

# ABB BALDOR RELIANCE III

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## Customer information packet

### EWDM4338T

30HP, 890RPM, 3PH, 60HZ, 364T, A36050M, TEFC, F

Class - None

Division - Not Applicable

**Specifications**

|                               |                                          |
|-------------------------------|------------------------------------------|
| Enclosure                     | TEFC                                     |
| Frame                         | 364T                                     |
| 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            | 30.000 HP @ 60 HZ                        |
| Phase                         | 3                                        |
| Synchronous Speed @ Frequency | 900 RPM @ 60 HZ                          |
| Voltage @ Frequency           | 230.0 V @ 60 HZ<br>460.0 V @ 60 HZ       |
| Agency Approvals              | CSA EEV<br>CCSA US                       |
| Ambient Temperature           | 40 °C                                    |
| Auxiliary Box                 | NO AUXILLARY BOX                         |
| Base Indicator                | Rigid                                    |
| Bearing Grease Type           | Polyrex EM (-20F +300F)                  |
| Current @ Voltage             | 80.000 A @ 230.0 V<br>40.000 A @ 460.0 V |
| Design Code                   | B                                        |
| Drip Cover                    | No Drip Cover                            |
| Duty Rating                   | CONT                                     |
| Efficiency @ 100% Load        | 91.7 %                                   |
| Enclosure Modification        | Severe Duty Features                     |
| Feedback Device               | NO FEEDBACK                              |
| Heater Indicator              | No Heater                                |
| High Voltage Full Load Amps   | 40.0 a                                   |
| Insulation Class              | F                                        |
| Inverter Code                 | Inverter Ready                           |
| IP Rating                     | IP55                                     |
| KVA Code                      | G                                        |

**Part Detail**

|              |            |
|--------------|------------|
| Revision     | A          |
| Type         | AC         |
| Mech. spec.  |            |
| Base         |            |
| Status       | PRD/A      |
| Elec. spec.  | A36WG0999  |
| Layout       | 617428-593 |
| Eff. date    | 12-09-2021 |
| CD Diagram   | 416820-002 |
| Poles        | 08         |
| Leads        | 3#6,6#8    |
| Proprietary  | False      |
| Created date | 08-20-2019 |

|                                      |                              |
|--------------------------------------|------------------------------|
| <b>Lifting Lugs</b>                  | <b>Standard Lifting Lugs</b> |
| <b>Motor Lead Quantity/Wire Size</b> | <b>3 @ 6 AWG</b>             |
| <b>Motor Standards</b>               | <b>NEMA</b>                  |
| <b>Motor Type</b>                    | <b>A36050M</b>               |
| <b>Mounting Arrangement</b>          | <b>F1</b>                    |
| <b>Number of Poles</b>               | <b>8</b>                     |
| <b>Overall Length</b>                | <b>33.48 IN</b>              |
| <b>Power Factor</b>                  | <b>77</b>                    |
| <b>Product Family</b>                | <b>Washdown Features</b>     |
| <b>Pulley End Bearing Type</b>       | <b>Ball</b>                  |
| <b>Pulley Face Code</b>              | <b>Standard</b>              |
| <b>Service Factor</b>                | <b>1.15</b>                  |
| <b>Shaft Diameter</b>                | <b>2.374 IN</b>              |
| <b>Shaft Ground Indicator</b>        | <b>No Shaft Grounding</b>    |
| <b>Shaft Rotation</b>                | <b>Reversible</b>            |
| <b>Shaft Slinger Indicator</b>       | <b>Shaft Slinger</b>         |
| <b>Speed</b>                         | <b>890 rpm</b>               |
| <b>Speed Code</b>                    | <b>Single Speed</b>          |
| <b>Starting Method</b>               | <b>Direct on line</b>        |
| <b>Thermal Device - Bearing</b>      | <b>None</b>                  |
| <b>Thermal Device - Winding</b>      | <b>None</b>                  |

