ABB BALDOR RELIANCE

# Customer information packet

## SPM4410TR-4

125HP, 1790RPM, 3PH, 60HZ, 444T, A4480M, TEFC
Class - CLI GP A,B,C,D; CLII GP F,G
Division - Division II

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11/19/2026 3:26:26 PM

## Specifications

| | |
|---|---|
| **Enclosure** | TEFC |
| **Frame** | 444T |
| **Frame Material** | Iron |
| **Frequency** | 60.00 Hz |
| **Haz Area Class and Group** | CLI GP A,B,C,D; CLII GP F,G |
| **Haz Area Division** | Division II |
| **Motor Letter Type** | Three Phase |
| **Output @ Frequency** | 125.000 HP @ 60 HZ |
| **Phase** | 3 |
| **Synchronous Speed @ Frequency** | 1800 RPM @ 60 HZ |
| **Voltage @ Frequency** | 460.0 V @ 60 HZ |
| **Agency Approvals** | CCSAUSEEV<br>CURUSEEV<br>NEMA PREMIUM<br>NEMA_PREMIUM |
| **Ambient Temperature** | 40 °C |
| **Auxiliary Box** | NO AUXILLARY BOX |
| **Base Indicator** | Rigid |
| **Bearing Grease Type** | Mobil SHC 220 (Athens Only) |
| **Current @ Voltage** | 142.000 A @ 460.0 V |
| **Design Code** | A |
| **Drip Cover** | No Drip Cover |
| **Duty Rating** | CONT |
| **Efficiency @ 100% Load** | 96.2 % |
| **Feedback Device** | NO FEEDBACK |
| **Heater Indicator** | No Heater |
| **High Voltage Full Load Amps** | 142.0 a |
| **Insulation Class** | F |
| **Inverter Code** | Inverter Duty |
| **KVA Code** | H |
| **Lifting Lugs** | Standard Lifting Lugs |
| **Max Speed** | 2700 rpm |

## Part Detail

| | |
|---|---|
| **Revision** | E |
| **Type** | AC |
| **Mech. spec.** | |
| **Base** | |
| **Status** | PRD/A |
| **Elec. spec.** | A44WG6731 |
| **Layout** | 617439-171 |
| **Eff. date** | 08-06-2026 |
| **CD Diagram** | 416820-036 |
| **Poles** | 04 |
| **Leads** | 3#2 Y |
| **Proprietary** | False |
| **Created date** | 09-15-2023 |

| | |
|---|---|
| **Motor Lead Quantity/Wire Size** | 3 @ 2 AWG |
| **Motor Standards** | NEMA |
| **Motor Type** | A4480M |
| **Mounting Arrangement** | F1 |
| **Number of Poles** | 4 |
| **Overall Length** | 44.97 IN |
| **Power Factor** | 86 |
| **Product Family** | General Industrial |
| **Pulley End Bearing Type** | Roller |
| **Pulley Face Code** | Standard |
| **Service Factor** | 1.15 |
| **Shaft Diameter** | 3.375 IN |
| **Shaft Ground Indicator** | No Shaft Grounding |
| **Shaft Rotation** | Reversible |
| **Shaft Slinger Indicator** | Shaft Slinger |
| **Speed** | 1790 rpm |
| **Speed Code** | Single Speed |
| **Starting Method** | Direct on line |
| **Thermal Device - Bearing** | None |
| **Thermal Device - Winding** | None |

