

ABB BALDOR RELIANCE III

Customer information packet

M1004T

1-.25HP, 1720-860RPM, 3PH, 60HZ, 143T, 3520M

Class - None

Division - Not Applicable

Specifications

Enclosure	OPEN
Frame	143T
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	.250 HP @ 60 HZ 1.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	900 RPM @ 60 HZ
Voltage @ Frequency	230.0 V @ 60 HZ 208.0 V @ 60 HZ
Agency Approvals	CSA UR
Ambient Temperature	40 °C
Auxiliary Box	NO AUXILLARY BOX
Auxiliary Box Lead Termination	None
Base Indicator	Rigid
Bearing Grease Type	Polyrex EM (-20F +300F)
Blower	None
Current @ Voltage	3.150 A @ 208.0 V 1.530 A @ 230.0 V
Design Code	-
Drip Cover	No Drip Cover
Duty Rating	CONT
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	1.5 a
Insulation Class	F

Part Detail

Revision	C
Type	AC
Mech. spec.	35BB001
Base	
Status	PRD/A
Elec. spec.	35WGG362
Layout	35LYBB001
Eff. date	07-02-2024
CD Diagram	CD0032
Poles	04/08
Leads	6#18
Proprietary	False
Created date	02-23-2023

Inverter Code	Not Inverter
KVA Code	J
Lifting Lugs	No Lifting Lugs
Locked Bearing Indicator	No Locked Bearing
Motor Lead Quantity/Wire Size	6 @ 18 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3520M
Mounting Arrangement	F1
Number of Poles	4 8
Overall Length	11.13 IN
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 Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	1720 rpm 860 rpm
Speed Code	2S-1W-VT
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

NP1256L									
CAT.NO.	M1004T								
SPEC.	35BB001G362								
HP	1-.25								
VOLTS	208-230								
AMP	3.15-1.53								
RPM	1720-860								
FRAME	143T		HZ	60			PH	3	
SER.F.	1.15	CODE	J	DES	-	CLASS		F	
NEMA-NOM-EFF		PF							
RATING	40C AMB-CONT								
CC									
DE	6205		ODE	6203					
ENCL	OPEN	SN							
	SFA 3.8-3.54								

Parts List

Part number	Description	Quantity
SA414920	SA 35BB001G362	1.000 ea
RA406689	RA 35BB001G362	1.000 ea
NS2512A01	INSULATOR, CONDUIT BOX X	1.000 ea
35CB3009	35 CB W/1.09 DIA. LEAD HOLE @ 6:	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
35EP3209A00	MASTER ODE,203 BRG,GRSR	1.000 ea
HW4500A01	1641B(ALEMITE)400 UNIV, GREASE FITT	1.000 ea
HW5100A03	WAVY WASHER (W1543-017)	1.000 ea
35EP3210A00	MASTER DE,205 BRG,1.000SH,GRSR	1.000 ea
HW4500A01	1641B(ALEMITE)400 UNIV, GREASE FITT	1.000 ea
XY1032A02	10-32 HEX NUT DIRECTIONAL SERRATION	4.000 ea
35CB4521	35 LIPPED CB LID (GALV & PHOSPH)	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, POLYREX EM EXXON	0.050 lb
MG1050G01	CELEROL MEDIUM CHARCOAL METALLIC GRAY	0.017 ga
HA3100A15	THRUBOLT 10-32 X 8.375	4.000 ea
LB1624	COMBINED WARNING LABEL, ISO/ANSI PICTOGR	1.000 ea
LC0032	CONNECTION LABEL	1.000 ea
NP1256L	ALUM UL CC INDUSTRIAL MOTOR A60	1.000 ea
35PA1066	PKG GRP, PRINT PK1008A07	1.000 ea
MN416A01	TAG-INSTAL-MAINT no wire (2500 bx)11/25	1.000 ea
FE-0000001	ZRTG FE ASSEMBLY	1.000 ea
PE-0000001	ZRTG PE ASSEMBLY	1.000 ea

Accessories

Part number	Description	Multiplier
35-8764	C FACE KIT	A8
35EP1604A01SP	D-FLANGE KIT	

