

**BALDOR® • RELIANCE** 

**Product Information Packet**

**VPECP4316T**

**75HP, 1780RPM, 3PH, 60HZ, 365VP, TEFC, V1**

| Part Detail |    |             |            |             |            |               |            |
|-------------|----|-------------|------------|-------------|------------|---------------|------------|
| Revision:   | B  | Status:     | PRD/A      | Change #:   |            | Proprietary:  | No         |
| Type:       | AC | Elec. Spec: | A36WG1512  | CD Diagram: | 416820-002 | Mfg Plant:    |            |
| Mech. Spec: |    | Layout:     | 616555-992 | Poles:      | 04         | Created Date: | 07-01-2015 |
| Base:       |    | Eff. Date:  | 06-06-2018 | Leads:      | 3#4,6#6    |               |            |

| Specs                          |                         |                                |                       |
|--------------------------------|-------------------------|--------------------------------|-----------------------|
| Catalog Number:                | VPECP4316T              | Heater Indicator:              | No Heater             |
| Enclosure:                     | TEFC                    | Insulation Class:              | F                     |
| Frame:                         | 365VP                   | Inverter Code:                 | Inverter Ready        |
| Frame Material:                | Iron                    | IP Rating:                     | NONE                  |
| Output @ Frequency:            | 75.000 HP @ 60 HZ       | KVA Code:                      | G                     |
| Synchronous Speed @ Frequency: | 1800 RPM @ 60 HZ        | Lifting Lugs:                  | Vertical Lifting Lugs |
| Voltage @ Frequency:           | 230.0 V @ 60 HZ         | Motor Lead Quantity/Wire Size: | 3 @ 4 AWG             |
|                                | 460.0 V @ 60 HZ         | Motor Type:                    | A36070M               |
| XP Class and Group:            | None                    | Mounting Arrangement:          | V1                    |
| XP Division:                   | Not Applicable          | Power Factor:                  | 86                    |
| Agency Approvals:              | CSA EEV                 | Product Family:                | General Industrial    |
| Auxillary Box:                 | No Auxillary Box        | Pulley End Bearing Type:       | Ball                  |
| Base Indicator:                | No Mounting             | Pulley Face Code:              | P-Base                |
| Bearing Grease Type:           | Polyrex EM (-20F +300F) | Shaft Ground Indicator:        | No Shaft Grounding    |
| Constant Torque Speed Range:   | 15-60                   | Shaft Rotation:                | Reversible            |
| Current @ Voltage:             | 171.000 A @ 230.0 V     | Shaft Slinger Indicator:       | Shaft Slinger         |
|                                | 85.900 A @ 460.0 V      | Speed Code:                    | Single Speed          |
| Design Code:                   | B                       | Motor Standards:               | NEMA                  |

|                                |                      |                                  |                |
|--------------------------------|----------------------|----------------------------------|----------------|
| <b>Drip Cover:</b>             | Drip Cover           | <b>Starting Method:</b>          | Direct on line |
| <b>Duty Rating:</b>            | CONT                 | <b>Thermal Device - Bearing:</b> | None           |
| <b>Enclosure Modification:</b> | Severe Duty Features | <b>Thermal Device - Winding:</b> | None           |
| <b>Feedback Device:</b>        | NO FEEDBACK          | <b>XP Temp Code:</b>             | T3             |

Nameplate NP2496L

MOBIL POLYREX EM

| Nameplate NP3238   |             |                 |               |                       |         |        |      |             |      |
|--------------------|-------------|-----------------|---------------|-----------------------|---------|--------|------|-------------|------|
| CAT NO             | VPECP4316T  | SPEC NO.        | A36-6892-1512 |                       |         |        |      |             |      |
| HP                 | 75          | AMPS            | 171/85.9      | VOLTS                 | 230/460 | DESIGN | B    |             |      |
| FRAME              | 365VP       | RPM             | 1780          | HZ                    | 60      | AMB    | 40   | SF          | 1.15 |
| D.E. BRG.DATA      | 6313        | O.D.E. BRG.DATA | 7310          | PH                    | 3       | DUTY   | CONT | INSUL.CLASS | F    |
| D.E. BRG.          | 65BC03JP30X | TYPE            | P             | ENCL                  | TEFC    | CODE   | G    |             |      |
| O.D.E. BRG.        | BA2B_459310 | POWER FACTOR    | 86            | NEMA NOM EFFICIENCY   | 95.4    |        |      |             |      |
| 3/4 LOAD EFF.      | 95.8        | MAX CORR KVAR   | 16.0          | GUARANTEED EFFICIENCY | 94.5    |        |      |             |      |
| TEMP CODE          | T3          | TEMP            | = 200         |                       |         |        |      |             |      |
| CHP HZ             | 60-90       | CT HZ           | 15-60         | VT HZ                 | 0-60    |        |      |             |      |
| INVERTER-TEMP-CODE | T3          |                 |               |                       |         |        |      |             |      |
| SER.NO.            |             | MOTOR WEIGHT    |               |                       |         |        |      |             |      |

