ABB BALDOR RELIANCE

Customer information packet

CDRX32444T-5

40HP, 1775RPM, 3PH, 60HZ, 324TC, XPFC, F1
Class - CLI GP C,D
Division - Division I

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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							

AC Induction Motor Performance Data
Record # 77494
Typical performance - not guaranteed values

Winding: 12WGY285-R007	**Type:** 1254M	**Enclosure:** XPFC

Nameplate Data			
Rated Output (HP)			40
Volts			575
Full Load Amps			39
R.P.M.			1775
Hz	60	**Phase**	3
NEMA Design Code	A	**KVA Code**	H
Service Factor (S.F.)			1
NEMA Nom. Eff.	94.1	**Power Factor**	82
Rating - Duty			40C AMB-CONT
S.F. Amps			

575 V, 60 Hz: Single Voltage Motor	
Full Load Torque	118 LB-FT
Start Configuration	direct on line
Breakdown Torque	367 LB-FT
Pull-up Torque	174 LB-FT
Locked-rotor Torque	185 LB-FT
Starting Current	267 A
No-load Current	15.6 A
Line-line Res. @ 25ºC	0.226 Ω
Temp. Rise @ Rated Load	54°C
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

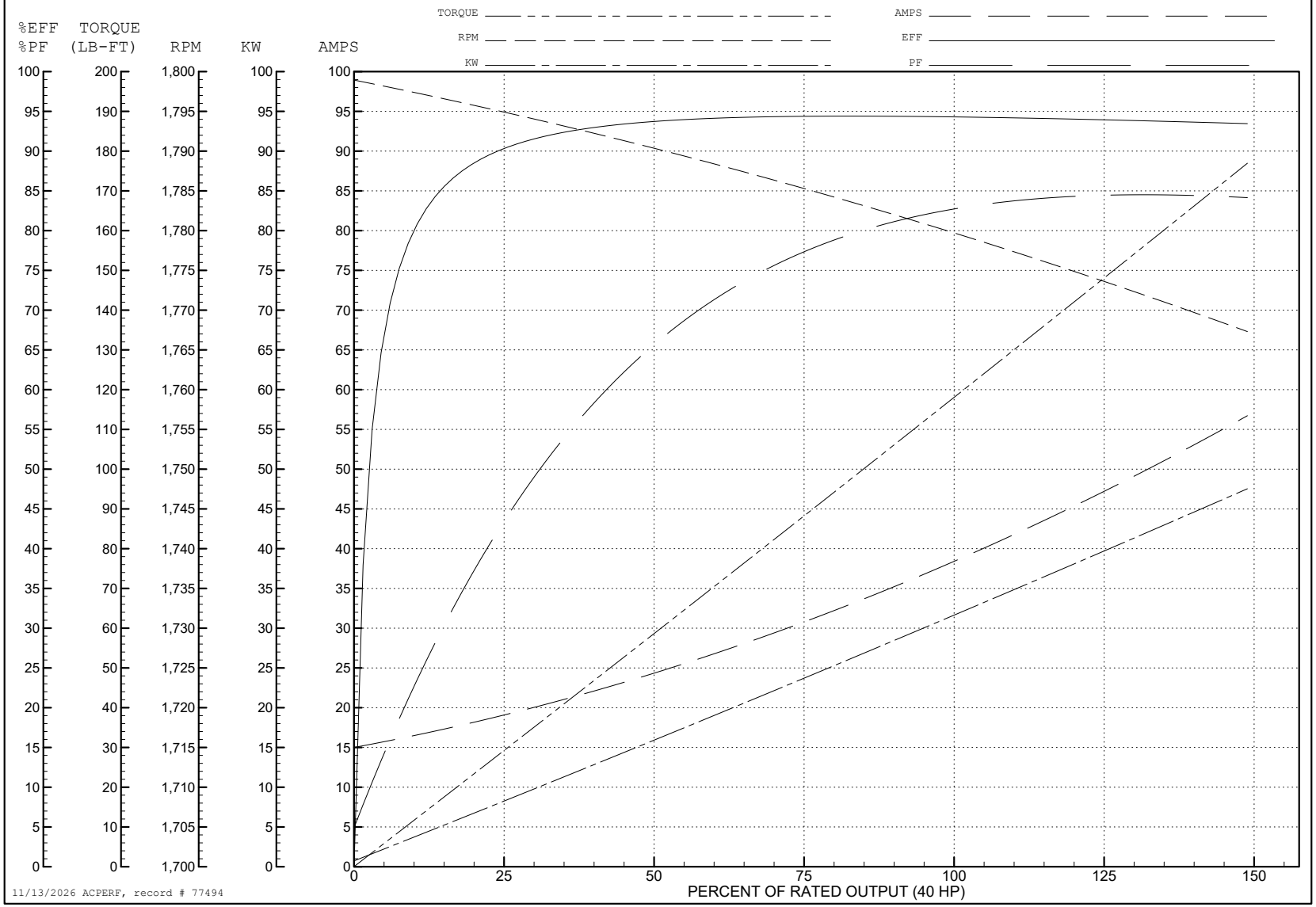
ABB Motors and Mechanical Inc.