**Nameplate**

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

**NP2428L**

|                                |               |       |         |              |             |                         |                     |    |                       |      |      |
|--------------------------------|---------------|-------|---------|--------------|-------------|-------------------------|---------------------|----|-----------------------|------|------|
| SPEC NO.                       | A36-7347-0999 |       |         | CAT.NO.      | EWDM4338T   |                         |                     |    | FRAME                 | 364T |      |
| HP                             | 30            | VOLTS | 230/460 |              | PHASE       | 3                       | DESIGN              | B  | TYPE                  | P    |      |
| RPM                            | 890           | AMPS  | 80/40   |              | HZ          | 60                      | AMB                 | 40 | SF                    | 1.15 |      |
| DRIVE END BEARING              | 65BC03JGG30A  |       | DUTY    | CONT         | INSUL.CLASS |                         | F                   |    |                       |      |      |
| OPP D.E. BEARING               | 65BC03JGG30A  |       | ENCL    | TEFC         | CODE        | G                       |                     |    |                       |      |      |
| SER.NO.                        |               |       |         | POWER FACTOR |             | 77                      | NEMA-NOM-EFFICIENCY |    |                       | 91.7 |      |
|                                |               |       |         |              |             | MAX CORR KVAR           |                     | 9  | GUARANTEED EFFICIENCY |      | 90.2 |
| IP55                           |               |       |         |              |             | NEMA NOM/CSA QUOTED EFF |                     |    |                       |      |      |
| 10:1CT AND 10:1VT ON VPWM INVE |               |       |         |              |             | RTER, 1.00SF            |                     |    | MOTOR WEIGHT          |      |      |

|                                                                                                                                                                                                         |             |                   |                       |                                            |                 |         |  |  |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|-------------------|-----------------------|--------------------------------------------|-----------------|---------|--|--|
| REL.<br>S.O.                                                                                                                                                                                            | FRAME       | HP                | TYPE                  | PHASE/<br>HERTZ                            | RPM             | VOLTS   |  |  |
|                                                                                                                                                                                                         | 364T        | 30                | P                     | 3/60                                       | 890             | 230/460 |  |  |
| AMPS                                                                                                                                                                                                    | DUTY        | AMB °C/<br>INSUL. | S.F.                  | NEMA<br>DESIGN                             | CODE<br>LETTER  | ENCL.   |  |  |
| 80/40                                                                                                                                                                                                   | CONT        | 40/F              | 1.15                  | B                                          | G               | TEFC    |  |  |
| E/S                                                                                                                                                                                                     | ROTOR       | TEST<br>S.O.      | TEST<br>DATE          | STATOR RES. @25 °C<br>OHMS (BETWEEN LINES) |                 |         |  |  |
| -                                                                                                                                                                                                       | 418141073AE | ---               | ---                   | .0676/.270                                 |                 |         |  |  |
| PERFORMANCE                                                                                                                                                                                             |             |                   |                       |                                            |                 |         |  |  |
| LOAD                                                                                                                                                                                                    | HP          | AMPERES           | RPM                   | %<br>POWER FACTOR                          | %<br>EFFICIENCY |         |  |  |
| NO LOAD                                                                                                                                                                                                 | 0           | 16.5              | 900                   | 7.17                                       | 0               |         |  |  |
