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# Customer information packet

## EM3558T

2HP, 1755RPM, 3PH, 60HZ, 145T, 3528M, TEFC, F1

ELECTRIC MOTOR WHOLESALE.COM

Class - None

Division - Not Applicable

## Specifications

Enclosure	TEFC
Frame	145T
Frame Material	Steel
Frequency	60.00 Hz
Output @ Frequency	2.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	460.0 V @ 60 HZ 230.0 V @ 60 HZ
XP Class and Group	None
XP Division	Not Applicable
Agency Approvals	CSA CSA EEV UR
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	2.900 A @ 460.0 V 5.800 A @ 230.0 V 6.600 A @ 208.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	86.5 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Face Code	Standard
Front Shaft Indicator	None
Heater Indicator	No Heater

## Part detail

Revision	R
Type	AC
Mech. spec.	35AA001
Base	
Status	PRD/A
Elec. spec.	35WGN909
Layout	35LYAA001
Eff. date	03-13-2018
CD Diagram	CD0005
Poles	04
Leads	9#18 Y
Proprietary	False
Created date	05-01-2013

High Voltage Full Load Amps	2.9 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 @ 18 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3528M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	13.31 IN
Power Factor	75
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	0.875 IN
Shaft Extension Location	Pulley End
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	1755 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**

**NP3441LUA**

<b>CAT.NO.</b>	EM3558T							
<b>SPEC</b>	35AA001N909G1							
<b>HP</b>	2							
<b>VOLTS</b>	230/460							
<b>AMPS</b>	5.8/2.9							
<b>RPM</b>	1755							
<b>FRAME</b>	145T		<b>HZ</b>	60		<b>PH</b>	3	
<b>SF</b>	1.15	<b>CODE</b>	L	<b>DES</b>	B	<b>CLASS</b>	F	
<b>NEMA NOM. EFF</b>	86.5	<b>PF</b>	75					
<b>RATING</b>	40C AMB-CONT							
<b>CC</b>	010A	<b>USABLE AT 208V</b>				6.6		
<b>ENCL</b>	TEFC	<b>SER</b>						
<b>DE</b>	6205	<b>ODE</b>	6203					
<b>VPWM INVERTER READY</b>								
<b>CT6-60H(10:1)VT3-60H(20:1</b>	50Hz 2HP 190/380V 6.6/3.3A						SF1.0	

## Parts list

Part number	Description	Quantity
SA262406	SA 35AA001N909G1	1.000 ea
RA249137	RA 35AA001N909G1	1.000 ea
34FN3002B01	EXTERNAL FAN, PLASTIC, .637/.639 HUB W/	1.000 ea
NS2512A01	INSULATOR, CONDUIT BOX X	1.000 ea
35CB3009	35 CB W/1.09 DIA. LEAD HOLE @ 6:	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
35EP3122A00	MASTER ODE,203 BRG,.683SH,#26 DRN,GRSR,F	1.000 ea
HW4500A01	1641B(ALEMITE)400 UNIV, GREASE FITT	1.000 ea
HW5100A03	WAVY WASHER (W1543-017)	1.000 ea
35EP3123F00	MASTER DE,205 BRG,.998SH,#26 DRN,GRSR	1.000 ea
HW4500A01	1641B(ALEMITE)400 UNIV, GREASE FITT	1.000 ea
XY1032A02	10-32 HEX NUT DIRECTIONAL SERRATION	4.000 ea
51XB1214A16	12-14X1.00 HXWSSLD SERTYB	1.000 ea
35FH4005A84SP	IEC FH W/GRSR, NO DIMPLES PRIMED	1.000 ea
51XW1032A06	10-32 X .38, TAPTITE II, HEX WSHR SLTD S	3.000 ea
35CB4521GX	CONDUIT BOX LID KIT **ORDER INDIV PARTS	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
HA3100A18	THRUBOLT 10-32 X 9.250	4.000 ea
MG1000Y03	MUNSELL 2.53Y 6.70/ 4.60, GLOSS 20,	0.017 ga
LC0005E01	CONN.DIA./WARNING LABEL (LC0005/LB1119N)	1.000 ea
NP3441LUA	ALUM SUPER-E VPWM INV READY UL CSA-EEV C	1.000 ea
36PA1000	PKG GRP, PRINT PK1016A06	1.000 ea
MN416A01	TAG-INSTAL-MAINT no wire (1200/bx) 3/19	1.000 ea
PE-0000001	ZRTG PE ASSEMBLY	1.000 ea
FE-0000001	ZRTG FE ASSEMBLY	1.000 ea

