

# ABB BALDOR RELIANCE III

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## Customer information packet

### SPM4408T-4

250HP, 1790RPM, 3PH, 60HZ, L449T, A44176M, TEF

Class - CLI GP A,B,C,D; CLII GP F,G

Division - Division II

**Specifications**

|                                      |                                                       |
|--------------------------------------|-------------------------------------------------------|
| <b>Enclosure</b>                     | TEFC                                                  |
| <b>Frame</b>                         | L449T                                                 |
| <b>Frame Material</b>                | Iron                                                  |
| <b>Frequency</b>                     | 60.00 Hz                                              |
| <b>Haz Area Class and Group</b>      | CLI GP A,B,C,D; CLII GP F,G                           |
| <b>Haz Area Division</b>             | Division II                                           |
| <b>Motor Letter Type</b>             | Three Phase                                           |
| <b>Output @ Frequency</b>            | 250.000 HP @ 60 HZ                                    |
| <b>Phase</b>                         | 3                                                     |
| <b>Synchronous Speed @ Frequency</b> | 1800 RPM @ 60 HZ                                      |
| <b>Voltage @ Frequency</b>           | 460.0 V @ 60 HZ                                       |
| <b>Agency Approvals</b>              | NEMA PREMIUM<br>CCSAUSEEV<br>CURUSEEV<br>NEMA_PREMIUM |
| <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>             | 280.000 A @ 460.0 V                                   |
| <b>Design Code</b>                   | A                                                     |
| <b>Duty Rating</b>                   | CONT                                                  |
| <b>Efficiency @ 100% Load</b>        | 96.5 %                                                |
| <b>Feedback Device</b>               | NO FEEDBACK                                           |
| <b>Frame Prefix</b>                  | L                                                     |
| <b>Heater Indicator</b>              | No Heater                                             |
| <b>High Voltage Full Load Amps</b>   | 280.0 a                                               |
| <b>Insulation Class</b>              | H                                                     |
| <b>Inverter Code</b>                 | Inverter Duty                                         |
| <b>KVA Code</b>                      | J                                                     |
| <b>Lifting Lugs</b>                  | Standard Lifting Lugs                                 |
| <b>Max Speed</b>                     | 2700 rpm                                              |

**Part Detail**

|                     |                      |
|---------------------|----------------------|
| <b>Revision</b>     | E                    |
| <b>Type</b>         | AC                   |
| <b>Mech. spec.</b>  |                      |
| <b>Base</b>         |                      |
| <b>Status</b>       | PRD/A                |
| <b>Elec. spec.</b>  | A44WG6739            |
| <b>Layout</b>       | 617439-179           |
| <b>Eff. date</b>    | 09-24-2026           |
| <b>CD Diagram</b>   | 416820-036           |
| <b>Poles</b>        | 04                   |
| <b>Leads</b>        | 3#1 (02 per group) Y |
| <b>Proprietary</b>  | False                |
| <b>Created date</b> | 09-26-2023           |

|                                      |                    |
|--------------------------------------|--------------------|
| <b>Motor Lead Quantity/Wire Size</b> | 6 @ 1 AWG          |
| <b>Motor Standards</b>               | NEMA               |
| <b>Motor Type</b>                    | A44176M            |
| <b>Mounting Arrangement</b>          | F1                 |
| <b>Number of Poles</b>               | 4                  |
| <b>Overall Length</b>                | 60.35 IN           |
| <b>Power Factor</b>                  | 86                 |
| <b>Product Family</b>                | General Industrial |
| <b>Pulley End Bearing Type</b>       | Ball               |
| <b>Pulley Face Code</b>              | Standard           |
| <b>Service Factor</b>                | 1.15               |
| <b>Shaft Diameter</b>                | 3.375 IN           |
| <b>Shaft Ground Indicator</b>        | No Shaft Grounding |
| <b>Shaft Rotation</b>                | Reversible         |
| <b>Shaft Slinger Indicator</b>       | Shaft Slinger      |
| <b>Speed</b>                         | 1790 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>      | None               |

