ABB BALDOR RELIANCE

# Customer information packet

## CTM1762T

20HP, 1770RPM, 3PH, 60HZ, 256T, TEFC, FOOT,
Class - None
Division - Not Applicable

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## Specifications

| | |
|---|---|
| **Enclosure** | TEFC |
| **Frame** | 256T |
| **Frame Material** | Iron |
| **Frequency** | 60.00 Hz |
| **Haz Area Class and Group** | None |
| **Haz Area Division** | Not Applicable |
| **Motor Letter Type** | Three Phase |
| **Output @ Frequency** | 5.000 HP @ 60 HZ |
| | 20.000 HP @ 60 HZ |
| **Phase** | 3 |
| **Synchronous Speed @ Frequency** | 1800 RPM @ 60 HZ |
| **Voltage @ Frequency** | 460.0 V @ 60 HZ |
| **Agency Approvals** | UR |
| | CSA |
| **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 |
| **Current @ Voltage** | 23.600 A @ 460.0 V |
| **Design Code** | B |
| **Drip Cover** | No Drip Cover |
| **Duty Rating** | CONT |
| **Electrically Isolated Bearing** | Not Electrically Isolated |
| **Feedback Device** | NO FEEDBACK |
| **Front Face Code** | Standard |
| **Front Shaft Indicator** | None |
| **Heater Indicator** | No Heater |
| **High Voltage Full Load Amps** | 9.3 a |
| **Insulation Class** | F |
| **Inverter Code** | Not Inverter |

## Part Detail

| | |
|---|---|
| **Revision** | U |
| **Type** | AC |
| **Mech. spec.** | 09J957 |
| **Base** | |
| **Status** | PRD/A |
| **Elec. spec.** | 09WGX186 |
| **Layout** | 09LYJ957 |
| **Eff. date** | 09-16-2025 |
| **CD Diagram** | CD0032 |
| **Poles** | 04/08 |
| **Leads** | 6#12 |
| **Proprietary** | False |
| **Created date** | 08-15-2014 |

| | |
|---|---|
| **KVA Code** | H |
| **Lifting Lugs** | Standard Lifting Lugs |
| **Locked Bearing Indicator** | Locked Bearing |
| **Motor Lead Exit** | Ko Box |
| **Motor Lead Quantity/Wire Size** | 6 @ 12 AWG |
| **Motor Lead Termination** | Flying Leads |
| **Motor Standards** | NEMA |
| **Motor Type** | 0944M |
| **Mounting Arrangement** | F1 |
| **Number of Poles** | 4 |
| | 8 |
| **Overall Length** | 24.78 IN |
| **Product Family** | Chemical Processing (Not DC) |
| **Pulley End Bearing Type** | Ball |
| **Pulley Face Code** | Standard |
| **Pulley Shaft Indicator** | Standard |
| **Rodent Screen** | None |
| **Service Factor** | 1.15 |
| **Shaft Diameter** | 1.625 IN |
| **Shaft Extension Location** | Pulley End |
| **Shaft Ground Indicator** | No Shaft Grounding |
| **Shaft Rotation** | Reversible |
| **Shaft Slinger Indicator** | Shaft Slinger |
| **Speed** | 1760 rpm |
| | 875 rpm |
| **Speed Code** | 2S-1W-VT |
| **Starting Method** | Direct on line |
| **Thermal Device - Bearing** | None |
| **Thermal Device - Winding** | None |
| **Vibration Sensor Indicator** | No Vibration Sensor |
| **Winding Thermal 1** | None |
| **Winding Thermal 2** | None |