**Accessories**

<b>Part number</b>	<b>Description</b>	<b>Multiplier</b>
35-8762	C FACE KIT	A8
35EP1506A01SP	D-FLANGE KIT	A8

**AC Induction Motor Performance Data**

Record # 53344

Typical performance - not guaranteed values

Winding: 35WGN909-R032		Type: 3528M	Enclosure: TEFC	
<b>Nameplate Data</b>			<b>460 V, 60 Hz: High Voltage Connection</b>	
Rated Output (HP)		2	Full Load Torque	5.99 LB-FT
Volts		230/460	Start Configuration	direct on line
Full Load Amps		5.8/2.9	Breakdown Torque	24.9 LB-FT
R.P.M.		1755	Pull-up Torque	15.9 LB-FT
Hz	60 Phase	3	Locked-rotor Torque	17.2 LB-FT
NEMA Design Code	B KVA Code	L	Starting Current	23.9 A
Service Factor (S.F.)		1.15	No-load Current	1.81 A
NEMA Nom. Eff.	86.5 Power Factor	75	Line-line Res. @ 25°C	8.02 Ω
Rating - Duty		40C AMB-CONT	Temp. Rise @ Rated Load	65°C
S.F. Amps			Temp. Rise @ S.F. Load	77°C
			Locked-rotor Power Factor	52.4
			Rotor inertia	0.165 LB-FT <sup>2</sup>

**Load Characteristics 460 V, 60 Hz, 2 HP**

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	33	53	66	74	80	83	78
Efficiency	75.5	84	86.3	86.5	85.8	84.5	86.2
Speed	1790	1779	1769	1756	1743	1728	1748
Line amperes	1.89	2.11	2.46	2.91	3.4	4	3.2

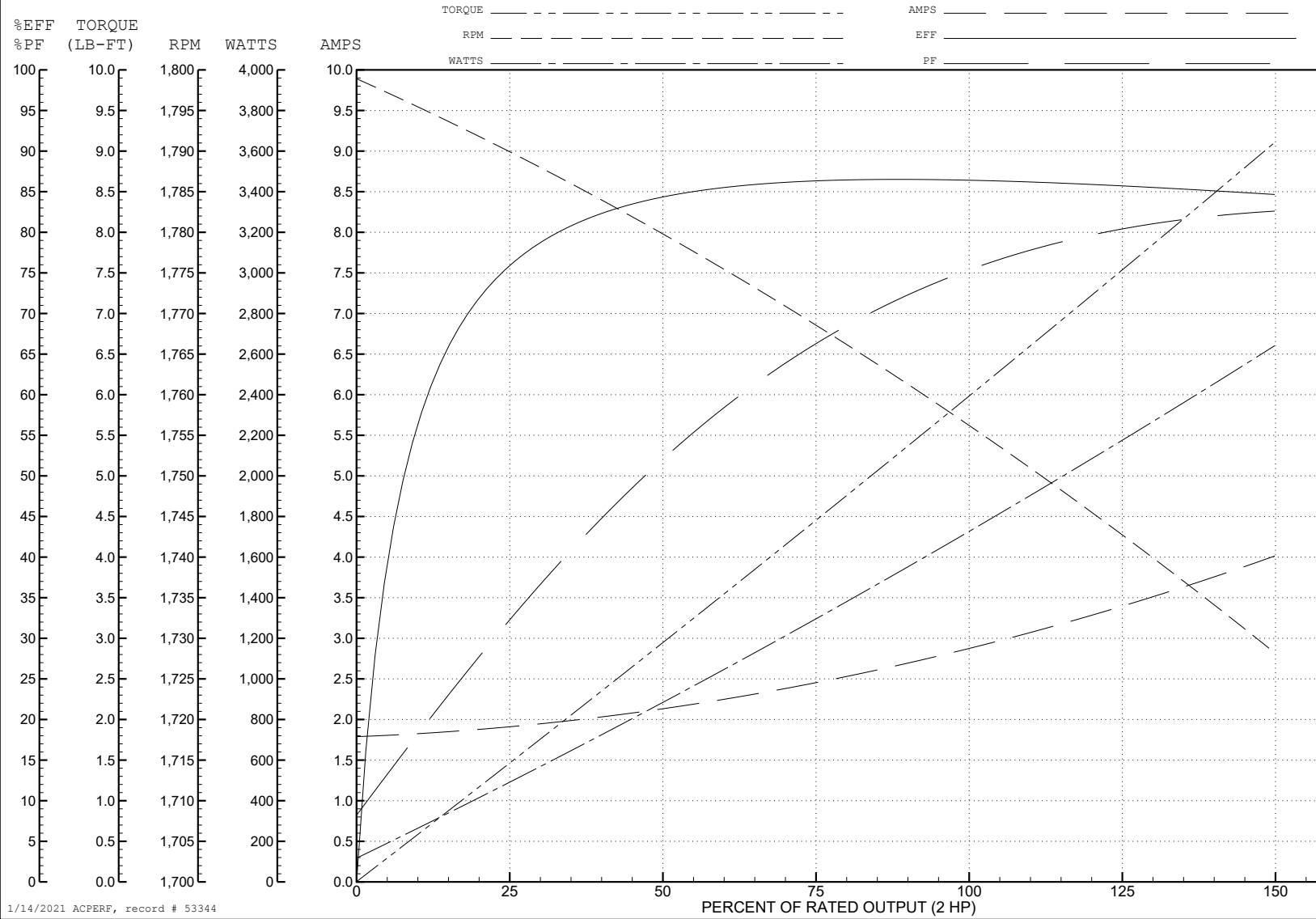
ABB Motors and Mechanical Inc.

