ABB BALDOR RELIANCE

# Customer information packet

## CEM4316T

75HP, 1780RPM, 3PH, 60HZ, 365TC, A36070M, TEFC
Class - None
Division - Not Applicable

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## Specifications

| | |
|---|---|
| **Enclosure** | TEFC |
| **Frame** | 365TC |
| **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** | 75.000 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** | CCSAUSEEV |
| | CURUSEEV |
| | NEMA PREMIUM |
| | NEMA PREMIUM (OLD LOGO) |
| **Ambient Temperature** | 40 °C |
| **Auxiliary Box** | NO AUXILLARY BOX |
| **Base Indicator** | Rigid |
| **Bearing Grease Type** | Polyrex EM (-20F +300F) |
| **Current @ Voltage** | 172.000 A @ 230.0 V |
| | 188.000 A @ 208.0 V |
| | 86.000 A @ 460.0 V |
| **Design Code** | B |
| **Drip Cover** | No Drip Cover |
| **Duty Rating** | CONT |
| **Efficiency @ 100% Load** | 95.4 % |
| **Enclosure Modification** | Severe Duty Features |
| **Feedback Device** | NO FEEDBACK |
| **Heater Indicator** | No Heater |
| **High Voltage Full Load Amps** | 86.0 a |
| **Insulation Class** | F |

## Part Detail

| | |
|---|---|
| **Revision** | K |
| **Type** | AC |
| **Mech. spec.** | |
| **Base** | |
| **Status** | PRD/A |
| **Elec. spec.** | A36WG4076 |
| **Layout** | 617428-019 |
| **Eff. date** | 10-31-2025 |
| **CD Diagram** | 416820-002 |
| **Poles** | 04 |
| **Leads** | 3#4,6#6 Y |
| **Proprietary** | False |
| **Created date** | 05-16-2019 |

| | |
|---|---|
| **Inverter Code** | Inverter Ready |
| **IP Rating** | NONE |
| **KVA Code** | G |
| **Lifting Lugs** | No Lifting Lugs |
| **Max Speed** | 2700 rpm |
| **Motor Lead Quantity/Wire Size** | 3 @ 4 AWG |
| **Motor Standards** | NEMA |
| **Motor Type** | A36070M |
| **Mounting Arrangement** | F1 |
| **Number of Poles** | 4 |
| **Overall Length** | 33.44 IN |
| **Power Factor** | 86 |
| **Pulley End Bearing Type** | Ball |
| **Pulley Face Code** | C-Face |
| **Service Factor** | 1.15 |
| **Shaft Diameter** | 2.375 IN |
| **Shaft Ground Indicator** | No Shaft Grounding |
| **Shaft Rotation** | Reversible |
| **Shaft Slinger Indicator** | Shaft Slinger |
| **Speed** | 1780 rpm |
| **Speed Code** | Single Speed |
| **Starting Method** | Direct on line |
| **Thermal Device - Bearing** | None |
| **Thermal Device - Winding** | None |

**Nameplate**

**NP3979LUA**

| | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **CAT #** | CEM4316T | | | | **SER** | | | | **CC** | 010A | | | | | | | | | | | | | | |
| **SPEC** | A36-1117-4076 | | | | **RATING** | 40C AMB-CONT | | | | | | | | | | | | | | | | | | |
| **HZ** | **VOLTS** | | | **AMPS** | | **RPM** | **HP** | **CODE** | **SF** | **DES** | **PF** | | **NEMA NOM. EFF** | | | | | | | | | | | |
| 60 | 230/460 | | | 172/86 | | 1780 | 75 | G | 1.15 | B | 86 | **%** | 95.4 | **%** | | | | | | | | | | |
| | - | | | | | | | | | | | **%** | | **%** | | | | | | | | | | |
| **PH** | 3 | **CL** | F | **MAX CORR KVAR** | 15.8 | | | | | | | | | | | | | | | | | | | |
| **BRG** | **DE** | 6313 | **ODE** | 6313 | **ENCL** | TEFC | **FR** | 365TC | | IP54 | | | | | | | | | | | | | | |
| **GREASE** | POLYREX EM | | | | | | | **MTR WT** | 923 | **LBS** | | | | | | | | | | | | | | |
| **USABLE AT** | 50HZ 60HP 190/380V 168/84A | | | | | | | SF1.0 | | | | | | | | | | | | | | | | |
| **INVERTER DUTY** | **CT** | 15-60 | **HZ** | 4:1 | **VT** | 3-60 | **HZ** | 20:1 | **CHP** | 60-90 | **HZ** | 1.5:1 | **1.0 SF VPWM** | | | | | | | | | | | |
| **MAX RPM** | 2700 | | | | | | | | | | | | | | | | | | | | | | | |

