ABB BALDOR RELIANCE

Customer information packet

CDRX32444T

40HP, 1775//1480RPM, 3PH, 60/50HZ, 324TC, XPF
Class - CLI GP C,D
Division - Division I

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Specifications

Enclosure	XPFC
Frame	324TC
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	40.000 HP @ 60 HZ
	30.000 HP @ 50 HZ
Phase	3
Synchronous Speed @ Frequency	1800 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	45.000 A @ 380.0 V
	48.000 A @ 460.0 V
	90.000 A @ 190.0 V
	96.000 A @ 230.0 V
Design Code	A
Drip Cover	No Drip Cover
Duty Rating	CONT

Part Detail

Revision	J
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	12WGY276
Layout	12LYT021
Eff. date	05-07-2026
CD Diagram	CD0180
Poles	04
Leads	9#8
Proprietary	False
Created date	06-04-2019

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	45.0 a
Insulation Class	F
Inverter Code	Inverter Duty
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.	12-0000-0748			**INV.TYPE**	PWM						
CAT.NO.	CDRX32444T			**C HP FR**	60	**C HP TO**	90				
HP	40//30/40			**CT HZ FROM**	6			**CT HZ TO**	60		
VOLTS	230/460//190/380			**VT HZ FROM**	6			**VT HZ TO**	60		
AMPS	96/48//90/45		**MAG CUR**	40/20							
RPM	1775//1480		**MX RPM**	2700							
HZ	60//50/6	**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 # 43813
Typical performance - not guaranteed values

Winding: 12WGY276-R023	**Type:** 1254M	**Enclosure:** XPFC

Nameplate Data			
Rated Output (HP)			40
Volts			230/460
Full Load Amps			96/48
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

460 V, 60 Hz: High Voltage Connection	
Full Load Torque	118 LB-FT
Start Configuration	direct on line
Breakdown Torque	386 LB-FT
Pull-up Torque	193 LB-FT
Locked-rotor Torque	216 LB-FT
Starting Current	338 A
No-load Current	19.9 A
Line-line Res. @ 25ºC	0.14898 Ω
Temp. Rise @ Rated Load	54°C
Locked-rotor Power Factor	27
Rotor inertia	7.19 LB-FT2

Load Characteristics 460 V, 60 Hz, 40 HP

% of Rated Load	**25**	**50**	**75**	**100**	**125**	**150**
Power Factor	47	69	78	83	85	85
Efficiency	90.1	93.5	94.2	94.2	93.8	93.1
Speed	1793.5	1788	1782.5	1776.6	1770.7	1764.1
Line amperes	22.9	29.5	38.4	48.1	59.2	70.8

