

BALDOR • RELIANCE

Customer information packet

VDRX21144T

10HP, 1765//1465RPM, 3PH, 60/50HZ, 215TC, XPF

Class - CLI GP C,D

Division - Division I

Specifications

| | |
|--------------------------------|--|
| Enclosure | XPFC |
| Frame | 215TC |
| 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 | 7.500 HP @ 50 HZ 10.000 HP @ 60 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 |
| Auxillary Box | No Auxillary Box |
| Auxillary Box Lead Termination | None |
| Base Indicator | No Mounting |
| Bearing Grease Type | Polyrex EM (-20F +300F) |
| Blower | None |
| Constant Torque Speed Range | 6 |
| Current @ Voltage | 11.600 A @ 380.0 V 12.500 A @ 460.0 V 23.200 A @ 190.0 V 25.000 A @ 230.0 V |
| Design Code | A |
| Drip Cover | No Drip Cover |
| Duty Rating | CONT |

Part detail

| | |
|--------------|------------|
| Revision | C |
| Type | AC |
| Mech. spec. | |
| Base | |
| Status | PRD/A |
| Elec. spec. | 07WGX598 |
| Layout | 07LYK484 |
| Eff. date | 02-14-2024 |
| CD Diagram | CD0005 |
| Poles | 04 |
| Leads | 9#14 |
| Proprietary | False |
| Created date | 06-21-2019 |

| | |
|-------------------------------|----------------------------|
| Efficiency @ 100% Load | 91.7 % |
| Electrically Isolated Bearing | Not Electrically Isolated |
| Feedback Device | NO FEEDBACK |
| Haz Area Temp Code | T3C |
| Heater Indicator | No Heater |
| High Voltage Full Load Amps | 11.6 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 Termination | Flying Leads |
| Motor Standards | NEMA |
| Motor Type | 0750M |
| Mounting Arrangement | F1 |
| Number of Poles | 4 |
| Overall Length | 20.77 IN |
| Power Factor | 81 |
| Product Family | General Purpose |
| Pulley Face Code | C-Face |
| Rodent Screen | None |
| RoHS Status | ROHS NON-COMPLIANT |
| Service Factor | 1.00 |
| Shaft Diameter | 1.375 IN |
| Shaft Ground Indicator | No Shaft Grounding |
| Shaft Rotation | Reversible |
| Speed | 1765 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 |

AC Induction Motor Performance Data

Record # 39054

Typical performance - not guaranteed values

| Winding: 07WGX598-R007 | | Type: 0750M | | Enclosure: XPFC | |
|-------------------------------|--------------------|---------------------|--|------------------------------|------------|
| Nameplate Data | | | 460 V, 60 Hz: High Voltage Connection | | |
| Rated Output (HP) | 10//7.5 | | Full Load Torque | 29.7 LB-FT | |
| Volts | 230/460//190/380 | | Start Configuration | direct on line | |
| Full Load Amps | 24.6/12.3//23/11.5 | | Breakdown Torque | 94.2 LB-FT | |
| R.P.M. | 1765//1465 | | Pull-up Torque | 56.3 LB-FT | |
| Hz | 60//50 | Phase | 3 | Locked-rotor Torque | 62.4 LB-FT |
| NEMA Design Code | A | KVA Code | J | Starting Current | 95.7 A |
| Service Factor (S.F.) | 1.15 | | No-load Current | 5.6 A | |
| NEMA Nom. Eff. | 92.4 | Power Factor | 81 | Line-line Res. @ 25°C | 0.867 Ω |
| Rating - Duty | 40C AMB-CONT | | Temp. Rise @ Rated Load | 55°C | |
| S.F. Amps | | | Temp. Rise @ S.F. Load | 70°C | |
| | | | Locked-rotor Power Factor | 35 | |
| | | | Rotor inertia | 1.23 LB-FT ² | |

Load Characteristics 460 V, 60 Hz, 10 HP

| % of Rated Load | 25 | 50 | 75 | 100 | 125 | 150 | S.F. |
|------------------------|-----------|-----------|-----------|------------|------------|------------|-------------|
| Power Factor | 41 | 64 | 76 | 81 | 84 | 85 | 83 |
| Efficiency | 89.8 | 93.6 | 92.6 | 92.4 | 91.3 | 90.2 | 91.7 |
| Speed | 1790 | 1782 | 1772 | 1764 | 1753 | 1743 | 1757 |
| Line amperes | 6.28 | 7.9 | 10 | 12.5 | 15.3 | 18.3 | 14.2 |