AC induction motor performance data

Record #71910 - Typical performance - not guaranteed values

| | |
|---|---|
| Winding | A36WG4076 |
| Type | A3670M |
| Enclosure | TEFC |

| Nameplate data | | | |
|---|---|---|---|
| Rated Output | | | 75 |
| Volts | | | 230/460 |
| Full Load Amps | | | 172/86 |
| R.P.M. | | | 1780 |
| Hz | 60 | Phase | 3 |
| KVA Code | | | G |
| S.F. | | | 1.15 |
| NEMA Nom. Eff. | 95.4 | Power Factor | 86 |
| Duty | | | CONT |
| S.F. Amps | | | |

460 V, 60 Hz:

| High Voltage Connection | |
|---|---|
| Full Load Torque | 220.4 LB-FT |
| Start Configuration | direct on line |
| Breakdown Torque | 618 LB-FT |
| Pull-up Torque | 341 LB-FT |
| Locked-rotor Torque | 434 LB-FT |
| Starting Current | 545 A |
| No-load Current | 27.5 |
| Line-line Res. @ 25°C | 0.081965 Ω |
| Temp. Rise @ Rated Load | 60°C |
| Temp. Rise @ S.F. Load | 75°C |
| Locked-rotor Power Factor | 31.8 |
| Rotor inertia | 0 |

Load Characteristics 460 V, 60 Hz, 75 HP

| % of Rated Load | NL | 25 | 50 | 75 | 100 | 125 | 150 | SF |
|---|---|---|---|---|---|---|---|---|
| Power Factor | 4 | 55 | 76 | 83 | 86 | 86 | 86 | 86 |
| Efficiency | 0 | 93.8 | 95.6 | 95.8 | 95.4 | 94.8 | 93.9 | 95 |
| Speed | 1798.9 | 1796.6 | 1791.5 | 1787.3 | 1782.2 | 1776.4 | 1769.9 | 1779 |
| Line amperes | 27.5 | 33.9 | 48.2 | 66 | 85.5 | 107 | 131 | 98.4 |