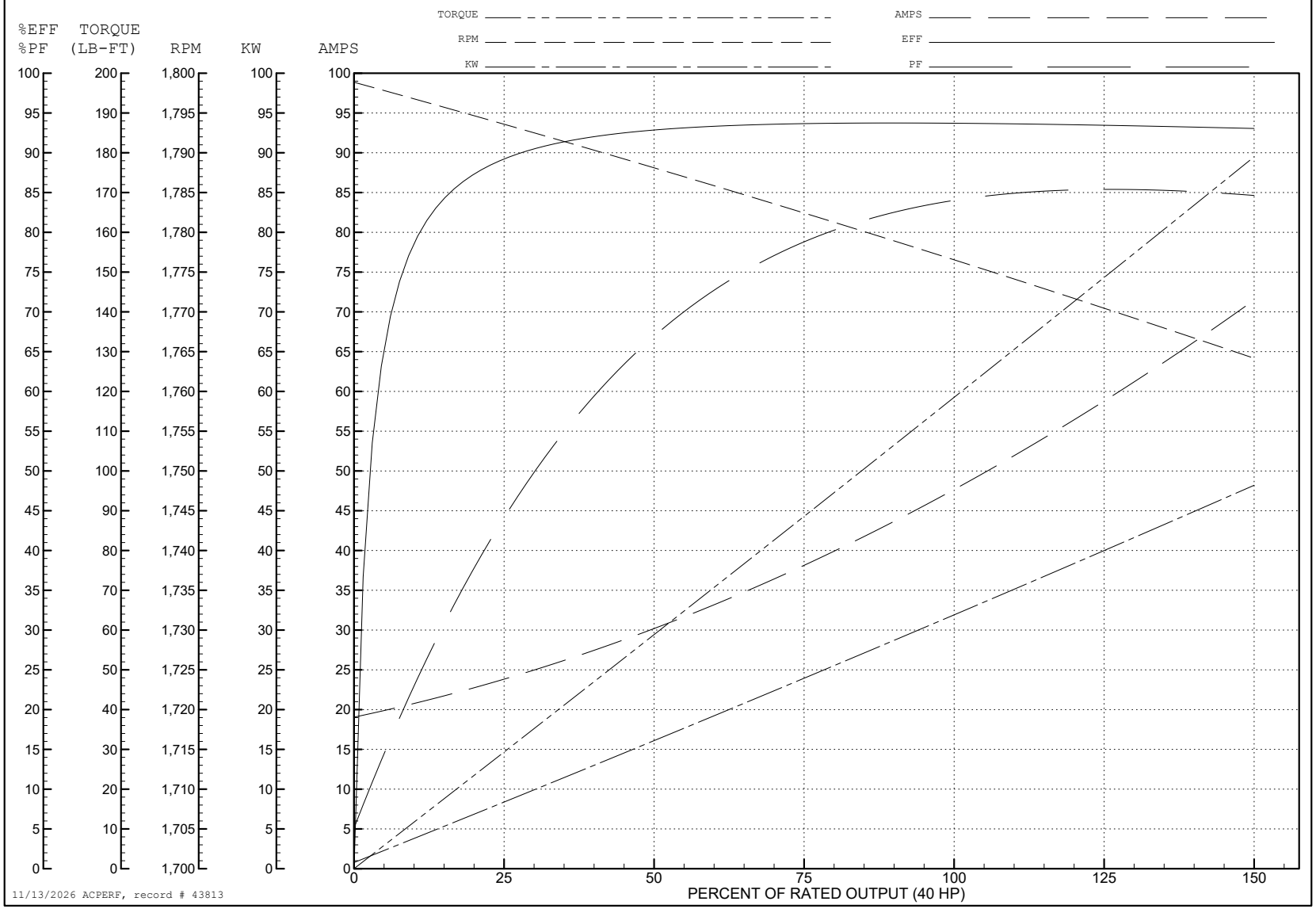
ABB Motors and Mechanical Inc.

WINDING # 12WGY276

40 HP 3 PH 60 HZ 1775 RPM 460 V 1254M

TORQUES(LB-FT): PO=386 PU=193 LR=216 LRA=338

Typical performance - not guaranteed values.



AC Induction Motor Performance Data
Record # 74483
Typical performance - not guaranteed values