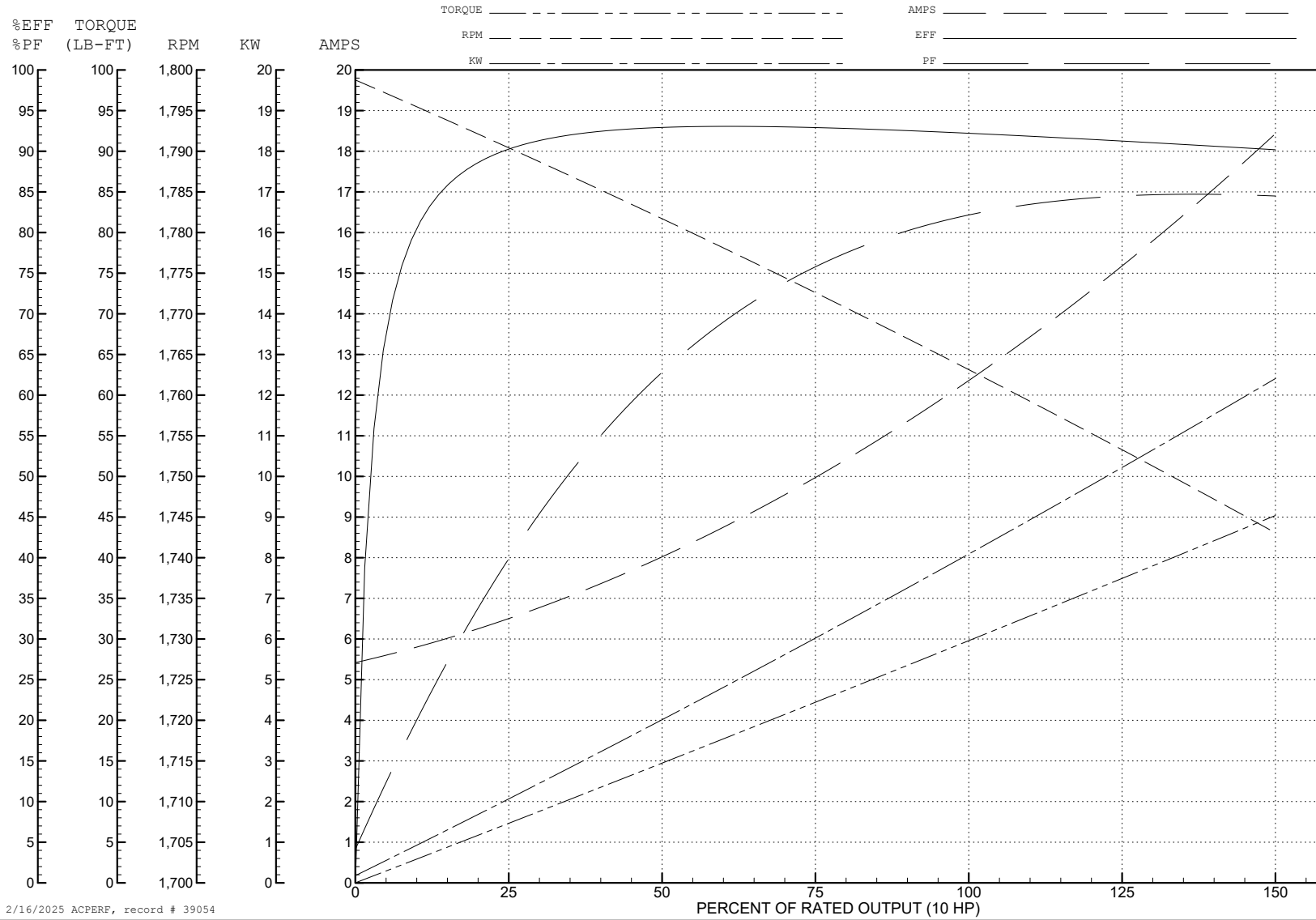
ABB Motors and Mechanical Inc.

WINDING # 07WGX598

Typical performance - not guaranteed values.

