



Customer information packet

XM25242T

60M 4P XPFC HOR 256T T'STATS INV DUTY

Class - CLI GP D; CLII GP F,G

Division - Division I

Specifications

| | |
|--------------------------------|--|
| Enclosure | XPFC |
| Frame | 256T |
| Frame Material | Iron |
| Frequency | 50.00 Hz 60.00 Hz |
| Motor Letter Type | Three Phase |
| Output @ Frequency | 20.000 HP @ 60 HZ 15.000 HP @ 50 HZ |
| Phase | 3 |
| Synchronous Speed @ Frequency | 1800 RPM @ 60 HZ |
| Voltage @ Frequency | 190.0 V @ 50 HZ 230.0 V @ 60 HZ 380.0 V @ 50 HZ 460.0 V @ 60 HZ |
| XP Class and Group | CLI GP D; CLII GP F,G |
| XP Division | Division I |
| Agency Approvals | UR CSA EEV CSA |
| 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 | 52.000 A @ 208.0 V 48.000 A @ 230.0 V 44.000 A @ 190.0 V 24.000 A @ 460.0 V 22.000 A @ 380.0 V |
| Design Code | A |

Part detail

| | |
|--------------|------------|
| Revision | K |
| Type | AC |
| Mech. spec. | 09E270 |
| Base | |
| Status | PRD/A |
| Elec. spec. | 09WGT459 |
| Layout | 09LYE270 |
| Eff. date | 07-18-2023 |
| CD Diagram | CD0180 |
| Poles | 04 |
| Leads | 9#10 |
| Proprietary | False |
| Created date | 03-27-2019 |

| | |
|-------------------------------|---------------------------|
| Drip Cover | No Drip Cover |
| Duty Rating | CONT |
| Efficiency @ 100% Load | 93.0 % |
| Electrically Isolated Bearing | Not Electrically Isolated |
| Feedback Device | NO FEEDBACK |
| Front Shaft Indicator | None |
| Heater Indicator | No Heater |
| High Voltage Full Load Amps | 22.0 a |
| Insulation Class | F |
| Inverter Code | Inverter Duty |
| IP Rating | NONE |
| KVA Code | J |
| Lifting Lugs | Standard Lifting Lugs |
| Locked Bearing Indicator | Locked Bearing |
| Max Speed | 2700 rpm |
| Motor Lead Quantity/Wire Size | 9 @ 10 AWG |
| Motor Lead Termination | Flying Leads |
| Motor Standards | NEMA |
| Motor Type | 0960M |
| Mounting Arrangement | F1 |
| Number of Poles | 4 |
| Overall Length | 25.50 IN |
| Power Factor | 83 |
| Product Family | Hazardous Location Motor |
| Pulley End Bearing Type | Ball |
| Pulley Face Code | Standard |
| Pulley Shaft Indicator | None |
| Rodent Screen | None |
| RoHS Status | ROHS COMPLIANT |
| Service Factor | 1.15 |
| Shaft Diameter | 1.625 IN |
| Shaft Ground Indicator | No Shaft Grounding |
| Shaft Rotation | Reversible |
| Shaft Slinger Indicator | No Slinger |

| | |
|-----------------------------------|----------------------------|
| Speed | 1470 rpm 1770 rpm |
| Speed Code | Single Speed |
| Starting Method | Direct on line |
| Thermal Device - Winding | Normally Closed Thermostat |
| Vibration Sensor Indicator | No Vibration Sensor |
| Winding Thermal 1 | None |
| Winding Thermal 2 | None |
| XP Temp Code | T3C |

