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# Customer information packet

## CPX32446T

40HP, 1775//1480RPM, 3PH, 60HZ, 324TY, XPFC

Class - CLI GP C,D; CLII GP E,F,G

Division - Division I

## Specifications

Enclosure	XPFC
Frame	324TY
Frame Material	Iron
Frequency	60.00 Hz
Haz Area Class and Group	CLI GP C,D; CLII GP E,F,G
Haz Area Division	Division I
Motor Letter Type	Three Phase
Output @ Frequency	30.000 HP @ 50 HZ 40.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	230.0 V @ 60 HZ 190.0 V @ 50 HZ 460.0 V @ 60 HZ 380.0 V @ 50 HZ
Agency Approvals	UL CSA EEV
Ambient Temperature	40 °C
Auxillary Box	No Auxillary Box
Auxillary Box Lead Termination	None
Base Indicator	Rigid
Bearing Grease Type	Polyrex EM (-20F +300F)
Blower	None
Constant Torque Speed Range	6
Current @ Voltage	96.000 A @ 230.0 V 90.000 A @ 190.0 V 48.000 A @ 460.0 V 45.000 A @ 380.0 V
Design Code	A
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	94.1 %

## Part detail

Revision	K
Type	AC
Mech. spec.	
Base	
Status	PRD/A
Elec. spec.	12WGY276
Layout	12LY-000-157
Eff. date	05-02-2024
CD Diagram	CD0180
Poles	04
Leads	9#8
Proprietary	False
Created date	02-19-2019

Electrically Isolated Bearing	Not Electrically Isolated
Enclosure Modification	Severe Duty Features
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	Not Inverter
IP Rating	IP55
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	32.24 IN
Power Factor	82
Product Family	Chemical Process Features
Pulley Face Code	Standard
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

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Winding Thermal 2

None

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**Nameplate**

NP2033XPSLEV										
<b>NO.</b>		<b>CC</b>	010A							
<b>S/N</b>		<b>TEMP CODE</b>	T3C							
<b>SPEC.</b>	12-0000-0488		<b>INV.TYPE</b>	PWM						
<b>CAT.NO.</b>	CPX32446T		<b>C HP FR</b>	60	<b>C HP TO</b>	90				
<b>HP</b>	40//30		<b>CT HZ FROM</b>	6	<b>CT HZ TO</b>	60				
<b>VOLTS</b>	230/460//190/380		<b>VT HZ FROM</b>	6	<b>VT HZ TO</b>	60				
<b>AMPS</b>	96/48//90/45		<b>MAG CUR</b>	40/20						
<b>RPM</b>	1775//1480		<b>MX RPM</b>	2700						
<b>HZ</b>	60//50	<b>PH</b>	3	<b>CL</b>	F	<b>NOM.EFF.</b>	94.1			
<b>SER.F.</b>	1.00	<b>DES</b>	A	<b>SL HZ</b>	0.83	<b>WK2</b>	7.19			
<b>FRAME</b>	324TY	<b>RATING</b>	40C AMB-CONT							
<b>BLANK</b>	55C AMB @ 1.0SF,60C RISE									
	1.15SF ON SINEWAVE		NEMA MG-1 PT.5,IP55							

**AC Induction Motor Performance Data**

Record # 43813

Typical performance - not guaranteed values

<b>Winding: 12WGY276-R023</b>		<b>Type: 1254M</b>		<b>Enclosure: XPFC</b>	
<b>Nameplate Data</b>			<b>460 V, 60 Hz: High Voltage Connection</b>		
<b>Rated Output (HP)</b>	40		<b>Full Load Torque</b>	118 LB-FT	
<b>Volts</b>	230/460		<b>Start Configuration</b>	direct on line	
<b>Full Load Amps</b>	96/48		<b>Breakdown Torque</b>	386 LB-FT	
<b>R.P.M.</b>	1775		<b>Pull-up Torque</b>	193 LB-FT	
<b>Hz</b>	<b>60 Phase</b>	3	<b>Locked-rotor Torque</b>	216 LB-FT	
<b>NEMA Design Code</b>	<b>A KVA Code</b>	H	<b>Starting Current</b>	338 A	
<b>Service Factor (S.F.)</b>	1		<b>No-load Current</b>	19.9 A	
<b>NEMA Nom. Eff.</b>	<b>94.1 Power Factor</b>	82	<b>Line-line Res. @ 25°C</b>	0.14898 Ω	
<b>Rating - Duty</b>	40C AMB-CONT		<b>Temp. Rise @ Rated Load</b>	54°C	
			<b>Locked-rotor Power Factor</b>	27	
			<b>Rotor inertia</b>	7.19 LB-FT <sup>2</sup>	