**Nameplate**

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

**NP4562L**

|                         |                    |                                |               |                                |              |                               |                |              |                            |
|-------------------------|--------------------|--------------------------------|---------------|--------------------------------|--------------|-------------------------------|----------------|--------------|----------------------------|
| <b>CAT NO</b>           | SPM4408T-4         | <b>SPEC NO.</b>                | A44-5000-6739 | <b>I.P.</b>                    | 55           |                               |                |              |                            |
| <b>HP</b>               | 250                | <b>AMPS</b>                    | 280           | <b>VOLTS</b>                   | 460          | <b>DESIGN</b>                 | A              |              |                            |
| <b>FRAME SIZE</b>       | L449T              | <b>RPM</b>                     | 1790          | <b>MAX RPM</b>                 | 2700         | <b>HZ</b>                     | 60             | <b>AMB</b>   | 40 C                       |
| <b>D.E. BRG.</b>        | 90BC03J30X         | <b>PH.3</b>                    | 3             | <b>DUTY</b>                    | CONT         | <b>INSUL.CLASS</b>            | H              |              |                            |
| <b>O.D.E. BRG.</b>      | 90BC03J30X         | <b>TYPE P</b>                  | P             | <b>ENCL</b>                    | TEFC         | <b>SF</b>                     | 1.15           | <b>CODE</b>  | J                          |
| <b>POWER FACTOR</b>     | 86                 | <b>MAX CORR KVAR</b>           | 50.8          | <b>NEMA NOM EFFICIENCY</b>     | 96.5         | <b>MOTOR WEIGHT</b>           |                | <b>LBS</b>   |                            |
| <b>CL.I,DIV 2,GRP:</b>  | A,B,C,D            | <b>T.CODE</b>                  | T3            | <b>CL.1,ZONE 2,GRP:</b>        |              | <b>IIA,IIB,IIC</b>            | T= 200         | <b>C</b>     | <b>INVERTER T.CODE</b> T3  |
| <b>CL.II,DIV 2,GRP:</b> | F,G                | <b>T.CODE</b>                  | T3C           | <b>CL II ZONE 22 GRPS IIIB</b> |              | <b>T=</b>                     | 160            | <b>C</b>     | <b>INVERTER T.CODE</b> T3C |
| <b>ID LOGO</b>          | <b>INV TYPE:</b>   | <b>VPWM</b>                    | <b>CT</b> 30  | <b>TO</b> 60                   | <b>VT</b> 3  | <b>TO</b> 60                  | <b>CHP</b> 60  | <b>TO</b> 90 |                            |
| <b>ID LOGO</b>          | <b>1.0 SF VPWM</b> | <b>WK2</b>                     | 116           | <b>LBFT2</b>                   | <b>SL HZ</b> | 0.3                           | <b>MAG CUR</b> | 99           |                            |
| <b>SER.NO.</b>          |                    | <b>MEETS INTENT OF IEEE-45</b> |               |                                |              | <b>FOR WEATHER PROTECTION</b> |                |              |                            |