ABB BALDOR RELIANCE III

**CUSTOMER INFORMATION PACKET**

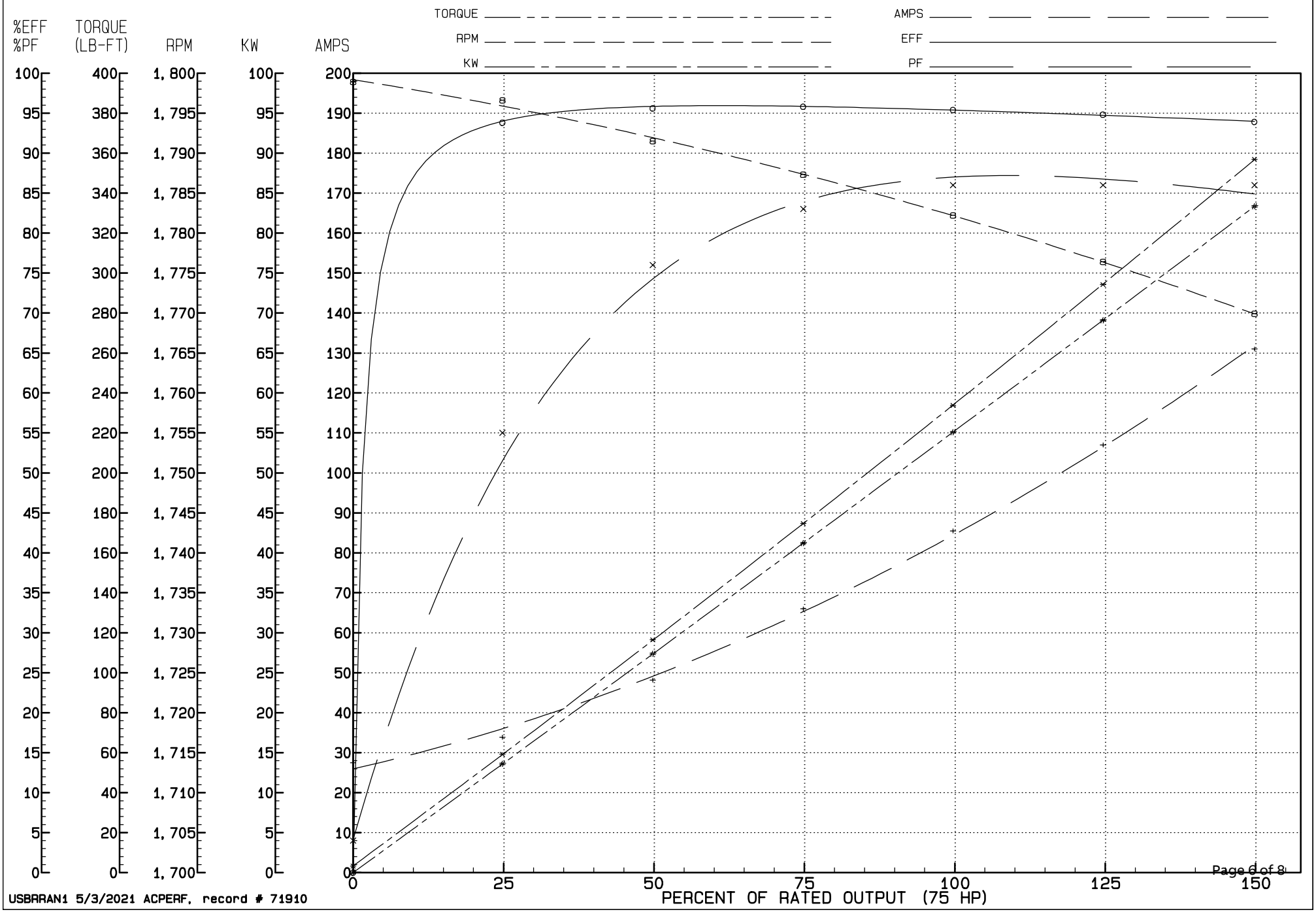
CEM4316T - 75HP, 1780RPM, 3PH, 60HZ, 365TC, A36070M, TEFC

# WINDING # A36WG4076

REVIEW

75 HP 3 PH 60 HZ 1780 RPM 460 V A3670M

TORQUES(LB-FT): PO=618.00 PU=341.00 LR=434.00 LRA=545.00




USBRRAN1 5/3/2021 ACPERF, record # 71910

617428-019

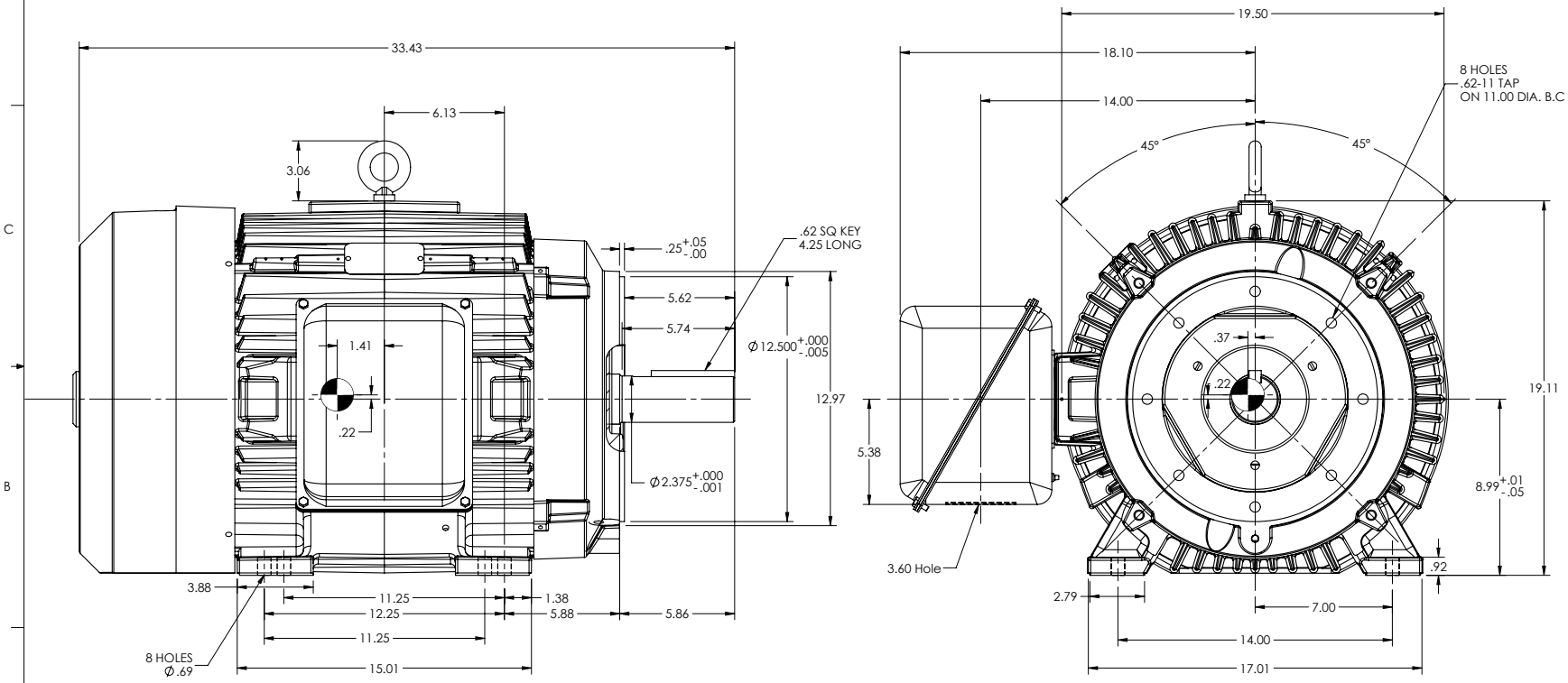
# DUTY MASTER ALTERNATING CURRENT MOTORS

