

# ABB BALDOR RELIANCE III

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## Customer information packet

### EM7086T

60//50HP, 1185//985RPM, 3PH, 60//50HZ, 404T

Class - CLI GP D; CLII GP F,G

Division - Division I

**Specifications**

|                                      |                                                                                        |
|--------------------------------------|----------------------------------------------------------------------------------------|
| <b>Enclosure</b>                     | TEFC                                                                                   |
| <b>Frame</b>                         | 404T                                                                                   |
| <b>Frame Material</b>                | Iron                                                                                   |
| <b>Frequency</b>                     | 50.00 Hz<br>60.00 Hz                                                                   |
| <b>Haz Area Class and Group</b>      | CLI GP D; CLII GP F,G                                                                  |
| <b>Haz Area Division</b>             | Division I                                                                             |
| <b>Motor Letter Type</b>             | Three Phase                                                                            |
| <b>Output @ Frequency</b>            | 60.000 HP @ 60 HZ<br>50.000 HP @ 50 HZ                                                 |
| <b>Phase</b>                         | 3                                                                                      |
| <b>Synchronous Speed @ Frequency</b> | 1000 RPM @ 50 HZ                                                                       |
| <b>Voltage @ Frequency</b>           | 190.0 V @ 50 HZ<br>230.0 V @ 60 HZ<br>380.0 V @ 50 HZ<br>460.0 V @ 60 HZ               |
| <b>Agency Approvals</b>              | CSA<br>CCSAUSEEV<br>UL                                                                 |
| <b>Ambient Temperature</b>           | 40 °C                                                                                  |
| <b>Auxiliary Box</b>                 | NO AUXILLARY BOX                                                                       |
| <b>Base Indicator</b>                | Rigid                                                                                  |
| <b>Bearing Grease Type</b>           | Polyrex EM (-20F +300F)                                                                |
| <b>Current @ Voltage</b>             | 135.000 A @ 230.0 V<br>136.000 A @ 190.0 V<br>67.300 A @ 460.0 V<br>68.200 A @ 380.0 V |
| <b>Design Code</b>                   | B                                                                                      |
| <b>Drip Cover</b>                    | No Drip Cover                                                                          |
| <b>Duty Rating</b>                   | CONT                                                                                   |
| <b>Efficiency @ 100% Load</b>        | 94.5 %                                                                                 |
| <b>Feedback Device</b>               | NO FEEDBACK                                                                            |

**Part Detail**

|                     |            |
|---------------------|------------|
| <b>Revision</b>     | C          |
| <b>Type</b>         | AC         |
| <b>Mech. spec.</b>  |            |
| <b>Base</b>         |            |
| <b>Status</b>       | PRD/A      |
| <b>Elec. spec.</b>  | A40WG0490  |
| <b>Layout</b>       | 617433-544 |
| <b>Eff. date</b>    | 02-05-2019 |
| <b>CD Diagram</b>   | 416820-002 |
| <b>Poles</b>        | 06         |
| <b>Leads</b>        | 3#4,6#6    |
| <b>Proprietary</b>  | False      |
| <b>Created date</b> | 03-14-2016 |

|                                      |                            |
|--------------------------------------|----------------------------|
| <b>Haz Area Temp Code</b>            | T4                         |
| <b>Heater Indicator</b>              | No Heater                  |
| <b>High Voltage Full Load Amps</b>   | 67.3 a                     |
| <b>Insulation Class</b>              | F                          |
| <b>Inverter Code</b>                 | Not Inverter               |
| <b>KVA Code</b>                      | G                          |
| <b>Lifting Lugs</b>                  | Standard Lifting Lugs      |
| <b>Motor Lead Quantity/Wire Size</b> | 3 @ 4 AWG                  |
| <b>Motor Standards</b>               | NEMA                       |
| <b>Motor Type</b>                    | A40072M                    |
| <b>Mounting Arrangement</b>          | F1                         |
| <b>Number of Poles</b>               | 6                          |
| <b>Overall Length</b>                | 38.22 IN                   |
| <b>Power Factor</b>                  | 88                         |
| <b>Product Family</b>                | General Industrial         |
| <b>Pulley End Bearing Type</b>       | Ball                       |
| <b>Pulley Face Code</b>              | Standard                   |
| <b>Service Factor</b>                | 1.00                       |
| <b>Shaft Diameter</b>                | 2.875 IN                   |
| <b>Shaft Ground Indicator</b>        | No Shaft Grounding         |
| <b>Shaft Rotation</b>                | Reversible                 |
| <b>Shaft Slinger Indicator</b>       | No Slinger                 |
| <b>Speed</b>                         | 1185 rpm<br>985 rpm        |
| <b>Speed Code</b>                    | Single Speed               |
| <b>Starting Method</b>               | Direct on line             |
| <b>Thermal Device - Bearing</b>      | None                       |
| <b>Thermal Device - Winding</b>      | Normally Closed Thermostat |

