

BALDOR • RELIANCE

Customer information packet

CPX32546T

50HP, 1775//1475RPM, 3PH, 60HZ, 326TY, XPFC

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

Division - Division I

Specifications

| | |
|--------------------------------|--|
| Enclosure | XPFC |
| Frame | 326TY |
| 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 | 40.000 HP @ 50 HZ 50.000 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 | 59.000 A @ 460.0 V 57.000 A @ 380.0 V 118.000 A @ 230.0 V 114.000 A @ 190.0 V |
| Design Code | A |
| Drip Cover | No Drip Cover |
| Duty Rating | CONT |
| Efficiency @ 100% Load | 94.5 % |

Part detail

| | |
|--------------|--------------|
| Revision | M |
| Type | AC |
| Mech. spec. | |
| Base | |
| Status | PRD/A |
| Elec. spec. | 12WGY585 |
| Layout | 12LY-000-157 |
| Eff. date | 11-05-2024 |
| 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 | 57.0 a |
| Insulation Class | F |
| Inverter Code | Inverter Duty |
| IP Rating | IP55 |
| KVA Code | J |
| Lifting Lugs | Standard Lifting Lugs |
| Locked Bearing Indicator | Locked Bearing |
| Max Speed | 2700 rpm |
| Motor Lead Termination | Flying Leads |
| Motor Standards | NEMA |
| Motor Type | 1276M |
| Mounting Arrangement | F1 |
| Number of Poles | 4 |
| Overall Length | 32.24 IN |
| Power Factor | 84 |
| 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

Winding Thermal 2

None

Nameplate

NP2033XPSLEV

| | | | | | | | |
|----------------|---------------------------|-------------------|---------------------|-----------------|------|-----------------|------|
| NO. | | CC | 010A | | | | |
| S/N | | TEMP CODE | T3C | | | | |
| SPEC. | 12-0000-0487 | INV.TYPE | PWM | | | | |
| CAT.NO. | CPX32546T | C HP FR | 60 | C HP TO | 90 | | |
| HP | 50//40 | CT HZ FROM | 6 | CT HZ TO | 60 | | |
| VOLTS | 230/460//190/380 | VT HZ FROM | 6 | VT HZ TO | 60 | | |
| AMPS | 118/59//114/57 | MAG CUR | 50/25 | | | | |
| RPM | 1775//1475 | MX RPM | 2700 | | | | |
| HZ | 60//50 | PH | 3 | CL | F | NOM.EFF. | 94.5 |
| SER.F. | 1.00 | DES | A | SL HZ | 0.83 | WK2 | 10.1 |
| FRAME | 326TY | RATING | 40C AMB-CONT | | | | |
| BLANK | 55C AMB @ 1.0SF, 60C RISE | | | | | | |
| | 1.15SF ON SINEWAVE | | NEMA MG-1 PT.5,IP55 | | | | |

AC Induction Motor Performance Data

Record # 60172

Typical performance - not guaranteed values

| Winding: 12WGY585-R008 | | Type: 1276M | | Enclosure: XPFC | |
|-------------------------------|--------------|---------------------|--|------------------------------|------------|
| Nameplate Data | | | 460 V, 60 Hz: High Voltage Connection | | |
| Rated Output (HP) | 50 | | Full Load Torque | 148 LB-FT | |
| Volts | 230/460 | | Start Configuration | direct on line | |
| Full Load Amps | 118/59 | | Breakdown Torque | 561 LB-FT | |
| R.P.M. | 1775 | | Pull-up Torque | 236 LB-FT | |
| Hz | 60 | Phase | 3 | Locked-rotor Torque | 279 LB-FT |
| NEMA Design Code | A | KVA Code | J | Starting Current | 475 A |
| Service Factor (S.F.) | 1 | | No-load Current | 25 A | |
| NEMA Nom. Eff. | 94.5 | Power Factor | 84 | Line-line Res. @ 25°C | 0.096885 Ω |
| Rating - Duty | 40C AMB-CONT | | Temp. Rise @ Rated Load | 56°C | |
| | | | Locked-rotor Power Factor | 26.4 | |
| | | | Rotor inertia | 10.1 LB-FT ² | |