| 1/4                                                                                                                                                                                                     | 7.52        | 19.5              | 897                   | 42.6                                       | 84.8            |         |  |  |
| 2/4                                                                                                                                                                                                     | 15.0        | 24.7              | 894                   | 62.9                                       | 90.4            |         |  |  |
| 3/4                                                                                                                                                                                                     | 22.5        | 32.0              | 891                   | 71.9                                       | 91.7            |         |  |  |
| 4/4                                                                                                                                                                                                     | 30.0        | 40.0              | 888                   | 76.5                                       | 91.7            |         |  |  |
| 5/4                                                                                                                                                                                                     | 37.5        | 48.8              | 884                   | 78.9                                       | 91.2            |         |  |  |
|                                                                                                                                                                                                         |             |                   |                       |                                            |                 |         |  |  |
| SPEED TORQUE                                                                                                                                                                                            |             |                   |                       |                                            |                 |         |  |  |
|                                                                                                                                                                                                         |             | RPM               | TORQUE<br>% FULL LOAD | TORQUE<br>LB.-FT.                          | AMPERES         |         |  |  |
| LOCKED ROTOR                                                                                                                                                                                            |             | 0                 | 136                   | 242                                        | 212             |         |  |  |
| PULL UP                                                                                                                                                                                                 |             | 213               | 128                   | 227                                        | 200             |         |  |  |
| BREAKDOWN                                                                                                                                                                                               |             | 841               | 228                   | 405                                        | 118             |         |  |  |
| FULL LOAD                                                                                                                                                                                               |             | 888               | 100                   | 177                                        | 40.0            |         |  |  |
| AMPERES SHOWN FOR 460. VOLT CONNECTION. IF OTHER VOLTAGE CONNECTIONS ARE AVAILABLE, THE<br>AMPERES WILL VARY INVERSELY WITH THE RATED VOLTAGE<br><br>REMARKS: TYPICAL DATA<br>NEMA NOM. EFF. = 91.7 PCT |             |                   |                       |                                            |                 |         |  |  |
|                                                                                                                      |             | DR. BY            | W. L. SMITH           | <b>A-C MOTOR<br/>PERFORMANCE DATA</b>      |                 |         |  |  |
|                                                                                                                                                                                                         |             | CK. BY            | C. E. JAMISON         |                                            |                 |         |  |  |
|                                                                                                                                                                                                         |             | APP. BY           | W. L. SMITH           |                                            |                 |         |  |  |
|                                                                                                                                                                                                         |             | DATE              | 08/16/19              |                                            |                 |         |  |  |
|                                                                                                                                                                                                         |             |                   |                       | A36WG0999-R007<br>ISSUE DATE 02/20/20      |                 |         |  |  |

