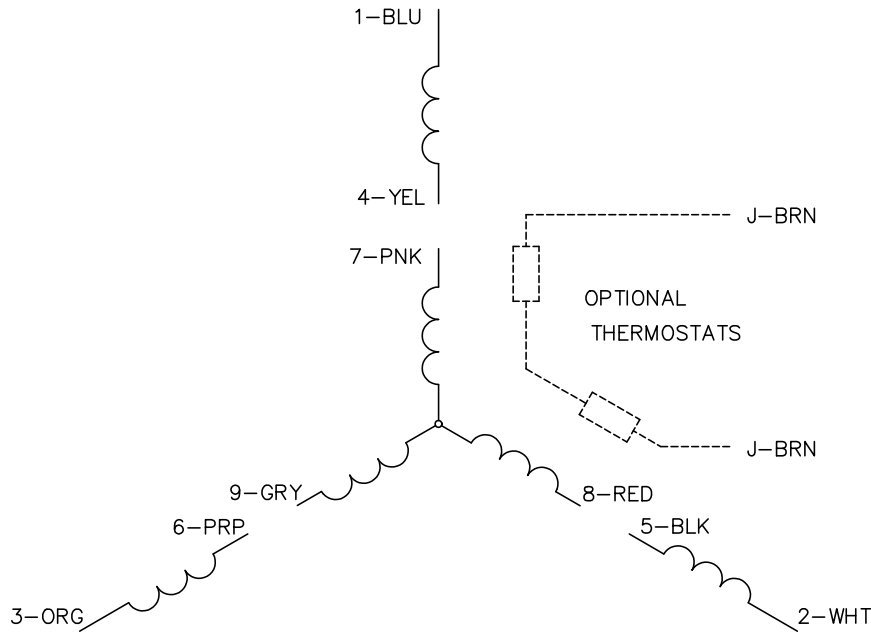
TORQUES (LB-FT): PO=33.7 PU=23.5 LR=27.5 LRA=114



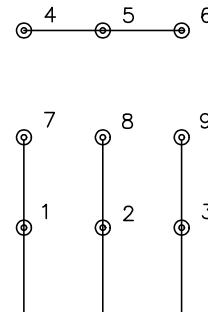
4/10/2025 ACPERF, record # 59341



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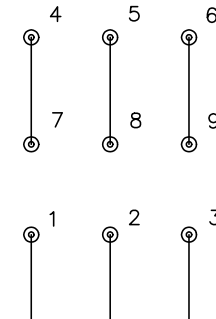


LOW VOLTAGE  
(2Y)



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.

CD0005

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