WINDING # 35WGN909

Typical performance - not guaranteed values.

2 HP 3 PH 60 HZ 1755 RPM 460 V 3528M

TORQUES (LB-FT): PO=24.9 PU=15.9 LR=17.2 LRA=23.9



1/14/2021 ACPERF, record # 53344



**AC Induction Motor Performance Data**

Record # 57956

Typical performance - not guaranteed values

<b>Winding: 35WGN909-R032</b>		<b>Type: 3528M</b>		<b>Enclosure: TEFC</b>	
<b>Nameplate Data</b>			<b>230 V, 60 Hz: Low Voltage Connection</b>		
<b>Rated Output (HP)</b>	2		<b>Full Load Torque</b>	5.99 LB-FT	
<b>Volts</b>	230/460		<b>Start Configuration</b>	direct on line	
<b>Full Load Amps</b>	5.8/2.9		<b>Breakdown Torque</b>	24.9 LB-FT	
<b>R.P.M.</b>	1755		<b>Pull-up Torque</b>	15.9 LB-FT	
<b>Hz</b>	<b>60 Phase</b>	3	<b>Locked-rotor Torque</b>	17.2 LB-FT	
<b>NEMA Design Code</b>	<b>B KVA Code</b>	L	<b>Starting Current</b>	47.8 A	
<b>Service Factor (S.F.)</b>	1.15		<b>No-load Current</b>	3.62 A	
<b>NEMA Nom. Eff.</b>	<b>86.5 Power Factor</b>	75	<b>Line-line Res. @ 25°C</b>	2 Ω	
<b>Rating - Duty</b>	40C AMB-CONT		<b>Temp. Rise @ Rated Load</b>	65°C	
<b>S.F. Amps</b>			<b>Temp. Rise @ S.F. Load</b>	77°C	
			<b>Locked-rotor Power Factor</b>	52.4	
			<b>Rotor inertia</b>	0.165 LB-FT <sup>2</sup>	

**Load Characteristics 230 V, 60 Hz, 2 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>	33	53	66	74	80	83	78
<b>Efficiency</b>	75.6	84.1	86.4	86.6	85.9	84.6	86.2
<b>Speed</b>	1790	1779	1769	1756	1743	1728	1748
<b>Line amperes</b>	3.78	4.22	4.92	5.82	6.8	8	6.41