Nameplate

NP0887XPSLEV

| | | | | | |
|----------------|--------------------------------|-------------------|--------------|-----------------|------|
| NO. | | CC | 010A | | |
| S/N | | TEMP CODE | T3C | | |
| SPEC. | 09E270T459G3 | INV.TYPE | PWM | | |
| CAT.NO. | XM25242T | C HP FR | 60 | C HP TO | 90 |
| HP | 20//15 | CT HZ FROM | 6 | CT HZ TO | 60 |
| VOLTS | 230/460//190/380 | VT HZ FROM | 6 | VT HZ TO | 60 |
| AMPS | 48/24//44/22 | MAG CUR | | | |
| RPM | 1770//1470 | MX RPM | 2700 | | |
| HZ | 60//50 | PH | 3 | CL | F |
| | | NOM.EFF. | 93 | | |
| SER.F. | 1.15 | DES | A | SL HZ | 1 |
| | | | | WK2 | 2.62 |
| FRAME | 256T | RATING | 40C AMB-CONT | | |
| | 55C AMB @1.0SF ON VFD,60C RISE | | | | |
| | NEMA MG-1 PT.5,IP54 | | | | |

AC Induction Motor Performance Data

Record # 68069

Typical performance - not guaranteed values

| Winding: 09WGT459-R010 | | Type: 0960M | | Enclosure: XPFC | |
|-------------------------------|------------------|---------------------|--|------------------------------|-----------|
| Nameplate Data | | | 460 V, 60 Hz: High Voltage Connection | | |
| Rated Output (HP) | 20//15 | | Full Load Torque | 59.27 LB-FT | |
| Volts | 230/460//190/380 | | Start Configuration | direct on line | |
| Full Load Amps | 48/24//44/22 | | Breakdown Torque | 232 LB-FT | |
| R.P.M. | 1770//1470 | | Pull-up Torque | 126 LB-FT | |
| Hz | 60//50 | Phase | 3 | Locked-rotor Torque | 141 LB-FT |
| NEMA Design Code | A | KVA Code | J | Starting Current | 198 A |
| Service Factor (S.F.) | 1.15 | | No-load Current | 10.4 A | |
| NEMA Nom. Eff. | 93 | Power Factor | 83 | Line-line Res. @ 25°C | 0.33814 Ω |
| Rating - Duty | 40C AMB-CONT | | Temp. Rise @ Rated Load | 58°C | |
| S.F. Amps | | | Temp. Rise @ S.F. Load | 70°C | |
| | | | Locked-rotor Power Factor | 26.5 | |

Load Characteristics 460 V, 60 Hz, 20 HP

| % of Rated Load | 25 | 50 | 75 | 100 | 125 | 150 | S.F. |
|------------------------|-----------|-----------|-----------|------------|------------|------------|-------------|
| Power Factor | 45 | 67 | 78 | 83 | 86 | 87 | 85 |
| Efficiency | 89.2 | 93 | 93.7 | 93.6 | 93.1 | 92.4 | 93.3 |
| Speed | 1793.2 | 1786.4 | 1779.1 | 1771.9 | 1763.7 | 1755.3 | 1767 |
| Line amperes | 11.8 | 15 | 19.2 | 24 | 29.3 | 34.9 | 27.2 |

