

ABB BALDOR RELIANCE III

Customer information packet

M1220T

1/.44HP, 1740/1170RPM, 3PH, 60HZ, 145T, 3528M

Class - None

Division - Not Applicable

Specifications

Enclosure	OPEN
Frame	145T
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	1.000 HP @ 60 HZ .440 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1200 RPM @ 60 HZ
Voltage @ Frequency	460.0 V @ 60 HZ
Agency Approvals	UR CSA
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	1.900 A @ 460.0 V
Design Code	B
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	1.2 a
Insulation Class	F
Inverter Code	Not Inverter
KVA Code	K

Part Detail

Revision	C
Type	AC
Mech. spec.	35BB001
Base	
Status	PRD/A
Elec. spec.	35WGG347
Layout	35LYBB001
Eff. date	07-02-2024
CD Diagram	CD0013
Poles	04/06
Leads	6#18 Y
Proprietary	False
Created date	02-23-2023

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	3528M
Mounting Arrangement	F1
Number of Poles	4 6
Overall Length	12.13 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	1170 rpm 1740 rpm
Speed Code	2S-2W-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.	M1220T										
SPEC.	35BB001G347										
HP	1/.44										
VOLTS	460										
AMP	1.9/1.21										
RPM	1740/1170										
FRAME	145T		HZ	60			PH	3			
SER.F.	1.15		CODE	K	DES	B	CLASS	F			
NEMA-NOM-EFF			PF								
RATING	40C AMB-CONT										
CC											
DE	6205		ODE	6203							
ENCL	OPEN	SN									
	SFA 1.74										

Parts List

Part number	Description	Quantity
SA414910	SA 35BB001G347	1.000 ea
RA406679	RA 35BB001G347	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
HA3100A18	THRUBOLT 10-32 X 9.250	4.000 ea
LB1624	COMBINED WARNING LABEL, ISO/ANSI PICTOGR	1.000 ea
LC0013	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 # 87804

Preliminary Data Sheet

Winding: 35WGG347-R001			Type: 3528M		Enclosure: OPEN		
Nameplate Data			460 V, 60 Hz: High Speed Connection				
Rated Output (HP)		1/.44	Full Load Torque		3.07 LB-FT		
Volts		460	Start Configuration		direct on line		
Full Load Amps		1.9/1.21	Breakdown Torque		10.46 LB-FT		
R.P.M.		1740/1170	Pull-up Torque		6.25 LB-FT		
Hz	60	Phase	3	Locked-rotor Torque		10.1 LB-FT	
NEMA Design Code		B	KVA Code	K	Starting Current		10.99 A
Service Factor (S.F.)		1.15	No-load Current		1.13 A		
NEMA Nom. Eff.		0	Power Factor	0	Line-line Res. @ 25°C		28.9 Ω
Rating - Duty		40C	AMB-CONT		Temp. Rise @ Rated Load		
					Locked-rotor Power Factor		87.2
					Rotor inertia		0.202 lb-ft²

Load Characteristics 460 V, 60 Hz, 1 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	36	54	68	77	83	86	81
Efficiency	59.5	71.8	76.3	77.3	76.7	74.7	76.9
Speed	1784	1771	1756	1739	1719	1696	1727
Line amperes	1.15	1.25	1.39	1.6	1.84	2.15	1.74