**Nameplate**

|                  |  |
|------------------|--|
| NP2496L          |  |
| MOBIL POLYREX EM |  |

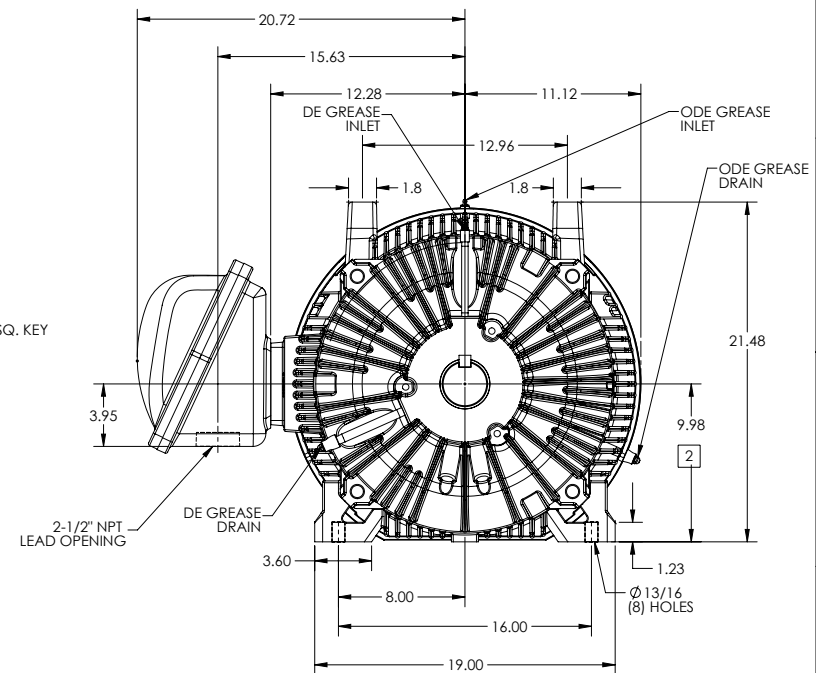
|                     |       |     |  |
|---------------------|-------|-----|--|
| 000613006PC         |       |     |  |
| CLASS I GROUP       | D X X | NO. |  |
| CLASS II GROUP      | F G X |     |  |
| OPERATING TEMP CODE | T4    |     |  |

**NP2549L**

|                   |                    |       |        |                     |      |             |          |      |       |      |
|-------------------|--------------------|-------|--------|---------------------|------|-------------|----------|------|-------|------|
| CAT.NO.           |                    |       |        | SPEC NO.            |      |             | P40G4870 |      | FRAME | 404T |
| HP                | 60//50             | PHASE | 3      | DESIGN              | B    | TYPE        | P        |      |       |      |
| RPM               | 1185//985          | HZ    | 60//50 | AMB                 | 40   | SF          | 1.00     |      |       |      |
| VOLTS             | 230/460//190/380   |       |        | DUTY                | CONT | INSUL.CLASS |          | F    |       |      |
| AMPS              | 135/67.3//136/68.2 |       |        | ENCL                | TEFC | CODE        | G        |      |       |      |
| DRIVE END BEARING | 80BC03J30X         |       |        | NEMA-NOM-EFFICIENCY |      |             |          | 94.5 |       |      |
| OPP D.E. BEARING  | 80BC03J30X         |       |        |                     |      |             |          |      |       |      |
| SER.NO.           |                    |       |        | MOTOR WEIGHT        |      |             | 1375     |      |       |      |

## SQUIRREL-CAGE INDUCTION

INCLUDES 404T FRAME MOUNTING HOLES



- 4 WEIGHT (LBS): 1400

CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT MOTOR PERFORMANCE IS SUITABLE IN THE APPLICATION.

