

ABB BALDOR RELIANCE III

Customer information packet

CDRX32444T-5

40HP, 1775RPM, 3PH, 60HZ, 324TC, XPFC, F1

Class - CLI GP C,D

Division - Division I

Specifications

Enclosure	XPFC
Frame	324TC
Frame Material	Iron
Frequency	60.00 Hz
Haz Area Class and Group	CLI GP C,D
Haz Area Division	Division I
Motor Letter Type	Three Phase
Output @ Frequency	40.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	575.0 V @ 60 HZ
Agency Approvals	CSA EEV UL
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	39.000 A @ 575.0 V
Design Code	A
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	94.1 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Haz Area Temp Code	T3C
Heater Indicator	No Heater
High Voltage Full Load Amps	39.0 a
Insulation Class	F
Inverter Code	Inverter Duty

Part Detail

Revision	G
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	12WGY285
Layout	12LYT021
Eff. date	12-10-2024
CD Diagram	CD0006
Poles	04
Leads	3#8
Proprietary	False
Created date	07-24-2019

IP Rating	NONE
KVA Code	H
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Max Speed	2700 rpm
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	1254M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	32.00 IN
Power Factor	82
Product Family	Hazardous Location Motor
Pulley Face Code	C-Face
Rodent Screen	None
RoHS Status	ROHS NON-COMPLIANT
Service Factor	1.00
Shaft Diameter	2.125 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Speed	1775 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.	12-0000-0852					INV.TYPE		PWM				
CAT.NO.	CDRX32444T-5					C HP FR	60	C HP TO	90			
HP	40					CT HZ FROM		6	CT HZ TO		60	
VOLTS	575					VT HZ FROM		6	VT HZ TO		60	
AMPS	39					MAG CUR						
RPM	1775					MX RPM		2700				
HZ	60	PH	3	CL	F	NOM.EFF.		94.1				
SER.F.	1.00	DES		A	SL HZ	0.83	WK2	7.19				
FRAME	324TC	RATING		40C AMB-CONT								
	55C AMB @ 1.0 SF, 60C RISE											
	1.15SF ON SINEWAVE					NEMA MG-1 PT.5,IP55						

Parts List

Part number	Description	Quantity
SA372173	SA 12-0000-0852	1.000 ea
RA361899	RA 12-0000-0852	1.000 ea
LC0006	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	4.000 ea
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	2.000 ea
MN416A01	TAG-INSTAL-MAINT no wire (2500 bx)11/25	1.000 ea
LB1081C	ALUM XP CAUTION LABEL (COL PLANT ONLY-	1.000 ea
14PA2000	PKGP, CTN ID 42X34X25, STD BASE	1.000 ea
12FH1001A07P	FAN COVER, MACH W/EPOXY PRIMER & SLOT FO	1.000 ea
HW1001A31	LOCKWASHER 5/16, ZINC PLT.591 OD, .319 I	3.000 ea
10XN3118K12	5/16-18 X .75 GRADE 5, ZINC PLATED	3.000 ea
09FN3001B03SP	EXTERNAL FAN, PLASTIC (COMES W/SCREW FRO	1.000 ea
HW2500A25	WOODRUFF KEY USA #1008 #BLOW CARBON STEE	1.000 ea
MJ1000A02	GREASE, POLYREX EM EXXON	0.200 lb
WD4100A02	DP-1000 HEYCO PLUG OR 62MP1000 MICRO PL	1.000 ea
10XN5013J44	1/2-13X2.75 HX HD BOLT, GR8,1.25" THD LG	4.000 ea
HW1001A50	LOCKWASHER 1/2, ZINC PLT, .879 OD, .509 I	4.000 ea
HA2067A01	ALUM SLINGER 311 BRG DRILL RIG MOTOR	1.000 ea
80XN1032J07	10-32 X 7/16 SET SCREW, HEX SOC, CUP PT	2.000 ea
HW5100A13	W4627-047 WVY WSHER	1.000 ea
HW4500A20	1/8NPT SL PIPE PLUG	2.000 ea
HW4505A02	BREATHER/DRAIN-EXP PROOF-.250-18 PTF AIS	1.000 ea
HW3023E06	.125 X .625 SPIRAL SPRING PIN	1.000 ea
12EP1707A11P	FACE MTD. EP XPFC, W/DRN HW4505A02 W/PRI	1.000 ea
HW1001A50	LOCKWASHER 1/2, ZINC PLT, .879 OD, .509 I	4.000 ea
10XN5013J44	1/2-13X2.75 HX HD BOLT, GR8,1.25" THD LG	4.000 ea
HA2067A02	ALUM SLINGER 312 BRG DRILL RIG MOTOR	1.000 ea
80XN1032J10	10-32 X 5/8 SET SCREW, HEX SOC, CUP PT	2.000 ea
10XN3118K40	5/16-18 X 2.75" HEX HD, GRADE 5	4.000 ea
HW1001A31	LOCKWASHER 5/16, ZINC PLT.591 OD, .319 I	4.000 ea

