

# ABB BALDOR RELIANCE III

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## Customer information packet

### VPECP4313T

75HP, 3555RPM, 3PH, 60HZ, 365VP, TEFC, V1

Class - None

Division - Not Applicable

**Specifications**

|                               |                                           |
|-------------------------------|-------------------------------------------|
| Enclosure                     | TEFC                                      |
| Frame                         | 365VP                                     |
| 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 | 3600 RPM @ 60 HZ                          |
| Voltage @ Frequency           | 230.0 V @ 60 HZ<br>460.0 V @ 60 HZ        |
| Agency Approvals              | CSA EEV                                   |
| Ambient Temperature           | 40 °C                                     |
| Auxiliary Box                 | NO AUXILLARY BOX                          |
| Base Indicator                | No Mounting                               |
| Bearing Grease Type           | Polyrex EM (-20F +300F)                   |
| Constant Torque Speed Range   | 15-60                                     |
| Current @ Voltage             | 161.000 A @ 230.0 V<br>80.700 A @ 460.0 V |
| Design Code                   | B                                         |
| Drip Cover                    | Drip Cover                                |
| Duty Rating                   | CONT                                      |
| Efficiency @ 100% Load        | 94.5 %                                    |
| Feedback Device               | NO FEEDBACK                               |
| Haz Area Temp Code            | T3                                        |
| Heater Indicator              | No Heater                                 |
| High Voltage Full Load Amps   | 80.7 a                                    |
| Insulation Class              | F                                         |
| Inverter Code                 | Inverter Ready                            |
| KVA Code                      | G                                         |
| Lifting Lugs                  | Vertical Lifting Lugs                     |

**Part Detail**

|              |            |
|--------------|------------|
| Revision     | E          |
| Type         | AC         |
| Mech. spec.  |            |
| Base         |            |
| Status       | PRD/A      |
| Elec. spec.  | A36WG0319  |
| Layout       | 617438-428 |
| Eff. date    | 10-24-2024 |
| CD Diagram   | 416820-002 |
| Poles        | 02         |
| Leads        | 3#2,6#4    |
| Proprietary  | False      |
| Created date | 07-01-2015 |

|                                      |                    |
|--------------------------------------|--------------------|
| <b>Motor Lead Quantity/Wire Size</b> | 3 @ 2 AWG          |
| <b>Motor Standards</b>               | NEMA               |
| <b>Motor Type</b>                    | A36068M            |
| <b>Mounting Arrangement</b>          | V1                 |
| <b>Number of Poles</b>               | 2                  |
| <b>Overall Length</b>                | 37.25 IN           |
| <b>Power Factor</b>                  | 92                 |
| <b>Product Family</b>                | General Industrial |
| <b>Pulley End Bearing Type</b>       | Ball               |
| <b>Pulley Face Code</b>              | P-Base             |
| <b>Service Factor</b>                | 1.15               |
| <b>Shaft Ground Indicator</b>        | No Shaft Grounding |
| <b>Shaft Rotation</b>                | Reversible         |
| <b>Shaft Slinger Indicator</b>       | Shaft Slinger      |
| <b>Speed</b>                         | 3555 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**