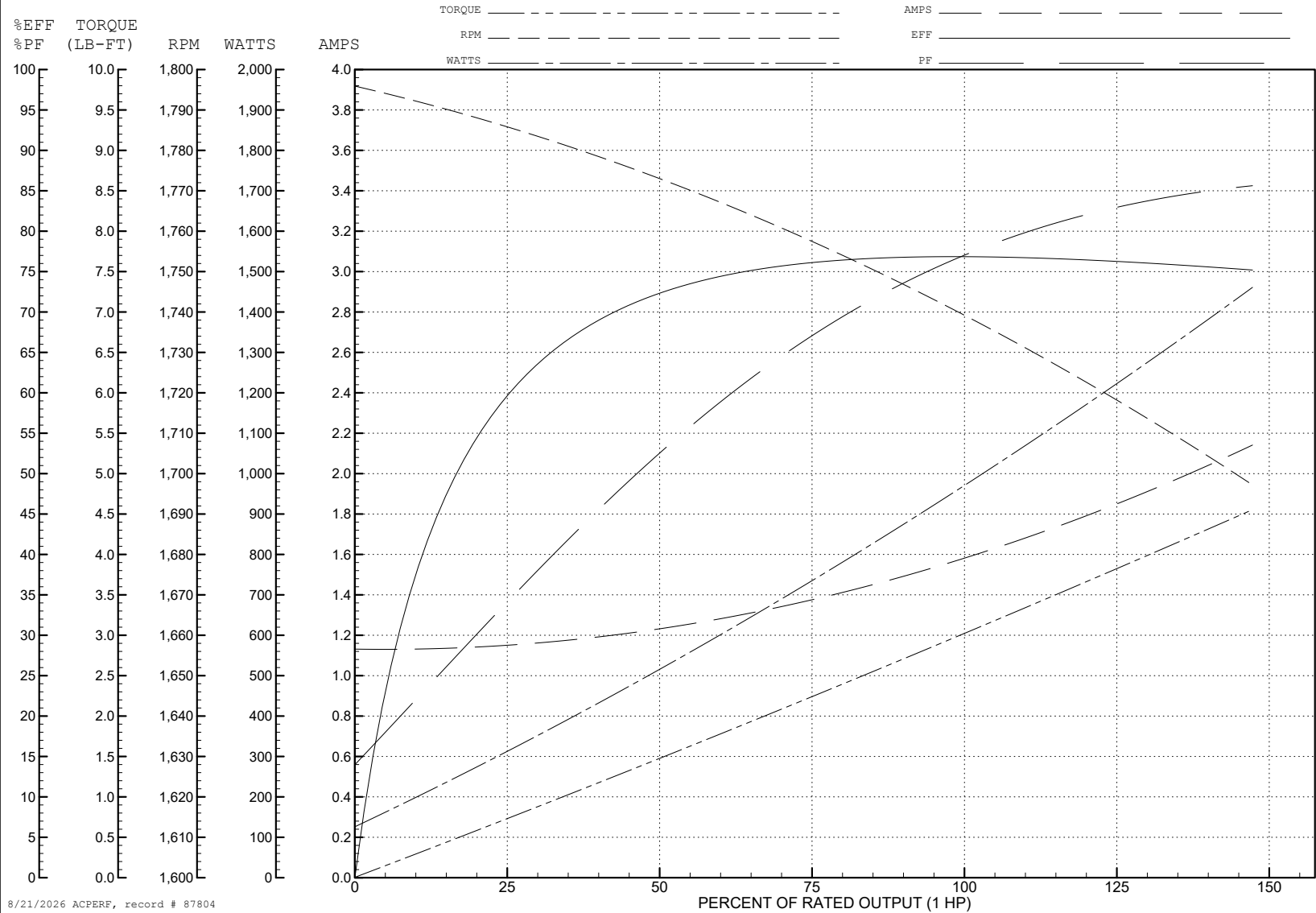
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WINDING # 35WGG347

Typical performance - not guaranteed values.

1 HP 3 PH 60 HZ 1739 RPM 460 V 3528M

TORQUES (LB-FT): PO=10.46 PU=6.25 LR=10.1 LRA=10.99



AC Induction Motor Performance Data

Record # 87805

Preliminary Data Sheet

Winding: 35WGG347-R001			Type: 3528M		Enclosure: OPEN		
Nameplate Data				460 V, 60 Hz: Low Speed Connection			
Rated Output (HP)		1/.44		Full Load Torque		1.98 LB-FT	
Volts		460		Start Configuration		direct on line	
Full Load Amps		1.9/1.21		Breakdown Torque		7.7 LB-FT	
R.P.M.		1740/1170		Pull-up Torque		4.83 LB-FT	
Hz	60	Phase	3	Locked-rotor Torque		5.29 LB-FT	
NEMA Design Code		B	KVA Code	K	Starting Current		5.18 A
Service Factor (S.F.)		1.15		No-load Current		0.922 A	
NEMA Nom. Eff.		0	Power Factor	0	Line-line Res. @ 25°C		60.5 Ω
Rating - Duty		40C AMB-CONT		Temp. Rise @ Rated Load			
				Locked-rotor Power Factor		87.2	
				Rotor inertia		0.202 lb-ft²	