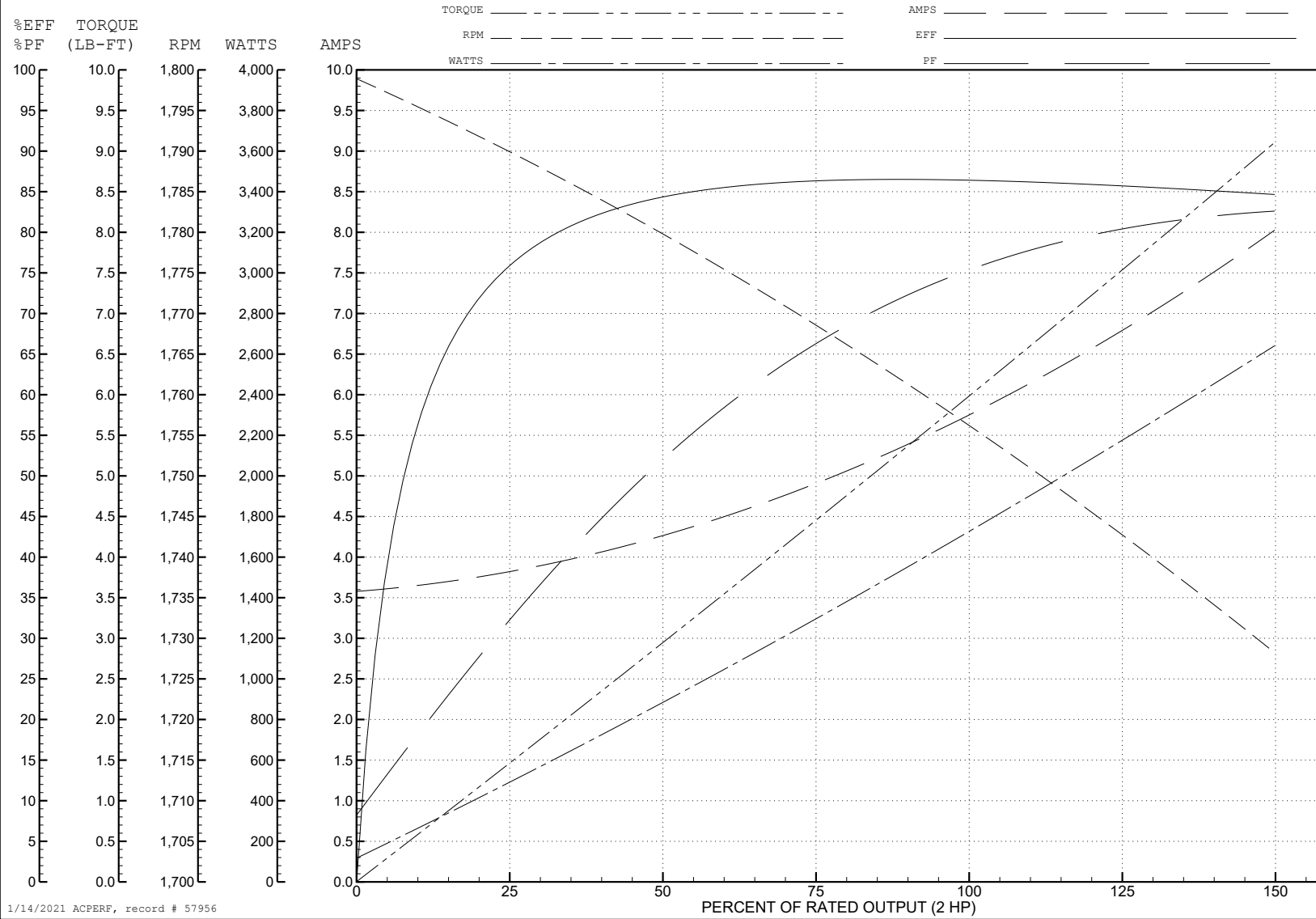
ABB Motors and Mechanical Inc.

WINDING # 35WGN909

Typical performance - not guaranteed values.