**NP3238**

|                           |             |                        |                     |               |              |            |             |                              |      |             |      |                    |   |
|---------------------------|-------------|------------------------|---------------------|---------------|--------------|------------|-------------|------------------------------|------|-------------|------|--------------------|---|
| <b>CAT NO</b>             | VPEC4313T   |                        | <b>SPEC NO.</b>     | A36-6893-0319 |              |            |             |                              |      |             |      |                    |   |
| <b>HP</b>                 | 75          | <b>AMPS</b>            | 161/80.7            |               | <b>VOLTS</b> | 230/460    |             | <b>DESIGN</b>                | B    |             |      |                    |   |
| <b>FRAME</b>              | 365VP       | <b>RPM</b>             | 3555                | <b>HZ</b>     | 60           | <b>AMB</b> | 40          | <b>SF</b>                    | 1.15 |             |      |                    |   |
| <b>D.E. BRG.DATA</b>      | 6313        | <b>O.D.E. BRG.DATA</b> |                     |               |              |            |             | <b>PH</b>                    | 3    | <b>DUTY</b> | CONT | <b>INSUL.CLASS</b> | F |
| <b>D.E. BRG.</b>          | 65BC03JP30X |                        | <b>TYPE</b>         | P             | <b>ENCL</b>  | TEFC       | <b>CODE</b> | G                            |      |             |      |                    |   |
| <b>O.D.E. BRG.</b>        |             | <b>POWER FACTOR</b>    |                     | 92            |              |            |             | <b>NEMA NOM EFFICIENCY</b>   |      |             |      | 94.5               |   |
| <b>3/4 LOAD EFF.</b>      |             | <b>MAX CORR KVAR</b>   |                     | 5             |              |            |             | <b>GUARANTEED EFFICIENCY</b> |      |             |      | 93.6               |   |
| <b>TEMP CODE</b>          | T3          | <b>TEMP =</b>          | 200                 |               |              |            |             |                              |      |             |      |                    |   |
| <b>CHP HZ</b>             | 60-90       | <b>CT HZ</b>           | 15-60               | <b>VT HZ</b>  | 0-60         |            |             |                              |      |             |      |                    |   |
| <b>INVERTER-TEMP-CODE</b> | T3          |                        |                     |               |              |            |             |                              |      |             |      |                    |   |
| <b>SER.NO.</b>            |             |                        | <b>MOTOR WEIGHT</b> |               |              |            |             |                              |      |             |      |                    |   |

|                                                                                                                                                                                                                                            |             |                   |                                              |                                            |                 |         |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|-------------------|----------------------------------------------|--------------------------------------------|-----------------|---------|
| REL.<br>S.O.                                                                                                                                                                                                                               | FRAME       | HP                | TYPE                                         | PHASE/<br>HERTZ                            | RPM             | VOLTS   |
|                                                                                                                                                                                                                                            | 365TC       | 75                | P                                            | 3/60                                       | 3555            | 230/460 |
| AMPS                                                                                                                                                                                                                                       | DUTY        | AMB °C/<br>INSUL. | S.F.                                         | NEMA<br>DESIGN                             | CODE<br>LETTER  | ENCL.   |
| 161/80.7                                                                                                                                                                                                                                   | 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) |                 |         |
| 892019                                                                                                                                                                                                                                     | 418141005TE | ---               | ---                                          | .0186/.0744                                |                 |         |
| PERFORMANCE                                                                                                                                                                                                                                |             |                   |                                              |                                            |                 |         |
| LOAD                                                                                                                                                                                                                                       | HP          | AMPERES           | RPM                                          | %<br>POWER FACTOR                          | %<br>EFFICIENCY |         |
| NO LOAD                                                                                                                                                                                                                                    | 0           | 15.5              | 3600                                         | 8.92                                       | 0               |         |