AC Induction Motor Performance Data

Record # 87869

Typical performance - not guaranteed values

Winding: 35WGG362-R001			Type: 3520M		Enclosure: OPEN		
Nameplate Data			230 V, 60 Hz: High Speed Connection				
Rated Output (HP)		1/.25	Full Load Torque		2.97 LB-FT		
Volts		208-230	Start Configuration		direct on line		
Full Load Amps		3.15/1.53	Breakdown Torque		9.38 LB-FT		
R.P.M.		1720/860	Pull-up Torque		7.48 LB-FT		
Hz	60	Phase	3	Locked-rotor Torque		7.98 LB-FT	
NEMA Design Code		-	KVA Code	J	Starting Current		18.56 A
Service Factor (S.F.)		1.15		No-load Current		1.79 A	
NEMA Nom. Eff.		0	Power Factor	0	Line-line Res. @ 25°C		6.75 Ω
Rating - Duty		40C AMB-CONT		Temp. Rise @ Rated Load		27°C	
S.F. Amps				Temp. Rise @ S.F. Load		33°C	
				Locked-rotor Power Factor		82.9	
				Rotor inertia		0.144 lb-ft²	

Load Characteristics 230 V, 60 Hz, 1 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	34	54	65	74	78	81	76
Efficiency	71.5	78.3	79.4	78	75.5	72.7	76.5
Speed	1780	1762	1742	1719	1695	1668	1705
Line amperes	1.97	2.23	2.69	3.15	3.8	4.43	3.54

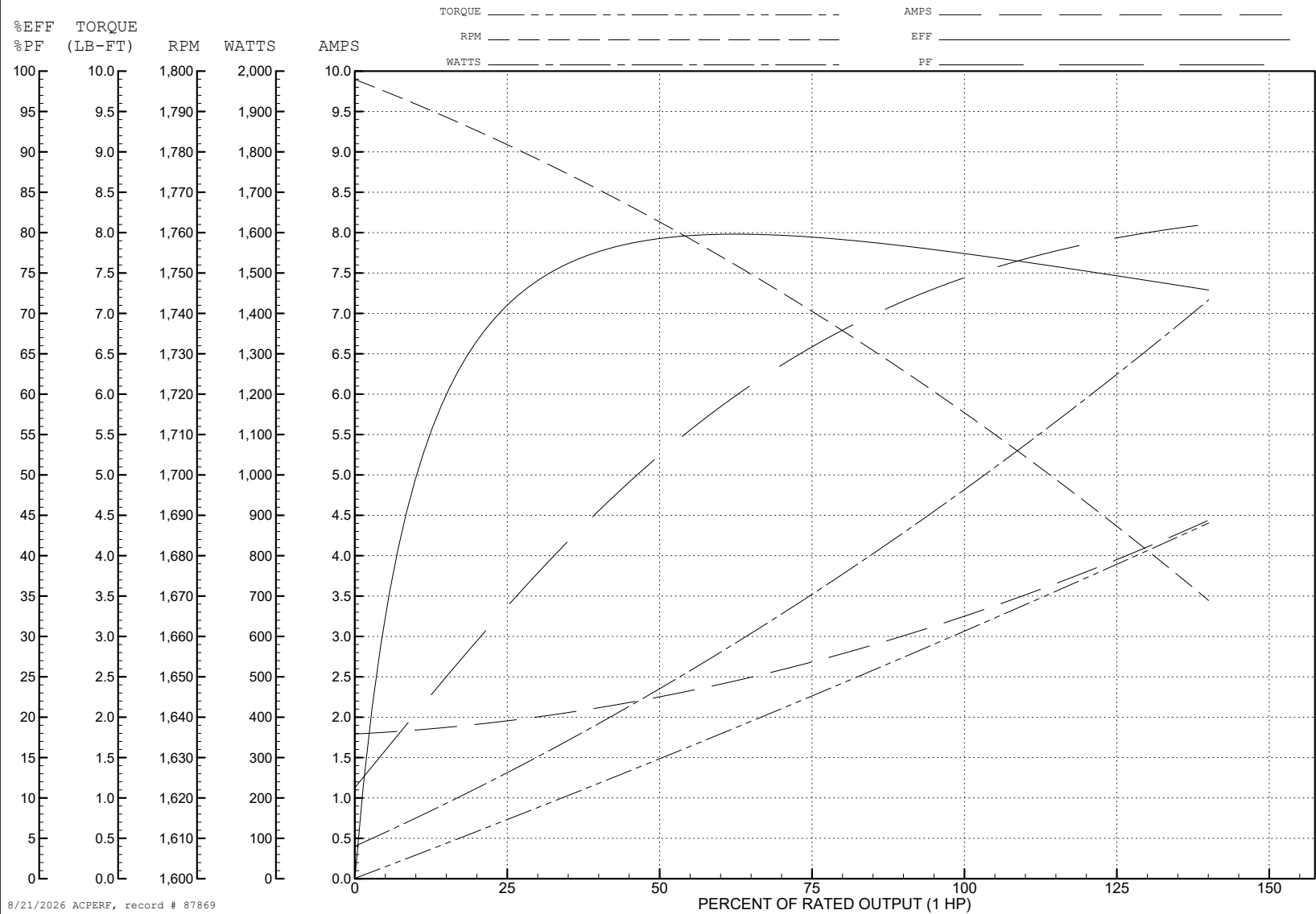
ABB Motors and Mechanical Inc.