10 HP 3 PH 60 HZ 1764 RPM 460 V 0750M

TORQUES (LB-FT): PO=94.2 PU=56.3 LR=62.4 LRA=95.7



2/16/2025 ACPERF, record # 39054

AC Induction Motor Performance Data

Record # 73683

Typical performance - not guaranteed values

| Winding: 07WGX598-R015 | | Type: 0750M | | Enclosure: XPFC | | |
|-------------------------------|--------------------|---------------------|--|----------------------------------|-------------------------|--------|
| Nameplate Data | | | 460 V, 60 Hz: High Voltage Connection | | | |
| Rated Output (HP) | 10//7.5 | | Full Load Torque | 29.7 LB-FT | | |
| Volts | 230/460//190/380 | | Start Configuration | direct on line | | |
| Full Load Amps | 25/12.5//23.2/11.6 | | Breakdown Torque | 94.2 LB-FT | | |
| R.P.M. | 1765//1465 | | Pull-up Torque | 56.3 LB-FT | | |
| Hz | 60//50 | Phase | 3 | Locked-rotor Torque | 62.4 LB-FT | |
| NEMA Design Code | A | | KVA Code | J | Starting Current | 95.7 A |
| Service Factor (S.F.) | 1 | | | No-load Current | 5.6 A | |
| NEMA Nom. Eff. | 91.7 | Power Factor | 81 | Line-line Res. @ 25°C | 0.866 Ω | |
| Rating - Duty | 40C AMB-CONT | | | Temp. Rise @ Rated Load | 55°C | |
| | | | | Locked-rotor Power Factor | 35.2 | |
| | | | | Rotor inertia | 1.23 LB-FT ² | |

Load Characteristics 460 V, 60 Hz, 10 HP

| % of Rated Load | 25 | 50 | 75 | 100 | 125 | 150 |
|------------------------|-----------|-----------|-----------|------------|------------|------------|
| Power Factor | 41 | 64 | 76 | 81 | 84 | 85 |
| Efficiency | 89.8 | 93.5 | 92.5 | 92.2 | 91.3 | 90.1 |
| Speed | 1790 | 1782 | 1772 | 1764 | 1753 | 1743 |
| Line amperes | 6.28 | 7.9 | 10 | 12.5 | 15.3 | 18.3 |

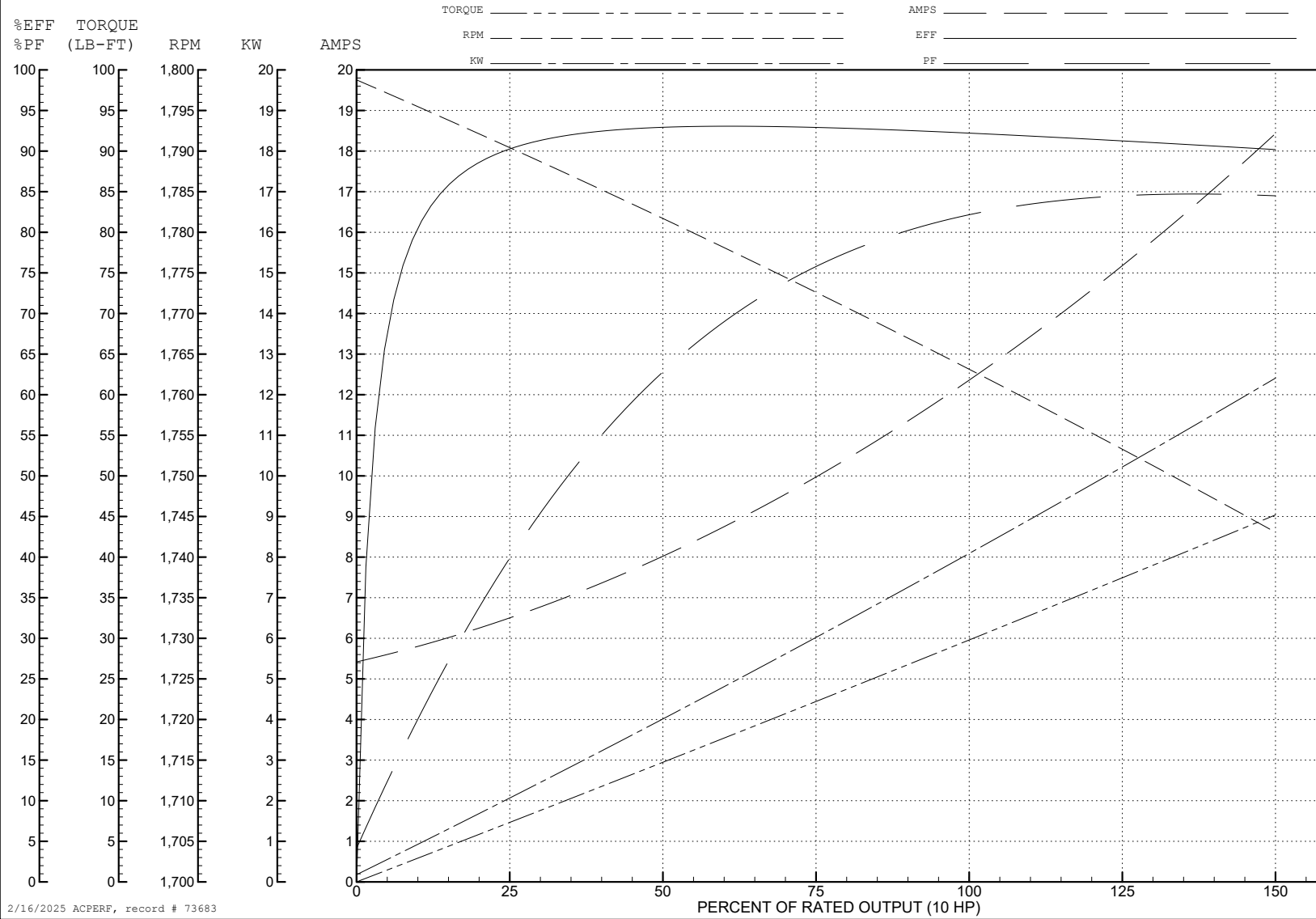
ABB Motors and Mechanical Inc.

