

ABB BALDOR RELIANCE III

Customer information packet

CXM05122

1HP, 3450//2885RPM, 3PH, 60HZ, 56C, XPFC, F1

Class - CLI GP D; CLII GP F,G

Division - Division I

Specifications

Enclosure	XPFC
Frame	56C
Frame Material	Steel
Frequency	50.00 Hz 60.00 Hz
Haz Area Class and Group	CLI GP D; CLII GP F,G
Haz Area Division	Division I
Motor Letter Type	Three Phase
Output @ Frequency	1.000 HP @ 60 HZ .750 HP @ 50 HZ
Phase	3
Synchronous Speed @ Frequency	3600 RPM @ 60 HZ
Voltage @ Frequency	460.0 V @ 60 HZ 190.0 V @ 50 HZ 230.0 V @ 60 HZ 380.0 V @ 50 HZ
Agency Approvals	UL CSA EEV
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
Constant Torque Speed Range	6
Current @ Voltage	1.300 A @ 380.0 V 1.400 A @ 460.0 V 2.600 A @ 190.0 V 2.800 A @ 230.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT

Part Detail

Revision	A
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	35WGS921
Layout	35LYE368
Eff. date	03-16-2022
CD Diagram	CD0005
Poles	02
Leads	9#18
Proprietary	False
Created date	08-10-2020

Efficiency @ 100% Load	82.5 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Haz Area Temp Code	T3C
Heater Indicator	No Heater
High Voltage Full Load Amps	1.3 a
Insulation Class	B
Inverter Code	Inverter Duty
IP Rating	NONE
KVA Code	L
Lifting Lugs	No Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Max Speed	5400 rpm
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3516M
Mounting Arrangement	F1
Number of Poles	2
Overall Length	14.28 IN
Power Factor	82
Product Family	General Purpose
Pulley Face Code	C-Face
Rodent Screen	None
RoHS Status	ROHS NON-COMPLIANT
Service Factor	1.00
Shaft Diameter	0.625 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Speed	3450 rpm
Speed Code	Single Speed
Starting Method	Direct on line
Thermal Device - Bearing	None
Thermal Device - Winding	Normally Closed Thermostat
Vibration Sensor Indicator	No Vibration Sensor

Winding Thermal 1	None
Winding Thermal 2	None

Nameplate

NP0887XPSLEV												
NO.							CC	010A				
S/N							TEMP CODE		T3C			
SPEC.	35-0000-0881						INV.TYPE		PWM			
CAT.NO.	CXM05122						C HP FR		60	C HP TO		90
HP	1//0.75						CT HZ FROM		6	CT HZ TO		60
VOLTS	230/460//190/380						VT HZ FROM		6	VT HZ TO		60
AMPS	2.8/1.4//2.6/1.3				MAG CUR		.67					
RPM	3450//2885				MX RPM		5400					
HZ	60//50	PH	3	CL	F	NOM.EFF.		82.5				
SER.F.	1.00	DES	B	SL HZ		2.5	WK2	0.05				
FRAME	56C	RATING		40C AMB-CONT								
	NEMA MG-1 PART 5, IP54											
	1.15 SF ON SINE WAVE											