**Nameplate**

| NP1258 | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **CAT.NO.** | CTM1762T | | | | | | | | |
| **SPEC.** | 09J957X186G1 | | | | | | | | |
| **HP** | 20/5 | | | | | | | | |
| **VOLTS** | 460 | | | | | | | | |
| **AMP** | 23.6/9.3 | | | | | | | | |
| **RPM** | 1760/875 | | | | | | | | |
| **FRAME** | 256T | **HZ** | 60 | | **PH** | 3 | | | |
| **SER.F.** | 1.15 | **CODE** | H | **DES** | B | **CL** | F | | |
| **NEMA-NOM-EFF** | | **PF** | | | | | | | |
| **RATING** | 40C AMB-CONT | | | | | | | | |
| **CC** | | | | | | | | | |
| **DE** | 6309 | **ODE** | 6309 | | | | | | |
| **ENCL** | TEFC | **SN** | | | | | | | |

| NP0090 | |
|---|---|
| **FRONT** | 6309 |
| **PULLEY** | 6309 |
| **LUBRICATE WITH** | |
| **GREASE** | POLYREX EM |

**AC Induction Motor Performance Data**
Record # 43648
Typical performance - not guaranteed values

| **Winding:** 09WGX186-R002 | **Type:** 0944M | **Enclosure:** TEFC |
|---|---|---|

| **Nameplate Data** | | | |
|---|---|---|---|
| **Rated Output (HP)** | | | 20/5 |
| **Volts** | | | 460 |
| **Full Load Amps** | | | 23.6/9.3 |
| **R.P.M.** | | | 1760/875 |
| **Hz** | 60 | **Phase** | 3 |
| **NEMA Design Code** | B | **KVA Code** | H |
| **Service Factor (S.F.)** | | | 1.15 |
| **NEMA Nom. Eff.** | 0 | **Power Factor** | 0 |
| **Rating - Duty** | | | 40C AMB-CONT |
| **S.F. Amps** | | | |

| **460 V, 60 Hz: High Speed Connection** | |
|---|---|
| **Full Load Torque** | 60 LB-FT |
| **Start Configuration** | direct on line |
| **Breakdown Torque** | 183 LB-FT |
| **Pull-up Torque** | 69 LB-FT |
| **Locked-rotor Torque** | 101 LB-FT |
| **Starting Current** | 160 A |
| **No-load Current** | 9 A |
| **Line-line Res. @ 25ºC** | 0.611 Ω |
| **Temp. Rise @ Rated Load** | 78°C |
| **Temp. Rise @ S.F. Load** | 95°C |
| **Locked-rotor Power Factor** | 41.9 |

**Load Characteristics 460 V, 60 Hz, 20 HP**

| **% of Rated Load** | **25** | **50** | **75** | **100** | **125** | **150** | **S.F.** |
|---|---|---|---|---|---|---|---|
| **Power Factor** | 54 | 76 | 85 | 89 | 89 | 89 | 89 |
| **Efficiency** | 84.6 | 89.6 | 90.5 | 90 | 89 | 87.6 | 89.4 |
| **Speed** | 1790 | 1781 | 1773 | 1762 | 1750 | 1738 | 1755 |
| **Line amperes** | 10.5 | 14 | 18.5 | 23.6 | 29.5 | 35.6 | 27.1 |