WINDING # 35WGG362

Typical performance - not guaranteed values.

1 HP 3 PH 60 HZ 1719 RPM 230 V 3520M

TORQUES (LB-FT): PO=9.38 PU=7.48 LR=7.98 LRA=18.56



AC Induction Motor Performance Data

Record # 87870

Typical performance - not guaranteed values

Winding: 35WGG362-R001			Type: 3520M		Enclosure: OPEN			
Nameplate Data			230 V, 60 Hz: Low Speed Connection					
Rated Output (HP)		1/.25	Full Load Torque		1.52 LB-FT			
Volts		208-230	Start Configuration		direct on line			
Full Load Amps		3.15/1.53	Breakdown Torque		4.91 LB-FT			
R.P.M.		1720/860	Pull-up Torque		2.56 LB-FT			
Hz	60	Phase	3	Locked-rotor Torque		3.59 LB-FT		
NEMA Design Code		-	KVA Code	J	Starting Current		4.9 A	
Service Factor (S.F.)		1.15	No-load Current		1.23 A			
NEMA Nom. Eff.		0	Power Factor		0	Line-line Res. @ 25°C		27 Ω
Rating - Duty		40C	AMB-CONT		Temp. Rise @ Rated Load			
					Locked-rotor Power Factor		82.9	
					Rotor inertia		0.144 lb-ft²	

Load Characteristics 230 V, 60 Hz, 0.25 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	27	36	46	54	62	68	59
Efficiency	35.9	51.7	59.9	64.2	66.1	66.5	65.3
Speed	890.9	883.2	874.9	865.7	855.4	843.6	860
Line amperes	1.23	1.25	1.28	1.34	1.43	1.54	1.39