|                                                                                                                                    |  |  |  |  |  |  |                             |  |  |  |  |  |  |                                                                                                                       |  |  |  |  |  |  |                       |  |  |  |  |  |  |                                 |  |  |  |  |  |  |                                            |  |  |  |  |  |  |                |  |  |  |  |  |  |           |  |  |  |  |  |  |
|------------------------------------------------------------------------------------------------------------------------------------|--|--|--|--|--|--|-----------------------------|--|--|--|--|--|--|-----------------------------------------------------------------------------------------------------------------------|--|--|--|--|--|--|-----------------------|--|--|--|--|--|--|---------------------------------|--|--|--|--|--|--|--------------------------------------------|--|--|--|--|--|--|----------------|--|--|--|--|--|--|-----------|--|--|--|--|--|--|
| ABB BALDOR<br>RELIANCE III<br>S/O                                                                                                  |  |  |  |  |  |  | CUSTOMER INFORMATION PACKET |  |  |  |  |  |  | SPM4408T-4 - 250HP, 1790RPM, 3PH, 60HZ, L449T, A44176M, TEF                                                           |  |  |  |  |  |  |                       |  |  |  |  |  |  |                                 |  |  |  |  |  |  |                                            |  |  |  |  |  |  |                |  |  |  |  |  |  |           |  |  |  |  |  |  |
|                                                                                                                                    |  |  |  |  |  |  | FRAME                       |  |  |  |  |  |  | HP                                                                                                                    |  |  |  |  |  |  | TYPE                  |  |  |  |  |  |  | PHASE/<br>HERTZ                 |  |  |  |  |  |  | RPM                                        |  |  |  |  |  |  | VOLTS          |  |  |  |  |  |  |           |  |  |  |  |  |  |
|                                                                                                                                    |  |  |  |  |  |  | 449T                        |  |  |  |  |  |  | 250                                                                                                                   |  |  |  |  |  |  | P                     |  |  |  |  |  |  | 3/60                            |  |  |  |  |  |  | 1790                                       |  |  |  |  |  |  | 460            |  |  |  |  |  |  |           |  |  |  |  |  |  |
|                                                                                                                                    |  |  |  |  |  |  | AMPS                        |  |  |  |  |  |  | DUTY                                                                                                                  |  |  |  |  |  |  | AMB °C/<br>INSUL      |  |  |  |  |  |  | S.F.                            |  |  |  |  |  |  | NEMA<br>DESIGN                             |  |  |  |  |  |  | CODE<br>LETTER |  |  |  |  |  |  | ENCLOSURE |  |  |  |  |  |  |
|                                                                                                                                    |  |  |  |  |  |  | 280                         |  |  |  |  |  |  | CONT                                                                                                                  |  |  |  |  |  |  | 40/H                  |  |  |  |  |  |  | 1.00                            |  |  |  |  |  |  | A                                          |  |  |  |  |  |  | J              |  |  |  |  |  |  | TEFC      |  |  |  |  |  |  |
|                                                                                                                                    |  |  |  |  |  |  | E/S                         |  |  |  |  |  |  | ROTOR                                                                                                                 |  |  |  |  |  |  | TEST<br>S.O.          |  |  |  |  |  |  | TEST<br>DATE                    |  |  |  |  |  |  | STATOR RES. @25 °C<br>OHMS (BETWEEN LINES) |  |  |  |  |  |  |                |  |  |  |  |  |  |           |  |  |  |  |  |  |
|                                                                                                                                    |  |  |  |  |  |  | ---                         |  |  |  |  |  |  | A44RC40176A00                                                                                                         |  |  |  |  |  |  | ---                   |  |  |  |  |  |  | ---                             |  |  |  |  |  |  | .00944                                     |  |  |  |  |  |  |                |  |  |  |  |  |  |           |  |  |  |  |  |  |