SQUIRREL-CAGE INDUCTION
CAST IRON CONSTRUCTION

ENCLOSURE: TOTALLY ENCLOSED
MOUNTING: FOOT

FRAMES 364TC-365TC

COOLING: FAN COOLED




MAXIMUM PERMISSIBLE SHAFT RUNOUT WHEN MEASURED AT END OF STD. SHAFT EXTENSION IS .002 T.I.R. UP TO AND INCLUDING 1.625 DIA AND .003 T.I.R. 1.625 DIA. TO 5 INCH DIA.

WEIGHT (LBS): 364TC = 815
365TC = 855

MOTOR WEIGHTS MAY VARY BY 15% DEPENDING UPON RATING.

CENTER OF GRAVITY WITH X & Y VARY ± 1.0 INCH FROM CENTER.

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

| | | | |
|---|---|---|---|
| REV. DESC: FIX COG | | | |
| REV: D | VERSION: 04 | REVISED: 09:34:56 05/28/2019 | TDR: 000001109340 |
| MODEL NO. 617428-019 | | | REF: |
| BY: RAGJSS1 | | | B |

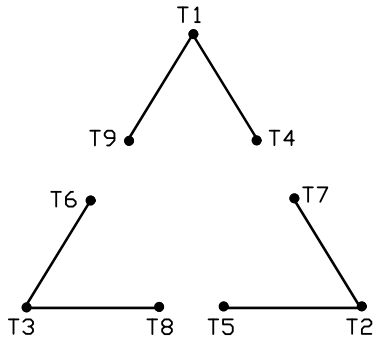
BALDOR

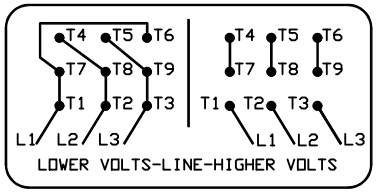
DIM SHEET 364-5TC TEFC (611740-003-SH1)

617428-019

416820-002

# A-C MOTOR
# CONNECTION DIAGRAM
# STANDARD 9 LEAD DELTA-CONNECTED




(N. P. 1575-B)

| | | |
|---|---|---|
| REV. DESC: ADJUST TEXT DARKNESS | | |
| REV. LTR: B | VERSION: 02 | TDR: 000001285318 |
| FILE: \RAG\00022\453 | REVISED: 09:36:26 09/24/2026 | BY: USJOSUL |
| MTL: – | | |

ABB

CONN DIAG – STANDARD 9 LEAD, DELTA-CONNECTED

SH1 of 1

416820-002