

ABB BALDOR RELIANCE III

Customer information packet

CDRX14124T

1HP, 3450//2875RPM, 3PH, 60/50HZ, 143TC, XPFC

Class - CLI GP C,D

Division - Division I

Specifications

Enclosure	XPFC
Frame	143TC
Frame Material	Steel
Frequency	50.00 Hz 60.00 Hz
Haz Area Class and Group	CLI GP C,D
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	-
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	35WGS921
Layout	35LYX732
Eff. date	06-19-2019
CD Diagram	CD0005
Poles	02
Leads	9#18
Proprietary	False
Created date	06-13-2019

Efficiency @ 100% Load	84.0 %
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	F
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	14.34 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	0.875 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

NP1401XPSLEV											
NO.						CC	010A				
S/N						TEMP CODE		T3C			
SPEC.	35-0000-0185					INV.TYPE		PWM			
CAT.NO.	CDRX14124T					C HP FR	60	C HP TO	90		
HP	1//.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	1.4/.7					
RPM	3450//2875				MX RPM	5400					
HZ	60//50	PH	3	CL	F	NOM.EFF.		84			
SER.F.	1.00	DES	B	SL HZ	2	WK2	0.036				
FRAME	143TC	RATING		40C AMB-CONT							
	55C AMB @ 1.0 SF										
	1.15 SF SINEWAVE					NEMA MG-1 PT 5,IP55					

Parts List

Part number	Description	Quantity
SA370883	SA 35-0000-0185	1.000 ea
RA360553	RA 35-0000-0185	1.000 ea
LB1624	COMBINED WARNING LABEL, ISO/ANSI PICTOGR	1.000 ea
LC0145B01	CONNECTION LABEL	1.000 ea
NP1401XPSLEV	SS XP INV UL CSA-EEV CC CL-I GP-C&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
LB1359F	ALUM XP CAUTION LABEL	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
35EP3700B07	FR ENDPLATE, XPFC - GROUP C, W/ DRAIN	1.000 ea
HW5100A03	WAVY WASHER (W1543-017)	1.000 ea
HW4506A02	BREATHER/DRAIN-EXP PROOF-.125-27 NPTF AI	1.000 ea
HW3022E05	.125 DIA X .500 ROLLED SPRING PIN	1.000 ea
HA2009A89	SPACER FOR XP MTRS - 205 BRG.	1.000 ea
35EP1704A40	PUEP 205 BRG XP,GP C,ALUM SLINGER,DRAIN	1.000 ea
HA2071A02	ALUM SLINGER 205 BRG DRILL RIG MOTOR	1.000 ea
80XN1032J04	10-32 X 1/4 SET SCREW, HEX SOC, CUP PT	1.000 ea
84XN1032J20	SCREW, SOC 10-32 X 1 1/4"BMH4602	2.000 ea
HW4001A01	1/4 HX SOC PIPE PLG (F/S) ALLOY STEEL W/	2.000 ea
63XN1032A07	10-32 X 7/16 TRUSS HEAD,TORX SERRATED ZN	2.000 ea
HW4506A02	BREATHER/DRAIN-EXP PROOF-.125-27 NPTF AI	1.000 ea
HW3022E05	.125 DIA X .500 ROLLED SPRING PIN	1.000 ea
35CB1005A01	CONDUIT BOX,MACH - GROUP "C" MTRS	1.000 ea
RM1020A41	O-RING, -150 BUNA-N, .103 CS X 2.862 ID	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
35CB1501A01	CONDUIT BOX LID, MACH. - GROUP "C" MTRS	1.000 ea
MG1500Y02	WILKOPON PRIMER YELLOW	0.022 ga
MG1025G29	WILKOFASST, 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
HA7000A01	KEY RETAINER 7/8" DIA SHAFT	1.000 ea

AC Induction Motor Performance Data

Record # 76574

Typical performance - not guaranteed values

Winding: 35WGS921-R013		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//190/380	Start Configuration	direct on line
Full Load Amps	2.8/1.4//2.6/1.3	Breakdown Torque	6.5 LB-FT
R.P.M.	3450//2875	Pull-up Torque	4.8 LB-FT
Hz	60//50 Phase	Locked-rotor Torque	5.7 LB-FT
NEMA Design Code	B KVA Code	Starting Current	12.1 A
Service Factor (S.F.)	1	No-load Current	0.68 A
NEMA Nom. Eff.	84 Power Factor	Line-line Res. @ 25°C	15.2 Ω
Rating - Duty	40C AMB-CONT	Temp. Rise @ Rated Load	33°C
		Locked-rotor Power Factor	56.1
		Rotor inertia	0.0443 LB-FT ²

Load Characteristics 460 V, 60 Hz, 1 HP

% of Rated Load	25	50	75	100	125	150
Power Factor	45	65	77	83	87	87
Efficiency	70.3	80.5	83.9	84.6	84.6	83.7
Speed	3567	3539	3510	3479	3446	3410
Line amperes	0.75	0.9	1.09	1.33	1.56	1.88