| 1/4                                                                                                                                                                                                                                        | 18.8        | 24.5              | 3589                                         | 77.9                                       | 92.0            |         |
| 2/4                                                                                                                                                                                                                                        | 37.5        | 40.8              | 3578                                         | 90.8                                       | 94.8            |         |
| 3/4                                                                                                                                                                                                                                        | 56.2        | 60.0              | 3567                                         | 92.2                                       | 95.3            |         |
| 4/4                                                                                                                                                                                                                                        | 75.0        | 80.7              | 3555                                         | 91.6                                       | 95.1            |         |
| 5/4                                                                                                                                                                                                                                        | 93.8        | 102               | 3542                                         | 90.9                                       | 94.6            |         |
|                                                                                                                                                                                                                                            |             |                   |                                              |                                            |                 |         |
| SPEED TORQUE                                                                                                                                                                                                                               |             |                   |                                              |                                            |                 |         |
|                                                                                                                                                                                                                                            |             | RPM               | TORQUE<br>% FULL LOAD                        | TORQUE<br>LB.-FT.                          | AMPERES         |         |
| LOCKED ROTOR                                                                                                                                                                                                                               |             | 0                 | 218                                          | 242                                        | 536             |         |
| PULL UP                                                                                                                                                                                                                                    |             | 1565              | 190                                          | 210                                        | 440             |         |
| BREAKDOWN                                                                                                                                                                                                                                  |             | 3395              | 230                                          | 255                                        | 259             |         |
| FULL LOAD                                                                                                                                                                                                                                  |             | 3555              | 100                                          | 111                                        | 80.7            |         |
| 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>XE MOTOR-NEMA NOM. EFF. 94.5 %<br>GUARANTEED MIN. EFF. 93.6% |             |                   |                                              |                                            |                 |         |
|                                                                                                                                                         |             | DR. BY            | J. J. HARRISON                               | <b>A-C MOTOR<br/>PERFORMANCE DATA</b>      |                 |         |
|                                                                                                                                                                                                                                            |             | CK. BY            | G. R. WEBB                                   |                                            |                 |         |
|                                                                                                                                                                                                                                            |             | APP. BY           | W. L. SMITH                                  |                                            |                 |         |
|                                                                                                                                                                                                                                            |             | DATE              | 10/16/02                                     |                                            |                 |         |
|                                                                                                                                                                                                                                            |             |                   | <b>A36WG0319-R001</b><br>ISSUE DATE 04/14/21 |                                            |                 |         |