WINDING # 07WGX598

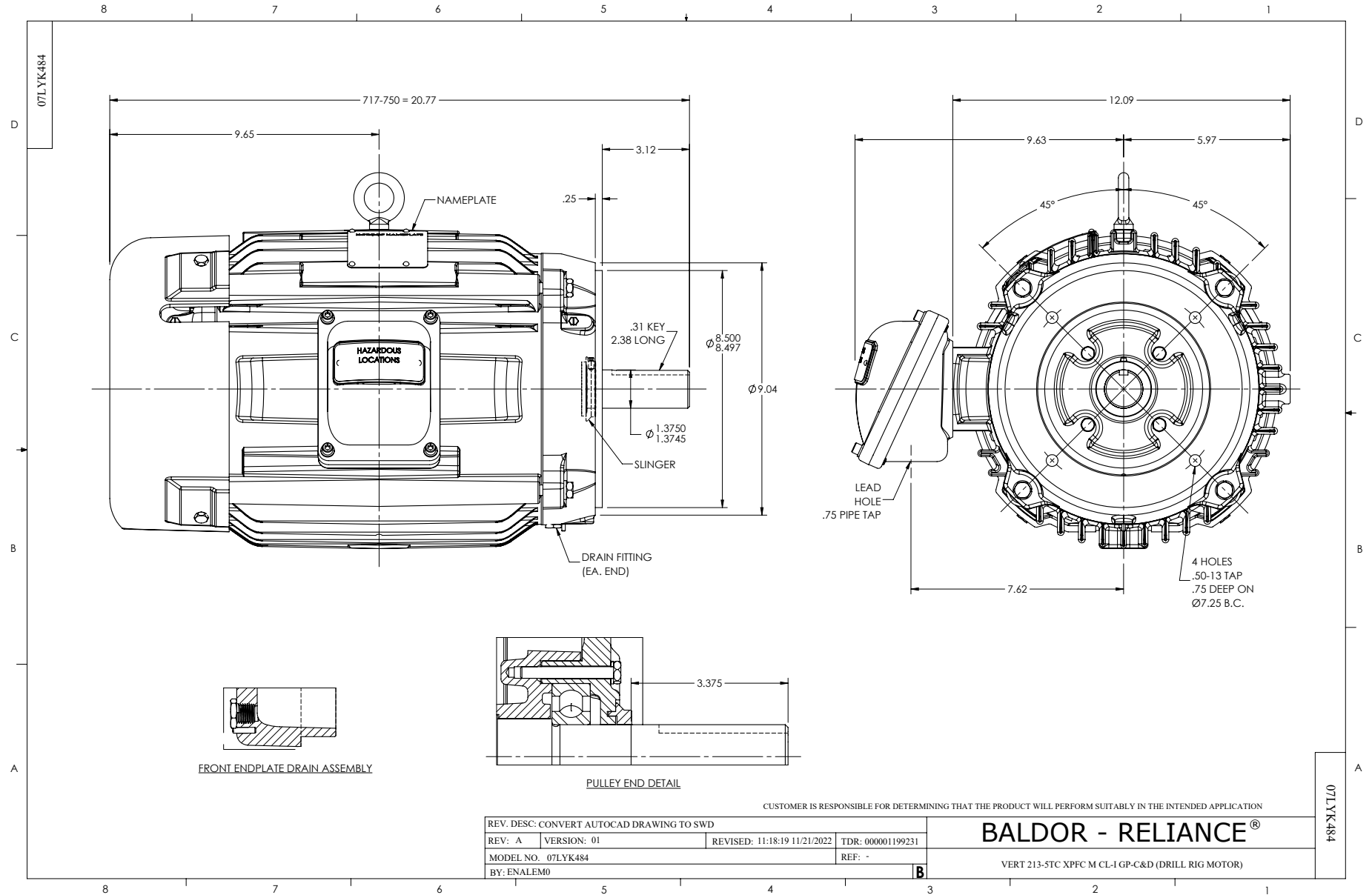
Typical performance - not guaranteed values.

