

BALDOR • RELIANCE

Customer information packet

ECP64314TR-4

60HP, 1780RPM, 3PH, 60HZ, 364T, A3658M, TEFC, W

Class - CLI GP A,B,C,D

Division - Division II

Specifications

| | |
|-------------------------------|--|
| Enclosure | TEFC |
| Frame | 364T |
| Frame Material | Iron |
| Frequency | 60.00 Hz |
| Haz Area Class and Group | CLI GP A,B,C,D |
| Haz Area Division | Division II |
| Motor Letter Type | Three Phase |
| Output @ Frequency | 60.000 HP @ 60 HZ |
| Phase | 3 |
| Synchronous Speed @ Frequency | 1800 RPM @ 60 HZ |
| Voltage @ Frequency | 460.0 V @ 60 HZ |
| Agency Approvals | CCSA US CCSAUSEEV NEMA PREMIUM NEMA_PREMIUM UR |
| Ambient Temperature | 40 °C |
| Auxillary Box | No Auxillary Box |
| Base Indicator | Rigid |
| Bearing Grease Type | Mobil SHC 220 (Athens Only) |
| Constant Torque Speed Range | 15-60 |
| Current @ Voltage | 70.000 A @ 460.0 V |
| Design Code | B |
| Drip Cover | No Drip Cover |
| Duty Rating | CONT |
| Efficiency @ 100% Load | 95.0 % |
| Feedback Device | NO FEEDBACK |
| Haz Area Temp Code | T3 |
| Heater Indicator | No Heater |
| High Voltage Full Load Amps | 70.0 a |
| Insulation Class | F |
| Inverter Code | Inverter Ready |

Part detail

| | |
|--------------|------------|
| Revision | AB |
| Type | AC |
| Mech. spec. | |
| Base | |
| Status | PRD/A |
| Elec. spec. | A36WG4085 |
| Layout | 617428-022 |
| Eff. date | 09-09-2024 |
| CD Diagram | CD0006 |
| Poles | 04 |
| Leads | 3#4 |
| Proprietary | False |
| Created date | 10-19-2010 |

| | |
|--------------------------------------|----------------------------|
| KVA Code | G |
| Lifting Lugs | No Lifting Lugs |
| Max Speed | 2700 rpm |
| Motor Lead Quantity/Wire Size | 3 @ 4 AWG |
| Motor Standards | None |
| Motor Type | A3658M |
| Mounting Arrangement | W6 |
| Number of Poles | 4 |
| Overall Length | 33.48 IN |
| Power Factor | 84 |
| Pulley End Bearing Type | Roller |
| Pulley Face Code | Standard |
| Service Factor | 1.15 |
| Shaft Diameter | 2.375 IN |
| Shaft Ground Indicator | No Shaft Grounding |
| Shaft Rotation | Phase Seq-Std Rot (CCWODE) |
| Shaft Slinger Indicator | No Slinger |
| Speed | 1780 rpm |
| Speed Code | Single Speed |
| Starting Method | Direct on line |
| Thermal Device - Bearing | None |
| Thermal Device - Winding | None |

Nameplate

NP4371

| | | | | | | | | | | | | | |
|--------------------------------|--------------|-----------|--------------------|--------------|---|-------------------------|------|------------|--------------------|---------------|-------|-------------|---|
| CAT # | ECP64314TR-4 | | | | | FR | 364T | | IP | 55 | | | |
| SPEC | P36G3368 | | | | | ENCL | TEFC | | DES | B | | | |
| HZ | 60 | PH | 3 | CL | F | HP | 60 | SF | 1.15 | PF | 84 % | CODE | G |
| VOLTS | 460 | | | | | AMPS | 70 | | | | | | |
| RPM | 1780 | | MAX RPM | 2700 | | SER | | | | | | | |
| NEMA-NOM-EFF | 95 | % | RATING | 40C AMB-CONT | | | | | | | | | |
| GUAR MIN. EFF | 94.1 | % | BRG DE | NU313 | | BRG ODE | 6313 | | | | | | |
| CL I DIV 2 GRPS A,B,C,D | | | | | | CL I ZONE 2 GRPS | | | IIA,IIB,IIC | TEMP T | 3-200 | C | |
| CT HZ | 15-60 | | VT HZ | 0-60 | | | | | | | | | |
| CHP HZ | 60-90 | | INV TEMP CL | 200 | | C | | | | | | | |
| | | | | | | MTR WT | 924 | LBS | | | | | |