REL S.O.

RPM 3555

S.F. 1.15

ROTOR 418141005TE

FRAME 365TC

VOLTS 230/460

NEMA DESIGN B

TEST S.O. TYPICAL DATA

HP 75

AMPS 161/80.7

CODE LETTER G

TEST DATE ---

TYPE P

DUTY CONT

ENCLOSURE TEFC

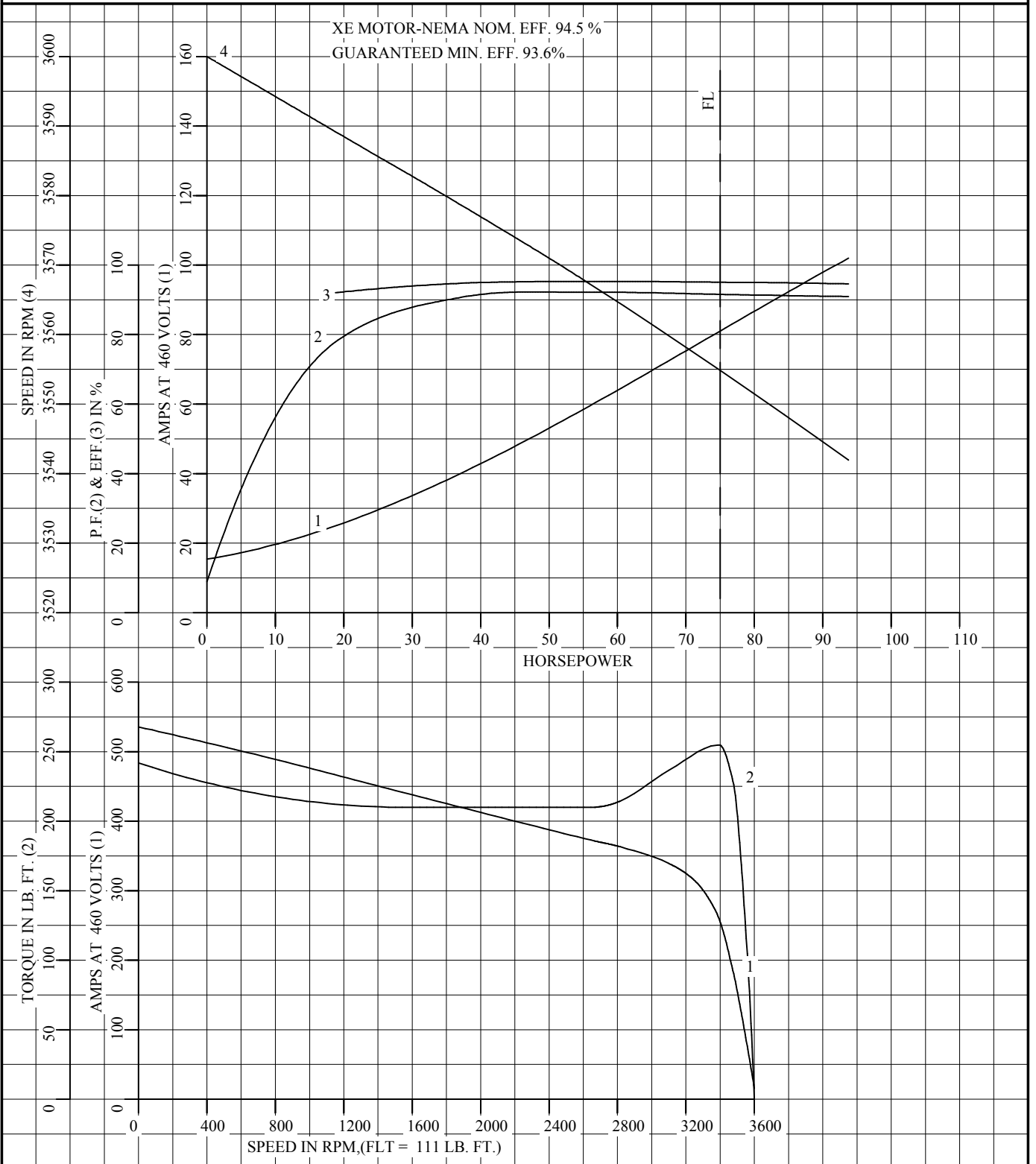
STATOR RES. @ 25 °C .0186/.0744

PHASE/HERTZ 3/60

AMB °C/INSUL 40/F

E/S 892019

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 J.J.HARRISON  
 CK. BY G. R. WEBB  
 APP. BY W.L.SMITH  
 DATE 10/16/02

**A-C MOTOR  
PERFORMANCE  
CURVES**

A36WG0319-R001

ISSUE DATE 04/14/21

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REL. S.O.