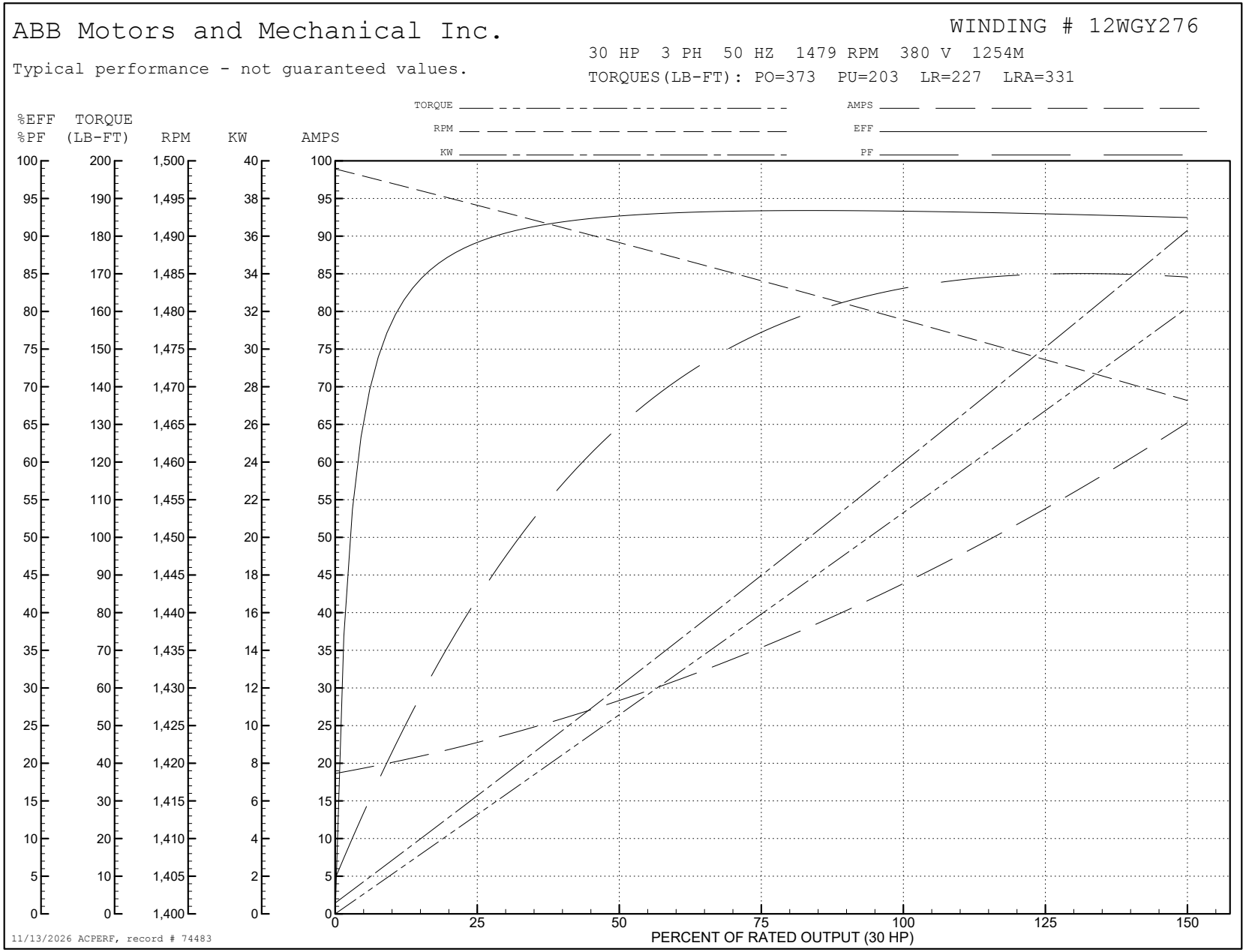
Winding: 12WGY276-R040	**Type:** 1254M	**Enclosure:** XPFC