# BALDOR

G405T/404T XP TEFC FOOT, 14CB1000A01 BOX

# DUTY MASTER ALTERNATING CURRENT MOTORS

## SQUIRREL-CAGE INDUCTION

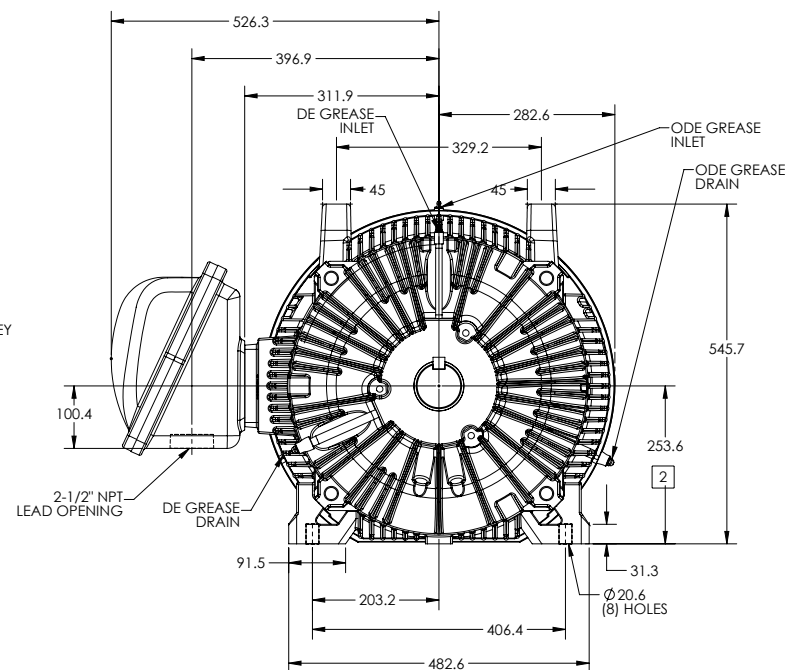
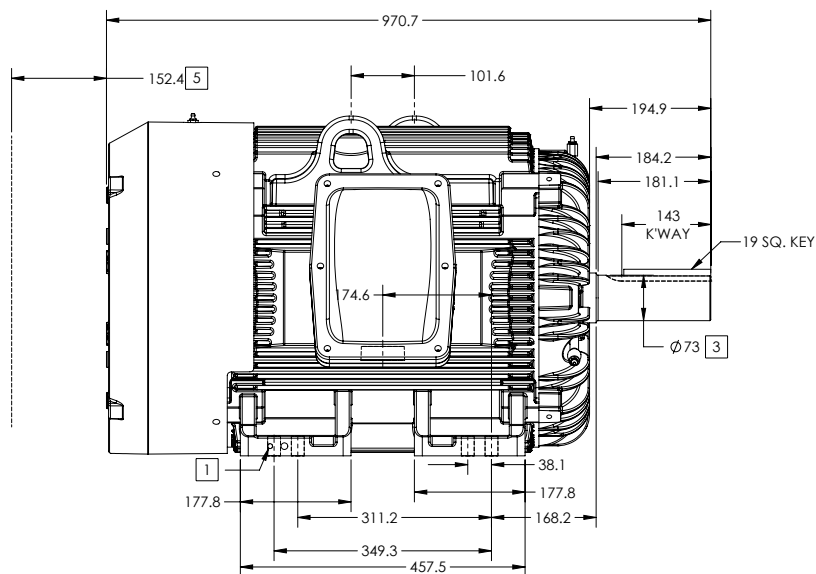
ENCLOSURE: X/P, UNDERWRITERS LISTED

FRAME G405T

COOLING: FAN COOLED

MOUNTING: FOOT

INCLUDES 404T FRAME MOUNTING HOLES



1. GROUND HOLES QTY 1 1/2-13 TAP; QTY 1 3/8-16 TAP
2. VARIES +.00,-1.5MM
3. VARIES +.00,-.025MM
4. MOTOR WEIGHTS MAY VARY BY 15% DEPENDING ON RATING.
5. OBSTRUCTION MUST NOT ENCROACH ON AIR INLET

6 MASS (KGS): 635

CONDUIT BOX LOCATED ON OPPOSITE SIDE WHEN F-2.  
IF MOUNTING CLEARANCE DETAILS ARE REQUIRED, CONSULT FACTORY.  
MAXIMUM PERMISSIBLE SHAFT RUNOUT WHEN MEASURED AT END OF  
STANDARD SHAFT EXTENSION IS .076MM T.I.R. TO 130MM DIA.