**Nameplate**

| NP2496L |
|---|
| MOBIL SHC -220 GREASE |

| NP4562L | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **CAT NO** | SPM4410TR-4 | | **SPEC NO.** | A44-5000-6731 | | | **I.P.** | 55 | | | | | | | | | | | | |
| **HP** | 125 | **AMPS** | 142 | | **VOLTS** | 460 | | **DESIGN** | A | | | | | | | | | | | |
| **FRAME SIZE** | 444T | **RPM** | 1790 | | **MAX RPM** | 2700 | **HZ** | 60 | **AMB** | 40 | **C** | | | | | | | | | |
| **D.E. BRG.** | 110RU02M30X | | **PH.3** | 3 | **DUTY** | CONT | | | **INSUL.CLASS** | F | | | | | | | | | | |
| **O.D.E. BRG.** | 90BC03J30X | | | **TYPE P** | P | **ENCL** | TEFC | **SF** | 1.15 | **CODE** | H | | | | | | | | | |
| **POWER FACTOR** | 86 | | **MAX CORR KVAR** | 25.8 | | | | **NEMA NOM EFFICIENCY** | 96.2 | | | **MOTOR WEIGHT** | | **LBS** | | | | | | |
| **CL.I,DIV 2,GRP:** | **A,B,C,D** | **T.CODE** | T3C | | | **CL.1,ZONE 2,GRP:** | | | **IIA,IIB,IIC** | **T=** | 160 | **C** | **INVERTER T.CODE** | T3 | | | | | | |
| **CL.II,DIV 2,GRP:** | **F,G** | **T.CODE** | T3C | | | **CL II ZONE 22 GRPS IIIB** | | | | **T=** | 160 | **C** | **INVERTER T.CODE** | T3C | | | | | | |
| **ID LOGO** | **INV TYPE:** | **VPWM** | **CT** | 30 | **TO** | 60 | **VT** | 3 | **TO** | 60 | **CHP** | 60 | **TO** | 90 | | | | | | |
| **ID LOGO** | **1.0 SF VPWM** | **WK2** | 52.8 | | **LBFT2** | | **SL HZ** | 0.41 | | **MAG CUR** | 44.3 | | | | | | | | | |
| **SER.NO.** | | | | **MEETS INTENT OF IEEE-45** | | | | | **FOR WEATHER PROTECTION** | | | | | | | | | | | |

| S/O | FRAME | HP | TYPE | PHASE/ HERTZ | RPM | VOLTS |
|---|---|---|---|---|---|---|
| | 445T | 125 | P | 3/60 | 1790 | 460 |

| AMPS | DUTY | AMB °C/ INSUL | S.F. | NEMA DESIGN | CODE LETTER | ENCLOSURE |
|---|---|---|---|---|---|---|
| 142 | CONT | 40/F | 1.15 | A | H | TEFC |

| E/S | ROTOR | TEST S.O. | TEST DATE | STATOR RES. @25 °C OHMS (BETWEEN LINES) |
|---|---|---|---|---|
| - | A44RC4080A00 | --- | --- | .0321 |

**PERFORMANCE**

| LOAD | HP | AMPERES | RPM | % POWER FACTOR | % EFFICIENCY |
|---|---|---|---|---|---|
| NO LOAD | 0 | 44.3 | 1800 | 4.39 | 0 |
| 1/4 | 31.3 | 56.5 | 1797 | 55.6 | 93.2 |
| 2/4 | 62.5 | 80.5 | 1794 | 75.9 | 95.7 |
| 3/4 | 93.7 | 109 | 1791 | 83.3 | 96.3 |
| 4/4 | 125 | 142 | 1788 | 85.8 | 96.2 |
| 5/4 | 156 | 175 | 1784 | 87.3 | 96.0 |
| | | | | | |

