



Customer information packet

CEM3311T-G

7.5HP, 1770RPM, 3PH, 60HZ, 213TC, OPSB, F1

Class - None

Division - Not Applicable

Specifications

| | |
|--------------------------------|---|
| Enclosure | OPSB |
| Frame | 213TC |
| Frame Material | Steel |
| Frequency | 60.00 Hz |
| Haz Area Class and Group | None |
| Haz Area Division | Not Applicable |
| Motor Letter Type | Three Phase |
| Output @ Frequency | 7.500 HP @ 60 HZ |
| Phase | 3 |
| Synchronous Speed @ Frequency | 1800 RPM @ 60 HZ |
| Voltage @ Frequency | 230.0 V @ 60 HZ 460.0 V @ 60 HZ |
| Agency Approvals | CSA CSA EEV NEMA PREMIUM UR |
| 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 |
| Current @ Voltage | 9.700 A @ 460.0 V 19.400 A @ 230.0 V |
| Design Code | A |
| Drip Cover | No Drip Cover |
| Duty Rating | CONT |
| Efficiency @ 100% Load | 91.0 % |
| Electrically Isolated Bearing | Not Electrically Isolated |
| Feedback Device | NO FEEDBACK |
| Heater Indicator | No Heater |
| High Voltage Full Load Amps | 9.7 a |

Part detail

| | |
|--------------|------------|
| Revision | F |
| Type | AC |
| Mech. spec. | |
| Base | |
| Status | PRD/A |
| Elec. spec. | 37WGS520 |
| Layout | 37LYK447 |
| Eff. date | 06-11-2024 |
| CD Diagram | CD0005 |
| Poles | 04 |
| Leads | 9#14 |
| Proprietary | False |
| Created date | 03-08-2020 |

| | |
|-----------------------------------|-----------------------|
| Insulation Class | H |
| Inverter Code | Inverter Ready |
| IP Rating | NONE |
| KVA Code | J |
| Lifting Lugs | Standard Lifting Lugs |
| Locked Bearing Indicator | Locked Bearing |
| Motor Lead Termination | Flying Leads |
| Motor Standards | NEMA |
| Motor Type | 3734M |
| Mounting Arrangement | F1 |
| Number of Poles | 4 |
| Overall Length | 17.06 IN |
| Power Factor | 79 |
| Product Family | General Purpose |
| Pulley Face Code | C-Face |
| Rodent Screen | None |
| Service Factor | 1.15 |
| Shaft Diameter | 1.375 IN |
| Shaft Ground Indicator | Shaft Grounding |
| Shaft Rotation | Reversible |
| Speed | 1770 rpm |
| Speed Code | Single Speed |
| 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

| NP3553LUA | | | | | | | | | |
|----------------------------------|--------------------------------|-------------|-----------|------------|---|--------------|---|-------|--|
| CAT.NO. | CEM3311T-G | | | | | | | | |
| SPEC. | 37-0000821 | | | | | | | | |
| HP | 7.5 | | | | | | | | |
| VOLTS | 230/460 | | | | | | | | |
| AMPS | 19.4/9.7 | | | | | | | | |
| RPM | 1770 | | | | | | | | |
| FRAME | 213TC | | HZ | 60 | | PH | 3 | | |
| SF | 1.15 | CODE | J | DES | A | CLASS | H | | |
| NEMA NOM. EFF | 91 | PF | 79 | | | | | | |
| RATING | 40C AMB-CONT | | | | | | | | |
| CC | 010A | | | | | | | | |
| ENCL | OPSB | SN | | | | | | | |
| DE | 6307 | ODE | 6206 | | | | | | |
| VPWM INVERTER READY | | | | | | | | | |
| CT30-60(2:1) VT3-60(20:1) | | | | | | | | | |
| USABLE AT | 50HZ 7.5HP 190/380V 23.2/11.6A | | | | | | | SF1.0 | |

AC Induction Motor Performance Data

Record # 52783

Typical performance - not guaranteed values

| Winding: 37WGS520-R013 | | Type: 3734M | Enclosure: OPSB | |
|------------------------|--------------|---------------------------|--|--|
| Nameplate Data | | | 460 V, 60 Hz: High Voltage Connection | |
| Rated Output (HP) | 7.5 | Full Load Torque | 22.4 LB-FT | |
| Volts | 230/460 | Start Configuration | direct on line | |
| Full Load Amps | 19.4/9.7 | Breakdown Torque | 77.6 LB-FT | |
| R.P.M. | 1770 | Pull-up Torque | 38.7 LB-FT | |
| Hz | 60 | Locked-rotor Torque | 46.3 LB-FT | |
| NEMA Design Code | A | Starting Current | 72.2 A | |
| Service Factor (S.F.) | 1.15 | No-load Current | 4.94 A | |
| NEMA Nom. Eff. | 91 | Line-line Res. @ 25°C | 1.53 Ω | |
| Rating - Duty | 40C AMB-CONT | Temp. Rise @ Rated Load | 37°C | |
| S.F. Amps | | Temp. Rise @ S.F. Load | 45°C | |
| | | Locked-rotor Power Factor | 39.2 | |
| | | Rotor inertia | 0.836 LB-FT ² | |