DIMENSIONS ARE IN MILLIMETERS; SEE SHEET 1 FOR DIMENSIONS IN INCHES

CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT MOTOR PERFORMANCE IS SUITABLE IN THE APPLICATION.

SHEET NUMBER  
2 OF 2

PPS-1137-119

| REV.                 | DESC        | CHG                          | 3" NPT TO 2-1/2" NPT ON SHEET 2 |
|----------------------|-------------|------------------------------|---------------------------------|
| REV: A               | VERSION: 01 | REVISED: 06/54/11 06/08/2017 | TDR: 000001031458               |
| MODEL NO. 617433-544 |             |                              | REF:                            |
| BY: RAGEC            | Material:   |                              |                                 |

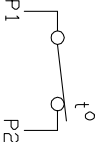
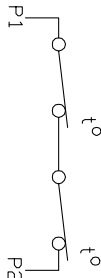
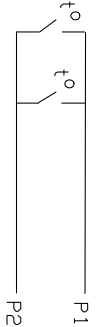
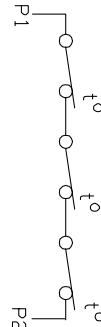
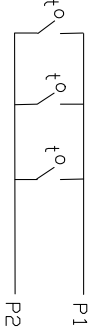
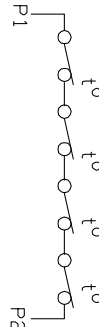
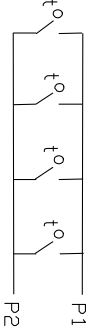
**BALDOR**

G405T-404T XP TEFC FOOT, 14CB1000A01 BOX

617433-544

CONNECTION DIAGRAM  
ACCESSORIES

| MOTOR WINDING THERMOSTATS |                       |                   |
|---------------------------|-----------------------|-------------------|
| CONTACTS                  | _____ @ _____ ° C     |                   |
| FIGURE NUMBER             | _____                 |                   |
| CONTACT RATING            |                       |                   |
| VOLTS                     | CONTINUOUS<br>AMPERES | INRUSH<br>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<br> | FIGURE 4<br> |
| FIGURE 2<br>  | FIGURE 5<br>  |
| FIGURE 3<br>  | FIGURE 6<br>  |
| FIGURE 7<br>  | FIGURE 8<br>  |

CUSTOMER \_\_\_\_\_ CUSTOMER ORDER NO. \_\_\_\_\_ S.O. NO. \_\_\_\_\_

418174-006

418174-006

|                          |                              |                   |
|--------------------------|------------------------------|-------------------|
| 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: -                   |                              |                   |

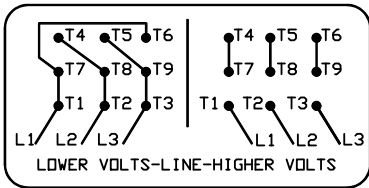
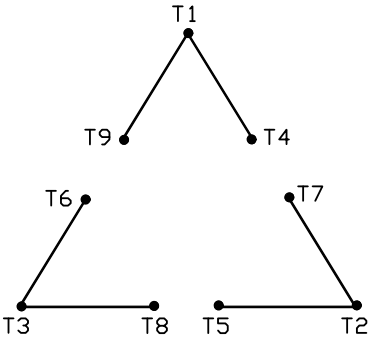
**BALDOR**

A-C MOTOR CONNECTION ACCESSORIES

SH 1 of 1

416820-002

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



( N. P. 1575-B )

416820-002

|                                 |                              |                   |
|---------------------------------|------------------------------|-------------------|
| 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: -                          |                              |                   |



CONN DIAG - STANDARD 9 LEAD, DELTA-CONNECTED

SH1 of 1