**SPEED TORQUE**

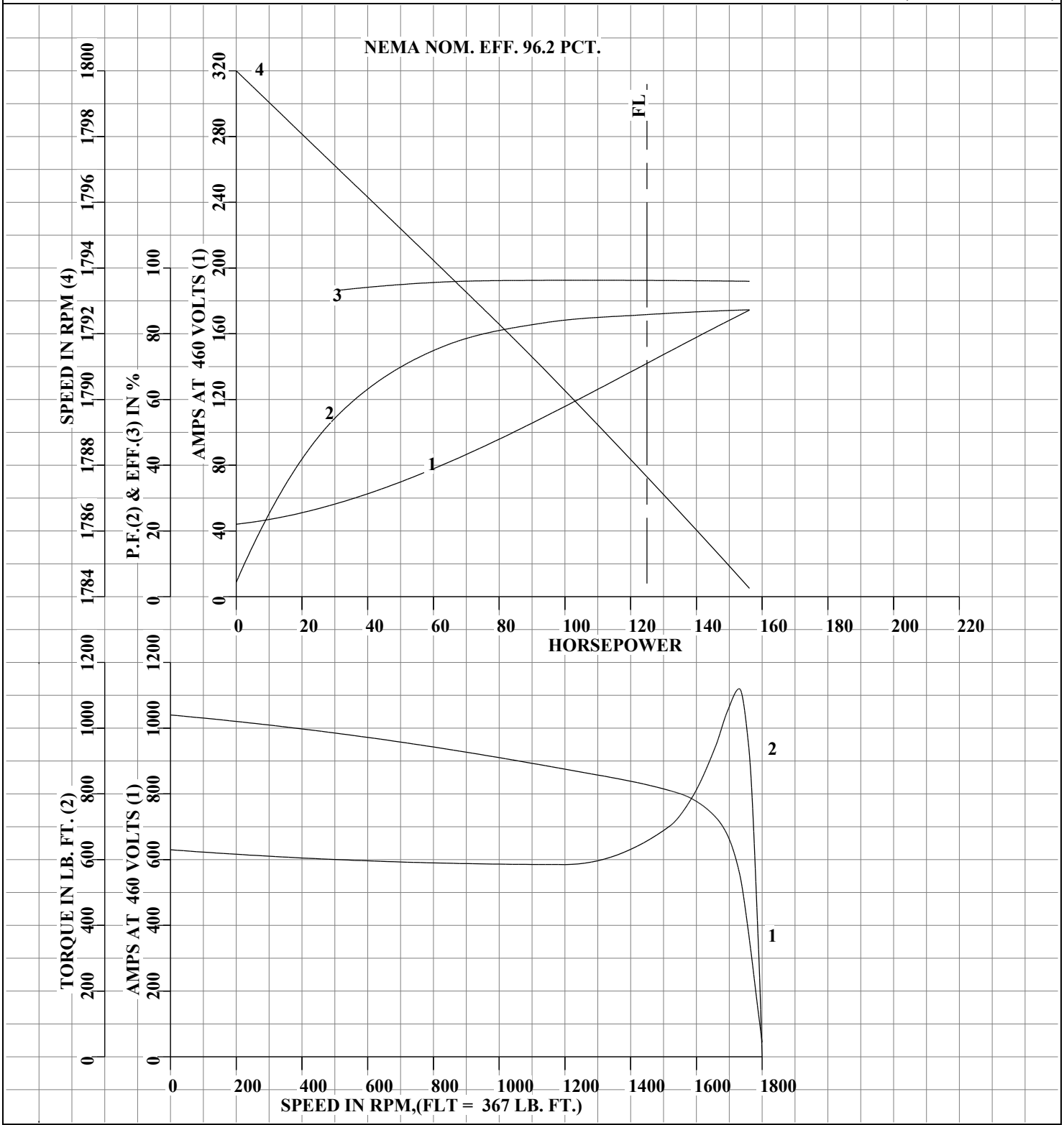
| | RPM | TORQUE % FULL LOAD | TORQUE LB.-FT. | AMPERES |
|---|---|---|---|---|
| LOCKED ROTOR | 0 | 172 | 630 | 1040 |
| PULL UP | 1200 | 159 | 585 | 875 |
| BREAKDOWN | 1731 | 305 | 1120 | 560 |
| FULL LOAD | 1788 | 100 | 367 | 142 |

**AMPERES SHOWN FOR 460 VOLT CONNECTION. IF OTHER CONNECTIONS ARE AVAILABLE, THE AMPERES WILL VARY INVERSELY WITH THE RATED VOLTAGE.**

**CALCULATED DATA**
**NEMA NOM. EFF. 96.2 PCT.**

| | | | |
|---|---|---|---|
| ABB | DRAWN BY: W. L. SMITH<br>CHECKED BY: C.E.JAMISON<br>APPROVED BY: W. L. SMITH<br>DATE: 11/19/24 | AC MOTOR PERFORMANCE DATA | A44WG6731-R002<br>DATE ISSUED 11/19/24 |

| | | | |
|---|---|---|---|
| FRAME 445T | RPM 1790 | S.F. 1.15 | ROTOR A44RC4080A00 |
| HP 125 | VOLTS 460 | NEMA DESIGN A | TEST S.O. CALCULATED DATA |
| TYPE P | AMPS 142 | CODE LETTER H | TEST DATE --- |
| PHASE / HERTZ 3/60 | DUTY CONT | ENCLOSURE TEFC | STATOR RES. @ 25°C .0321 |
| | AMB °C / INSUL 40/F | E/S - | OHMS (BETWEEN LINES) |




AMPERES SHOWN FOR 460 VOLT CONNECTION, IF OTHER VOLTAGE CONNECTIONS ARE AVAILABLE, THE AMPERES WILL VARY INVERSELY WITH THE RATED VOLTAGE.

| | | | |
|---|---|---|---|
| ABB | DRAWN BY: W. L. SMITH<br>CHECKED BY: C.E.JAMISON<br>APPROVED BY: W. L. SMITH<br>DATE: 11/19/24 | AC MOTOR PERFORMANCE DATA | A44WG6731-R002<br>ISSUE DATE 11/19/24 |