Load Characteristics 460 V, 60 Hz, 7.5 HP

| % of Rated Load | 25 | 50 | 75 | 100 | 125 | 150 | S.F. |
|-----------------|------|------|------|------|------|------|------|
| Power Factor | 38 | 60 | 72 | 78 | 82 | 83 | 81 |
| Efficiency | 85.1 | 90.4 | 91.6 | 91.3 | 90.5 | 89.4 | 90.7 |
| Speed | 1792 | 1785 | 1778 | 1769 | 1760 | 1749 | 1766 |
| Line amperes | 5.35 | 6.5 | 8.01 | 9.89 | 11.9 | 14.2 | 11 |

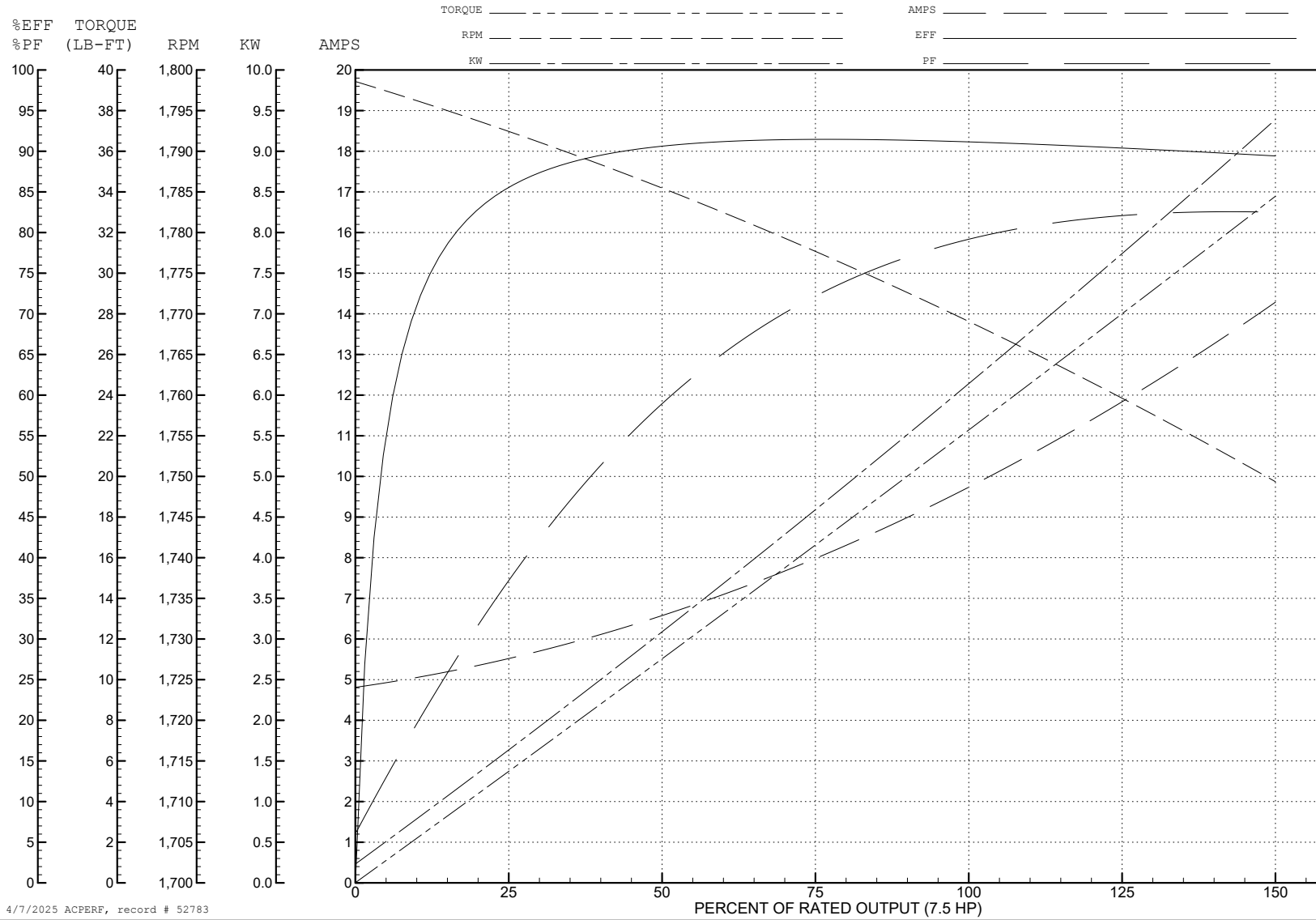
ABB Motors and Mechanical Inc.