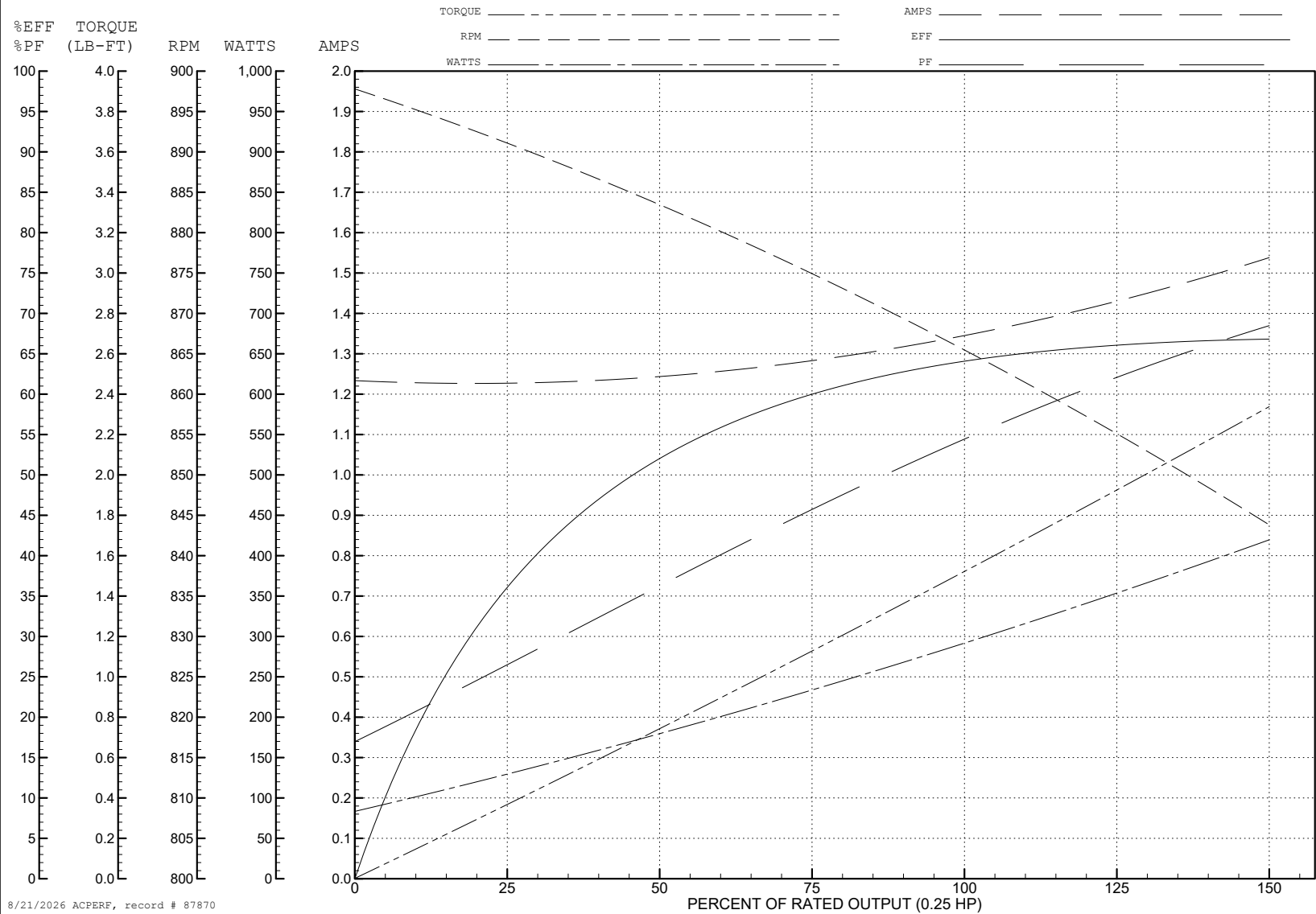
ABB Motors and Mechanical Inc.

WINDING # 35WGG362

Typical performance - not guaranteed values.

0.25 HP 3 PH 60 HZ 865.7 RPM 230 V 3520M

TORQUES (LB-FT) : PO=4.91 PU=2.56 LR=3.59 LRA=4.9



AC Induction Motor Performance Data

Record # 87871

Typical performance - not guaranteed values

Winding: 35WGG362-R002			Type: 3520M		Enclosure: TEFC		
Nameplate Data			230 V, 60 Hz: High Speed Connection				
Rated Output (HP)		1/.25	Full Load Torque		2.97 LB-FT		
Volts		208-230	Start Configuration		direct on line		
Full Load Amps		3.15/1.53	Breakdown Torque		9.38 LB-FT		
R.P.M.		1720/860	Pull-up Torque		7.48 LB-FT		
Hz	60	Phase	3	Locked-rotor Torque		7.98 LB-FT	
NEMA Design Code		-	KVA Code	J	Starting Current		18.56 A
Service Factor (S.F.)		1.15		No-load Current		1.79 A	
NEMA Nom. Eff.		0	Power Factor	0	Line-line Res. @ 25°C		6.75 Ω
Rating - Duty		40C AMB-CONT		Temp. Rise @ Rated Load		27°C	
S.F. Amps				Temp. Rise @ S.F. Load		33°C	
				Locked-rotor Power Factor		82.9	
				Rotor inertia		0.144 lb-ft²	