2 HP 3 PH 60 HZ 1755 RPM 230 V 3528M

TORQUES (LB-FT): PO=24.9 PU=15.9 LR=17.2 LRA=47.8



1/14/2021 ACPERF, record # 57956

**AC Induction Motor Performance Data**

Record # 73870

Typical performance - not guaranteed values

Winding: 35WGN909-R032		Type: 3528M	Enclosure: TEFC	
<b>Nameplate Data</b>			<b>400 V, 50 Hz: High Voltage Connection</b>	
Rated Output (HP)	2	Full Load Torque	7.25 LB-FT	
Volts	200/400	Start Configuration	direct on line	
Full Load Amps	6.8/3.4	Breakdown Torque	25.8 LB-FT	
R.P.M.	1450	Pull-up Torque	18.08 LB-FT	
Hz	50 Phase	Locked-rotor Torque	19.56 LB-FT	
NEMA Design Code	B KVA Code	Starting Current	24.2 A	
Service Factor (S.F.)	1.15	No-load Current	2.09 A	
NEMA Nom. Eff.	84.5 Power Factor	Line-line Res. @ 25°C	8.02 Ω	
Rating - Duty	40C AMB-CONT	Temp. Rise @ Rated Load	85°C	
S.F. Amps		Temp. Rise @ S.F. Load	104°C	
		Locked-rotor Power Factor	58.9	
		Rotor inertia	0.165 LB-FT <sup>2</sup>	

**Load Characteristics 400 V, 50 Hz, 2 HP**

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	33	54	67	75	81	84	79
Efficiency	74.5	82.9	84.7	84.5	83.2	81.2	83.7
Speed	1489	1477	1466	1451	1436	1419	1442
Line amperes	2.18	2.43	2.85	3.39	3.99	4.75	3.75

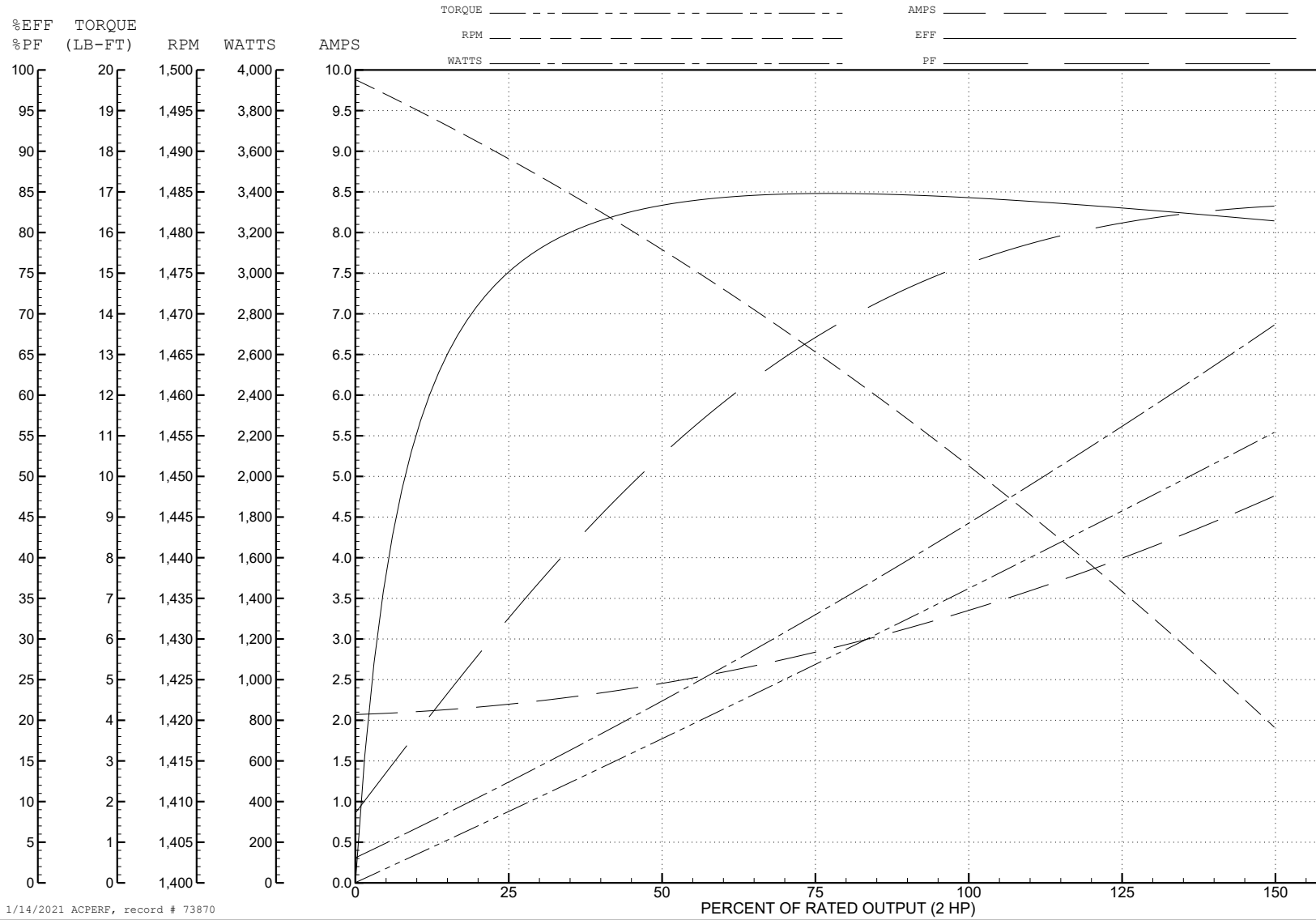
ABB Motors and Mechanical Inc.