Parts List

Part number	Description	Quantity
SA385411	SA 35-0000-0881	1.000 ea
RA375652	RA 35-0000-0881	1.000 ea
LB1624	COMBINED WARNING LABEL, ISO/ANSI PICTOGR	1.000 ea
LC0145B01	CONNECTION LABEL	1.000 ea
NP0887XPSLEV	SS XP INV UL CSA-EEV CC CL-I GP-D	1.000 ea
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	2.000 ea
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	4.000 ea
MN416A01	TAG-INSTAL-MAINT no wire (2500 bx)11/25	1.000 ea
NP0018F	ALUM UL XP CONDUIT BOX NAMEPLATE	1.000 ea
35FH4005A01SP	IEC FH NO GREASER W/PRIMED	1.000 ea
51XW1032A06	10-32 X .38, TAPTITE II, HEX WSHR SLTD S	3.000 ea
34FN3002B01	EXTERNAL FAN, PLASTIC, .637/.639 HUB W/	1.000 ea
51XB0818A12	8-18X3/4 HXWSSLD SERTYB	1.000 ea
MJ1000A02	GREASE, POLYREX EM EXXON	0.050 lb
HA3104A06	THRUBOLT 5/16-18 X 8.50 OHIO ROD	4.000 ea
XY3118A12	5/16-18 HEX NUT DIRECTIONAL SERRATION	4.000 ea
35EP3700A01SP	FR ENDPLATE, XPFC	1.000 ea
HW5100A03	WAVY WASHER (W1543-017)	1.000 ea
35EP3702A01SP	PU EP-205 BRG-35X-56C-143-5TC	1.000 ea
HA3013A01	1/2-20X5/8 SPL.HX BOLT	2.000 ea
84XN1032J20	SCREW, SOC 10-32 X 1 1/4"BMH4602	2.000 ea
HW3021C06	3/32 DI X .625 PIN (F/S)	2.000 ea
35CB3001A01SP	EXPL CONDUIT BOX, MACH, 1/2" PIPE TAP LE	1.000 ea
11XW1032G06	10-32 X .38, TAPTITE II, HEX WSHR SLTD U	1.000 ea
HW3001B01	BRASS CUP WASHER, FOR #10 SCREW	1.000 ea
35CB3500A01SP	CONDUIT BOX LID, MACH	1.000 ea
51XN2520A16	SCREW, HEX WS SLT, ZN, 1/4-20 X 1.00	4.000 ea
MG1500Y02	WILKOPON PRIMER YELLOW	0.022 ga
MG1025G29	WILKOFAS, 789.229, DARK CHARCOAL GRAY	0.022 ga
36PA1000	PKG GRP, PRINT PK1016A08	1.000 ea
HW2501D13	KEY, 3/16 SQ X 1.375	1.000 ea

HA7000A04

KEY RETAINER 0.625 DIA SHAFTS

1.000 ea

AC Induction Motor Performance Data

Record # 58785

Typical performance - not guaranteed values

Winding: 35WGS921-R006			Type: 3516M		Enclosure: XPFC	
Nameplate Data			460 V, 60 Hz: High Voltage Connection			
Rated Output (HP)		1	Full Load Torque		1.5 LB-FT	
Volts		230/460	Start Configuration		direct on line	
Full Load Amps		2.8/1.4	Breakdown Torque		6.5 LB-FT	
R.P.M.		3450	Pull-up Torque		4.8 LB-FT	
Hz	60	Phase	3	Locked-rotor Torque		5.7 LB-FT
NEMA Design Code		B	KVA Code		L	
Service Factor (S.F.)		1	No-load Current		0.68 A	
NEMA Nom. Eff.		84	Power Factor		82	
Rating - Duty		40C AMB-CONT		Temp. Rise @ Rated Load		33°C
				Locked-rotor Power Factor		56.1
				Rotor inertia		0.0443 LB-FT2

Load Characteristics 460 V, 60 Hz, 1 HP

% of Rated Load	25	50	75	100	125	150
Power Factor	44	65	77	84	87	89
Efficiency	70.5	80.5	83.6	84.6	84.4	83.7
Speed	3567	3539	3510	3479	3446	3410
Line amperes	0.75	0.9	1.09	1.33	1.56	1.88