| Parts List  |                                       |          |
|-------------|---------------------------------------|----------|
| Part Number | Description                           | Quantity |
| SA303156    | SA A36-6892-1512                      | 1.000 EA |
| RA290273    | RA A36-6892-1512                      | 1.000 EA |
| 421948032   | LABEL, MYLAR                          | 1.000 EA |
| NP2496L     | MOTOR LUBE NAMEPLATE                  | 1.000 EA |
| 000613006PU | N/P (RELEASE QTY 10,000) UL CSA LABEL | 1.000 EA |
| 000692000FF | N/P                                   | 1.000 EA |
| 000692000VD | LABEL WARNING                         | 1.000 EA |
| NP3238      | SS CP XEX SEVERE DUTY MAIN NP         | 1.000 EA |
| 418185012FL | B/BRG ANGULAR SET - 360               | 1.000 PR |
| 035051010AA | BBLCW W-10                            | 1.000 EA |
| 085922097A  | BRKT 360 087793066WCC                 | 1.000 EA |
| 415072001B  | CLAMP                                 | 1.000 EA |
| 078559035AA | F/C 360 078559035WCC                  | 1.000 EA |
| 034180008FA | KEY 3/8X3/8X1L - 320                  | 1.000 EA |
| 412118006A  | DRAIN                                 | 1.000 EA |
| 702676001A  | FAN 250                               | 1.000 EA |
| 004824015A  | GREASE POLYREX EM                     | 0.540 LB |
| 032018016DK | HHCS 1/2-13X2L PLTD.                  | 4.000 EA |
| 032018010CK | HHCS 3/8-16X1-1/4 PLTD.               | 4.000 EA |
| 032018030CK | HHCS 3/8-16X3-3/4 PLATED              | 3.000 EA |
| 415096002A  | CPLG 1/8 HEX TYPE                     | 1.000 EA |
| 034630002AB | CPLG 1/4" PLATED                      | 1.000 EA |
| 415045002H  | SLGR                                  | 1.000 EA |
| 034017014AB | LCKW 3/8 STD. PLATED                  | 4.000 EA |

| Parts List (continued) |                          |          |
|------------------------|--------------------------|----------|
| Part Number            | Description              | Quantity |
| 034017014AB            | LCKW 3/8 STD. PLATED     | 3.000 EA |
| 034530052AB            | P/NIP 1/8X6-1/2 GALV.    | 1.000 EA |
| 034530016BC            | P/NIP 1/4X2 GALV. - 320  | 1.000 EA |
| 034690002AB            | PPLG 1/4" PLTD.          | 1.000 EA |
| 034690002AB            | PPLG 1/4" PLTD.          | 1.000 EA |
| 089495002A             | BRKT 360 089495001WCA    | 1.000 EA |
| 032018012DK            | HHCS 1/2-13X1-1/2 PLTD.  | 4.000 EA |
| 032018030CK            | HHCS 3/8-16X3-3/4 PLATED | 3.000 EA |
| 415045002E             | SLGR                     | 1.000 EA |
| 034017014AB            | LCKW 3/8 STD. PLATED     | 3.000 EA |
| 412118006A             | DRAIN                    | 1.000 EA |
| 410700004F             | WSHR                     | 1.000 EA |
| 076708000BB            | C/B - 360                | 1.000 EA |
| 065776000C             | TERBD 320-400            | 1.000 EA |
| 076709000A             | C/B Cover - 360          | 1.000 EA |
| 067053000B             | GASK 320-400             | 1.000 EA |
| 418150003A             | GREASE FITTING CAP       | 1.000 EA |
| 032018010CK            | HHCS 3/8-16X1-1/4 PLTD.  | 4.000 EA |
| 032018022CK            | HHCS 3/8-16X2-3/4 PLTD   | 4.000 EA |
| 405851012AN            | SPACE                    | 4.000 EA |
| 702641041A             | D/CVR 360 SUB PAINT      | 1.000 EA |
| 034017014AB            | LCKW 3/8 STD. PLATED     | 4.000 EA |
| 035000001A             | ALFTG 1/8" 1610-BL       | 1.000 EA |
| 415000103H             | 415000103H               | 1.000 EA |