**Load Characteristics 460 V, 60 Hz, 40 HP**

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

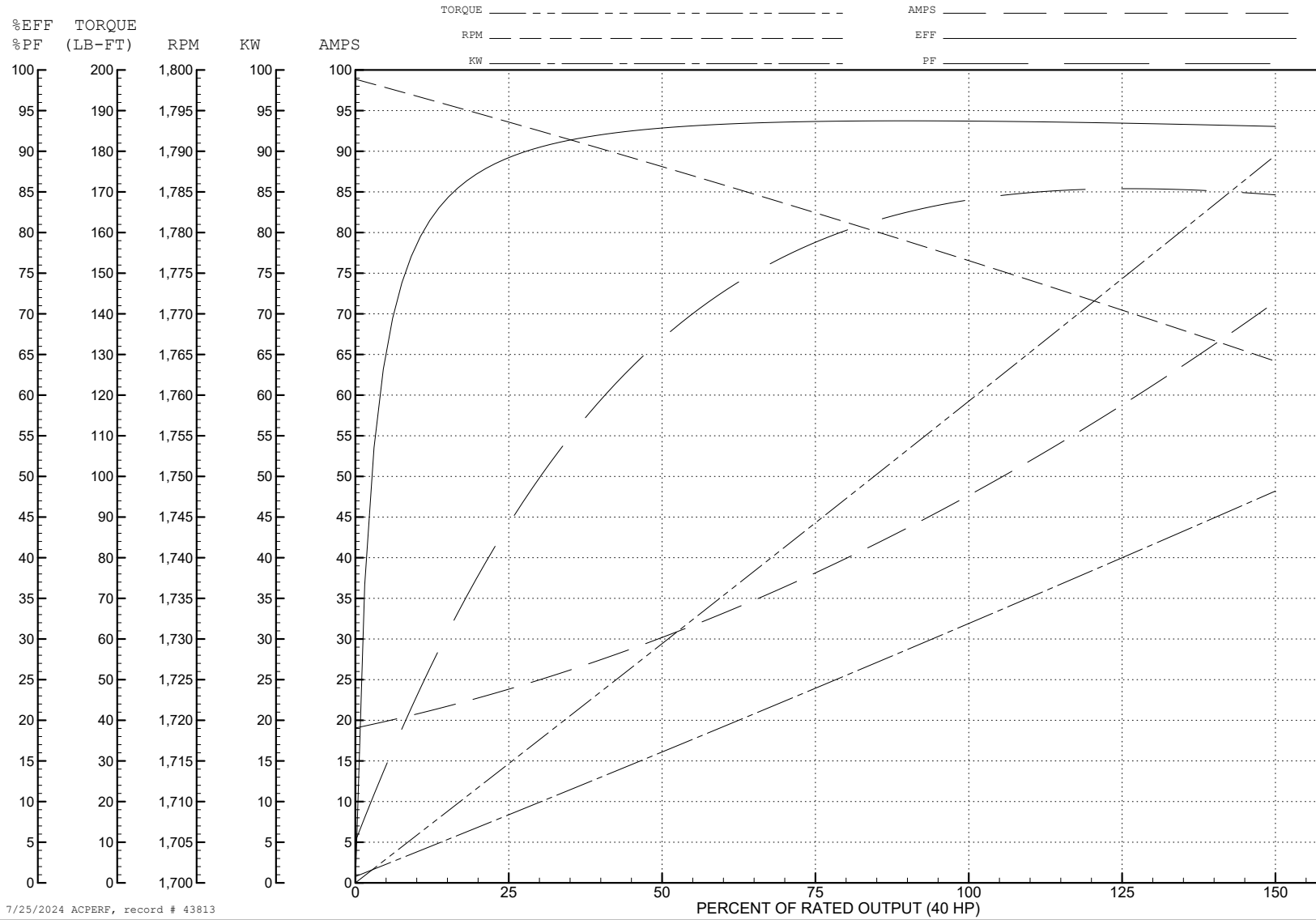
ABB Motors and Mechanical Inc.