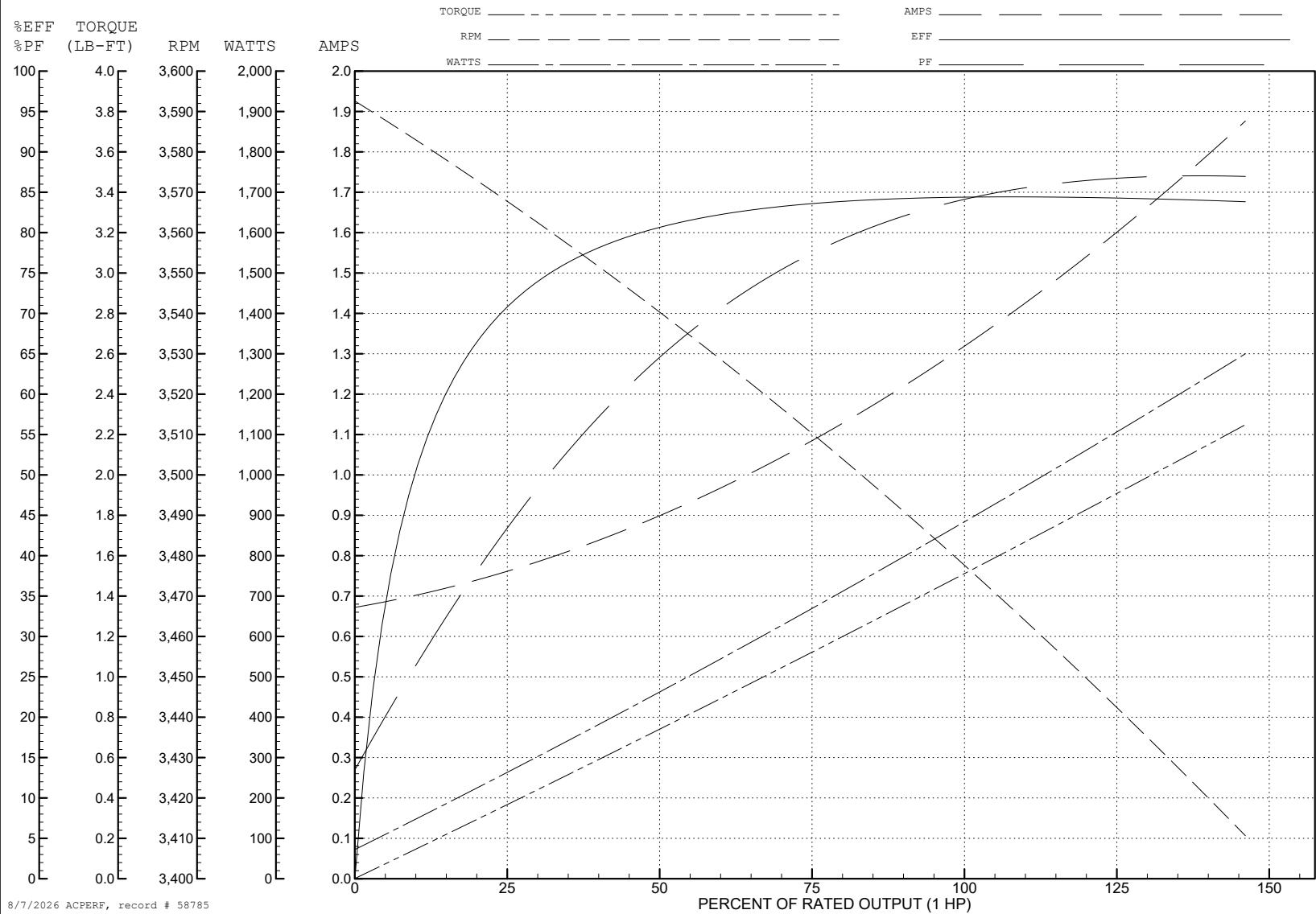
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WINDING # 35WGS921

Typical performance - not guaranteed values.

1 HP 3 PH 60 HZ 3450 RPM 460 V 3516M

TORQUES (LB-FT): PO=6.5 PU=4.8 LR=5.7 LRA=12.1



AC Induction Motor Performance Data

Record # 84243

Typical performance - not guaranteed values

Winding: 35WGS921-R020			Type: 3516M		Enclosure: XPFC		
Nameplate Data				380 V, 50 Hz: High Voltage Connection			
Rated Output (HP)		1//.75		Full Load Torque		1.35 LB-FT	
Volts		230/460//190/380		Start Configuration		direct on line	
Full Load Amps		2.8/1.4//2.6/1.3		Breakdown Torque		5.97 LB-FT	
R.P.M.		3450//2885		Pull-up Torque		4.9 LB-FT	
Hz	60//50	Phase	3	Locked-rotor Torque		5.82 LB-FT	
NEMA Design Code		B	KVA Code	L	Starting Current		11.24 A
Service Factor (S.F.)		1		No-load Current		0.664 A	
NEMA Nom. Eff.		84	Power Factor	82	Line-line Res. @ 25°C		15.2 Ω
Rating - Duty		40C AMB-CONT		Temp. Rise @ Rated Load		29°C	
				Locked-rotor Power Factor		56.1	
				Rotor inertia		0.0443 lb-ft²	

Load Characteristics 380 V, 50 Hz, 0.75 HP

% of Rated Load	25	50	75	100	125	150
Power Factor	43	63	76	82	87	87
Efficiency	70.4	80.7	83.7	83.9	84.1	83
Speed	2970	2945	2918	2890	2860	2827
Line amperes	0.717	0.846	1.01	1.23	1.44	1.73

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WINDING # 35WGS921

Typical performance - not guaranteed values.

0.75 HP 3 PH 50 HZ 2890 RPM 380 V 3516M

TORQUES (LB-FT): PO=5.97 PU=4.9 LR=5.82 LRA=11.24