REL S.O.

 RPM **890**

 S.F. **1.15**

 ROTOR **418141073AE**

 FRAME **364T**

 VOLTS **230/460**

 NEMA DESIGN **B**

 TEST S.O. **TYPICAL DATA**

 HP **30**

 AMPS **80/40**

 CODE LETTER **G**

 TEST DATE **---**

 TYPE **P**

 DUTY **CONT**

 ENCLOSURE **TEFC**

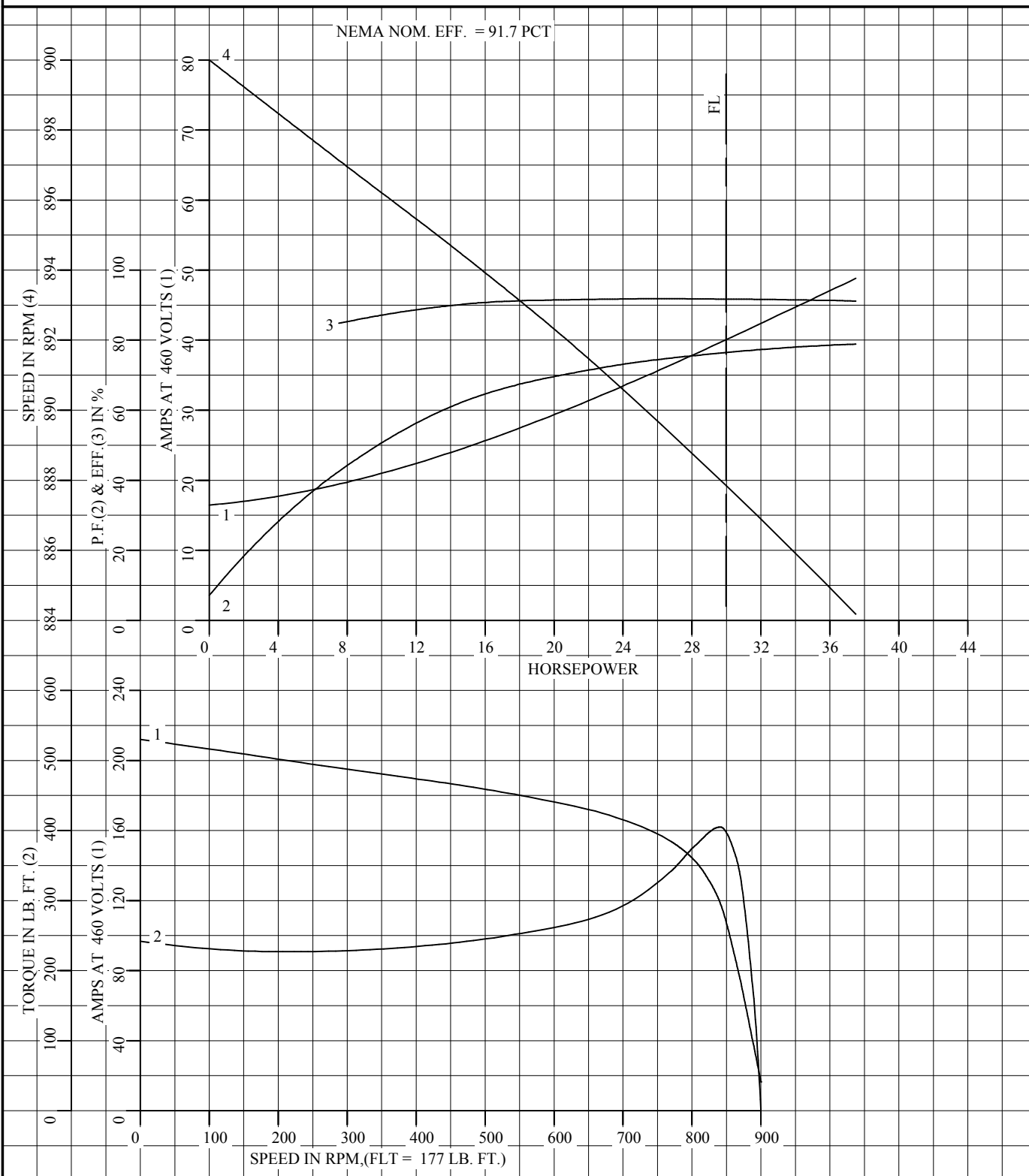
 STATOR RES. @ 25 °C **.0676/.270**

 PHASE/HERTZ **3/60**

 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.

