

ABB BALDOR RELIANCE III

Customer information packet

M1218

.5/.22HP, 1750/1170RPM, 3PH, 60HZ, 56, 3516M

Class - None

Division - Not Applicable

Specifications

Enclosure	OPEN
Frame	56
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	.500 HP @ 60 HZ .220 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	1.020 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	0.7 a
Insulation Class	F
Inverter Code	Not Inverter
KVA Code	L

Part Detail

Revision	D
Type	AC
Mech. spec.	35B011
Base	
Status	PRD/A
Elec. spec.	35WGG351
Layout	35LYB011
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	3516M
Mounting Arrangement	F1
Number of Poles	4 6
Overall Length	11.07 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	0.625 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	1170 rpm 1750 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.	M1218								
SPEC.	35B011G351G1								
HP	.5/.22								
VOLTS	460								
AMP	1.02/.7								
RPM	1750/1170								
FRAME	56		HZ		60		PH		3
SER.F.	1.15	CODE		L	DES	B	CLASS		F
NEMA-NOM-EFF			PF						
RATING	40C AMB-CONT								
CC									
DE	6205		ODE		6203				
ENCL	OPEN	SN							
	SFA 1.07/.72								

Parts List

Part number	Description	Quantity
SA414926	SA 35B011G351G1	1.000 ea
RA406695	RA 35B011G351G1	1.000 ea
35FN3002A05SP	EXFN, PLASTIC, 6.376 OD, .638 ID	1.000 ea
NS2512A01	INSULATOR, CONDUIT BOX X	1.000 ea
35CB3007	35 CB CASTING W/.88 DIA. LEAD HOLE	1.000 ea
51XB1016A06	10-16X3/8 HXWSSLD SERTYB	2.000 ea
11XW1032G06	10-32 X .38, TAPTITE II, HEX WSHR SLTD U	1.000 ea
35EP3209G00	MASTER ODE,203 BRG	1.000 ea
HW5100A03	WAVY WASHER (W1543-017)	1.000 ea
35EP3210B00	MASTER DE,205 BRG,1.000SH	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
HA7000A04	KEY RETAINER 0.625 DIA SHAFTS	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
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 # 87818

Preliminary Data Sheet

Winding: 35WGG351-R002			Type: 3516M		Enclosure: OPEN	
Nameplate Data			460 V, 60 Hz: High Speed Connection			
Rated Output (HP)		.5/.22	Full Load Torque		1.5 LB-FT	
Volts		460	Start Configuration		direct on line	
Full Load Amps		1.02/.7	Breakdown Torque		5.56 LB-FT	
R.P.M.		1750/1170	Pull-up Torque		3.08 LB-FT	
Hz	60 Phase	3	Locked-rotor Torque		3.84 LB-FT	
NEMA Design Code		B KVA Code	Starting Current		5.92 A	
Service Factor (S.F.)		1.15	No-load Current		0.88 A	
NEMA Nom. Eff.		0 Power Factor	Line-line Res. @ 25°C		61.7 Ω	
Rating - Duty		40C AMB-CONT	Temp. Rise @ Rated Load		45°C	
S.F. Amps		1.07/.72	Temp. Rise @ S.F. Load		50°C	
			Locked-rotor Power Factor		92.3	
			Rotor inertia		0.116 lb-ft²	

Load Characteristics 460 V, 60 Hz, 0.5 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	29	42	54	64	73	79	69
Efficiency	46.8	62.3	68.5	71.6	72.5	72.4	72.1
Speed	1788	1776	1765	1752	1738	1720	1744
Line amperes	0.875	0.899	0.949	1.02	1.11	1.26	1.07