| PERFORMANCE                                                                                                                        |  |  |  |  |  |  |                             |  |  |  |  |  |  |                                                                                                                       |  |  |  |  |  |  |                       |  |  |  |  |  |  |                                 |  |  |  |  |  |  |                                            |  |  |  |  |  |  |                |  |  |  |  |  |  |           |  |  |  |  |  |  |
| LOAD                                                                                                                               |  |  |  |  |  |  | HP                          |  |  |  |  |  |  | AMPERES                                                                                                               |  |  |  |  |  |  | RPM                   |  |  |  |  |  |  | % POWER FACTOR                  |  |  |  |  |  |  | % EFFICIENCY                               |  |  |  |  |  |  |                |  |  |  |  |  |  |           |  |  |  |  |  |  |
| NO LOAD                                                                                                                            |  |  |  |  |  |  | 0                           |  |  |  |  |  |  | 92.7                                                                                                                  |  |  |  |  |  |  | 1800                  |  |  |  |  |  |  | 3.25                            |  |  |  |  |  |  | 0                                          |  |  |  |  |  |  |                |  |  |  |  |  |  |           |  |  |  |  |  |  |
| 1/4                                                                                                                                |  |  |  |  |  |  | 62.5                        |  |  |  |  |  |  | 115                                                                                                                   |  |  |  |  |  |  | 1797                  |  |  |  |  |  |  | 53.9                            |  |  |  |  |  |  | 94.6                                       |  |  |  |  |  |  |                |  |  |  |  |  |  |           |  |  |  |  |  |  |
| 2/4                                                                                                                                |  |  |  |  |  |  | 125                         |  |  |  |  |  |  | 160                                                                                                                   |  |  |  |  |  |  | 1795                  |  |  |  |  |  |  | 75.8                            |  |  |  |  |  |  | 96.5                                       |  |  |  |  |  |  |                |  |  |  |  |  |  |           |  |  |  |  |  |  |
| 3/4                                                                                                                                |  |  |  |  |  |  | 187                         |  |  |  |  |  |  | 217                                                                                                                   |  |  |  |  |  |  | 1792                  |  |  |  |  |  |  | 83.6                            |  |  |  |  |  |  | 96.7                                       |  |  |  |  |  |  |                |  |  |  |  |  |  |           |  |  |  |  |  |  |
| 4/4                                                                                                                                |  |  |  |  |  |  | 250                         |  |  |  |  |  |  | 280                                                                                                                   |  |  |  |  |  |  | 1789                  |  |  |  |  |  |  | 86.6                            |  |  |  |  |  |  | 96.6                                       |  |  |  |  |  |  |                |  |  |  |  |  |  |           |  |  |  |  |  |  |
| 5/4                                                                                                                                |  |  |  |  |  |  | 312                         |  |  |  |  |  |  | 345                                                                                                                   |  |  |  |  |  |  | 1787                  |  |  |  |  |  |  | 88.0                            |  |  |  |  |  |  | 96.3                                       |  |  |  |  |  |  |                |  |  |  |  |  |  |           |  |  |  |  |  |  |
|                                                                                                                                    |  |  |  |  |  |  |                             |  |  |  |  |  |  |                                                                                                                       |  |  |  |  |  |  |                       |  |  |  |  |  |  |                                 |  |  |  |  |  |  |                                            |  |  |  |  |  |  |                |  |  |  |  |  |  |           |  |  |  |  |  |  |