WINDING # 12WGY276

Typical performance - not guaranteed values.

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

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



7/25/2024 ACPERF, record # 43813

**AC Induction Motor Performance Data**

Record # 74483

Typical performance - not guaranteed values

<b>Winding: 12WGY276-R040</b>		<b>Type: 1254M</b>		<b>Enclosure: XPFC</b>	
<b>Nameplate Data</b>			<b>380 V, 50 Hz: High Voltage Connection</b>		
<b>Rated Output (HP)</b>	40//30		<b>Full Load Torque</b>	106 LB-FT	
<b>Volts</b>	230/460//190/380		<b>Start Configuration</b>	direct on line	
<b>Full Load Amps</b>	96/48//90/45		<b>Breakdown Torque</b>	373 LB-FT	
<b>R.P.M.</b>	1775//1480		<b>Pull-up Torque</b>	203 LB-FT	
<b>Hz</b>	60//50	<b>Phase</b>	3	<b>Locked-rotor Torque</b>	227 LB-FT
<b>NEMA Design Code</b>	<b>A KVA Code</b>		H	<b>Starting Current</b>	331 A
<b>Service Factor (S.F.)</b>			1	<b>No-load Current</b>	19.39 A
<b>NEMA Nom. Eff.</b>	94.1	<b>Power Factor</b>	82	<b>Line-line Res. @ 25°C</b>	0.145 Ω
<b>Rating - Duty</b>	40C AMB-CONT			<b>Temp. Rise @ Rated Load</b>	47°C
<b>S.F. Amps</b>				<b>Temp. Rise @ S.F. Load</b>	57°C
				<b>Locked-rotor Power Factor</b>	30.4
				<b>Rotor inertia</b>	7.19 LB-FT <sup>2</sup>