Load Characteristics 460 V, 60 Hz, 50 HP

| % of Rated Load | 25 | 50 | 75 | 100 | 125 | 150 |
|------------------------|-----------|-----------|-----------|------------|------------|------------|
| Power Factor | 46 | 68 | 78 | 84 | 85 | 87 |
| Efficiency | 90 | 93.7 | 94.6 | 94.7 | 94.4 | 93.9 |
| Speed | 1794 | 1789.1 | 1784.4 | 1779.2 | 1773.7 | 1767.4 |
| Line amperes | 28.6 | 36.9 | 47.3 | 59.1 | 72.4 | 86.3 |

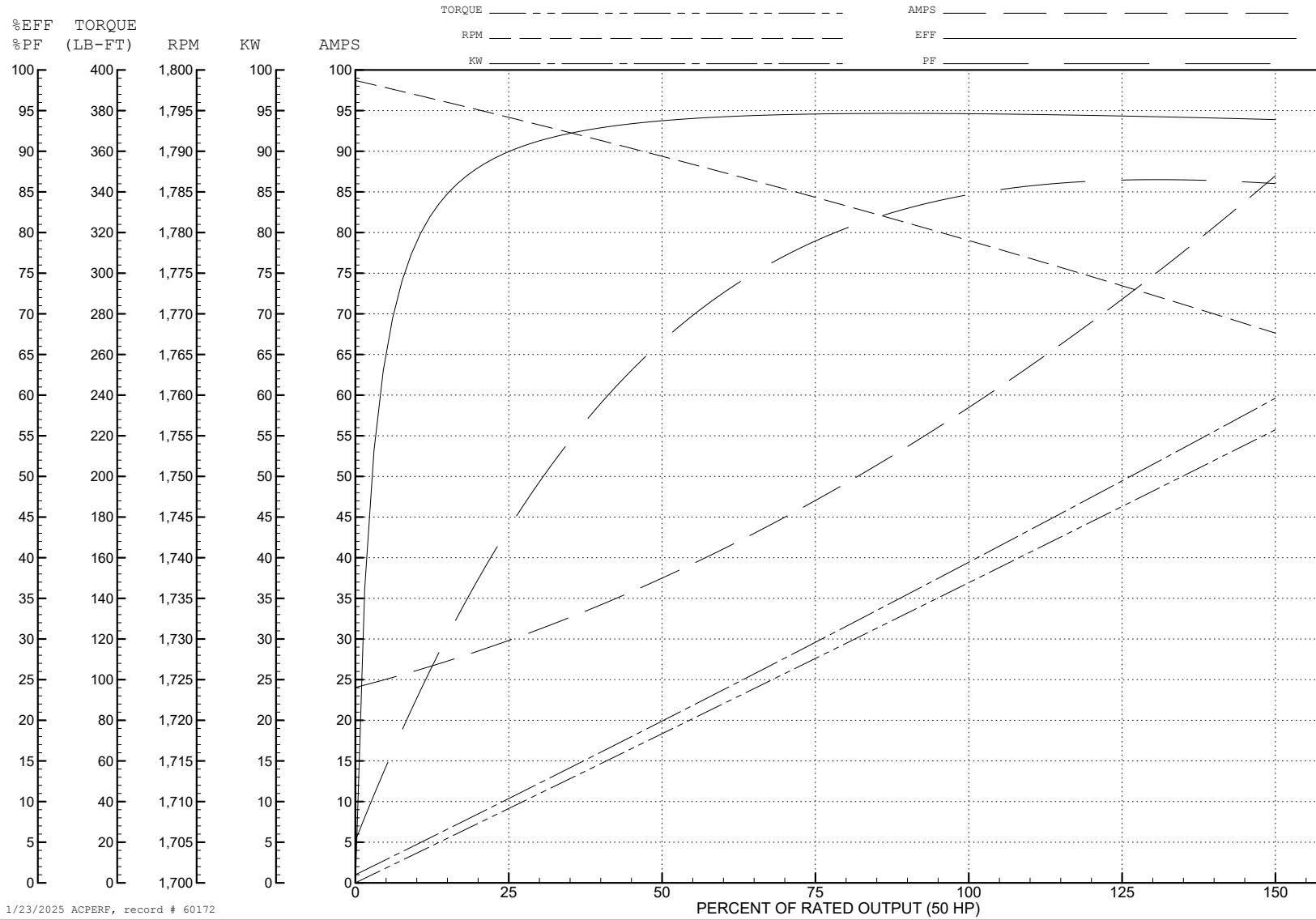
ABB Motors and Mechanical Inc.