NP4372

| | | | |
|--------------------|---------------|----------------------|------------|
| CAT # | ECP64314TR-4 | ROTOR BARS | 47 |
| SPEC | P36G3368 | STATOR SLOTS | 60 |
| SER | | MAX CORR KVAR | 13.8 |
| GREASE | MOBIL SHC 220 | | |
| ABMA DE BRG | 65RU03M30X | ODE | 65BC03J30X |
| | | | |
| | | | |

| | | | | |
|----------------------------------|-------------------------|---|-----------------|---|
| SPACE HEATER LEADS H1-H2: | TIE LIKE NUMBERS | | TOGETHER | |
| MAX. SPACE HEATER TEMP. | C | V | A | W |

AC induction motor performance data

Record #72800 - Typical performance - not guaranteed values

| | |
|-----------|-----------|
| Winding | A36WG4085 |
| Type | A3658M |
| Enclosure | TEFC |

Nameplate data

| | | | |
|----------------|----|--------------|------|
| Rated Output | | | 60 |
| Volts | | | 460 |
| Full Load Amps | | | 70 |
| R.P.M. | | | 1780 |
| Hz | 60 | Phase | 3 |
| KVA Code | | | G |
| S.F. | | | 1.15 |
| NEMA Nom. Eff. | 95 | Power Factor | 84 |
| Duty | | | CONT |
| S.F. Amps | | | |

460 V, 60 Hz:

High Voltage Connection

| | |
|---------------------------|----------------|
| Full Load Torque | 176.4 LB-FT |
| Start Configuration | direct on line |
| Breakdown Torque | 422 LB-FT |
| Pull-up Torque | 276 LB-FT |
| Locked-rotor Torque | 352 LB-FT |
| Starting Current | 462 A |
| No-load Current | 24.8 |
| Line-line Res. @ 25°C | 0.10816 Ω |
| Temp. Rise @ Rated Load | 56°C |
| Temp. Rise @ S.F. Load | 70°C |
| Locked-rotor Power Factor | 32.1 |
| Rotor inertia | 0 |