FRAME 365TC

HP 75

TYPE P

PHASE/HERTZ 3/60

RPM 3555

VOLTS 230/460

AMPS 161/80.7

DUTY CONT

AMB °C/INSUL 40/F

S.F. 1.15

NEMA DESIGN B

CODE LETTER G

ENCLOSURE TEFC

E/S 892019

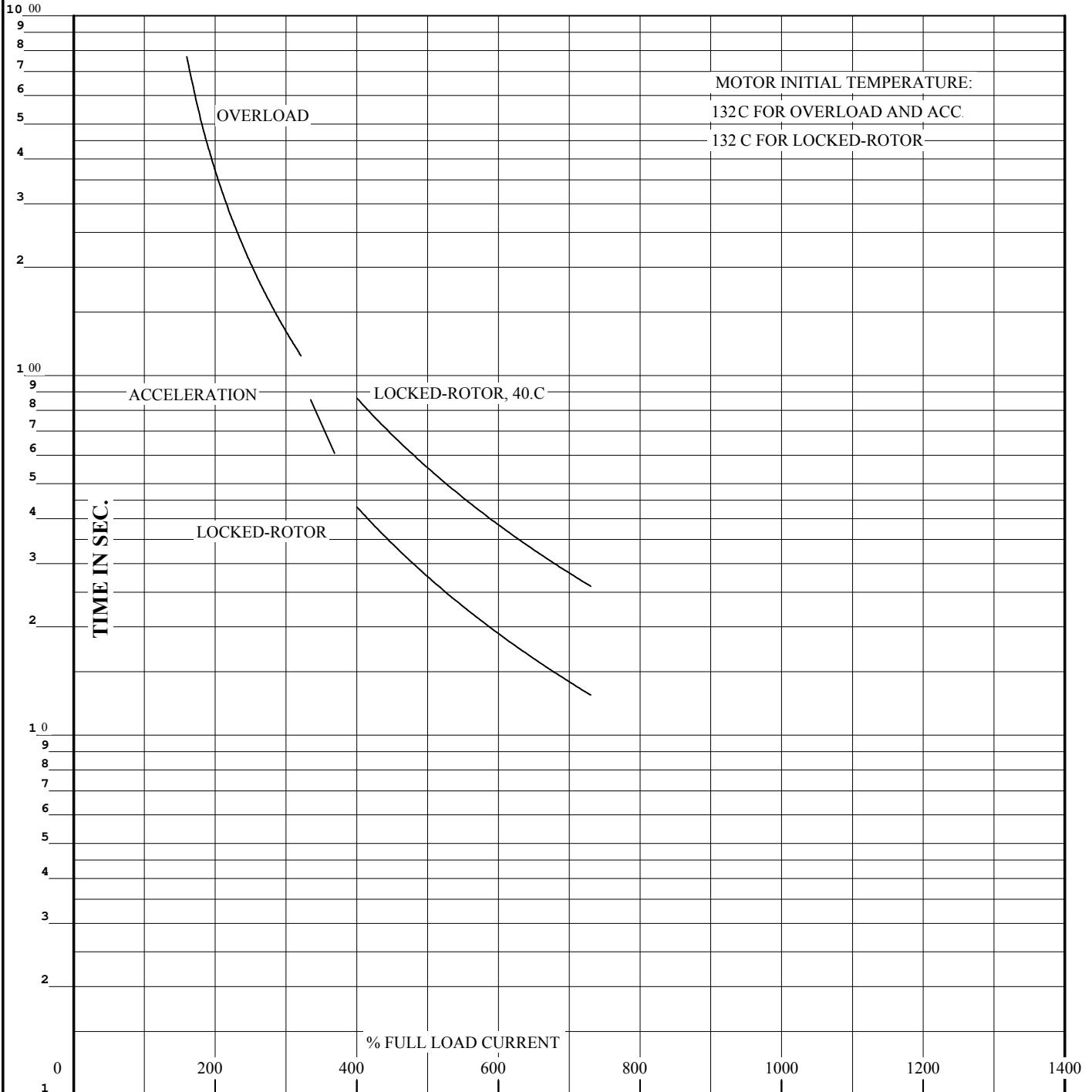
ROTOR 418141005TE

TEST S.O. TYPICAL DATA

TEST DATE ---

STATOR RES. @ 25 °C .0186/.0744

OHMS (BETWEEN LINES)



THERMAL LIMIT CURVE

REMARKS:

XE MOTOR-NEMA NOM. EFF. 94.5 %

GUARANTEED MIN. EFF. 93.6%

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

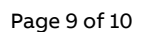
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PERFORMANCE  
CURVES**

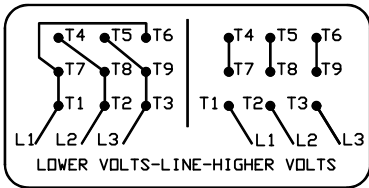
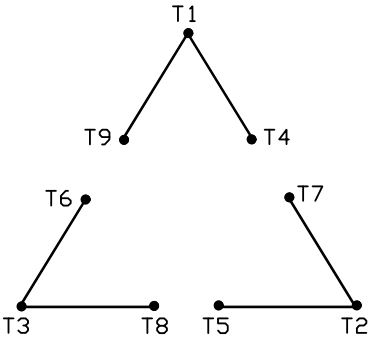
A36WG0319-R001

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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: -                          | © □                          |                   |



CONN DIAG - STANDARD 9 LEAD, DELTA-CONNECTED  
SH1 of 1

416820-002