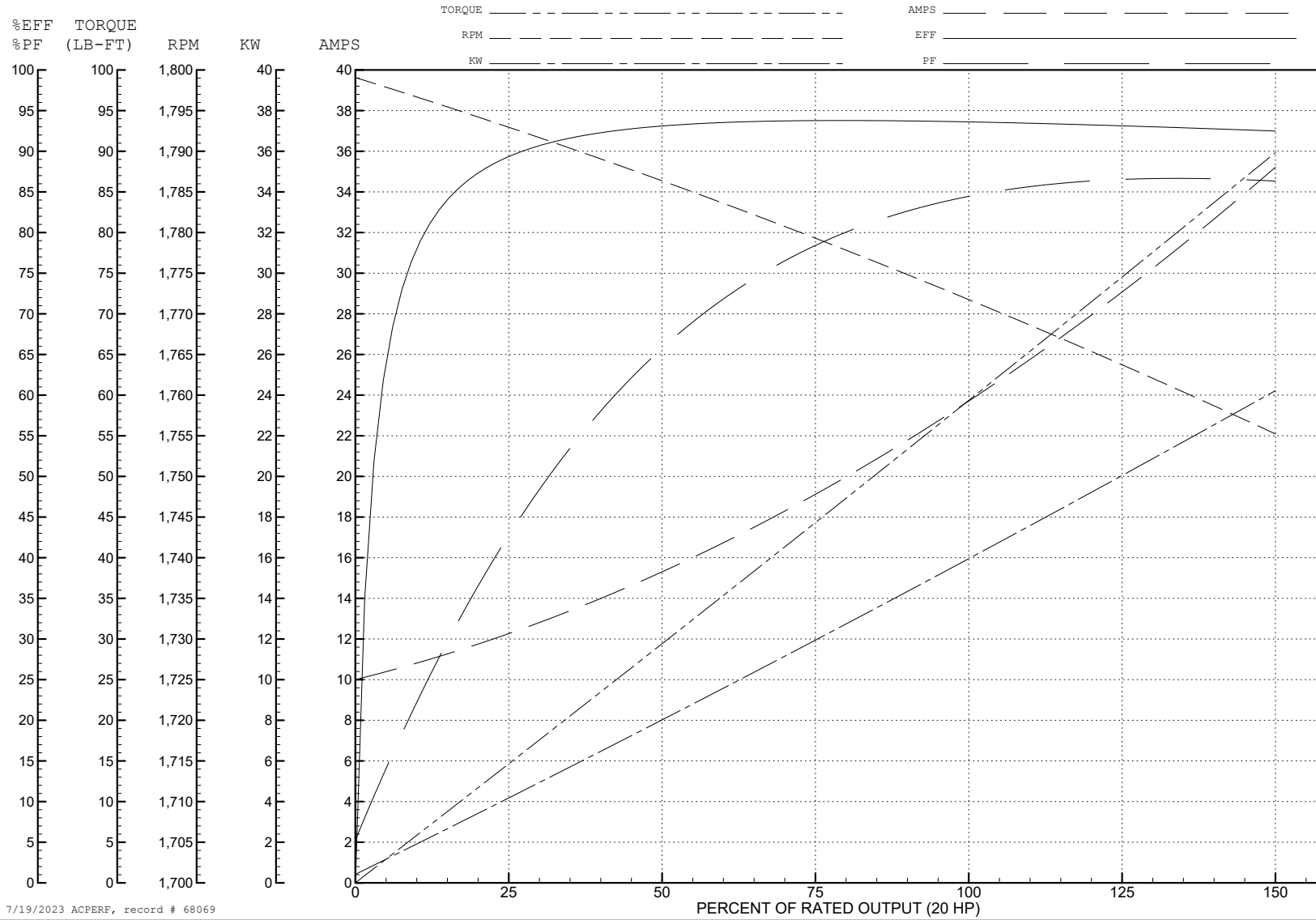
ABB Motors and Mechanical Inc.

WINDING # 09WGT459

20 HP 3 PH 60 HZ 1771.9 RPM 460 V 0960M

Typical performance - not guaranteed values.