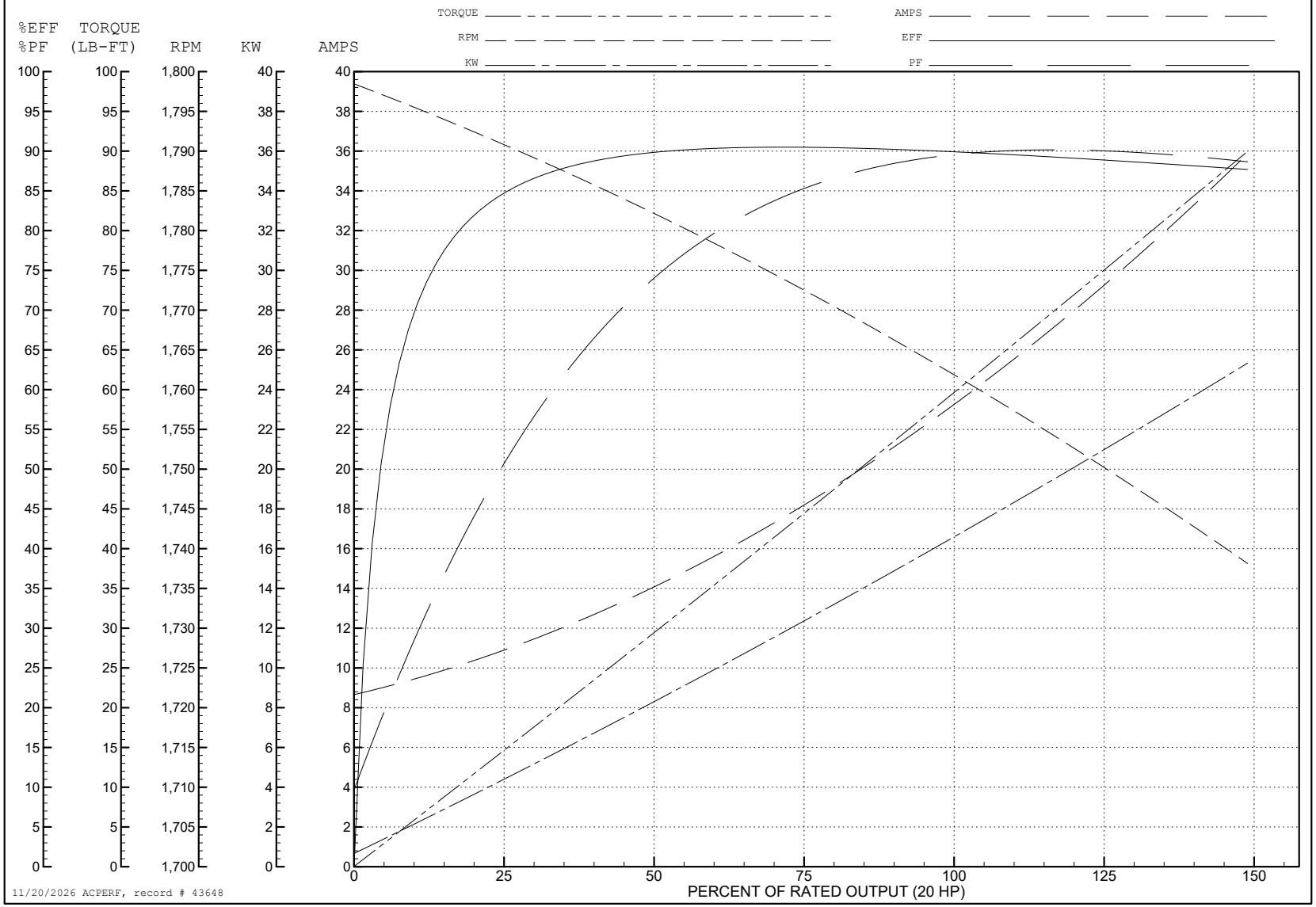
ABB Motors and Mechanical Inc.

WINDING # 09WGX186

20 HP 3 PH 60 HZ 1762 RPM 460 V 0944M

Typical performance - not guaranteed values.

TORQUES(LB-FT): PO=183 PU=69 LR=101 LRA=160



**AC Induction Motor Performance Data**
Record # 43649
Typical performance - not guaranteed values

| **Winding:** 09WGX186-R002 | **Type:** 0944M | **Enclosure:** TEFC |
|---|---|---|

| **Nameplate Data** | | | |
|---|---|---|---|
| **Rated Output (HP)** | | | 20/5 |
| **Volts** | | | 460 |
| **Full Load Amps** | | | 23.6/9.3 |
| **R.P.M.** | | | 1760/875 |
| **Hz** | 60 | **Phase** | 3 |
| **NEMA Design Code** | B | **KVA Code** | H |
| **Service Factor (S.F.)** | | | 1.15 |
| **NEMA Nom. Eff.** | 0 | **Power Factor** | 0 |
| **Rating - Duty** | | | 40C AMB-CONT |
| **S.F. Amps** | | | |

| **460 V, 60 Hz: Low Speed Connection** | |
|---|---|
| **Full Load Torque** | 30 LB-FT |
| **Start Configuration** | direct on line |
| **Breakdown Torque** | 70 LB-FT |
| **Pull-up Torque** | 30 LB-FT |
| **Locked-rotor Torque** | 40 LB-FT |
| **Starting Current** | 45 A |
| **No-load Current** | 6.6 A |
| **Line-line Res. @ 25ºC** | 2.51 Ω |
| **Temp. Rise @ Rated Load** | 48°C |
| **Temp. Rise @ S.F. Load** | 55°C |
| **Locked-rotor Power Factor** | 40.2 |