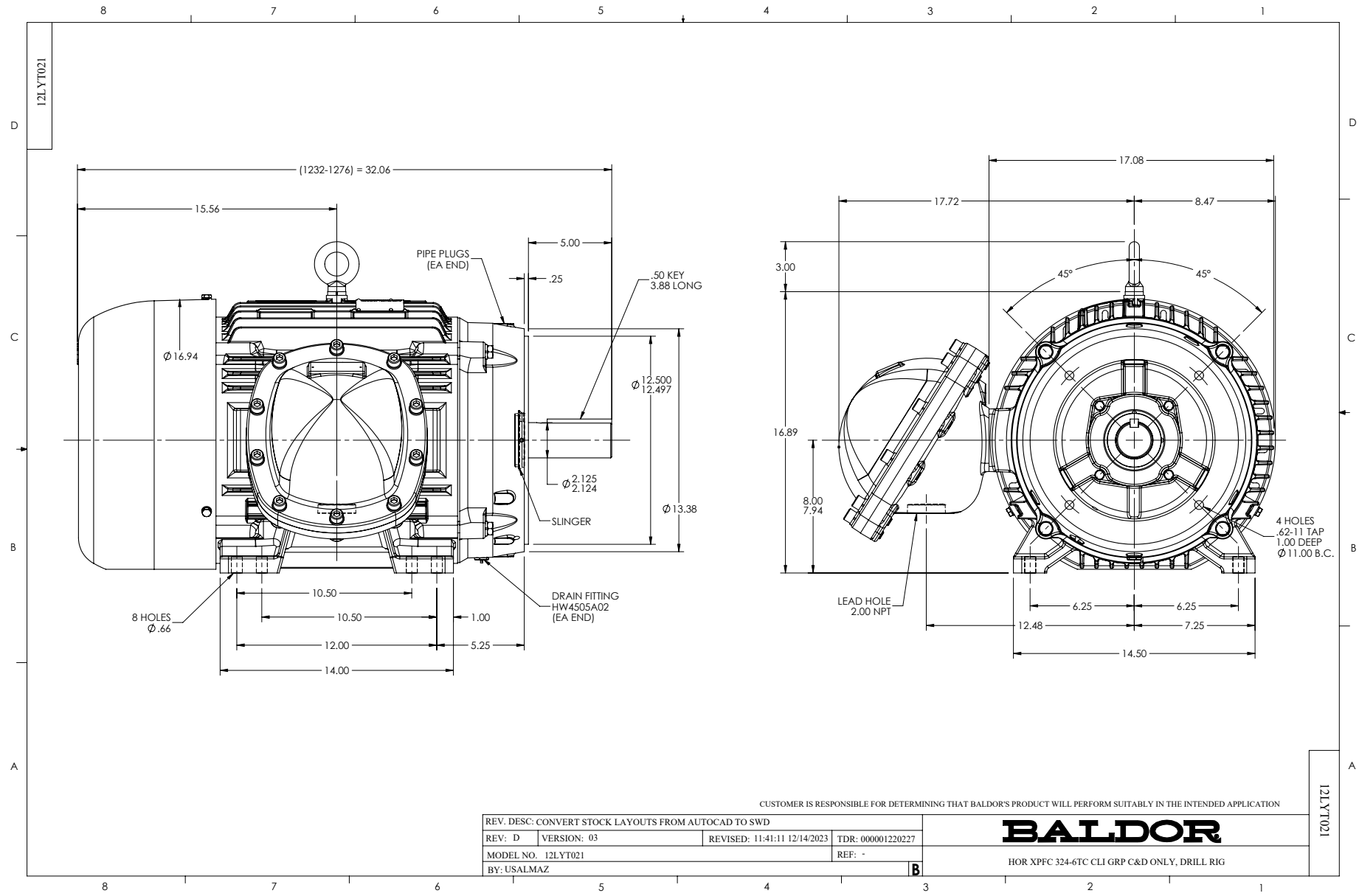
Nameplate Data			
Rated Output (HP)			40//30
Volts			230/460//190/380
Full Load Amps			96/48//90/45
R.P.M.			1775//1480
Hz	60//50	**Phase**	3
NEMA Design Code	A	**KVA Code**	H
Service Factor (S.F.)			1
NEMA Nom. Eff.	94.1	**Power Factor**	82
Rating - Duty			40C AMB-CONT
S.F. Amps			

380 V, 50 Hz: High Voltage Connection	
Full Load Torque	106 LB-FT
Start Configuration	direct on line
Breakdown Torque	373 LB-FT
Pull-up Torque	203 LB-FT
Locked-rotor Torque	227 LB-FT
Starting Current	331 A
No-load Current	19.39 A
Line-line Res. @ 25ºC	0.145 Ω
Temp. Rise @ Rated Load	47°C
Temp. Rise @ S.F. Load	57°C
Locked-rotor Power Factor	30.4
Rotor inertia	7.19 LB-FT2