Load Characteristics 460 V, 60 Hz, 0.44 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	26	38	48	57	65	72	62
Efficiency	42.5	58.5	66.1	70	71.8	72.3	71.1
Speed	1192	1186	1178	1171	1162	1153	1166
Line amperes	0.923	0.94	0.974	1.03	1.1	1.19	1.07

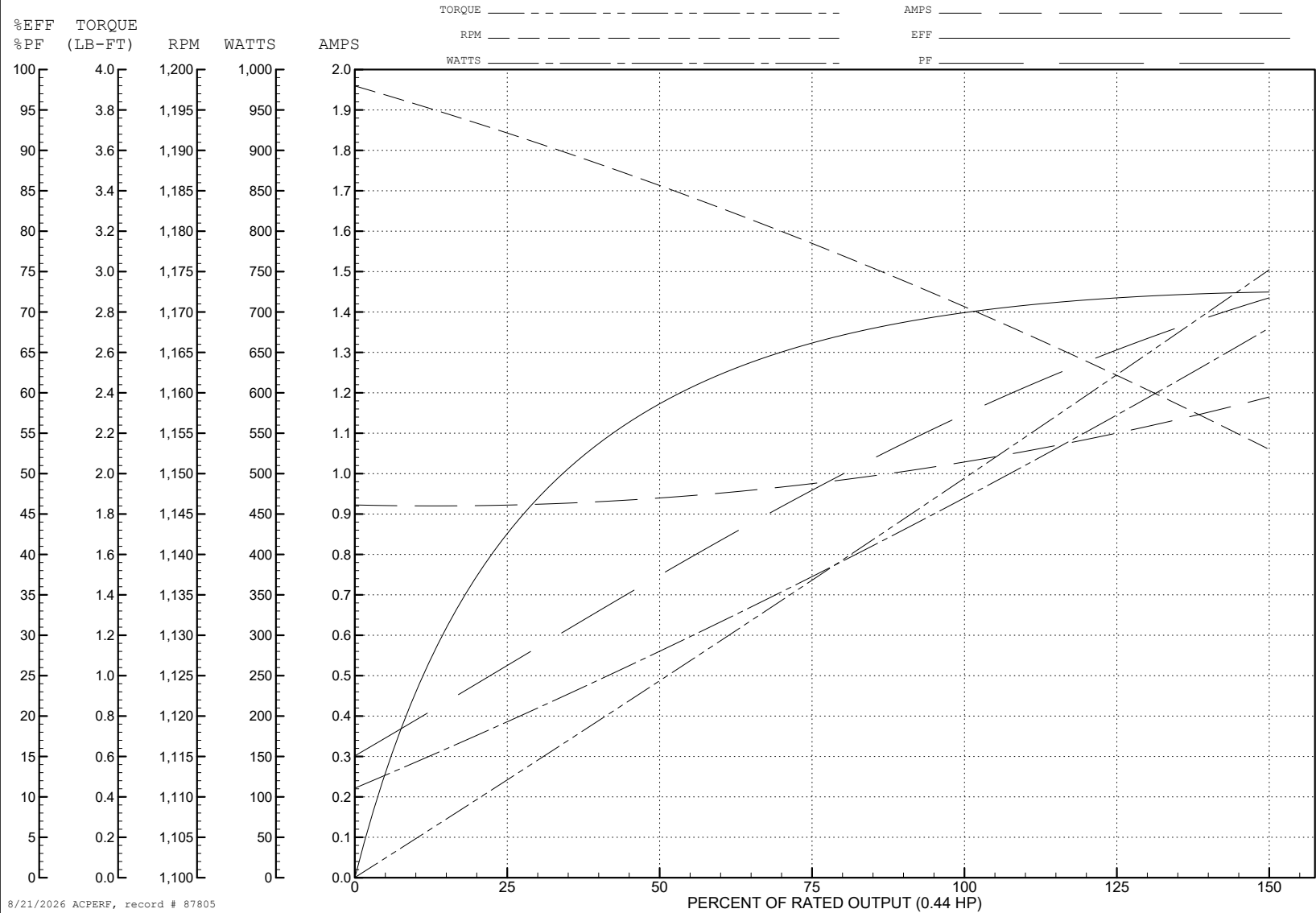
ABB Motors and Mechanical Inc.