| SPEED TORQUE                                                                                                                       |  |  |  |  |  |  |                             |  |  |  |  |  |  |                                                                                                                       |  |  |  |  |  |  |                       |  |  |  |  |  |  |                                 |  |  |  |  |  |  |                                            |  |  |  |  |  |  |                |  |  |  |  |  |  |           |  |  |  |  |  |  |
|                                                                                                                                    |  |  |  |  |  |  |                             |  |  |  |  |  |  | RPM                                                                                                                   |  |  |  |  |  |  | TORQUE<br>% FULL LOAD |  |  |  |  |  |  | TORQUE LB.-FT.                  |  |  |  |  |  |  | AMPERES                                    |  |  |  |  |  |  |                |  |  |  |  |  |  |           |  |  |  |  |  |  |
| LOCKED ROTOR                                                                                                                       |  |  |  |  |  |  |                             |  |  |  |  |  |  | 0                                                                                                                     |  |  |  |  |  |  | 382                   |  |  |  |  |  |  | 2802                            |  |  |  |  |  |  | 2583                                       |  |  |  |  |  |  |                |  |  |  |  |  |  |           |  |  |  |  |  |  |
| PULL UP                                                                                                                            |  |  |  |  |  |  |                             |  |  |  |  |  |  | 1570                                                                                                                  |  |  |  |  |  |  | 237                   |  |  |  |  |  |  | 1739                            |  |  |  |  |  |  | 1541                                       |  |  |  |  |  |  |                |  |  |  |  |  |  |           |  |  |  |  |  |  |
| BREAKDOWN                                                                                                                          |  |  |  |  |  |  |                             |  |  |  |  |  |  | 1730                                                                                                                  |  |  |  |  |  |  | 287                   |  |  |  |  |  |  | 2110                            |  |  |  |  |  |  | 1121                                       |  |  |  |  |  |  |                |  |  |  |  |  |  |           |  |  |  |  |  |  |
| FULL LOAD                                                                                                                          |  |  |  |  |  |  |                             |  |  |  |  |  |  | 1789                                                                                                                  |  |  |  |  |  |  | 100                   |  |  |  |  |  |  | 734                             |  |  |  |  |  |  | 280                                        |  |  |  |  |  |  |                |  |  |  |  |  |  |           |  |  |  |  |  |  |
| AMPERES SHOWN FOR 460 VOLT CONNECTION. IF OTHER CONNECTIONS ARE AVAILABLE, THE AMPERES WILL VARY INVERSELY WITH THE RATED VOLTAGE. |  |  |  |  |  |  |                             |  |  |  |  |  |  |                                                                                                                       |  |  |  |  |  |  |                       |  |  |  |  |  |  |                                 |  |  |  |  |  |  |                                            |  |  |  |  |  |  |                |  |  |  |  |  |  |           |  |  |  |  |  |  |
| TYPICAL DATA<br>XE MOTOR; NEMA NOM. EFF. 96.5 PCT.                                                                                 |  |  |  |  |  |  |                             |  |  |  |  |  |  |                                                                                                                       |  |  |  |  |  |  |                       |  |  |  |  |  |  |                                 |  |  |  |  |  |  |                                            |  |  |  |  |  |  |                |  |  |  |  |  |  |           |  |  |  |  |  |  |
|                                                 |  |  |  |  |  |  |                             |  |  |  |  |  |  | DRAWN BY: <u>J. P. TSAO</u><br>CHECKED BY: <u>W.L.SMITH</u><br>APPROVED BY: <u>W.L.SMITH</u><br>DATE: <u>08/21/25</u> |  |  |  |  |  |  |                       |  |  |  |  |  |  | AC MOTOR<br>PERFORMANCE<br>DATA |  |  |  |  |  |  | A44WG6739-R002<br><br>DATE ISSUED 08/21/25 |  |  |  |  |  |  |                |  |  |  |  |  |  |           |  |  |  |  |  |  |