Load Characteristics 460 V, 60 Hz, 60 HP

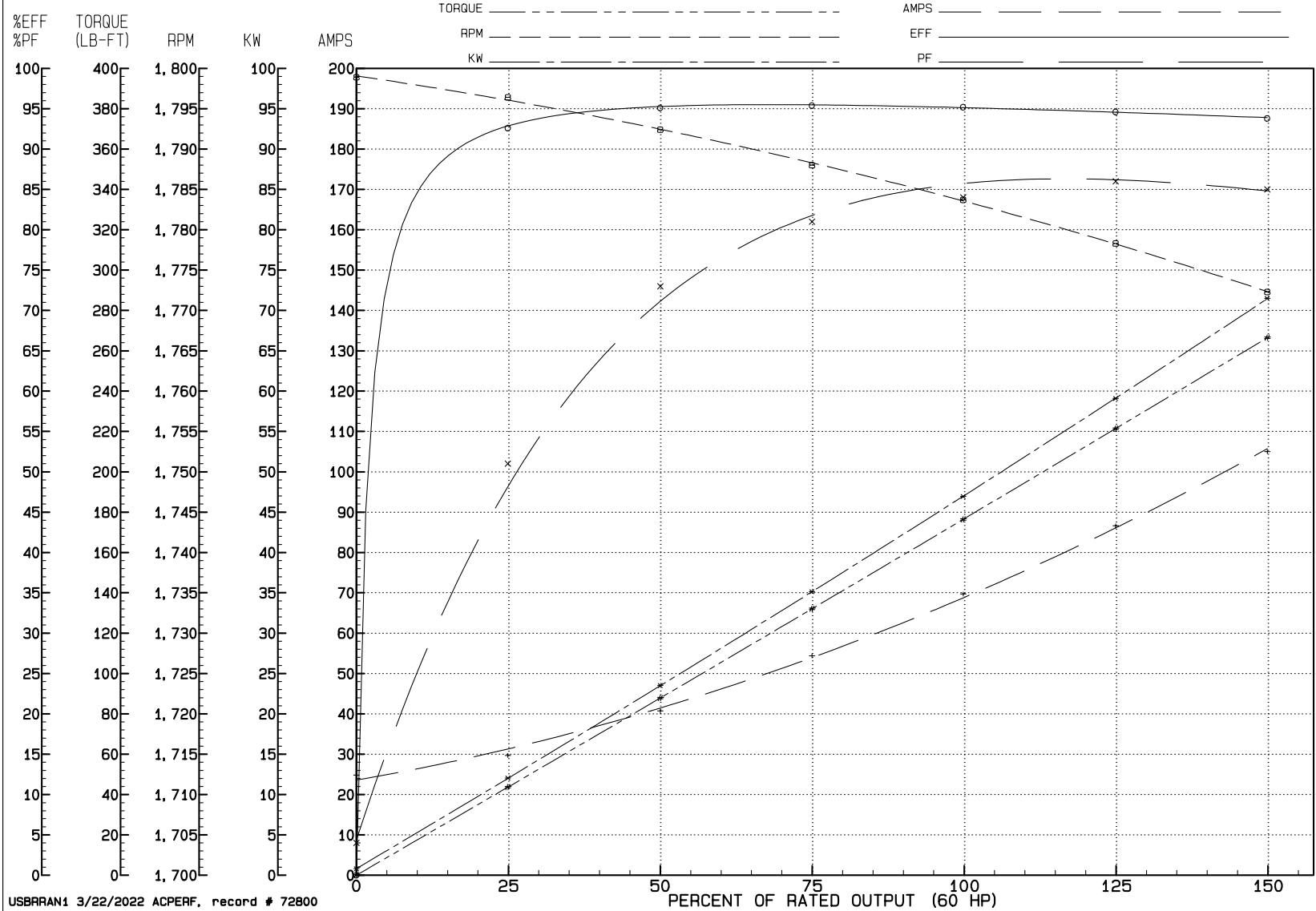
| % of Rated Load | NL | 25 | 50 | 75 | 100 | 125 | 150 | SF |
|-----------------|--------|--------|--------|------|--------|--------|--------|------|
| Power Factor | 4 | 51 | 73 | 81 | 84 | 86 | 85 | 85 |
| Efficiency | 0 | 92.6 | 95.1 | 95.4 | 95.2 | 94.6 | 93.8 | 94.8 |
| Speed | 1798.9 | 1796.4 | 1792.4 | 1788 | 1783.7 | 1778.3 | 1772.3 | 1780 |
| Line amperes | 24.8 | 29.7 | 40.7 | 54.4 | 69.7 | 86.6 | 105 | 79.8 |