**Load Characteristics 380 V, 50 Hz, 30 HP**

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



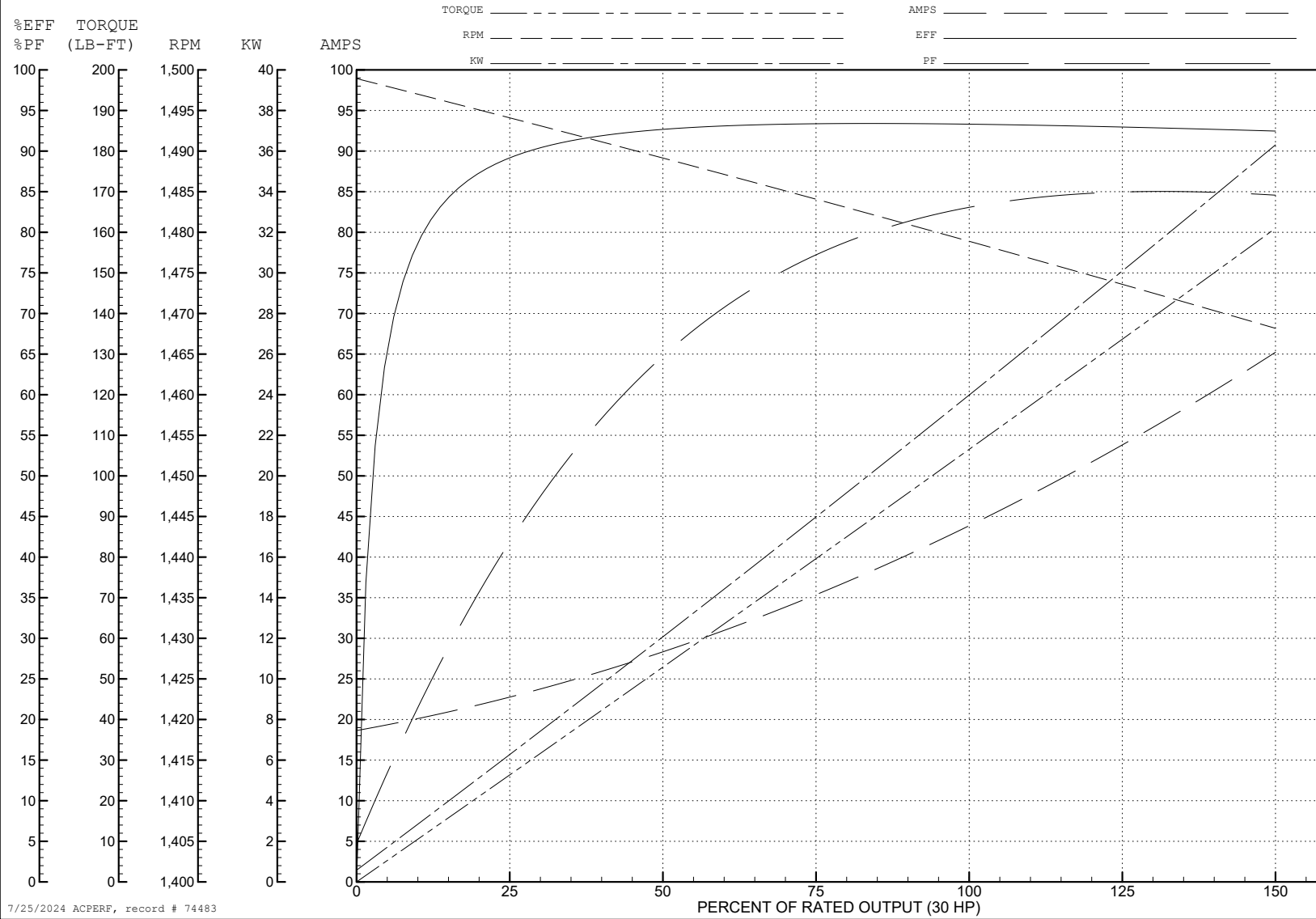
ABB Motors and Mechanical Inc.

WINDING # 12WGY276

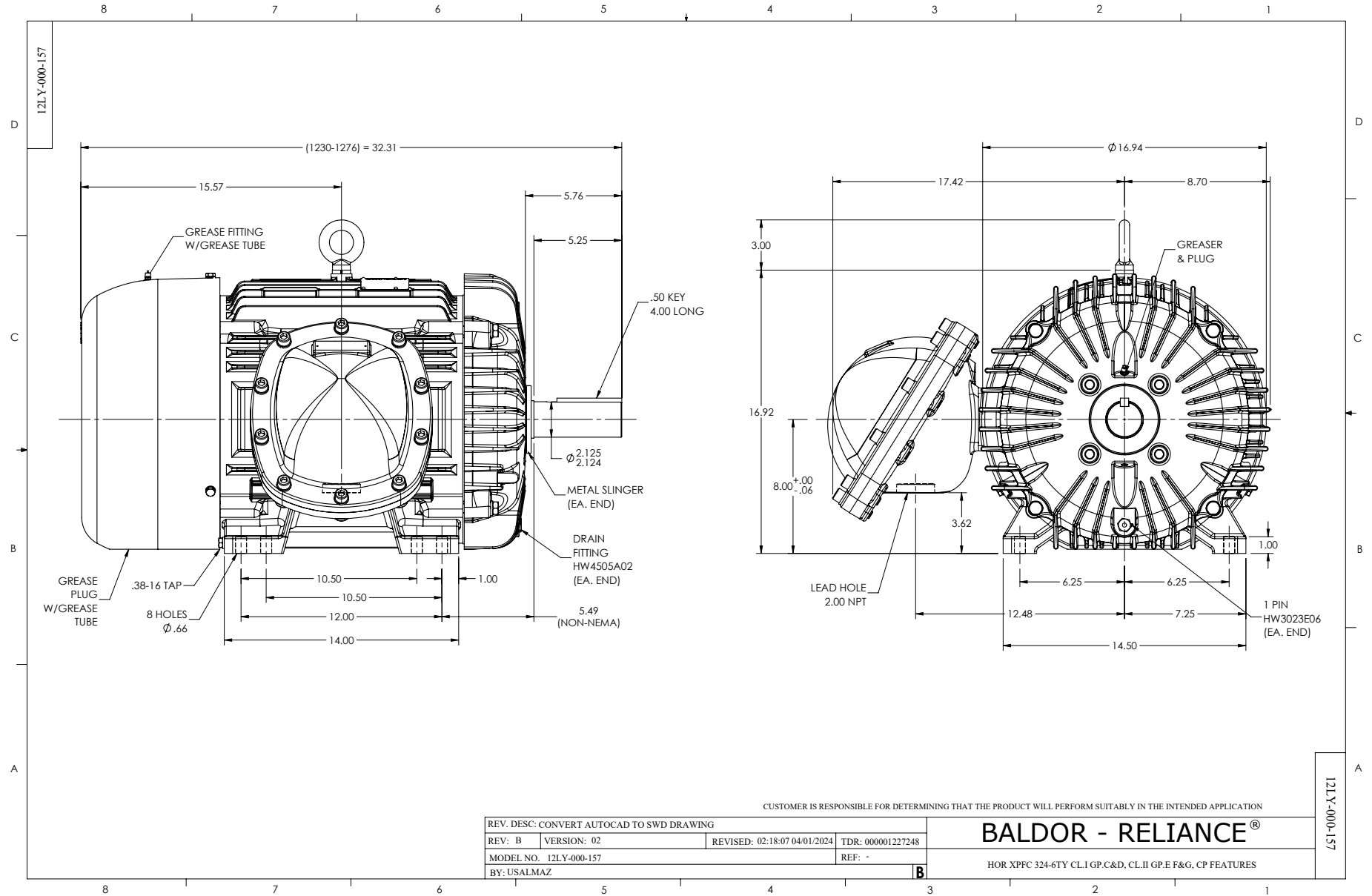
Typical performance - not guaranteed values.