WINDING # 35WGN909

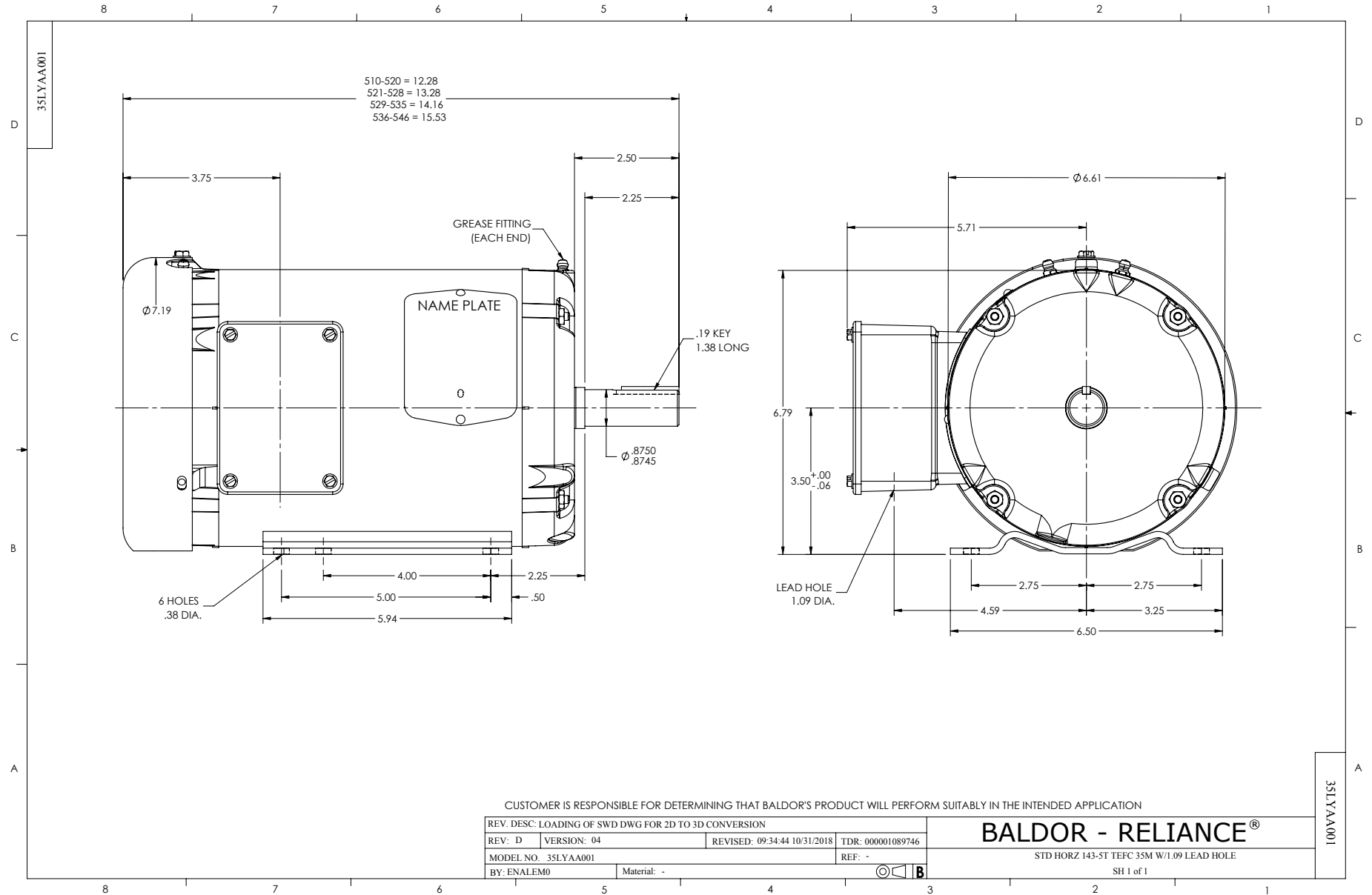
Typical performance - not guaranteed values.

