

ABB BALDOR RELIANCE III

Customer information packet

DRX18524T

5HP, 3500//2900RPM, 3PH, 60HZ, 184T, XPFC, F1

Class - CLI GP C,D

Division - Division I

Specifications

Enclosure	XPFC
Frame	184T
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	5.000 HP @ 60 HZ 3.000 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	11.000 A @ 230.0 V 4.200 A @ 380.0 V 5.500 A @ 460.0 V 8.400 A @ 190.0 V
Design Code	A
Drip Cover	No Drip Cover
Duty Rating	CONT

Part Detail

Revision	C
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	06WGW431
Layout	06LY-000-044
Eff. date	02-28-2024
CD Diagram	CD0005
Poles	02
Leads	9#16
Proprietary	False
Created date	03-21-2019

Efficiency @ 100% Load	88.5 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Haz Area Temp Code	T3C
Heater Indicator	No Heater
High Voltage Full Load Amps	4.2 a
Insulation Class	F
Inverter Code	Inverter Duty
IP Rating	NONE
KVA Code	L
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Max Speed	5400 rpm
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	0640M
Mounting Arrangement	F1
Number of Poles	2
Overall Length	17.56 IN
Power Factor	96
Product Family	General Purpose
Pulley Face Code	Standard
Rodent Screen	None
RoHS Status	ROHS NON-COMPLIANT
Service Factor	1.00
Shaft Diameter	1.125 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Speed	3500 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.	06-0000-0055					INV.TYPE		PWM			
CAT.NO.	DRX18524T					C HP FR	60	C HP TO	90		
HP	5//3					CT HZ FROM		6	CT HZ TO		60
VOLTS	230/460//190/380					VT HZ FROM		6	VT HZ TO		60
AMPS	11/5.5//8.4/4.2				MAG CUR	3/1.5					
RPM	3500//2900				MX RPM	5400					
HZ	60//50	PH	3	CL	F	NOM.EFF.		88.5			
SER.F.	1.00	DES	A	SL HZ	1.7	WK2	0.18				
FRAME	184T	RATING		40C AMB-CONT							
	55C AMB @1.0SF										
	1.15SF SINEWAVE					NEMA MG-1 PT 5,IP55					

Parts List

Part number	Description	Quantity
SA367917	SA 06-0000-0055	1.000 ea
RA357398	RA 06-0000-0055	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
06FH1003A06	FH, XP W/GRSR	1.000 ea
51XN1032A14	10-32 X 0.875 HX WS SL SR	4.000 ea
36FN3000C01SP	EXFN, PLASTIC, 5.25 OD, .912 ID	1.000 ea
MJ1000A02	GREASE, POLYREX EM EXXON	0.050 lb
06EP1709A08	FRONT XPFC 205 BRG GRP C W/ DRAIN (HW450	1.000 ea
10XN3118K20	5/16-18 X 1 1/4 GRADE 5 STEEL ZC PLATED	4.000 ea
HW1001A31	LOCKWASHER 5/16, ZINC PLT.591 OD, .319 I	4.000 ea
HW5100A05	WVY WSHR F/205 & 304 BRGS	1.000 ea
HW4500A01	1641B(ALEMITE)400 UNIV, GREASE FITT	1.000 ea
HW4500A19	1/4-28X1/4 SLOTTED PLUG F/S	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
36EP1718A16	PULLEY 206 BRG GROUP C W/GRSR, DRAIN & S	1.000 ea
HW1001A31	LOCKWASHER 5/16, ZINC PLT.591 OD, .319 I	4.000 ea
10XN3118K20	5/16-18 X 1 1/4 GRADE 5 STEEL ZC PLATED	4.000 ea
HA2065A01	ALUM SLINGER 206 BRGS DRILL RIG MOTOR	1.000 ea
80XN1032J07	10-32 X 7/16 SET SCREW, HEX SOC, CUP PT	2.000 ea
HW4500A01	1641B(ALEMITE)400 UNIV, GREASE FITT	1.000 ea
HW4500A19	1/4-28X1/4 SLOTTED PLUG F/S	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

07CB1000A02	CONDUIT BOX, MODEL 306,EXP. PROOF	1.000 ea
10XN2520A14	1/4 20X7/8 HX HD CAP	4.000 ea
HW1001A25	LOCKWASHER 1/4, ZINC PLT .493 OD, .255 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
10XN2520K16	1/4-20 X 1" HX HD SCRW GRADE 5, ZINC P	4.000 ea
HW1001A25	LOCKWASHER 1/4, ZINC PLT .493 OD, .255 I	4.000 ea
MG1500Y02	WILKOPON PRIMER YELLOW	0.001 ga
MG1025G29	WILKOFAS, 789.229, DARK CHARCOAL GRAY	0.022 ga
37PA1074	PALLET PACK GRP, PRINT BOX PK1026A06	1.000 ea
HW2501E16	KEY, 1/4 SQ X 1.750	1.000 ea
HA7000A02	KEY RETAINER RING, 1 1/8 DIA, 1 3/8 DIA	1.000 ea

AC Induction Motor Performance Data

Record # 72833

Typical performance - not guaranteed values

Winding: 06WGW431-R028			Type: 0640M		Enclosure: XPFC			
Nameplate Data				460 V, 60 Hz: High Voltage Connection				
Rated Output (HP)		5//3		Full Load Torque		7.61 LB-FT		
Volts		230/460//190/380		Start Configuration		direct on line		
Full Load Amps		11/5.5//8.4/4.2		Breakdown Torque		35.64 LB-FT		
R.P.M.		3500//2900		Pull-up Torque		26.7 LB-FT		
Hz		60//50	Phase	3	Locked-rotor Torque		30.8 LB-FT	
NEMA Design Code		A		KVA Code	L	Starting Current		62.3 A
Service Factor (S.F.)		1		No-load Current		1.55 A		
NEMA Nom. Eff.		88.5	Power Factor		96	Line-line Res. @ 25°C		2.12 Ω
Rating - Duty		40C AMB-CONT		Temp. Rise @ Rated Load		49°C		
				Locked-rotor Power Factor		43		
				Rotor inertia		0.179 LB-FT2		

Load Characteristics 460 V, 60 Hz, 5 HP

% of Rated Load	25	50	75	100	125	150
Power Factor	75	88	95	96	96	93
Efficiency	75.1	83.3	85.8	86.2	85.7	84.8
Speed	3562	3533	3503	3470	3435	3398
Line amperes	2.14	3.27	4.38	5.7	7.1	8.72

ABB Motors and Mechanical Inc.

WINDING # 06WGW431

Typical performance - not guaranteed values.

5 HP 3 PH 60 HZ 3470 RPM 460 V 0640M

TORQUES (LB-FT): PO=35.64 PU=26.7 LR=30.8 LRA=62.3