FRAME 449T

RPM 1790

S.F. 1.00

ROTOR A44RC40176A00

HP 250

VOLTS 460

NEMA DESIGN A

TEST S.O. TYPICAL DATA

TYPE P

AMPS 280

CODE LETTER J

TEST DATE ---

PHASE / HERTZ 3/60

DUTY CONT

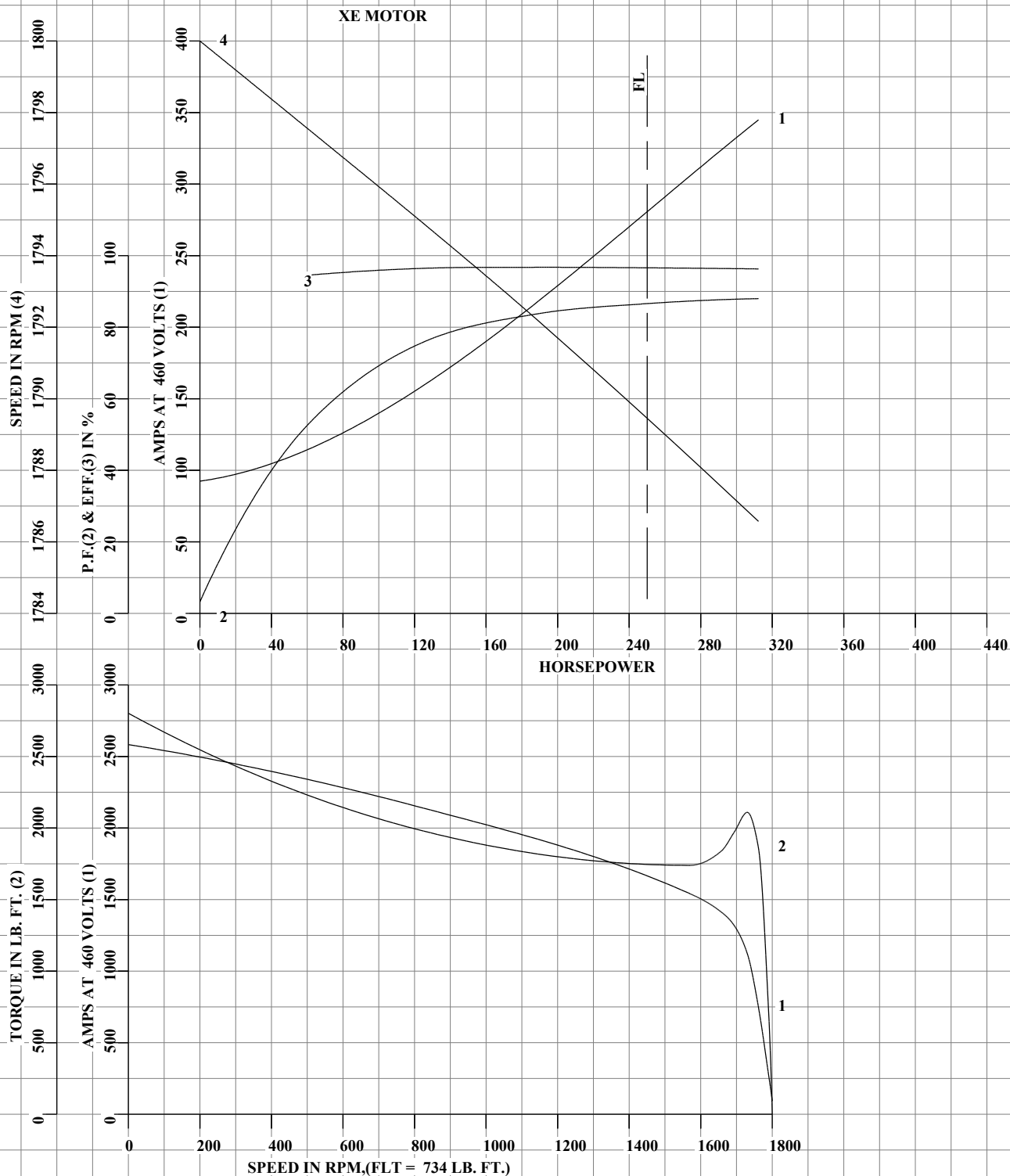
ENCLOSURE TEFC

STATOR RES. @ 25°C .00944

AMB °C / INSUL 40/H

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.