WINDING # 12WGY585

Typical performance - not guaranteed values.

50 HP 3 PH 60 HZ 1775 RPM 460 V 1276M

TORQUES (LB-FT): PO=561 PU=236 LR=279 LRA=475



1/23/2025 ACPERF, record # 60172

AC Induction Motor Performance Data

Record # 74482

Typical performance - not guaranteed values

| Winding: 12WGY585-R011 | | Type: 1276M | Enclosure: XPFC | | | |
|------------------------|------------------|--------------|--|---------------------------|-------------------------|-------|
| Nameplate Data | | | 380 V, 50 Hz: High Voltage Connection | | | |
| Rated Output (HP) | 50//40 | | Full Load Torque | 142 LB-FT | | |
| Volts | 230/460//190/380 | | Start Configuration | direct on line | | |
| Full Load Amps | 118/59//114/57 | | Breakdown Torque | 544 LB-FT | | |
| R.P.M. | 1775//1475 | | Pull-up Torque | 248 LB-FT | | |
| Hz | 60//50 | Phase | 3 | Locked-rotor Torque | 293 LB-FT | |
| NEMA Design Code | A | | KVA Code | J | Starting Current | 465 A |
| Service Factor (S.F.) | 1 | | | No-load Current | 24.51 A | |
| NEMA Nom. Eff. | 94.5 | Power Factor | 84 | Line-line Res. @ 25°C | 0.0936 Ω | |
| Rating - Duty | 40C | | AMB-CONT | Temp. Rise @ Rated Load | 52°C | |
| S.F. Amps | | | | Temp. Rise @ S.F. Load | 63°C | |
| | | | | Locked-rotor Power Factor | 29.3 | |
| | | | | Rotor inertia | 10.1 LB-FT ² | |

Load Characteristics 380 V, 50 Hz, 40 HP

| % of Rated Load | 25 | 50 | 75 | 100 | 125 | 150 |
|-----------------|------|-------|-------|-------|-------|-------|
| Power Factor | 45 | 67 | 78 | 84 | 86 | 87 |
| Efficiency | 90.3 | 93.7 | 94.6 | 94.3 | 94.2 | 93.2 |
| Speed | 1494 | 1490 | 1485 | 1480 | 1475 | 1469 |
| Line amperes | 27.9 | 35.86 | 45.89 | 57.36 | 70.22 | 83.76 |