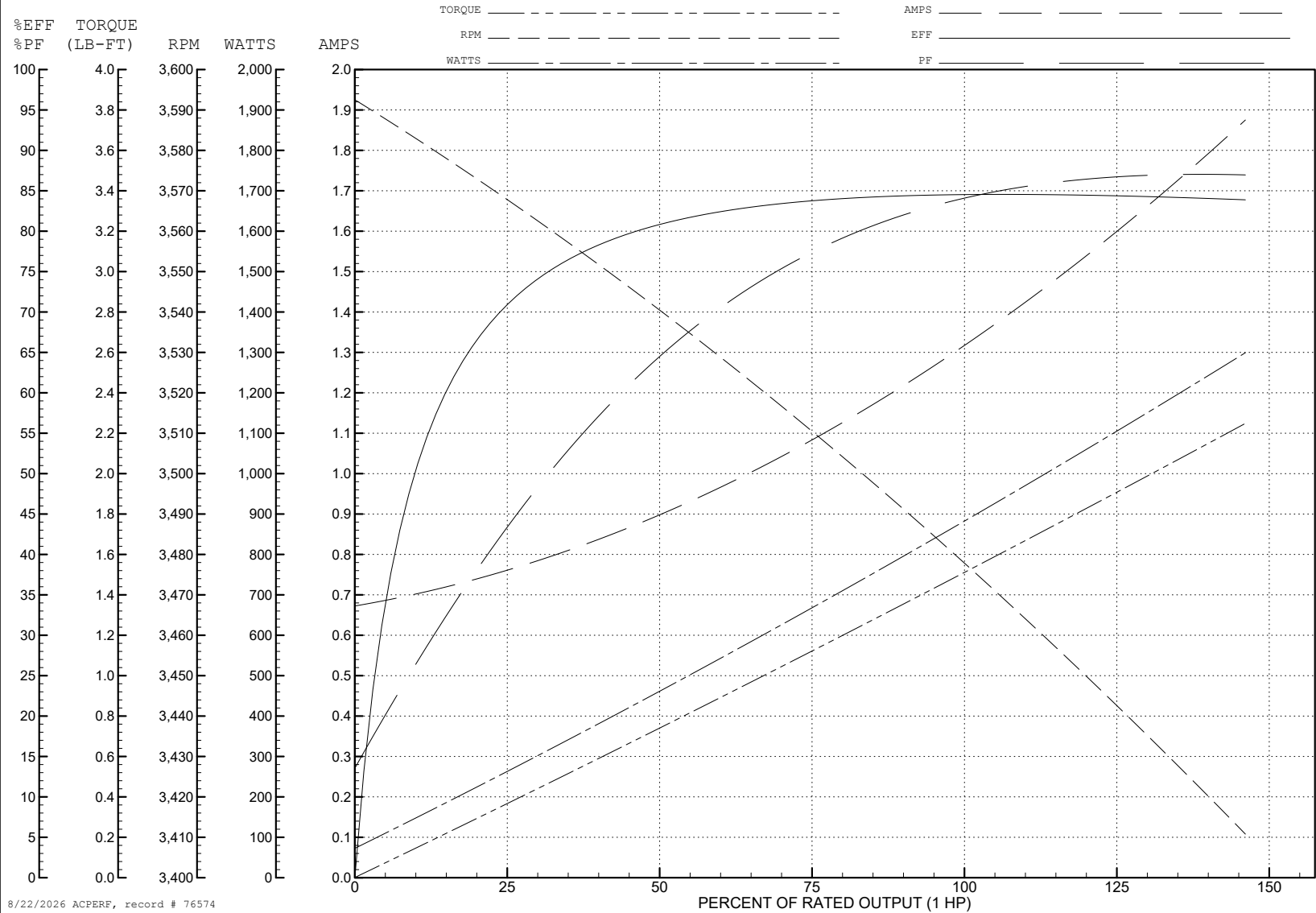
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WINDING # 35WGS921

Typical performance - not guaranteed values.

1 HP 3 PH 60 HZ 3479 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 # 76575

Typical performance - not guaranteed values

Winding: 35WGS921-R013		Type: 3516M	Enclosure: XPFC
Nameplate Data		380 V, 50 Hz: High Voltage Connection	
Rated Output (HP)	1	Full Load Torque	1.36 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	5.94 LB-FT
R.P.M.	3450//2875	Pull-up Torque	4.9 LB-FT
Hz	60//50 Phase	Locked-rotor Torque	5.82 LB-FT
NEMA Design Code	B KVA Code	Starting Current	11.24 A
Service Factor (S.F.)	1	No-load Current	0.669 A
NEMA Nom. Eff.	84 Power Factor	Line-line Res. @ 25°C	15.2 Ω
Rating - Duty	40C AMB-CONT	Temp. Rise @ Rated Load	30°C
		Locked-rotor Power Factor	62.7
		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	45	65	76	82	87	87
Efficiency	65.3	76.9	80.7	82.1	82.1	81.4
Speed	2968	2942	2916	2887	2857	2824
Line amperes	0.731	0.867	1.04	1.26	1.46	1.76

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WINDING # 35WGS921

Typical performance - not guaranteed values.

0.75 HP 3 PH 50 HZ 2887 RPM 380 V 3516M

TORQUES (LB-FT) : PO=5.94 PU=4.9 LR=5.82 LRA=11.24