HW4500A20	1/8NPT SL PIPE PLUG	2.000 ea
HW4505A02	BREATHER/DRAIN-EXP PROOF-.250-18 PTF AIS	1.000 ea
HW3023E06	.125 X .625 SPIRAL SPRING PIN	1.000 ea
12EP1705A34LP5	FREP MACH. 312 W/EPOXY PRIMER & PAINT	1.000 ea
12CB1003A01P	KOBX,MACH 2.00 NPT GROUP C MTRS,EPOXY PR	1.000 ea
10XN3118K24	5/16-18 X 1.50" HEX HD, GRADE 5	4.000 ea
WD1000B19	TERMINAL BURNDY L250HP	1.000 ea
10XN3816K08	3/8-16 X .50 HEX HD CAP SCREW GRADE 5	1.000 ea
HW1001A38	LOCKWASHER 3/8, ZINC PLT .688 OD, .382 I	1.000 ea
12CB1502A01P	CONDUIT BOX LID MACH. GROUP C MTRS	1.000 ea
84XN5013J32	SOCKET HD.CAP SCR,1/2-13 X 2"LG,ALLOY ST	10.000 ea
HW1001A50	LOCKWASHER 1/2, ZINC PLT,.879 OD, .509 I	10.000 ea
MG1025G29	WILKOFAS, 789.229, DARK CHARCOAL GRAY	0.125 ga
HW2501H33	KEY, 1/2 SQ X 3.875	1.000 ea
LB1624	COMBINED WARNING LABEL, ISO/ANSI PICTOGR	1.000 ea
MJ5001A27	32220KN GRAY SEALER *MIN BUY 4 QTS=1GAL	0.001 qt

AC Induction Motor Performance Data

Record # 77494

Typical performance - not guaranteed values

Winding: 12WGY285-R007				Type: 1254M		Enclosure: XPFC	
Nameplate Data				575 V, 60 Hz: Single Voltage Motor			
Rated Output (HP)		40		Full Load Torque		118 LB-FT	
Volts		575		Start Configuration		direct on line	
Full Load Amps		39		Breakdown Torque		367 LB-FT	
R.P.M.		1775		Pull-up Torque		174 LB-FT	
Hz		60 Phase		Locked-rotor Torque		185 LB-FT	
NEMA Design Code		A KVA Code		Starting Current		267 A	
Service Factor (S.F.)		1		No-load Current		15.6 A	
NEMA Nom. Eff.		94.1 Power Factor		Line-line Res. @ 25°C		0.226 Ω	
Rating - Duty		40C AMB-CONT		Temp. Rise @ Rated Load		54°C	
S.F. Amps				Temp. Rise @ S.F. Load		65°C	
				Locked-rotor Power Factor		27.2	
				Rotor inertia		7.19 LB-FT2	

Load Characteristics 575 V, 60 Hz, 40 HP

% of Rated Load	25	50	75	100	125	150
Power Factor	46	67	77	82	84	85
Efficiency	90	93.6	94.3	94.3	94.1	93.3
Speed	1795	1790	1785	1780	1774	1767
Line amperes	18.3	24.1	31.1	38.7	47.6	56.3

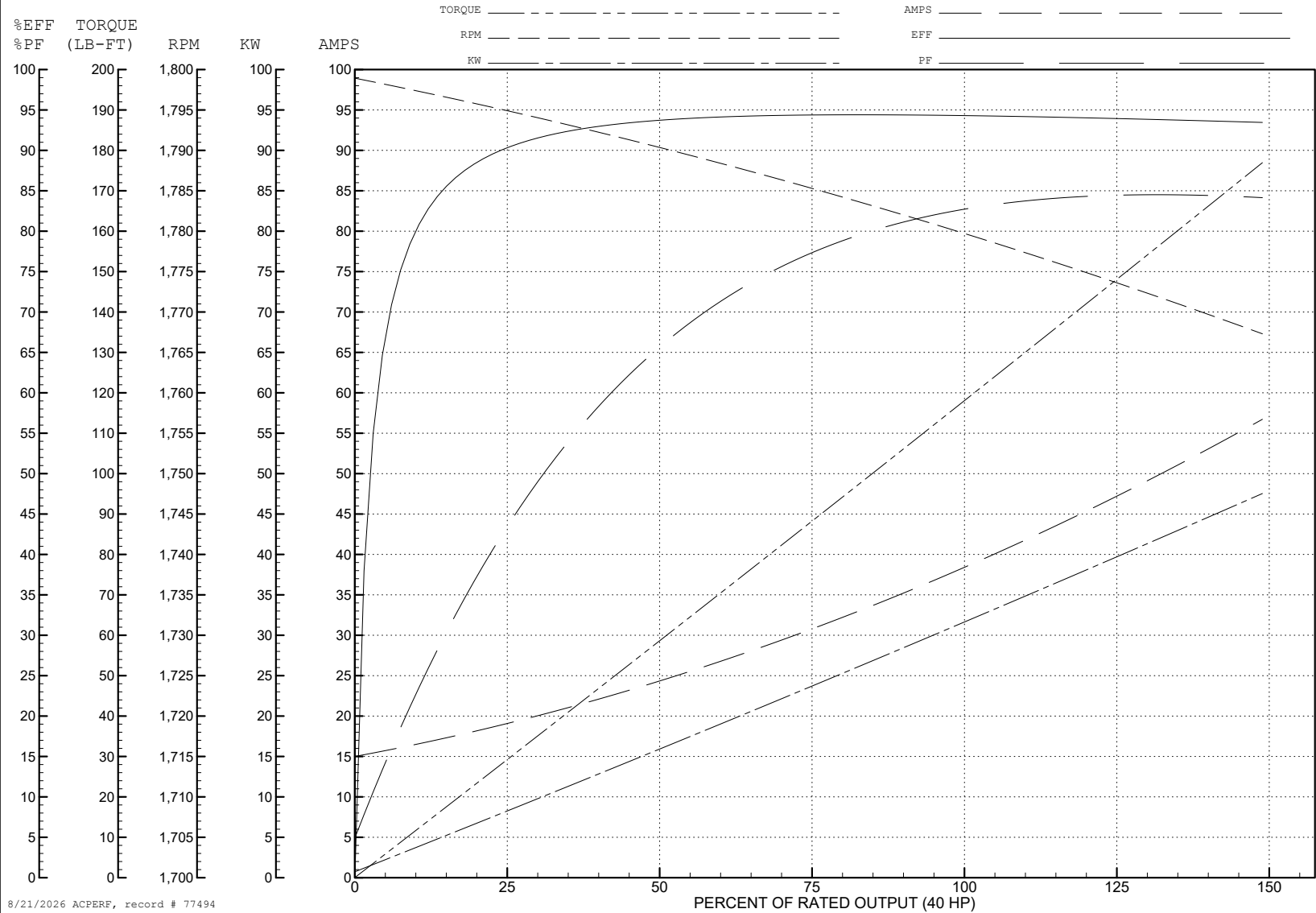
ABB Motors and Mechanical Inc.