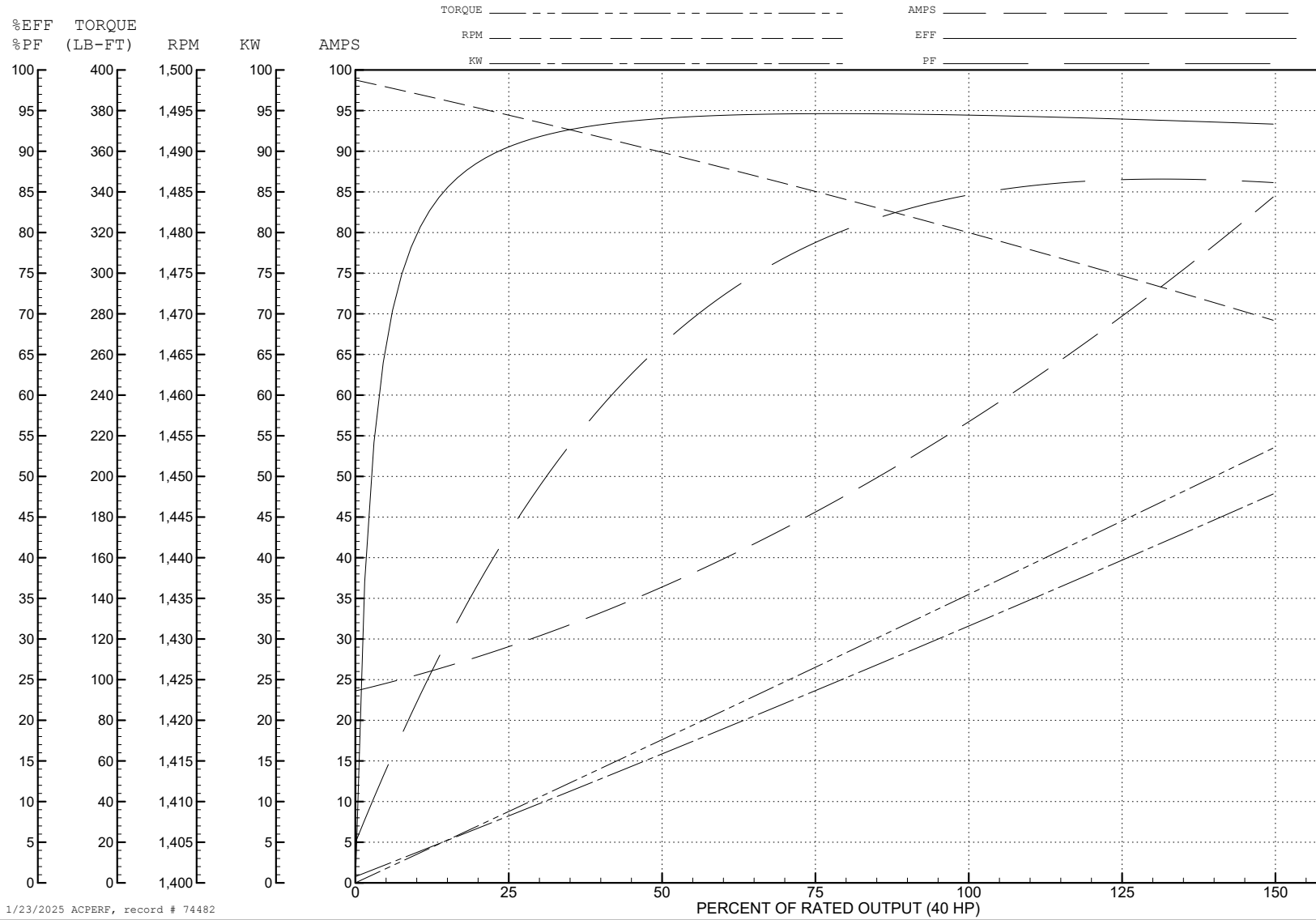
ABB Motors and Mechanical Inc.