Load Characteristics 230 V, 60 Hz, 1 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	34	54	65	74	78	81	76
Efficiency	71.5	78.3	79.4	78	75.5	72.7	76.5
Speed	1780	1762	1742	1719	1695	1668	1705
Line amperes	1.97	2.23	2.69	3.15	3.8	4.43	3.54

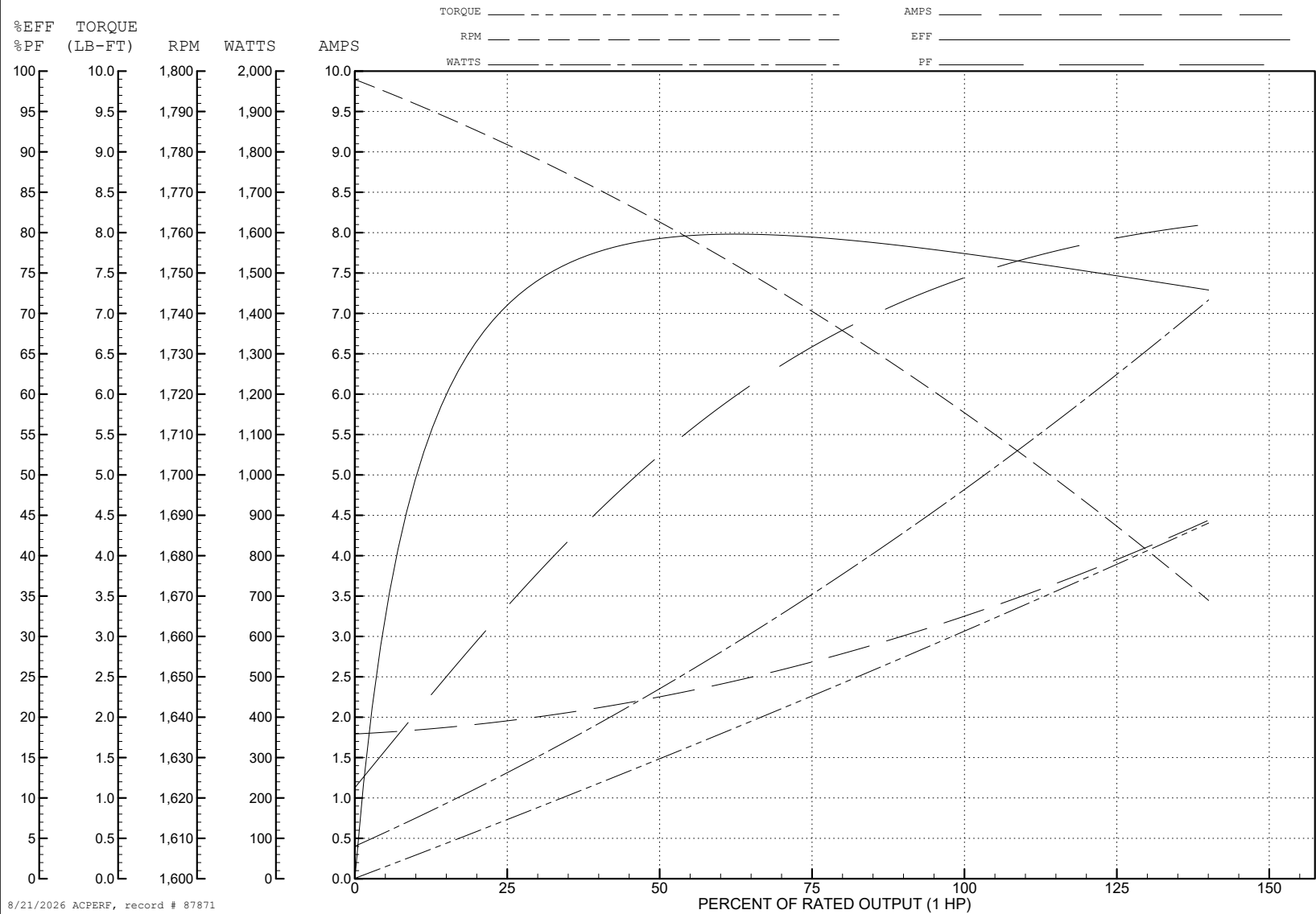
ABB Motors and Mechanical Inc.