**Load Characteristics 460 V, 60 Hz, 5 HP**

| **% of Rated Load** | **25** | **50** | **75** | **100** | **125** | **150** | **S.F.** |
|---|---|---|---|---|---|---|---|
| **Power Factor** | 25 | 40 | 52 | 60 | 65 | 68 | 63 |
| **Efficiency** | 71.8 | 81.4 | 84.5 | 85.1 | 84.9 | 83.8 | 85 |
| **Speed** | 895 | 891 | 887 | 881 | 876 | 869 | 878 |
| **Line amperes** | 6.7 | 7.3 | 8.1 | 9.3 | 10.6 | 12.2 | 10.1 |

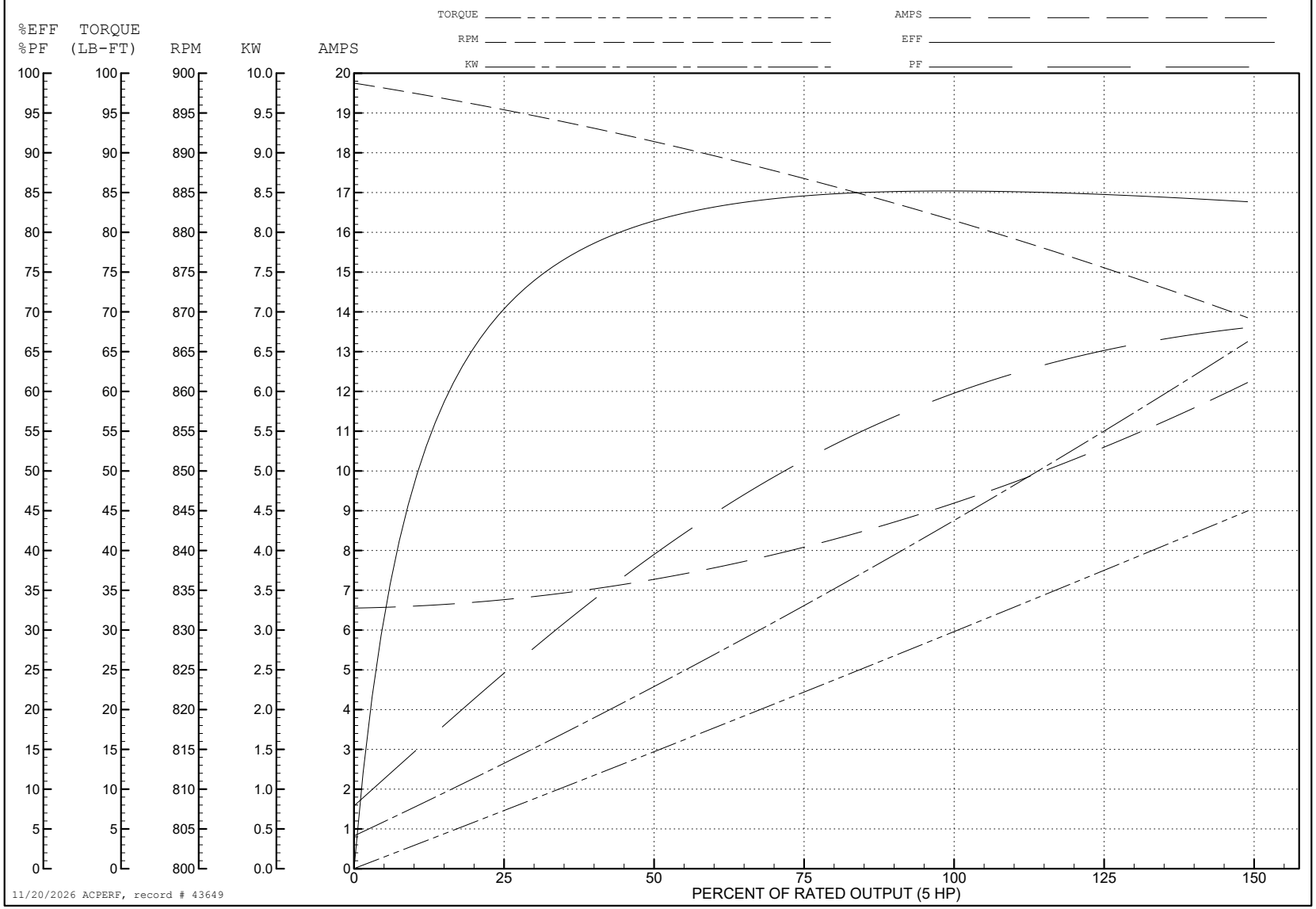
ABB Motors and Mechanical Inc.