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|             |  |          |
|-------------|--|----------|
| 033512008LB | HHTTS 1/4-20X1 PLATED                  | 4.000 EA |
| 034000014AB | WSH ID.406 OD.812 TH.065               | 4.000 EA |
| 034000014AB | WSH ID.406 OD.812 TH.065               | 4.000 EA |
| 048977006B  | GRFTG - XP                             | 1.000 EA |
| 035000001A  | ALFTG 1/8" 1610-BL                     | 1.000 EA |
| 418150003A  | GREASE FITTING CAP                     | 1.000 EA |
| 033775004EA | DRSCR #6-1/4 304 S.S.                  | 4.000 EA |
| 609013011C  | LFT/P - 360                            | 2.000 EA |
| 032018012EK | HHCS 5/8-11X1-1/2L PLTD.               | 4.000 EA |
| 034017018AB | LCKW 5/8"                              | 4.000 EA |
| 034180024FA | KEY 3/8X3/8X3 L                        | 1.000 EA |
| 034017018AB | LCKW 5/8"                              | 2.000 EA |
| 14PA1000    | PACKAGING 314 GROUP COMBINED PRINT     | 1.000 EA |
| 033102018AG | NUT 5/8-11 PLATED                      | 2.000 EA |
| 032018012EK | HHCS 5/8-11X1-1/2L PLTD.               | 2.000 EA |
| 604797064C  | 2"X4"-24"                              | 2.000 EA |
| 604797064C  | 2"X4"-24"                              | 1.000 EA |
| 604797064C  | 2"X4"-24"                              | 1.000 EA |
| 604797064C  | 2"X4"-24"                              | 1.000 EA |
| 415038028A  | BLOCK,SHIPPING                         | 1.000 EA |
| 415038028B  | BLOCK,SHIPPING                         | 1.000 EA |
| MG1025N19   | WILKO 778.50 BLUE GREEN - 55 GAL DRUMS | 0.250 GA |
| 032018005DL | 1/2-13 X 5/8 SILICON BRONZE HHCS       | 1.000 EA |



|           |             |                   |           |  |             |         |
|-----------|-------------|-------------------|-----------|--|-------------|---------|
| REL. S.O. | FRAME       | HP                | TYPE      | PHASE/HERTZ                                | RPM         | VOLTS   |
|           | 365TDZ      | 75                | P         | 3/60                                       | 1780        | 230/460 |
| AMPS      | DUTY        | AMB °C/<br>INSUL. | S.F.      | NEMA DESIGN                                | CODE LETTER | ENCL.   |
| 171/85.9  | CONT        | 40/F              | 1.15      | B  | G           | TEFC    |
| E/S       | ROTOR       | TEST S.O.         | TEST DATE | STATOR RES. @25 °C<br>(OHMS BETWEEN LINES) |             |         |
| 892008    | 418141043EE | ---               | ---       | .0210/.0843                                |             |         |

PERFORMANCE

| LOAD    | HP   | AMPERES | RPM  | POWER FACTOR % | EFFICIENCY % |
|---------|------|---------|------|----------------|--------------|
| NO LOAD | 0    | 26.1    | 1800 | 3.86           | 0            |
| 1/4     | 18.8 | 33.4    | 1796 | 56.1           | 93.8         |
| 2/4     | 37.5 | 47.7    | 1791 | 77.0           | 95.7         |
| 3/4     | 56.2 | 65.8    | 1786 | 83.5           | 95.8         |
| 4/4     | 75.0 | 85.9    | 1781 | 85.6           | 95.4         |
| 5/4     | 93.8 | 107     | 1776 | 86.7           | 94.8         |

SPEED TORQUE

|              | RPM  | TORQUE % FULL LOAD | TORQUE LB.-FT. | AMPERES |
|--------------|------|--------------------|----------------|---------|
| LOCKED ROTOR | 0    | 196                | 433            | 542     |
| PULL UP      | 1130 | 166                | 368            | 458     |
| BREAKDOWN    | 1699 | 252                | 557            | 293     |
| FULL LOAD    | 1781 | 100                | 221            | 85.9    |