WINDING # 35WGG362

Typical performance - not guaranteed values.

1 HP 3 PH 60 HZ 1719 RPM 230 V 3520M

TORQUES (LB-FT) : PO=9.38 PU=7.48 LR=7.98 LRA=18.56



AC Induction Motor Performance Data

Record # 87873

Typical performance - not guaranteed values

Winding: 35WGG362-R002			Type: 3520M		Enclosure: TEFC			
Nameplate Data			230 V, 60 Hz: Low Speed Connection					
Rated Output (HP)		1/.25	Full Load Torque		1.52 LB-FT			
Volts		208-230	Start Configuration		direct on line			
Full Load Amps		3.15/1.53	Breakdown Torque		4.91 LB-FT			
R.P.M.		1720/860	Pull-up Torque		2.56 LB-FT			
Hz	60	Phase	3	Locked-rotor Torque		3.59 LB-FT		
NEMA Design Code		-	KVA Code	J	Starting Current		4.9 A	
Service Factor (S.F.)		1.15		No-load Current		1.23 A		
NEMA Nom. Eff.		0	Power Factor		0	Line-line Res. @ 25°C		27 Ω
Rating - Duty		40C		AMB-CONT		Temp. Rise @ Rated Load		
						Locked-rotor Power Factor		76.6
						Rotor inertia		0.144 lb-ft²

Load Characteristics 230 V, 60 Hz, 0.25 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	27	36	46	54	62	68	59
Efficiency	35.9	51.7	59.9	64.2	66.1	66.5	65.3
Speed	890.9	883.2	874.9	865.7	855.4	843.6	860
Line amperes	1.23	1.25	1.28	1.34	1.43	1.54	1.39