2 HP 3 PH 50 HZ 1450 RPM 400 V 3528M

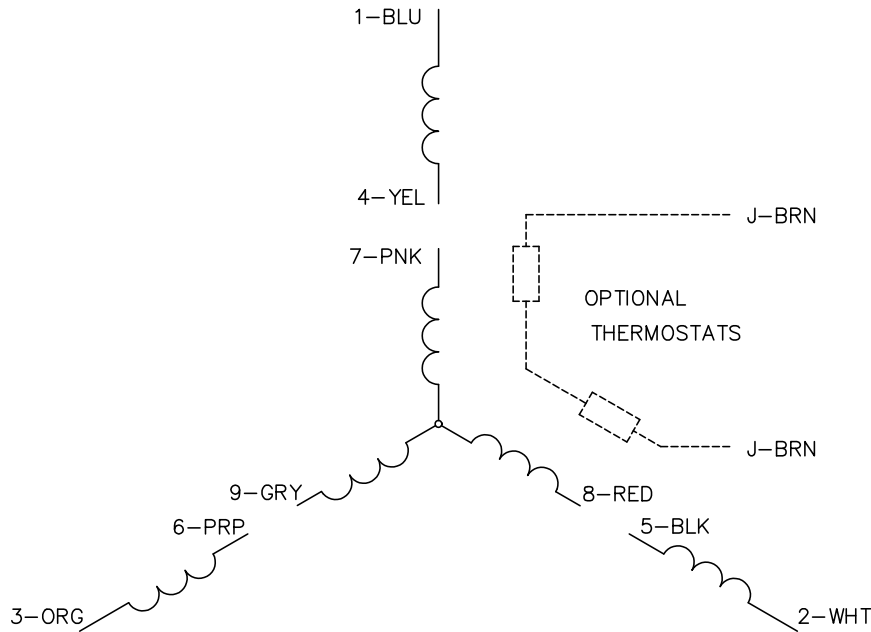
TORQUES (LB-FT): PO=25.8 PU=18.08 LR=19.56 LRA=24.2



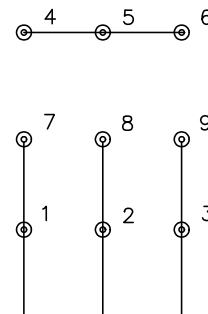
1/14/2021 ACPERF, record # 73870



CD0005

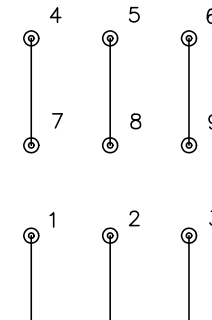


LOW VOLTAGE  
(2Y)



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.

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