10 HP 3 PH 60 HZ 1764 RPM 460 V 0750M

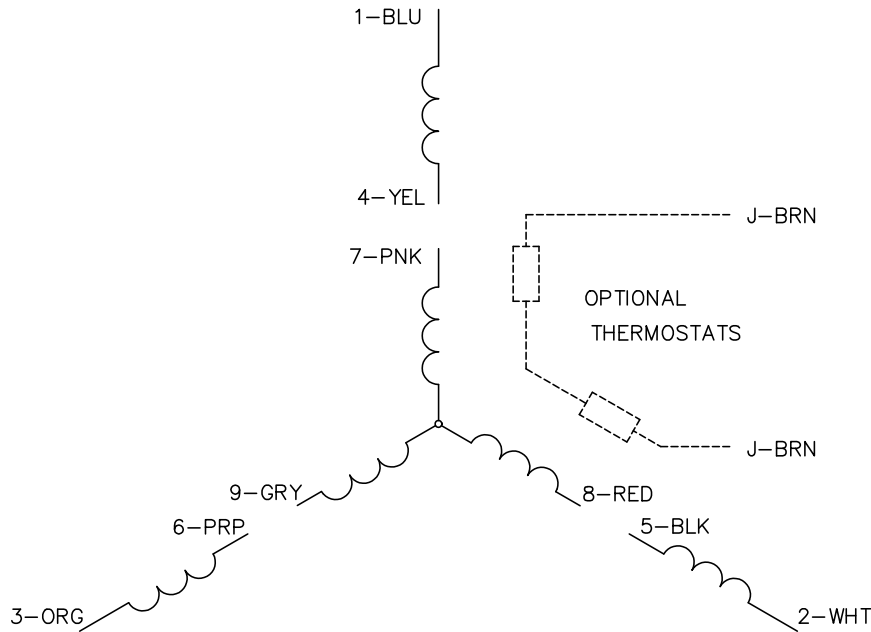
TORQUES (LB-FT): PO=94.2 PU=56.3 LR=62.4 LRA=95.7



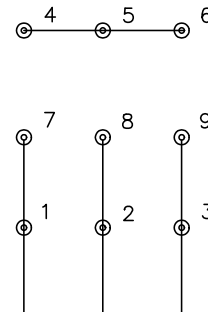
2/16/2025 ACPERF, record # 73683



CD0005

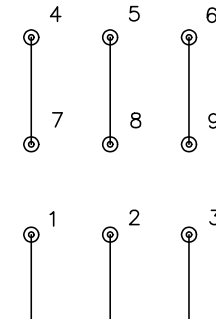


LOW VOLTAGE
(2Y)



LINE

HIGH VOLTAGE
(1Y)



LINE

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.

CD0005

| | | | |
|---|---------|-------------------------|--------------|
| REV. DESC: REVISE TO SHOW OPTIONAL COLORS | | | |
| REV. LTR: E | BY: JLP | REVISED: 01/19/99 10:15 | TDR: 0171435 |
| S00000 | | FILE: AAA00005140 | MDL: - |
| | | MTL: - | |

BALDOR ELECTRIC Co.

3PH, DV, 9 LEADS