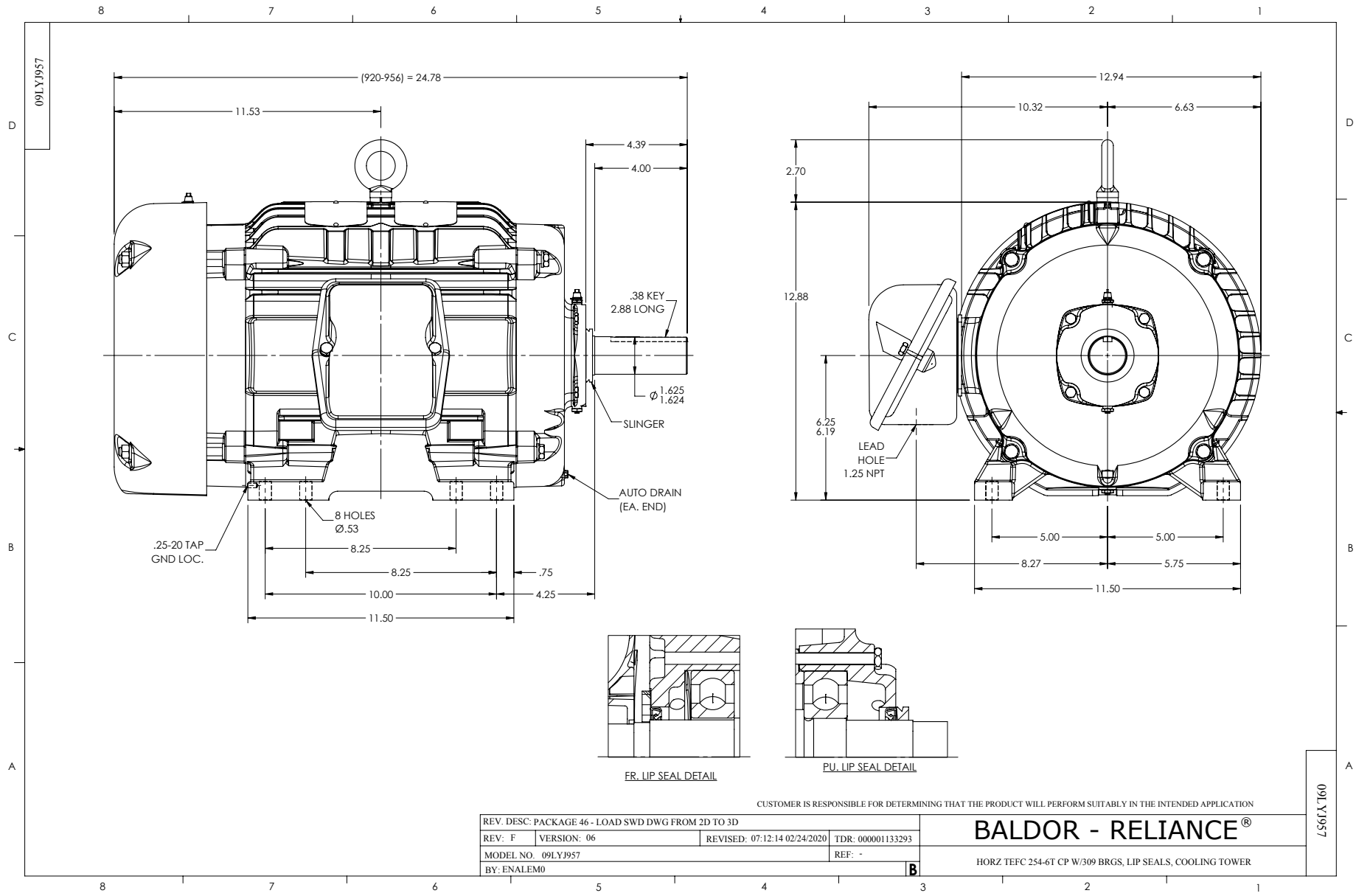
WINDING # 09WGX186

5 HP 3 PH 60 HZ 881 RPM 460 V 0944M

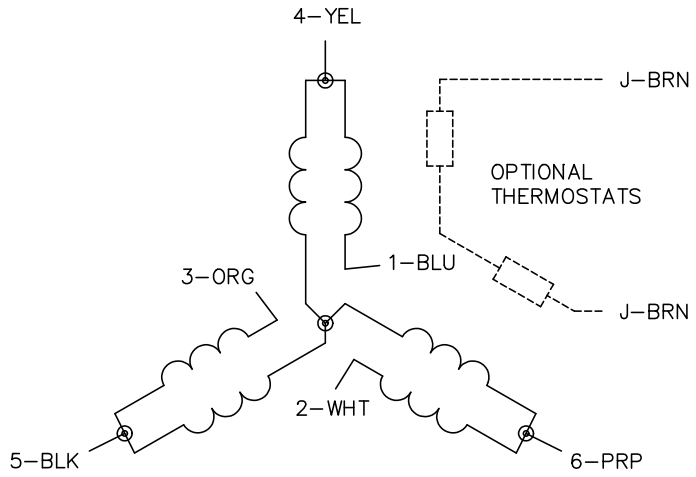
Typical performance - not guaranteed values.

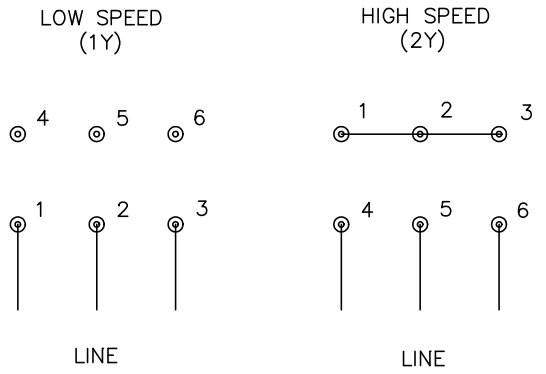
TORQUES(LB-FT): PO=70 PU=30 LR=40 LRA=45




09LYJ957
(920-956) = 24.78
11.53
4.39
4.00
.38 KEY
2.88 LONG
Ø 1.625
1.624
SLINGER
AUTO DRAIN
(EA. END)
8 HOLES
Ø.53
.25-20 TAP
GND LOC.
8.25
8.25
.75
10.00
4.25
11.50
12.94
10.32
6.63
2.70
12.88
6.25
6.19
LEAD
HOLE
1.25 NPT
5.00
5.00
8.27
5.75
11.50
FR. LIP SEAL DETAIL
PU. LIP SEAL DETAIL
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT THE PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION
REV. DESC: PACKAGE 46 - LOAD SWD DWG FROM 2D TO 3D
REV: F
VERSION: 06
REVISED: 07:12:14 02/24/2020
TDR: 000001133293
MODEL NO. 09LYJ957
REF: -
BY: ENALEM0
B
BALDOR - RELIANCE®
HORZ TEFC 254-6T CP W/309 BRGS, LIP SEALS, COOLING TOWER
09LYJ957

CD0032




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.

CD0032

| | | | |
|---|---|---|---|
| REV. DESC: REVISE TO SHOW OPTIONAL COLORS | | | BALDOR ELECTRIC Co. |
| REV. LTR: E | BY: JLP | REVISED: 01/22/99 8:27 | TDR: 0171435 |
| CD0032 | | FILE: AAA00005145 | MDL: – |
| | | MTL: – | 3PH, SV, 6 LEADS, 2–SPEED 1–WINDING VARIABLE TORQUE |