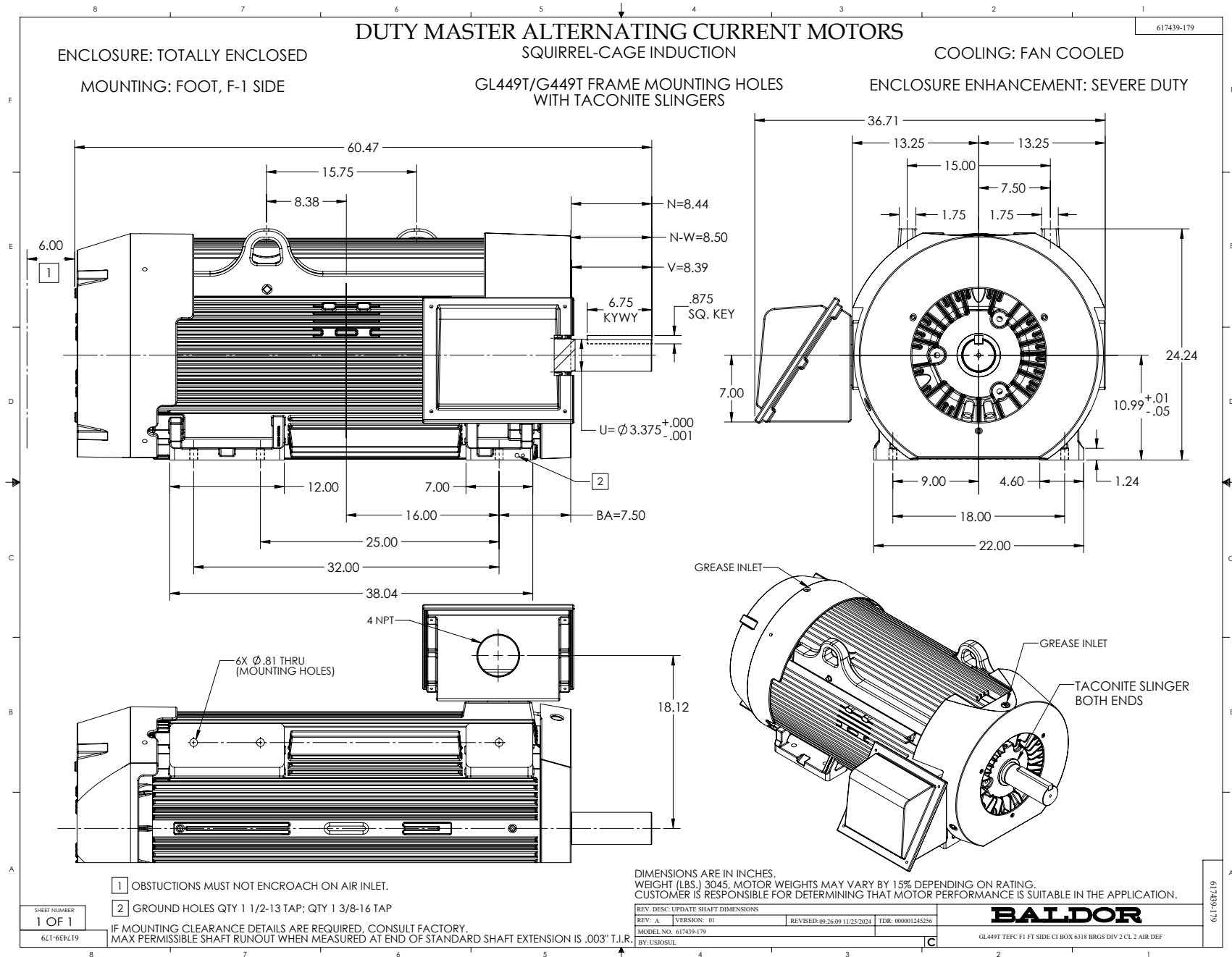


DRAWN BY: J. P. TSAO  
CHECKED BY: W. L. SMITH  
APPROVED BY: W. L. SMITH  
DATE: 08/21/25

AC MOTOR  
PERFORMANCE  
DATA

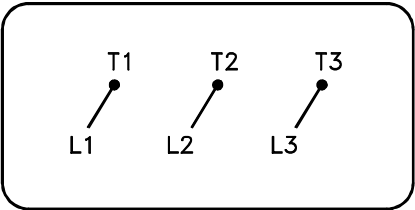
**A44WG6739-R002**

ISSUE DATE 08/21/25



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 |             |                                |
| REV. LTR: -                          | VERSION: 00 | TDR: 000000538207              |
| FILE: \MGA\00000\682                 |             | REVISED: 11: 54: 06 04/30/2010 |
| MTL: -                               |             | BY: RAGRA                      |

**BALDOR**

CONN DIAG - STANDARD 3 LEAD  
SH 1 of 1