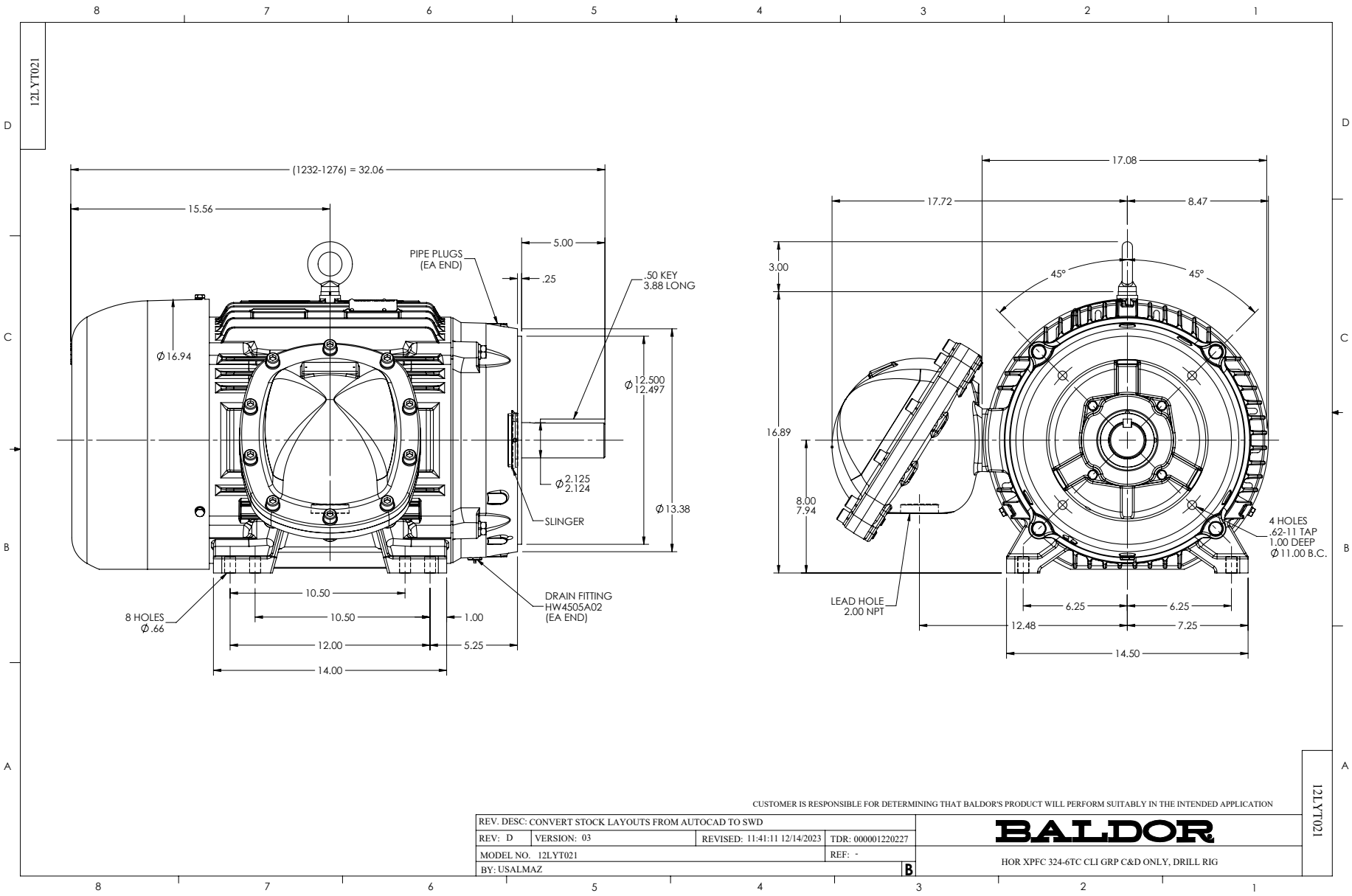
WINDING # 12WGY285

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

Typical performance - not guaranteed values.

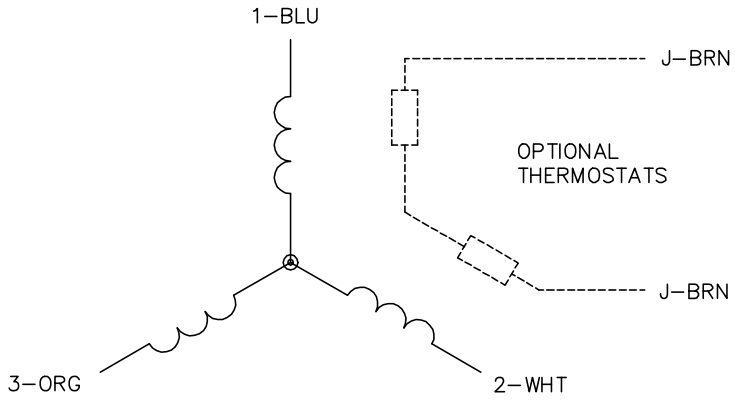
TORQUES(LB-FT): PO=367 PU=174 LR=185 LRA=267

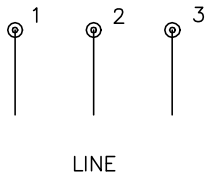



12LYT021
(1232-1276) = 32.06
15.56
5.00
PIPE PLUGS
(EA END)
.25
.50 KEY
3.88 LONG
Ø16.94
Ø12.500
12.497
Ø2.125
2.124
Ø13.38
SLINGER
8 HOLES
Ø.66
10.50
10.50
1.00
12.00
5.25
14.00
DRAIN FITTING
HW4505A02
(EA END)
17.08
17.72
8.47
3.00
45°
45°
16.89
8.00
7.94
4 HOLES
.62-11 TAP
1.00 DEEP
Ø11.00 B.C.
LEAD HOLE
2.00 NPT
6.25
6.25
12.48
7.25
14.50
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT BALDOR'S PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION
REV. DESC: CONVERT STOCK LAYOUTS FROM AUTOCAD TO SWD
REV: D
VERSION: 03
REVISED: 11:41:11 12/14/2023
TDR: 000001220227
MODEL NO. 12LYT021
REF: -
BY: USALMAZ
B
BALDOR
HOR XPFC 324-6TC CLI GRP C&D ONLY, DRILL RIG
12LYT021

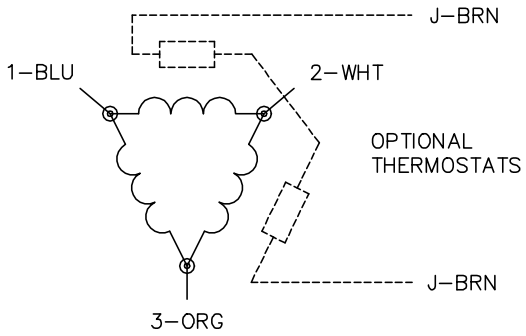
CD0006

TYPICAL WYE–CONNECTED MOTOR





TYPICAL DELTA–CONNECTED MOTOR



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: ENBRIR0
MTL: –		

BALDOR - RELIANCE®

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

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