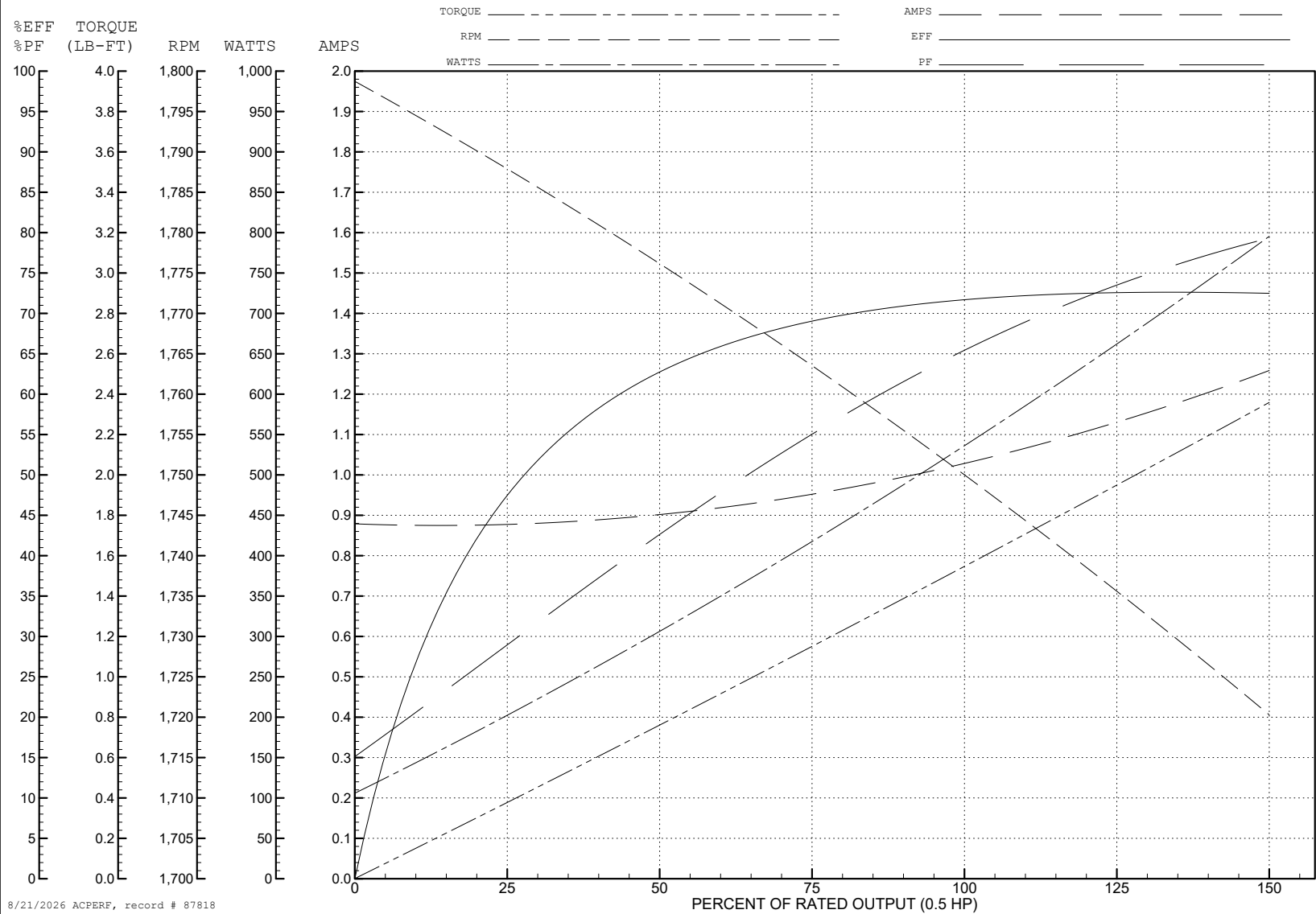
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WINDING # 35WGG351

Typical performance - not guaranteed values.

0.5 HP 3 PH 60 HZ 1752 RPM 460 V 3516M

TORQUES (LB-FT) : PO=5.56 PU=3.08 LR=3.84 LRA=5.92



AC Induction Motor Performance Data

Record # 87819

Preliminary Data Sheet

Winding: 35WGG351-R002			Type: 3516M		Enclosure: OPEN		
Nameplate Data			460 V, 60 Hz: Low Speed Connection				
Rated Output (HP)		.5/.22	Full Load Torque		0.985 LB-FT		
Volts		460	Start Configuration		direct on line		
Full Load Amps		1.02/.7	Breakdown Torque		4.23 LB-FT		
R.P.M.		1750/1170	Pull-up Torque		2.25 LB-FT		
Hz	60	Phase	3	Locked-rotor Torque		2.87 LB-FT	
NEMA Design Code		B	KVA Code	L	Starting Current		3.02 A
Service Factor (S.F.)		1.15		No-load Current		0.702 A	
NEMA Nom. Eff.		0	Power Factor	0	Line-line Res. @ 25°C		116 Ω
Rating - Duty		40C AMB-CONT		Temp. Rise @ Rated Load		42°C	
S.F. Amps		1.07/.72		Temp. Rise @ S.F. Load		44°C	
				Locked-rotor Power Factor		90.5	
				Rotor inertia		0.116 lb-ft²	

Load Characteristics 460 V, 60 Hz, 0.22 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	28	35	43	50	57	63	54
Efficiency	26.7	41.5	50.8	56.8	60.7	63	59.1
Speed	1193	1187	1181	1175	1168	1160	1171
Line amperes	0.698	0.7	0.708	0.723	0.745	0.774	0.736

ABB Motors and Mechanical Inc.

WINDING # 35WGG351

Typical performance - not guaranteed values.

0.22 HP 3 PH 60 HZ 1175 RPM 460 V 3516M

TORQUES (LB-FT) : PO=4.23 PU=2.25 LR=2.87 LRA=3.02