WINDING # 12WGY585

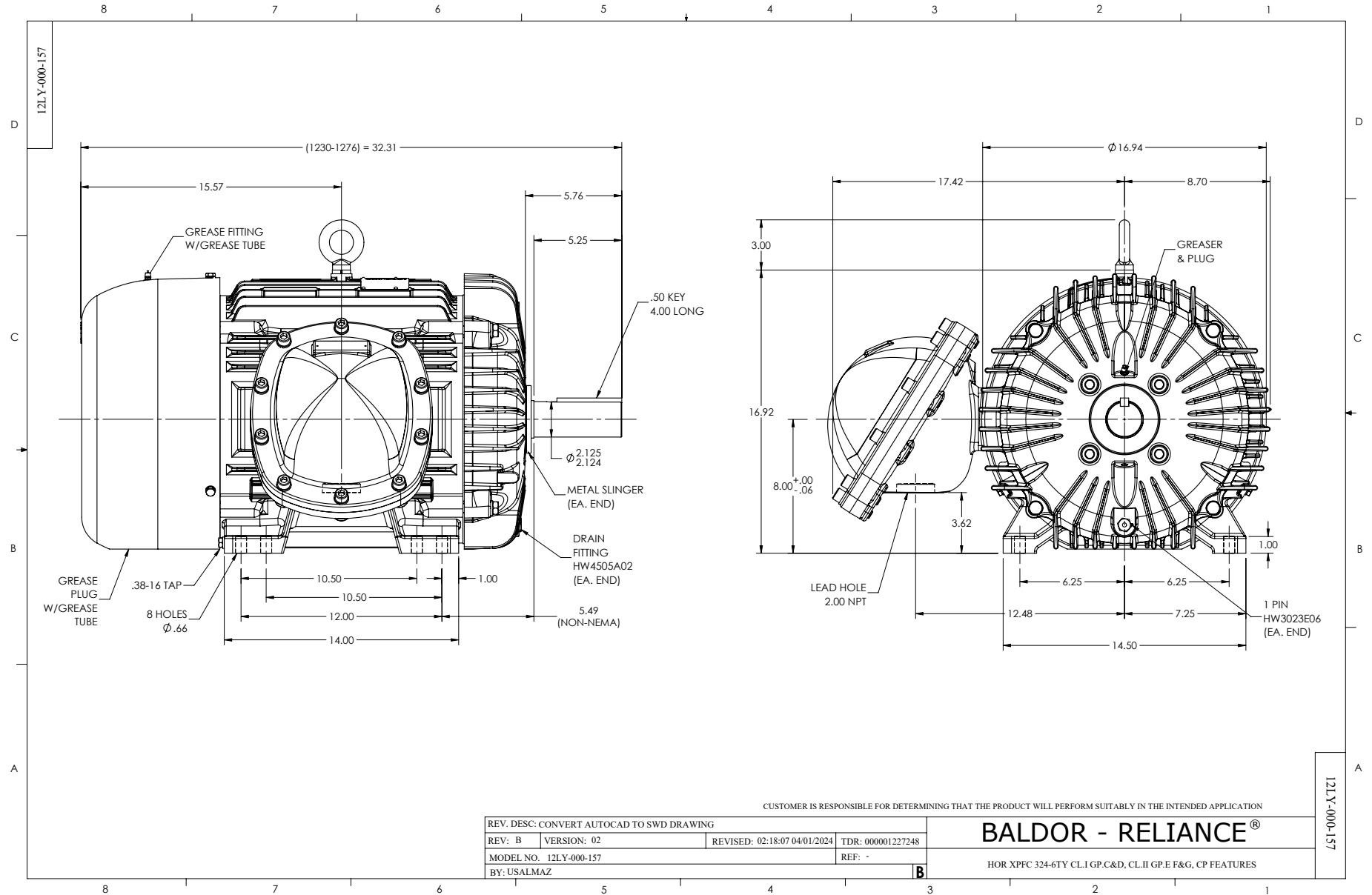
Typical performance - not guaranteed values.

40 HP 3 PH 50 HZ 1480 RPM 380 V 1276M

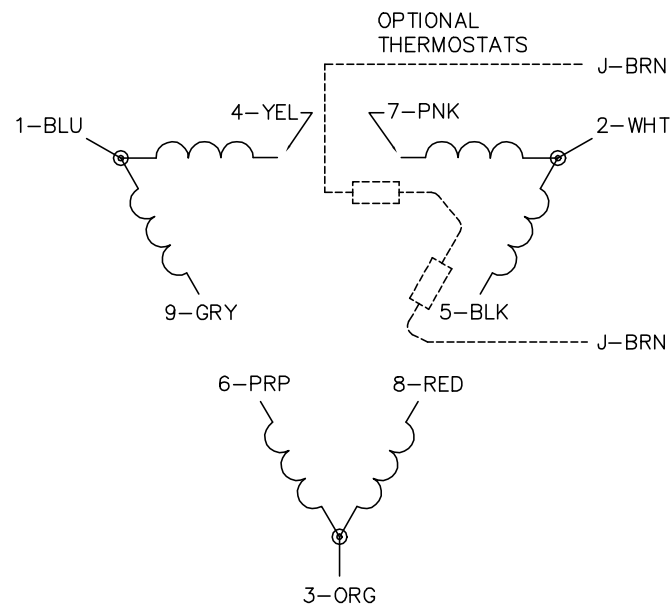
TORQUES (LB-FT): PO=544 PU=248 LR=293 LRA=465



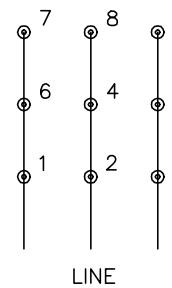
1/23/2025 ACPERF, record # 74482



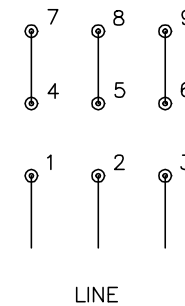
CD0180



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

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|-----------------------------------|--------------------------------|-------------------|
| 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

SH 1 of 1