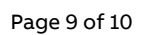
WINDING # 12WGY285

Typical performance - not guaranteed values.

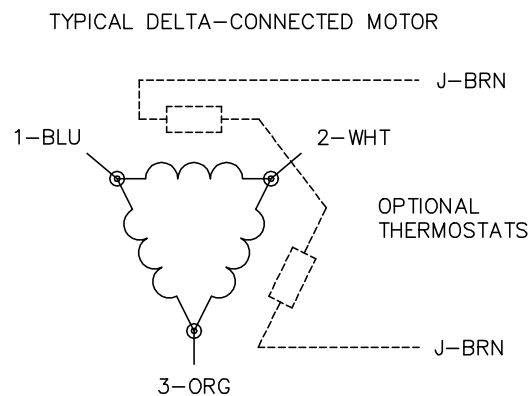
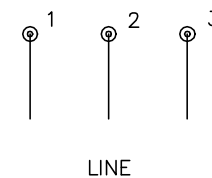
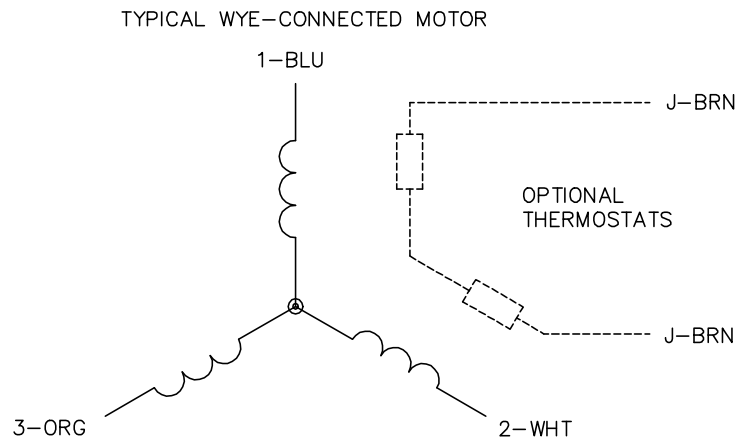
40 HP 3 PH 60 HZ 1775 RPM 575 V 1254M

TORQUES (LB-FT): PO=367 PU=174 LR=185 LRA=267





CD0006


NOTES:

1. THREE LEAD MOTOR MAY BE EITHER WYE CONNECTED OR DELTA CONNECTED.
2. INTERCHANGE ANY TWO LINE LEADS TO REVERSE ROTATION.
3. OPTIONAL THERMOSTATS ARE PROVIDED WHEN SPECIFIED.
4. ACTUAL NUMBER OF INTERNAL PARALLEL CIRCUITS MAY VARY.
5. LEAD COLORS ARE OPTIONAL. LEADS MUST BE NUMBERED AS SHOWN.

CD0006

REV. DESC: ADD CLASS CONN00000007

REV. LTR: E

VERSION: 01

TDR: 000001099922

FILE: \AAA\00005\141

REVISED: 10:24:49 02/19/2019

BY: ENBRIRO

MTL: -


BALDOR - RELIANCE®

3PH, SV, 3 LEADS, WYE OR DELTA CONNECTED

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