

ABB BALDOR RELIANCE III

Customer information packet

CDRX21124T

10HP, 3490//2900RPM, 3PH, 60HZ, 215TC, XPFC, F

Class - CLI GP C,D

Division - Division I

Specifications

Enclosure	XPFC
Frame	215TC
Frame Material	Iron
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	7.500 HP @ 50 HZ 10.000 HP @ 60 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	11.000 A @ 380.0 V 11.800 A @ 460.0 V 21.600 A @ 190.0 V 23.600 A @ 230.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT

Part Detail

Revision	D
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	07WGY855
Layout	07LYJ232
Eff. date	02-14-2024
CD Diagram	CD0005
Poles	02
Leads	9#14
Proprietary	False
Created date	05-28-2019

Efficiency @ 100% Load	90.2 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Haz Area Temp Code	T3C
Heater Indicator	No Heater
High Voltage Full Load Amps	11.0 a
Insulation Class	F
Inverter Code	Inverter Duty
IP Rating	NONE
KVA Code	G
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Max Speed	5400 rpm
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	0730M
Mounting Arrangement	F1
Number of Poles	2
Overall Length	20.78 IN
Power Factor	87
Product Family	General Purpose
Pulley Face Code	C-Face
Rodent Screen	None
RoHS Status	ROHS NON-COMPLIANT
Service Factor	1.00
Shaft Diameter	1.375 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Speed	3490 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.	07-0000-0145					INV.TYPE		PWM			
CAT.NO.	CDRX21124T					C HP FR	60	C HP TO	90		
HP	10//7.5					CT HZ FROM		6	CT HZ TO		60
VOLTS	230/460//190/380					VT HZ FROM		6	VT HZ TO		60
AMPS	23.6/11.8//21.6/11				MAG CUR	7.2/3.6					
RPM	3490//2900				MX RPM	5400					
HZ	60//50	PH	3	CL	F	NOM.EFF.		90.2			
SER.F.	1.00	DES	B	SL HZ	1.8	WK2	0.273				
FRAME	215TC	RATING		40C AMB-CONT							
	1.15 SF SINEWAVE										
	55C AMB @ 1.0SF					NEMA MG-1 PT 5,IP55					

Parts List

Part number	Description	Quantity
SA370026	SA 07-0000-0145	1.000 ea
RA359653	RA 07-0000-0145	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
LB1081F	ALUM XP CAUTION LABEL (FS PLANT ONLY-	1.000 ea
HW3201A05	3/8-16 EYEBOLT	1.000 ea
07FH1003A05	FAN HOUSING 307 EXPLOSION PROOF W/ GREAS	1.000 ea
10XN2520A12	1/4-20 X 3/4 HEX HEAD CAP	4.000 ea
36FN3000C02SP	EXFN, PLASTIC, 5.25 OD, 1.175 ID	1.000 ea
51XB1214A16	12-14X1.00 HXWSSLD SERTYB	1.000 ea
MJ1000A02	GREASE, POLYREX EM EXXON	0.050 lb
07EP1707A17	FREP XP GR C W/DRAINS, GRSRS	1.000 ea
10XN3816K28	3/8-16 X 1.75 HEX HD CAP SCREW, GRADE 5	4.000 ea
HW1001A38	LOCKWASHER 3/8, ZINC PLT .688 OD, .382 I	4.000 ea
HW5100A06	W2420-025 WVY WSHR (WB)	1.000 ea
HW4500A01	1641B(ALEMITE)400 UNIV, GREASE FITT	1.000 ea
HW4500A19	1/4-28X1/4 SLOTTED PLUG F/S	1.000 ea
HW3022E05	.125 DIA X .500 ROLLED SPRING PIN	1.000 ea
07EP1708A12	PUEP 213-5TC 307M "DRILL RIG DUTY" SLING	1.000 ea
HW1001A38	LOCKWASHER 3/8, ZINC PLT .688 OD, .382 I	4.000 ea
10XN3816K28	3/8-16 X 1.75 HEX HD CAP SCREW, GRADE 5	4.000 ea
HA2065A02	ALUM SLINGER 307 BRGS DRILL RIG MOTOR	1.000 ea
80XN1032J07	10-32 X 7/16 SET SCREW, HEX SOC, CUP PT	2.000 ea
10XN2520A32	1/4 X 2 HEX HEAD CAP SCR, GRADE 2	4.000 ea
HW1001A25	LOCKWASHER 1/4, ZINC PLT .493 OD, .255 I	4.000 ea
HW4500A01	1641B(ALEMITE)400 UNIV, GREASE FITT	1.000 ea
HW4500A19	1/4-28X1/4 SLOTTED PLUG F/S	1.000 ea