TORQUES (LB-FT): PO=232 PU=126 LR=141 LRA=198



7/19/2023 ACPERF, record # 68069

AC Induction Motor Performance Data

Record # 68070

Typical performance - not guaranteed values

| Winding: 09WGT459-R010 | | Type: 0960M | Enclosure: XPFC | | | |
|------------------------|------------------|--------------|--|---------------------------|-------------------------|---------|
| Nameplate Data | | | 380 V, 50 Hz: High Voltage Connection | | | |
| Rated Output (HP) | 20//15 | | Full Load Torque | 53.45 LB-FT | | |
| Volts | 230/460//190/380 | | Start Configuration | direct on line | | |
| Full Load Amps | 48/24//44/22 | | Breakdown Torque | 224 LB-FT | | |
| R.P.M. | 1770//1470 | | Pull-up Torque | 131 LB-FT | | |
| Hz | 60//50 | Phase | 3 | Locked-rotor Torque | 146 LB-FT | |
| NEMA Design Code | A | | KVA Code | J | Starting Current | 193 A |
| Service Factor (S.F.) | 1.15 | | No-load Current | 10.16 A | | |
| NEMA Nom. Eff. | 93 | Power Factor | 83 | | Line-line Res. @ 25°C | 0.316 Ω |
| Rating - Duty | 40C | | AMB-CONT | Temp. Rise @ Rated Load | 50°C | |
| S.F. Amps | | | | Temp. Rise @ S.F. Load | 61°C | |
| | | | | Locked-rotor Power Factor | 29.3 | |
| | | | | Rotor inertia | 2.65 LB-FT ² | |

Load Characteristics 380 V, 50 Hz, 15 HP

| % of Rated Load | 25 | 50 | 75 | 100 | 125 | 150 | S.F. |
|-----------------|-------|-------|-------|-------|-------|-------|------|
| Power Factor | 43 | 66 | 77 | 83 | 86 | 87 | 85 |
| Efficiency | 88 | 92.2 | 93.1 | 93.1 | 92.5 | 91.8 | 92.7 |
| Speed | 1494 | 1488 | 1481 | 1475 | 1467 | 1460 | 1470 |
| Line amperes | 11.32 | 14.06 | 17.76 | 22.07 | 26.82 | 31.83 | 24.9 |

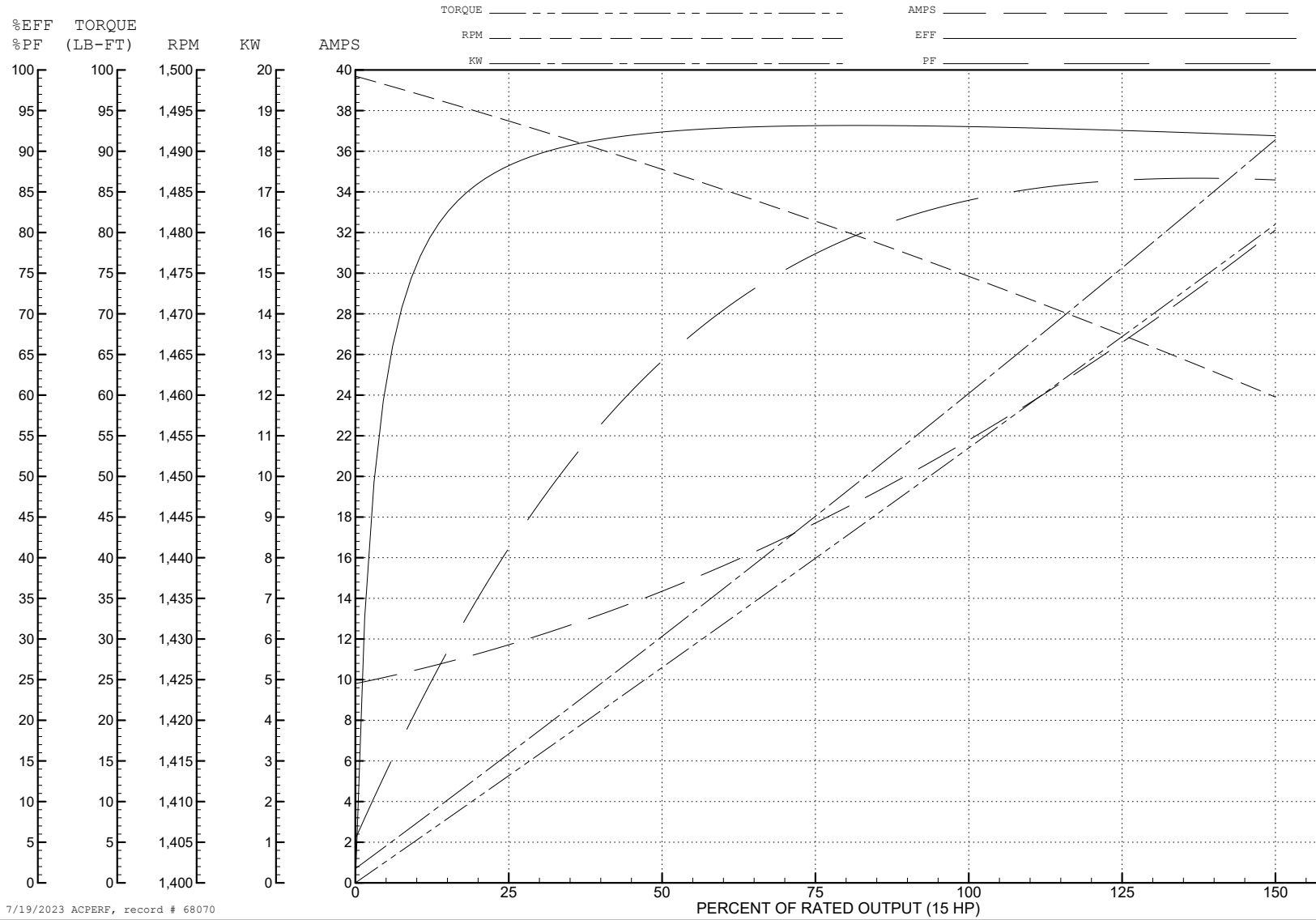
ABB Motors and Mechanical Inc.