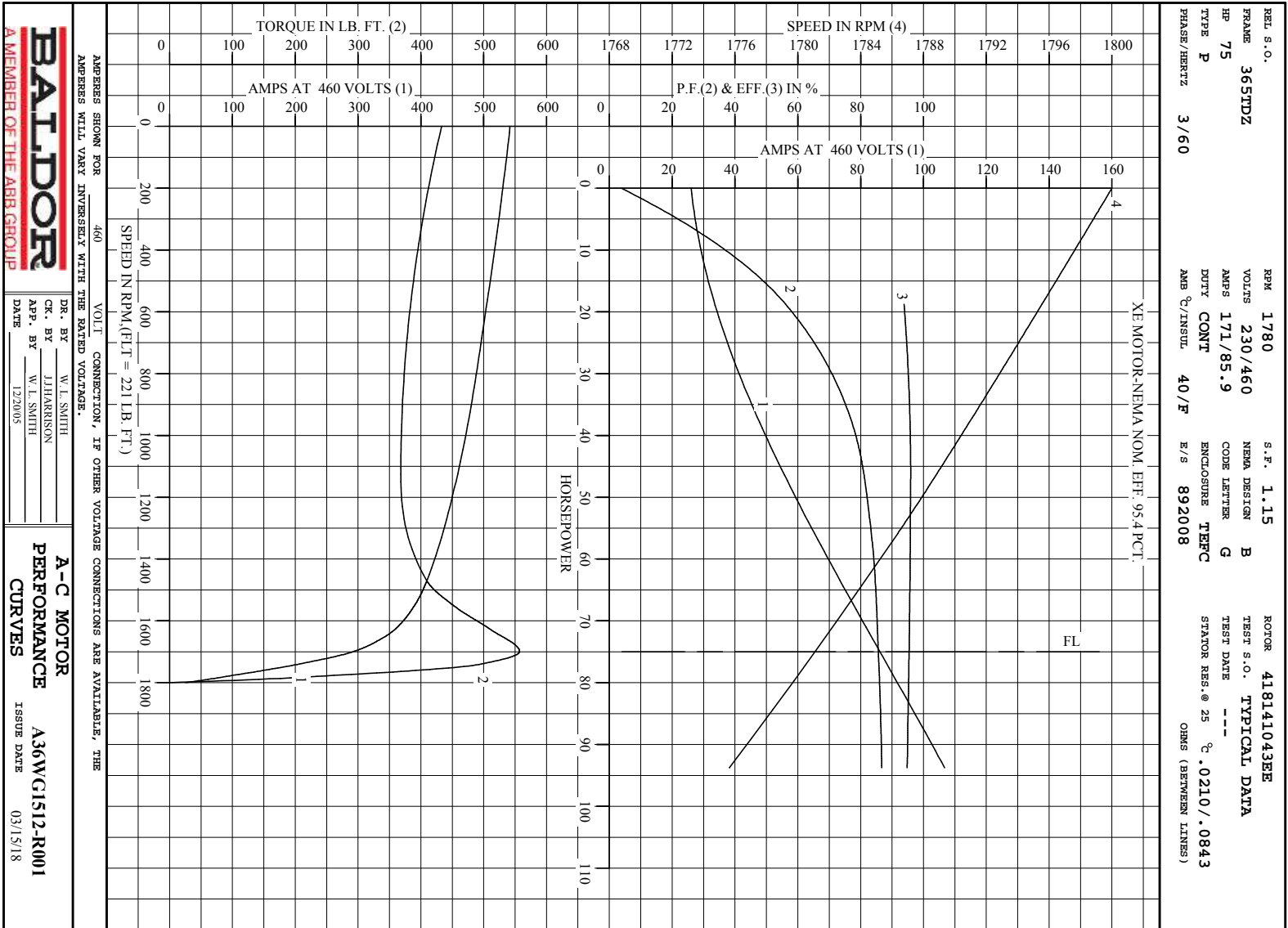
AMPERES SHOWN FOR 460. VOLT CONNECTION. IF OTHER VOLTAGE CONNECTIONS ARE AVAILABLE, THE AMPERES WILL VARY INVERSELY WITH THE RATED VOLTAGE

REMARKS : TYPICAL DATA  
 XE MOTOR-NEMA NOM. EFF. 95.4 PCT.