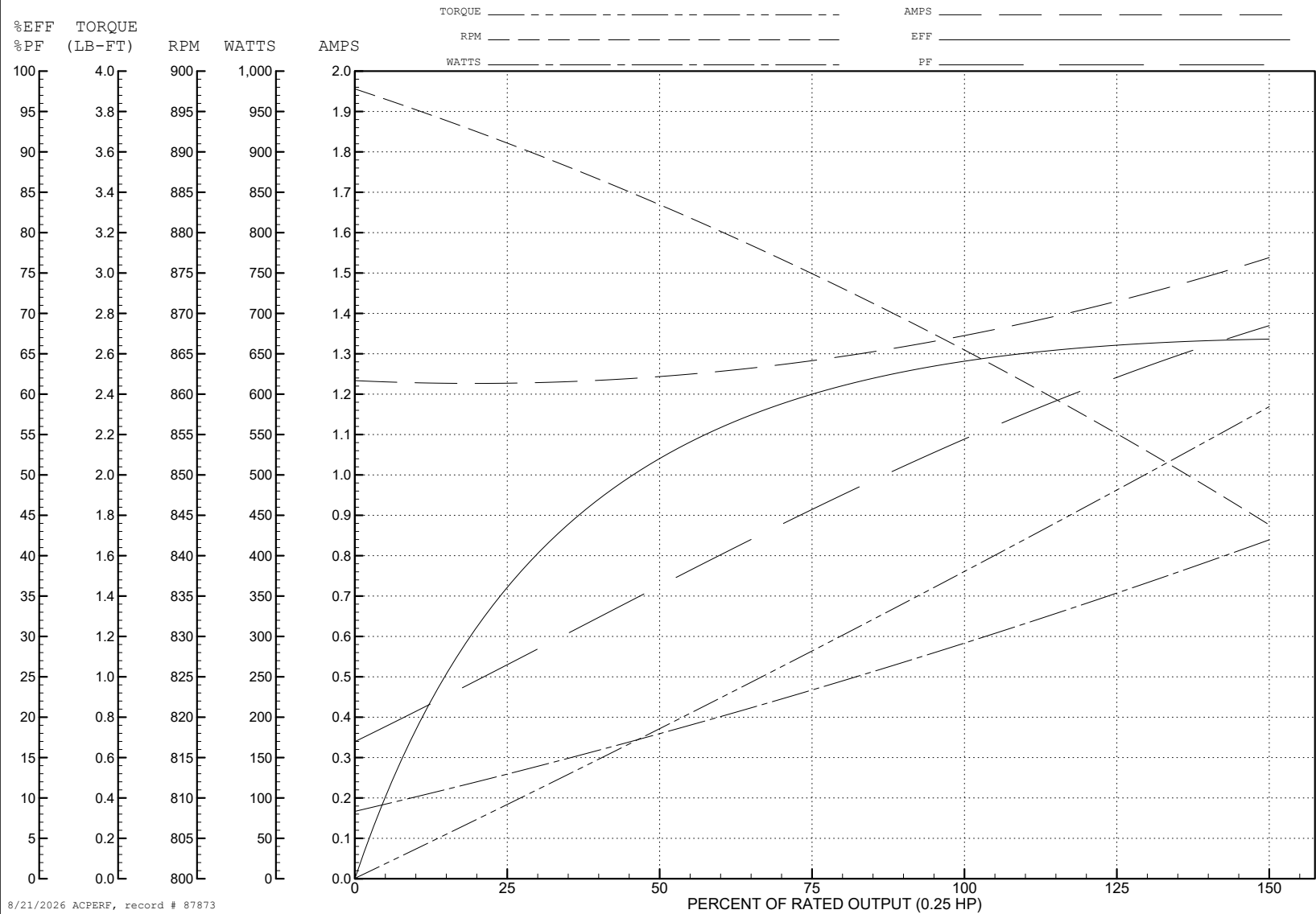
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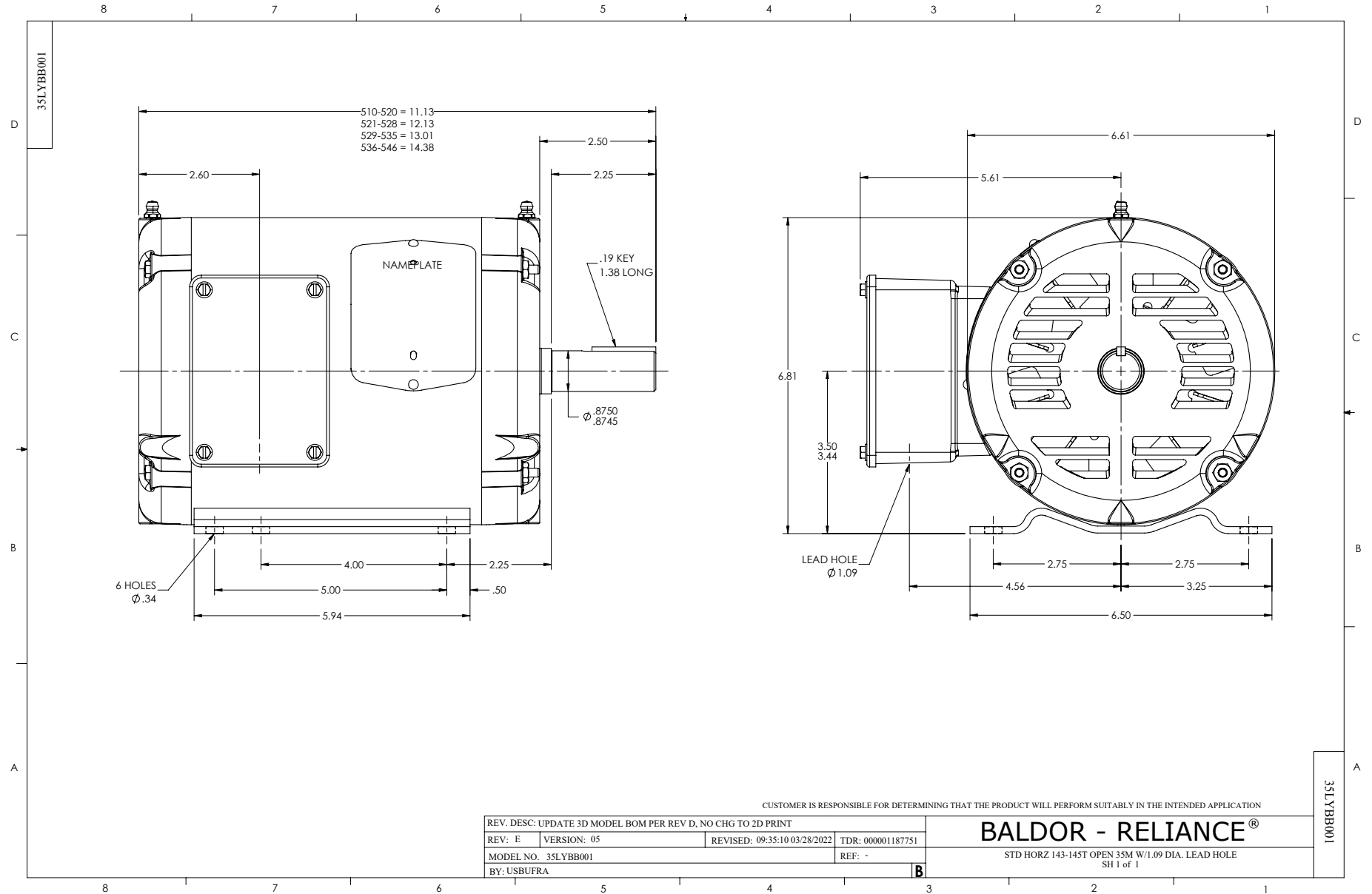
WINDING # 35WGG362