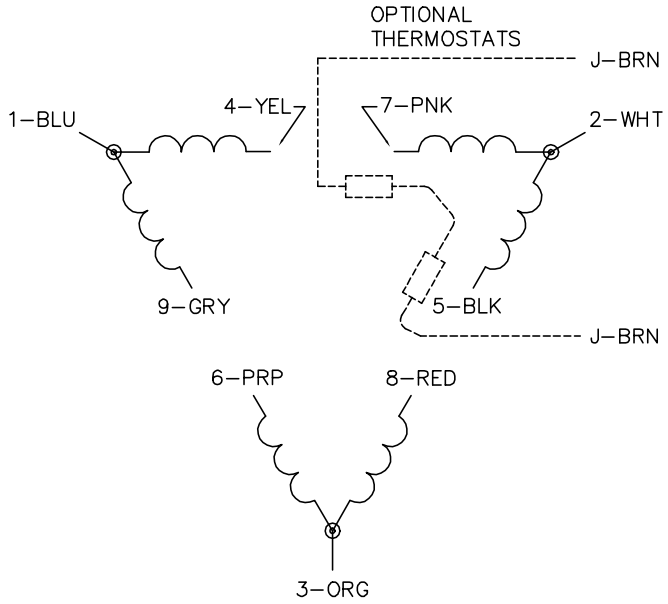
Load Characteristics 380 V, 50 Hz, 30 HP

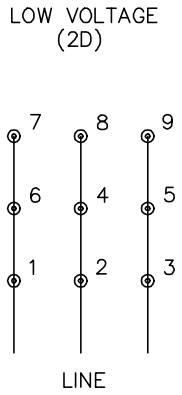
% of Rated Load	**25**	**50**	**75**	**100**	**125**	**150**
Power Factor	44	66	77	82	84	85
Efficiency	88.7	92.8	93.7	93.1	92.8	92.5
Speed	1494	1489	1484	1479	1474	1468
Line amperes	21.96	27.73	35.61	44.25	54.18	64.6

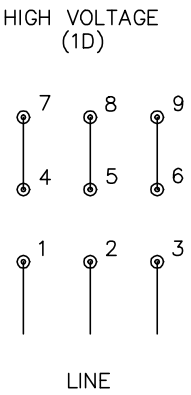

ABB Motors and Mechanical Inc.
WINDING # 12WGY276
30 HP 3 PH 50 HZ 1479 RPM 380 V 1254M
Typical performance - not guaranteed values.
TORQUES(LB-FT): PO=373 PU=203 LR=227 LRA=331
TORQUE
RPM
KW
AMPS
EFF
PF
%EFF
%PF
TORQUE (LB-FT)
RPM
KW
AMPS
PERCENT OF RATED OUTPUT (30 HP)
11/13/2026 ACPERF, record # 74483


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

CD0180







NOTES:

1. INTERCHANGE ANY TWO LINE LEADS TO REVERSE ROTATION.
2. OPTIONAL THERMOSTATS ARE PROVIDED WHEN SPECIFIED.
3. ACTUAL NUMBER OF INTERNAL PARALLEL CIRCUITS MAY BE A MULTIPLE OF THOSE SHOWN ABOVE.
4. LEAD COLORS ARE OPTIONAL. LEADS MUST ALWAYS BE NUMBERED AS SHOWN.

CD0180

REV. DESC: ADD CLASS CONN00000007		
REV. LTR: D	VERSION: 01	TDR: 000001099922
FILE: \AAA\00005\148	REVISED: 10:25:29 02/19/2019	BY: ENBRIR0
MTL: –		

BALDOR - RELIANCE®

3PH, DV, 9 LEADS, DELTA CONNECTION

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