WINDING # 09WGT459

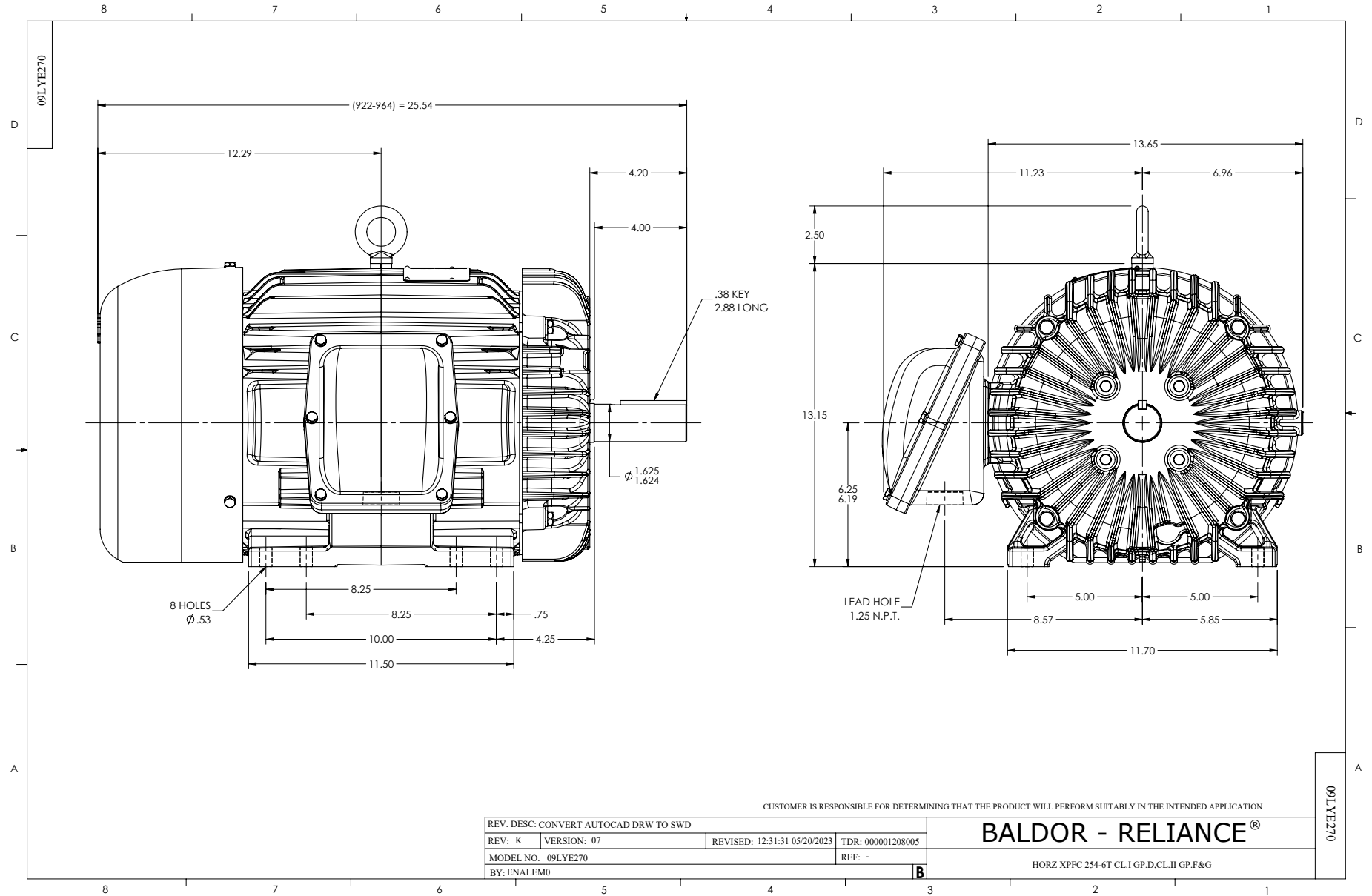
15 HP 3 PH 50 HZ 1475 RPM 380 V 0960M

Typical performance - not guaranteed values.

TORQUES (LB-FT): PO=224 PU=131 LR=146 LRA=193



7/19/2023 ACPERF, record # 68070



CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT THE PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION

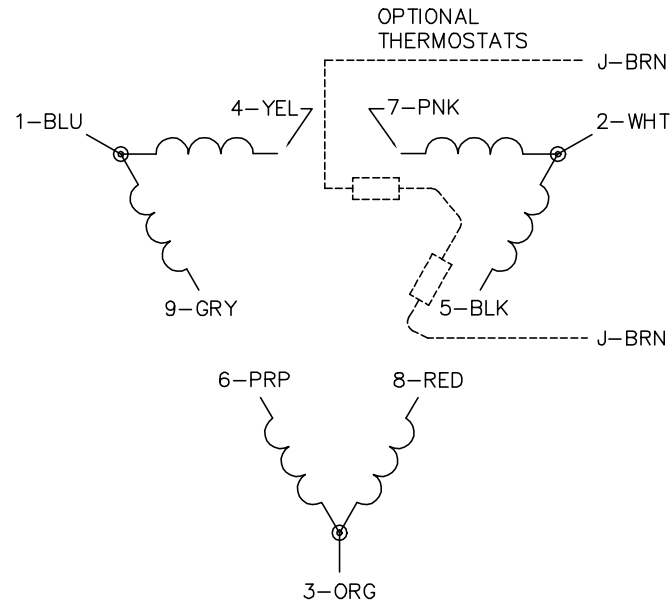
| | | | |
|---------------------------------------|-------------|---------------------|------------------|
| REV. DESC: CONVERT AUTOCAD DRW TO SWD | | | |
| REV: K | VERSION: 07 | REVISED: 12/31/2023 | TDR: 00001208005 |
| MODEL NO. 09LYE270 | | REF: - | |
| BY: ENALEM0 | | B | |

BALDOR - RELIANCE®

HORZ XPFC 254-6T CL.I GP.D.CL.II GP.F&G

09LYE270

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: - | © □ | |

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3PH, DV, 9 LEADS, DELTA CONNECTION

SH 1 of 1