HW4506A02	BREATHING/DRAIN-EXP PROOF-.125-27 NPTF AI	1.000 ea
HW3022E05	.125 DIA X .500 ROLLED SPRING PIN	1.000 ea
07CB1000A01	CONDUIT BOX MACH	1.000 ea
10XN3118A16	5/16-18X1 HEX HD CAP	4.000 ea
HW1001A31	LOCKWASHER 5/16, ZINC PLT.591 OD, .319 I	4.000 ea
WD1000B17	T&B CX35TN OR L35P TERMINAL LUG	1.000 ea
11XW1032G06	10-32 X .38, TAPTITE II, HEX WSHR SLTD U	1.000 ea
07CB1502A01	CONDUIT BOX LID MACH (DUCTILE IRON)	1.000 ea
84XN2520J16	1/4-20 X 1 SOC HD CAP SCREW	4.000 ea
MG1500Y02	WILKOPON PRIMER YELLOW	0.022 ga
MG1025G29	WILKOFAS, 789.229, DARK CHARCOAL GRAY	0.022 ga
07PA1011	PKG GRP, 07 CAST IRON PK1181	1.000 ea
10XL3807A28	3/8-7 X 1 3/4" LAG SCREW	2.000 ea
HW2501F21	KEY, 5/16 SQ X 2.375	1.000 ea
HA7000A02	KEY RETAINER RING, 1 1/8 DIA, 1 3/8 DIA	1.000 ea
MJ5001A27	32220KN GRAY SEALER *MIN BUY 4 QTS=1GAL	0.001 qt

AC Induction Motor Performance Data

Record # 73682

Typical performance - not guaranteed values

Winding: 07WGY855-R021			Type: 0730M		Enclosure: TEFC	
Nameplate Data			460 V, 60 Hz: High Voltage Connection			
Rated Output (HP)	10//7.5		Full Load Torque	15.1 LB-FT		
Volts	230/460//190/380		Start Configuration	direct on line		
Full Load Amps	23.6/11.8//21.6/11		Breakdown Torque	56.3 LB-FT		
R.P.M.	3490//2900		Pull-up Torque	17.7 LB-FT		
Hz	60//50	Phase	3	Locked-rotor Torque	23.8 LB-FT	
NEMA Design Code	B		KVA Code	G	Starting Current	78.5 A
Service Factor (S.F.)	1		No-load Current	3.65 A		
NEMA Nom. Eff.	90.2	Power Factor	87	Line-line Res. @ 25°C	1.05 Ω	
Rating - Duty	40C AMB-CONT		Temp. Rise @ Rated Load	63°C		
S.F. Amps			Temp. Rise @ S.F. Load	79°C		
			Locked-rotor Power Factor	33.7		
			Rotor inertia	0.273 lb-ft²		

Load Characteristics 460 V, 60 Hz, 10 HP

% of Rated Load	25	50	75	100	125	150
Power Factor	60	80	87	90	90	90
Efficiency	88	91.4	91.3	90.5	89.5	88.2
Speed	3576	3551	3525	3497	3465	3429
Line amperes	4.55	6.56	8.97	11.6	14.5	17.7

ABB Motors and Mechanical Inc.

WINDING # 07WGY855

Typical performance - not guaranteed values.

10 HP 3 PH 60 HZ 3497 RPM 460 V 0730M

TORQUES (LB-FT): PO=56.3 PU=17.7 LR=23.8 LRA=78.5