**BALDOR**  
A MEMBER OF THE ABB GROUP

DR. BY W. L. SMITH  
CK. BY C. E. JAMISON  
APP. BY W. L. SMITH  
DATE 08/16/19

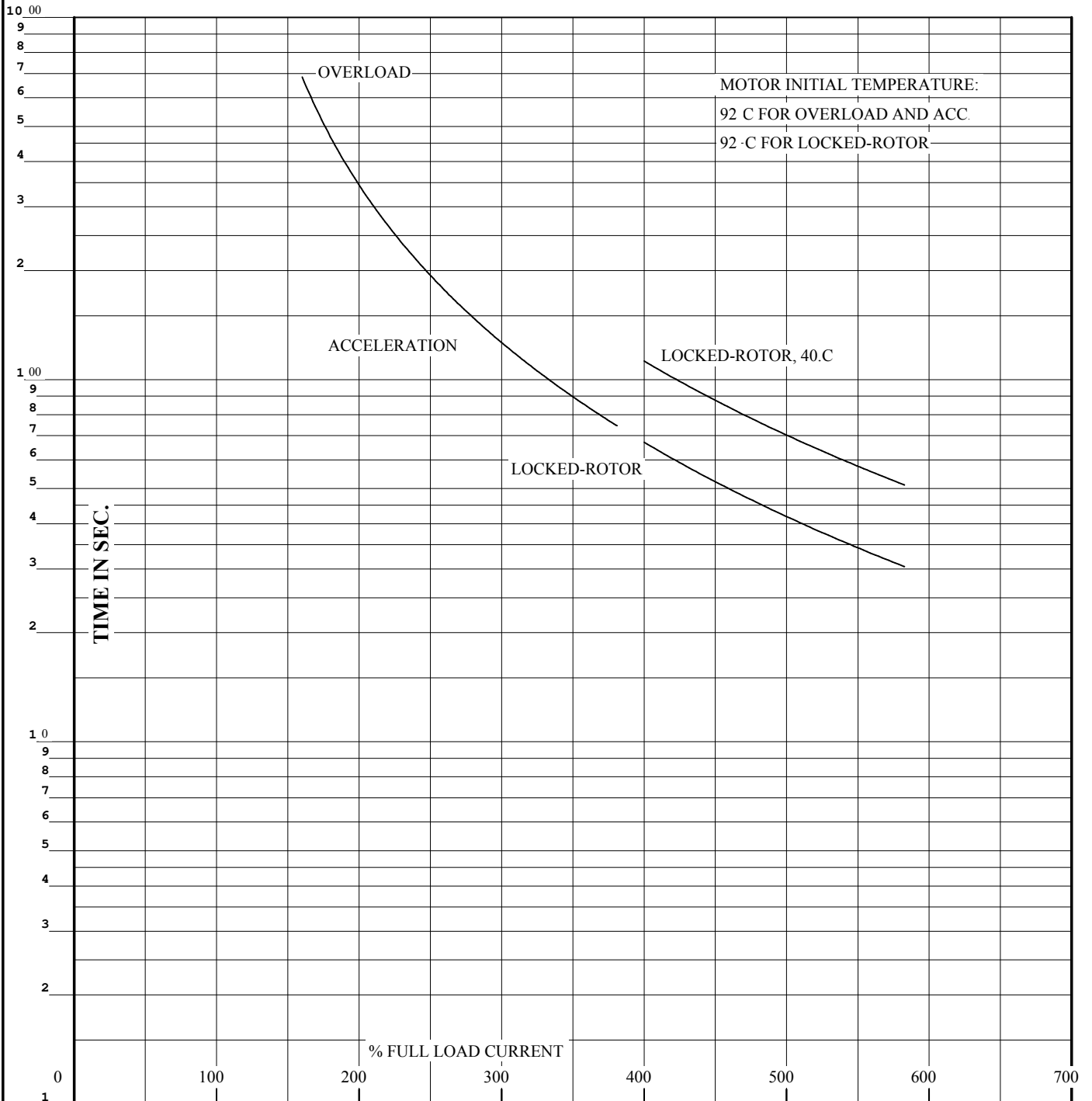
**A-C MOTOR  
PERFORMANCE  
CURVES**

A36WG0999-R007

ISSUE DATE 02/20/20

Page 7 of 10

|                         |                          |                       |                                       |
|-------------------------|--------------------------|-----------------------|---------------------------------------|
| REL. S.O.               | RPM <b>890</b>           | S.F. <b>1.15</b>      | ROTOR <b>418141073AE</b>              |
| FRAME <b>364T</b>       | VOLTS <b>230/460</b>     | NEMA DESIGN <b>B</b>  | TEST S.O. <b>TYPICAL DATA</b>         |
| HP <b>30</b>            | AMPS <b>80/40</b>        | CODE LETTER <b>G</b>  | TEST DATE <b>---</b>                  |
| TYPE <b>P</b>           | DUTY <b>CONT</b>         | ENCLOSURE <b>TEFC</b> | STATOR RES. @ 25 °C <b>.0676/.270</b> |
| PHASE/HERTZ <b>3/60</b> | AMB °C/INSUL <b>40/F</b> | E/S <b>-</b>          | OHMS (BETWEEN LINES)                  |