WINDING # 37WGS520

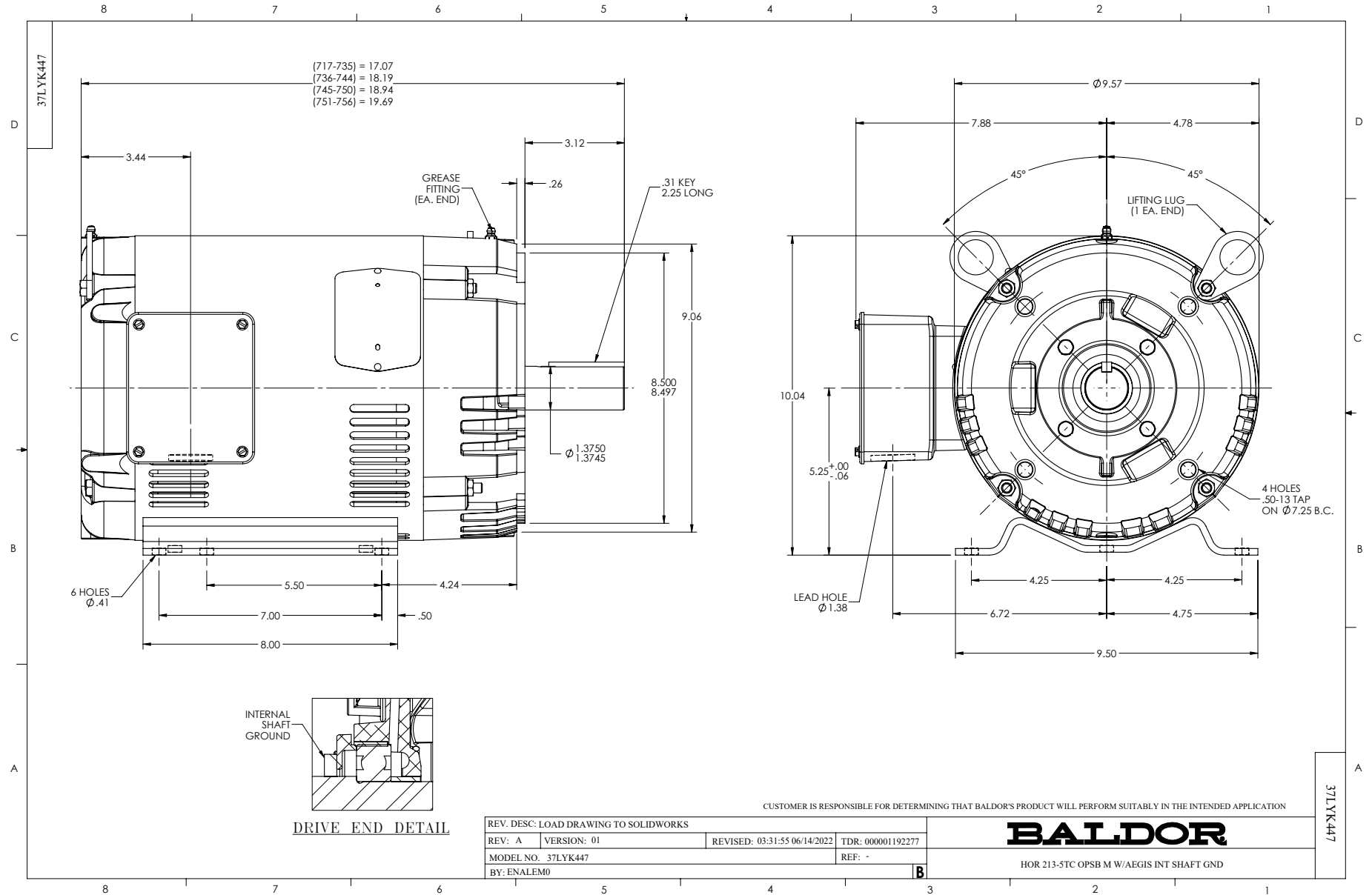
7.5 HP 3 PH 60 HZ 1770 RPM 460 V 3734M

Typical performance - not guaranteed values.

TORQUES (LB-FT): PO=77.6 PU=38.7 LR=46.3 LRA=72.2



4/7/2025 ACPERF, record # 52783



CD0005

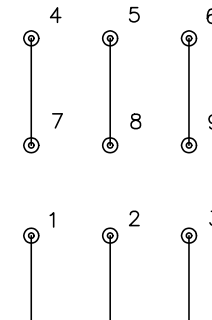


LOW VOLTAGE
(2Y)



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