# DUTY MASTER ALTERNATING CURRENT MOTORS

617439-171

ENCLOSURE: TOTALLY ENCLOSED

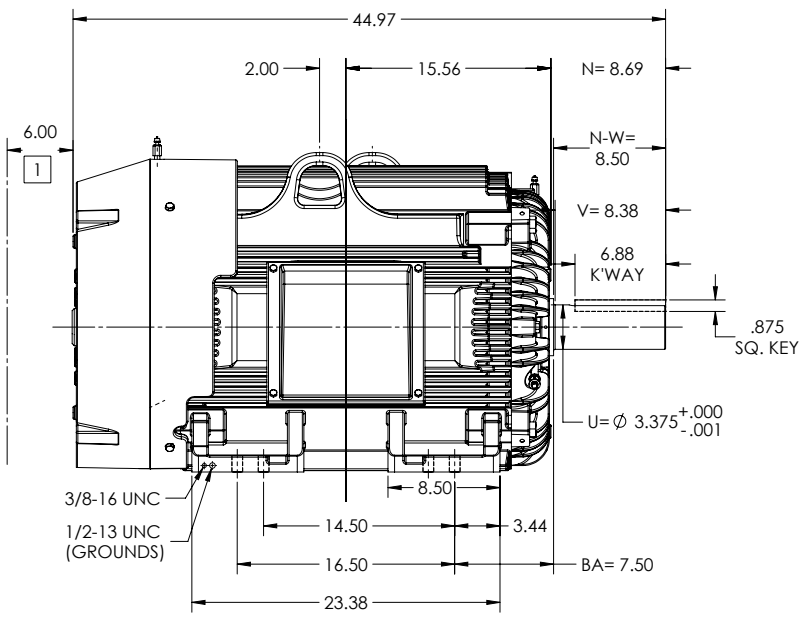
SQUIRREL-CAGE INDUCTION

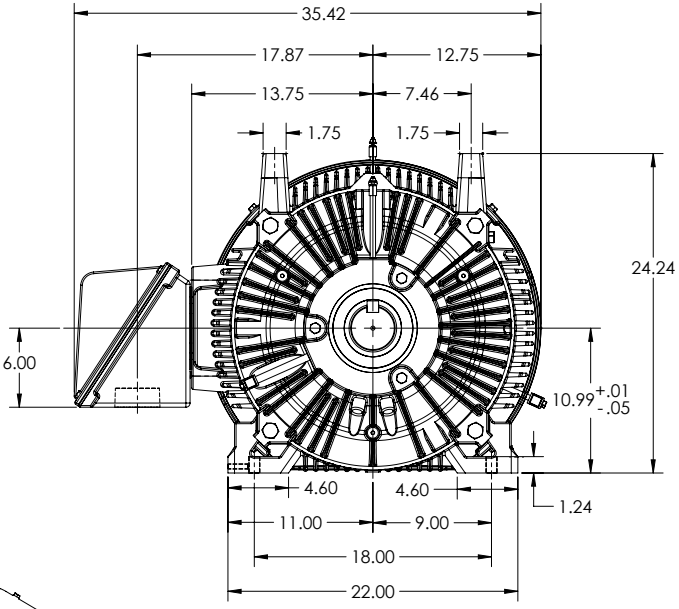
MOUNTING: FOOT, F-1 SIDE

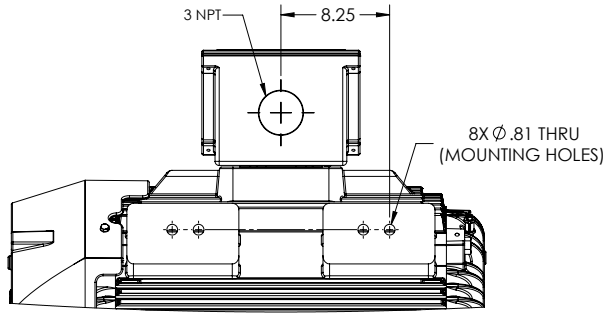
G445T/G444T FRAME MOUNTING HOLES

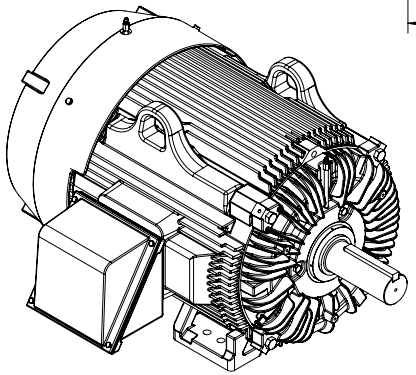
COOLING: FAN COOLED

ROLLER BEARING DESIGN



1 OBSTRUCTION MUST NOT ENCROACH ON AIR INLET.

IF MOUNTING CLEARANCE DETAILS ARE REQUIRED, CONSULT FACTORY.
MAX PERMISSIBLE SHAFT RUNOUT WHEN MEASURED AT END OF STANDARD SHAFT EXTENSION IS .003" T.I.R.