THERMAL LIMIT CURVE

REMARKS: NEMA NOM. EFF. = 91.7 PCT

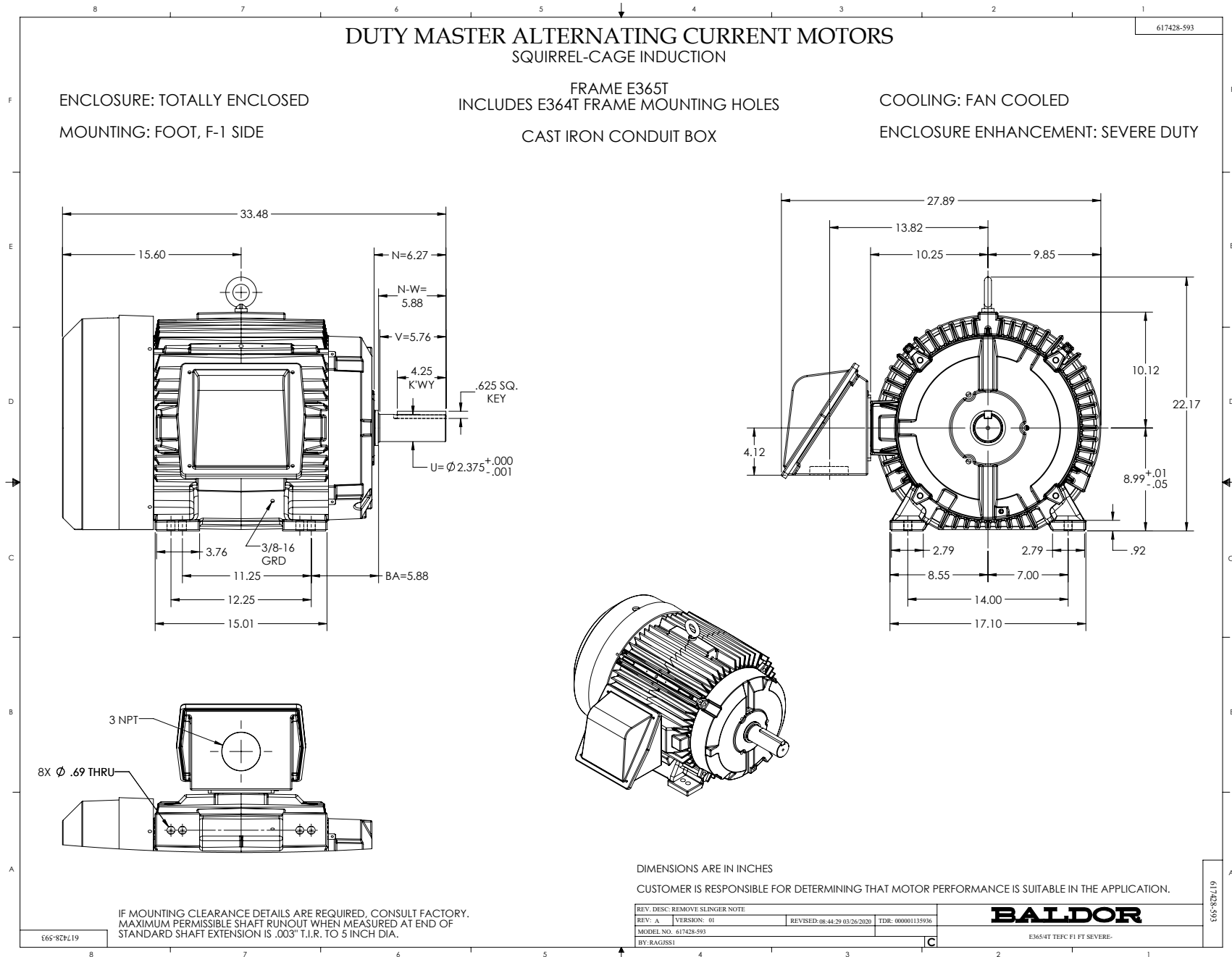
AMPERES SHOWN FOR 460 VOLT CONNECTION, IF OTHER VOLTAGE CONNECTIONS ARE AVAILABLE, THE AMPERES WILL VARY INVERSELY WITH THE RATED VOLTAGE.

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|         |               |
|---------|---------------|
| DR. BY  | W. L. SMITH   |
| CK. BY  | C. E. JAMISON |
| APP. BY | W. L. SMITH   |
| DATE    | 08/16/19      |

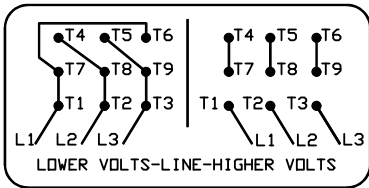
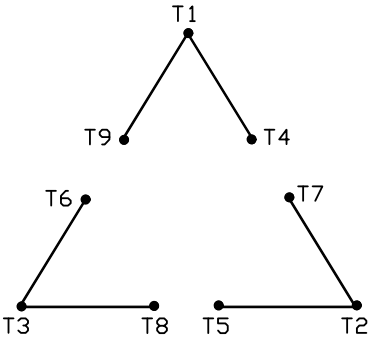
**A-C MOTOR  
PERFORMANCE  
CURVES**

|                                  |
|----------------------------------|
| A36WG0999-R007                   |
| ISSUE DATE 02/20/20 Page 8 of 10 |



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