Typical performance - not guaranteed values.

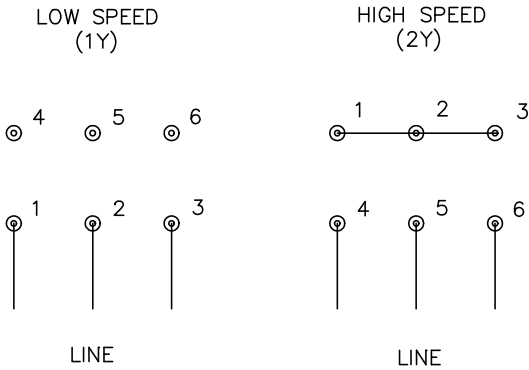
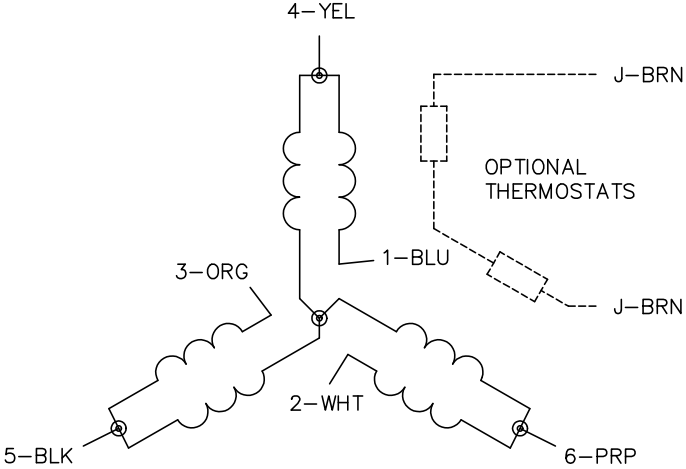
0.25 HP 3 PH 60 HZ 865.7 RPM 230 V 3520M

TORQUES (LB-FT) : PO=4.91 PU=2.56 LR=3.59 LRA=4.9





CD0032



- 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: 01/22/99 8:27	TDR: 0171435
CD0032		FILE: AAA00005145	MDL: -
		MTL: -	

BALDOR ELECTRIC Co.	
3PH, SV, 6 LEADS, 2-SPEED 1-WINDING VARIABLE TORQUE	

CD0032