DIMENSIONS ARE IN INCHES.
MOTOR WEIGHTS (LBS) = 2130 ±15% DEPENDING ON RATING.
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT MOTOR PERFORMANCE IS SUITABLE IN THE APPLICATION.

SHEET NUMBER 1 OF 2

617439-171

| | | | |
|---|---|---|---|
| REV. DESC: NEW | | | |
| REV: - | VERSION: 00 | REVISED: 03:33:45 09/25/2023 | TDR: 000001213524 |
| MODEL NO. 617439-171 | | | REF: |
| BY: ENSTEK0 | Material: | C | |

BALDOR

G445/444T TEFC F1 FT/CAST IRON BOX/ROLLER BEARING/DIV 2 CL 2

617439-171

# DUTY MASTER ALTERNATING CURRENT MOTORS

617439-171

ENCLOSURE: TOTALLY ENCLOSED

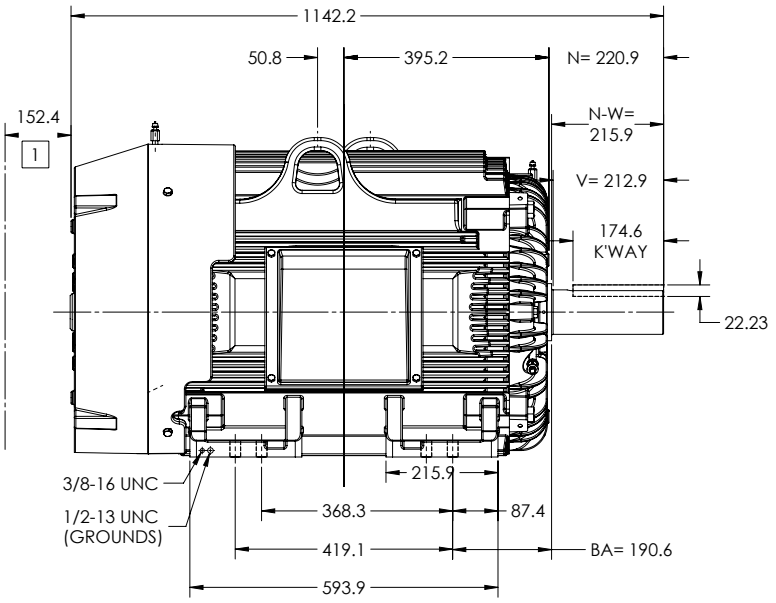
SQUIRREL-CAGE INDUCTION

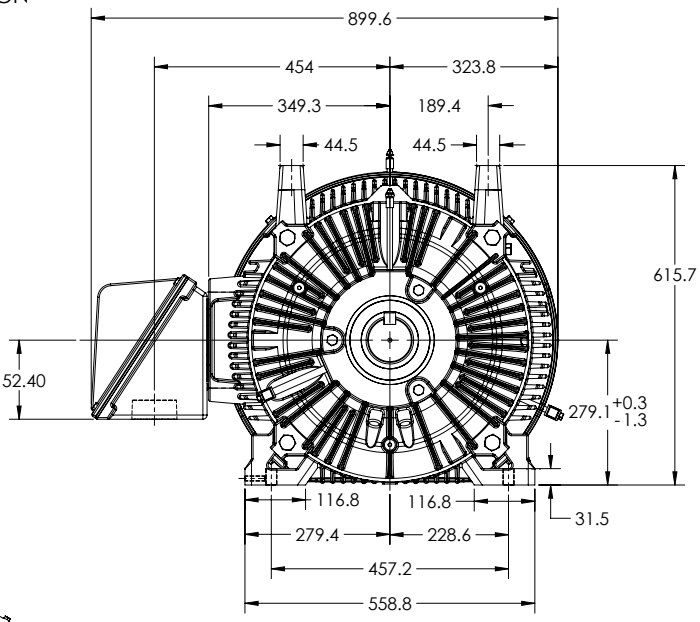
MOUNTING: FOOT, F-1 SIDE

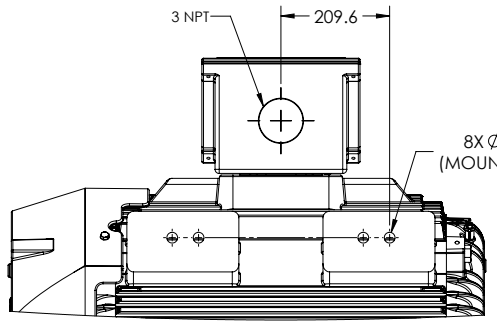
G445T/G444T FRAME MOUNTING HOLES

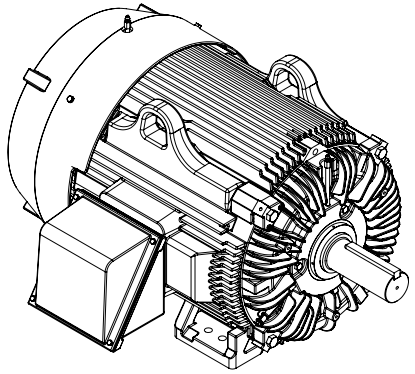
COOLING: FAN COOLED

ROLLER BEARING DESIGN



1 OBSTRUCTION MUST NOT ENCROACH ON AIR INLET.

IF MOUNTING CLEARANCE DETAILS ARE REQUIRED, CONSULT FACTORY.
MAX PERMISSIBLE SHAFT RUNOUT WHEN MEASURED AT END OF STANDARD SHAFT EXTENSION IS .08 T.I.R.

DIMENSIONS ARE IN MILLIMETERS.
MOTOR WEIGHT (KG) = 966 ±15% DEPENDING ON RATING.
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT MOTOR PERFORMANCE IS SUITABLE IN THE APPLICATION.

SHEET NUMBER 2 OF 2

617439-171

| | | | |
|---|---|---|---|
| REV. DESC: NEW | | | |