REVIEW

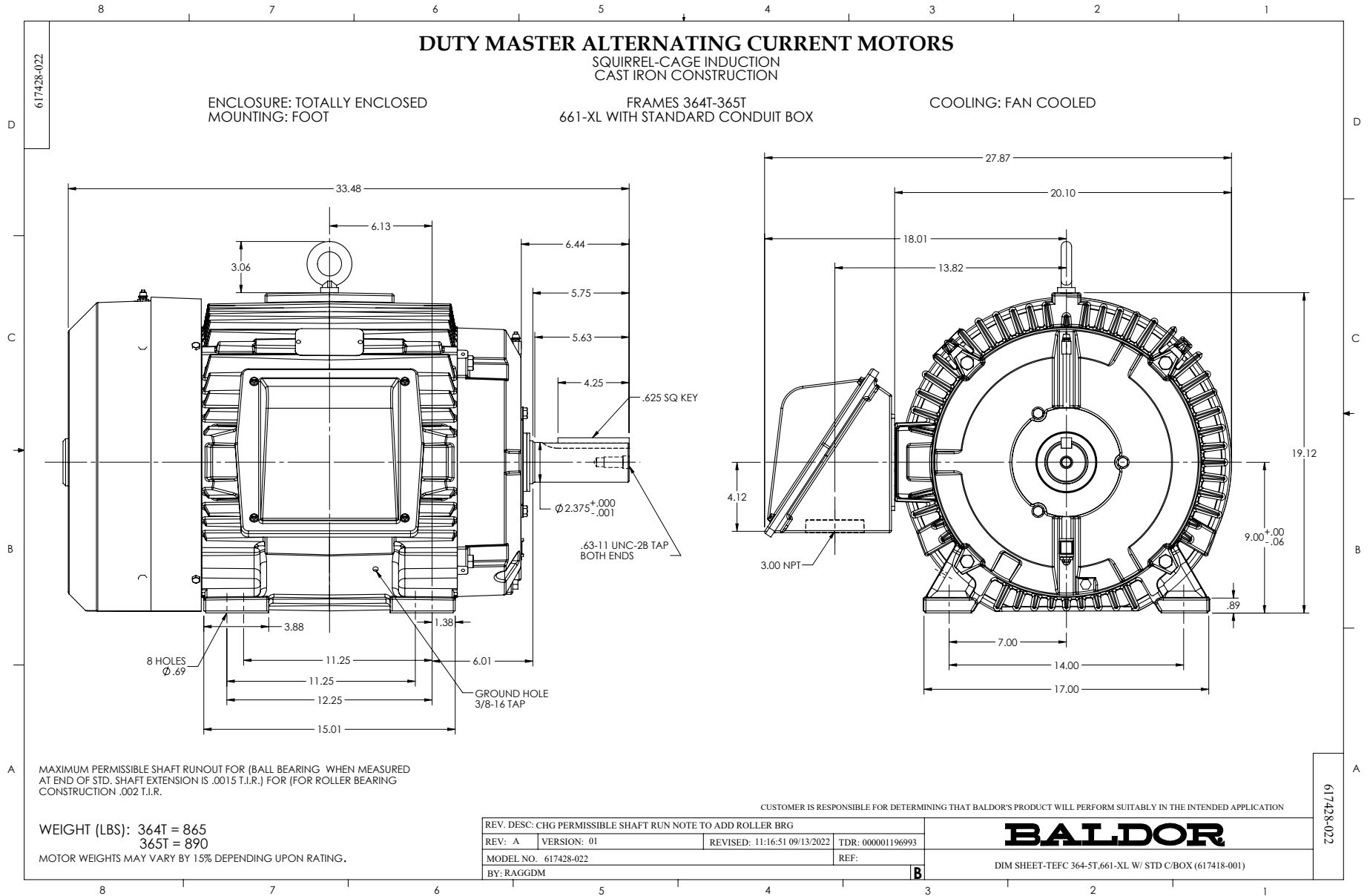
WINDING # A36WG4085

60 HP 3 PH 60 HZ 1780 RPM 460 V A3658M

TORQUES (LB-FT): P0=422.00 PU=276.00 LR=352.00 LRA=462.00



USBRAN1 3/22/2022 ACPERF, record # 72800



CD0006



NOTES:

1. THREE LEAD MOTOR MAY BE EITHER WYE CONNECTED OR DELTA CONNECTED.
2. INTERCHANGE ANY TWO LINE LEADS TO REVERSE ROTATION.
3. OPTIONAL THERMOSTATS ARE PROVIDED WHEN SPECIFIED.
4. ACTUAL NUMBER OF INTERNAL PARALLEL CIRCUITS MAY VARY.
5. LEAD COLORS ARE OPTIONAL. LEADS MUST BE NUMBERED AS SHOWN.

CD0006

| | | |
|-----------------------------------|------------------------------|-------------------|
| REV. DESC: ADD CLASS CONN00000007 | | |
| REV. LTR: E | VERSION: 01 | TDR: 000001099922 |
| FILE: \AAA\00005\141 | REVISED: 10:24:49 02/19/2019 | BY: ENBRIRO |
| MTL: - | © □ | |

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3PH, SV, 3 LEADS, WYE OR DELTA CONNECTED

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