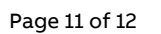
WINDING # 35WGG347

Typical performance - not guaranteed values.

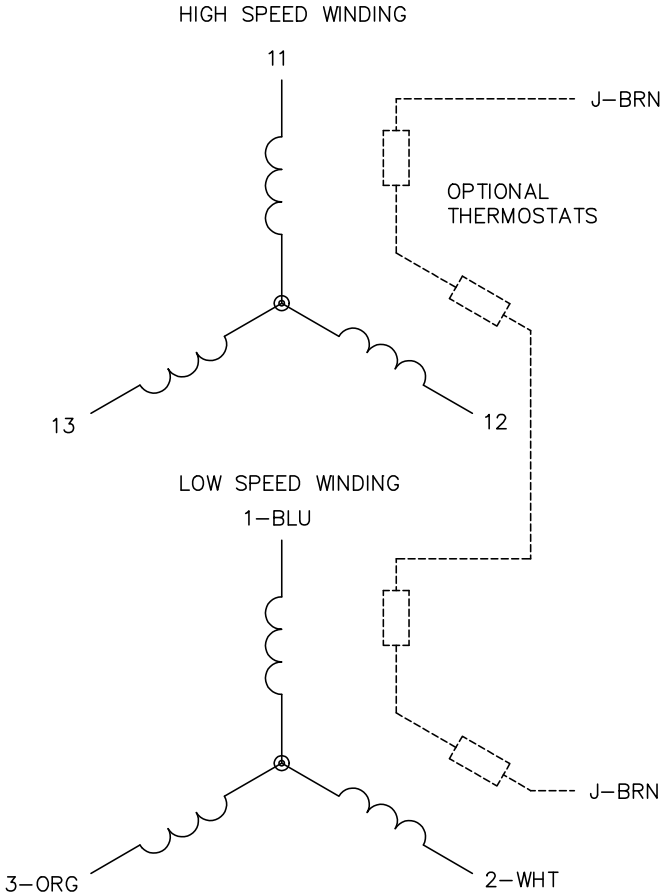
0.44 HP 3 PH 60 HZ 1171 RPM 460 V 3528M

TORQUES (LB-FT): PO=7.7 PU=4.83 LR=5.29 LRA=5.18



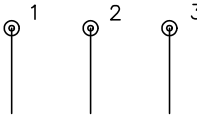


CD0013



LOW SPEED

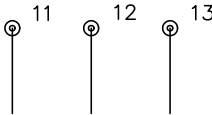
11 12 13



LINE

HIGH SPEED

1 2 3



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 VARY.
 4. LEAD COLORS ARE OPTIONAL. LEADS MUST ALWAYS BE NUMBERED AS SHOWN.

REV. DESC: REVISE TO SHOW OPTIONAL COLORS

REV. LTR: D

BY: JLP

REVISED: 01/22/99 8:50

TDR: 0171435

CD0013

FILE: AAA00005143

MDL: -

MTL: -

BALDOR ELECTRIC Co.

3PH, SV, 6 LEADS, 2-SPEED 2-WINDING

CD0013