| REV: - | VERSION: 00 | REVISED: 03:33:45 09/25/2023 | TDR: 000001213524 |
| MODEL NO. 617439-171 | | | REF: |
| BY: ENSTEK0 | Material: | C | |

BALDOR

G445/444T TEFC F1 FT/CAST IRON BOX/ROLLER BEARING/DIV 2 CL 2

617439-171

# CONNECTION DIAGRAM

## ACCESSORIES

418174-006

MOTOR WINDING THERMOSTATS

CONTACTS _____ @ _____ °C

FIGURE NUMBER _____

| VOLTS | CONTACT RATING CONTINUOUS AMPERES | INRUSH AMPERES |
|---|---|---|
| 110-120 | 3.0 | 30 |
| 220-240 | 1.5 | 15 |
| 440-480 | 0.75 | 7.5 |
| 550-600 | 0.60 | 6.0 |

THERMOSTATS

| NORMALLY CLOSED | NORMALLY OPEN |
|---|---|
| FIGURE 1   | FIGURE 4   |
| FIGURE 2   | FIGURE 5   |
| FIGURE 3   | FIGURE 6   |
| FIGURE 7   | FIGURE 8   |

CUSTOMER _____ CUSTOMER ORDER NO. _____ S.O. NO. _____

| | | |
|---|---|---|
| REV. DESC: LOADED TO BUS | | |
| REV. LTR: A | VERSION: 01 | TDR: 000000570390 |
| FILE: \RAG\00013\849 | REVISED: 10:16:21 12/07/2010 | BY: RAGDRF |
| MTL: - | | |

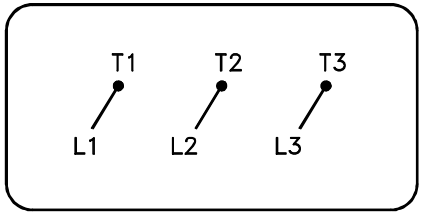
BALDOR

A-C MOTOR CONNECTION ACCESSORIES

SH 1 of 1

416820–036

# A–C MOTOR
# CONNECTION DIAGRAM
## STANDARD 3 LEAD CONNECTED




(N.P. 1575–BA)

416820–036

| | | | |
|---|---|---|---|
| REV. DESC: LOADED TO BUS, C/R 335225 | | | BALDOR |
| REV. LTR: – | VERSION: 00 | TDR: 000000538207 | |
| FILE: \MGA\00000\682 | | REVISED: 11:54:06 04/30/2010 | CONN DIAG – STANDARD 3 LEAD |
| MTL: – | | BY: RAGRA | SH 1 of 1 |