30 HP 3 PH 50 HZ 1479 RPM 380 V 1254M

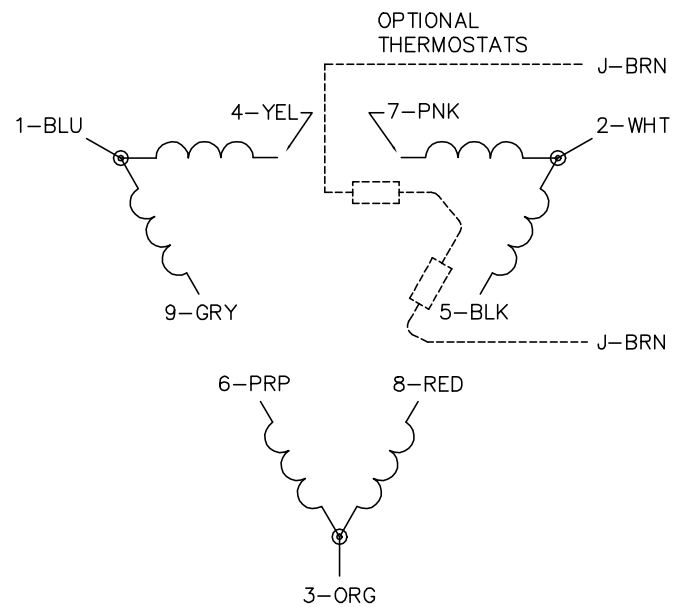
TORQUES (LB-FT): PO=373 PU=203 LR=227 LRA=331



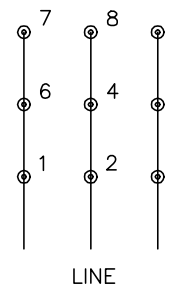
7/25/2024 ACPERF, record # 74483



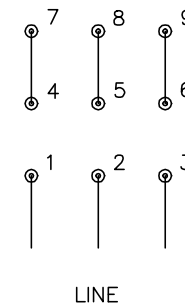
CD0180



LOW VOLTAGE  
(2D)



HIGH VOLTAGE  
(1D)



**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: ENBRIRO
MTL: -	© □	

**BALDOR - RELIANCE®**

3PH, DV, 9 LEADS, DELTA CONNECTION

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