DR. BY W. L. SMITH  
 CK. BY J.J. HARRISON  
 APP. BY W. L. SMITH  
 DATE 12/20/05

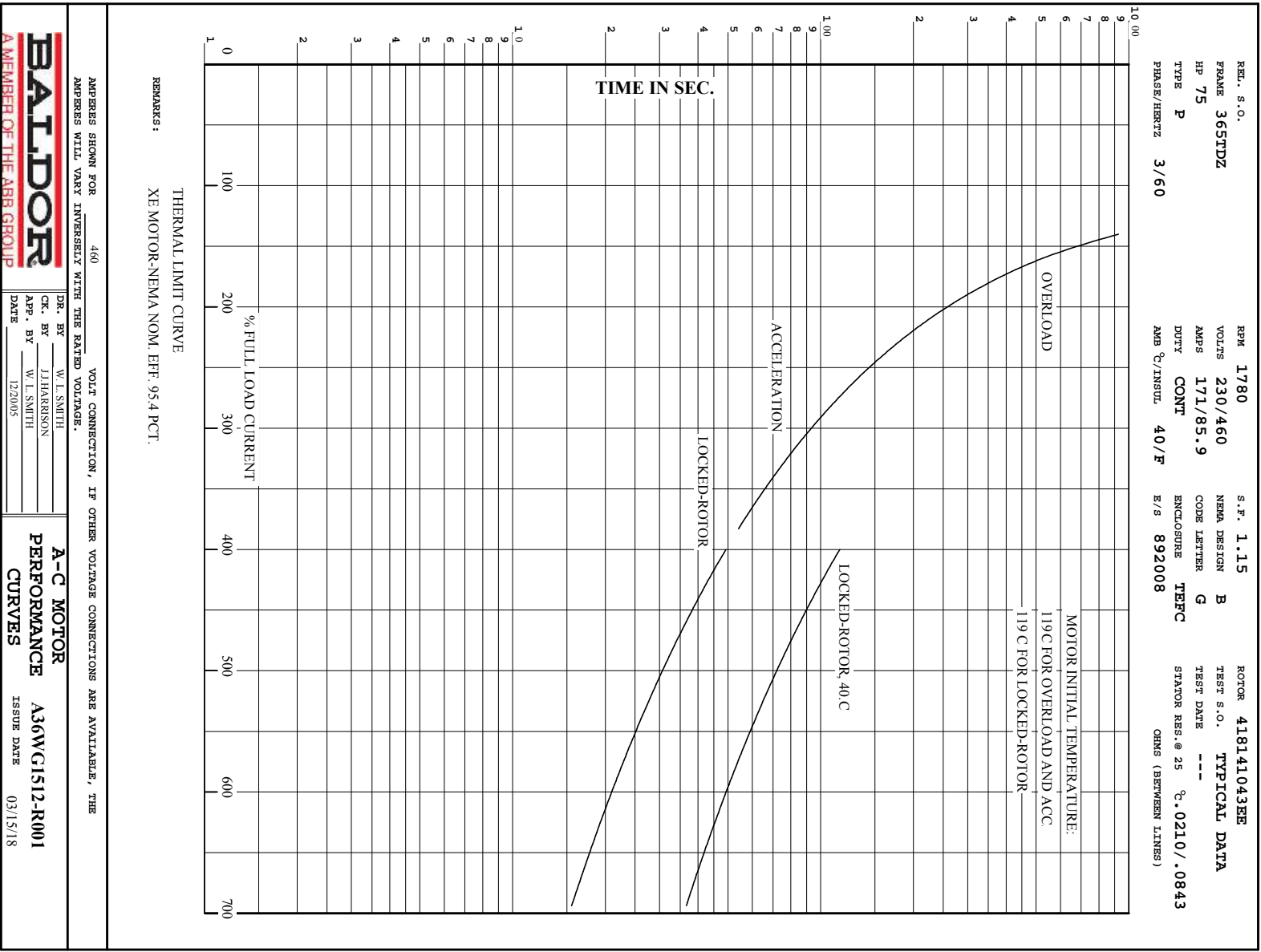
A-C MOTOR PERFORMANCE DATA  
 A36WG1512-R001  
 ISSUE DATE 03/15/18



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  | A-C MOTOR           |
| CHK. BY J. HARRISON | PERFORMANCE         |
| APP. BY W. L. SMITH | A36WC1S12-R001      |
| DATE 12/30/05       | CURVES              |
|                     | ISSUE DATE 03/15/18 |



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



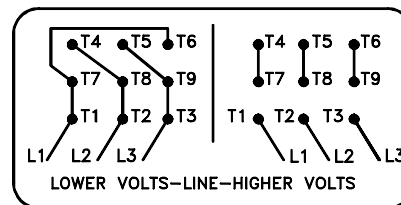
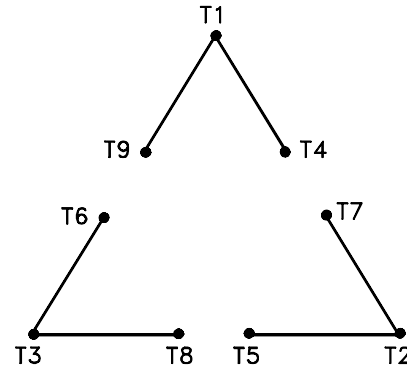
DR. BY W.L. SMITH  
 CK. BY J. HARRISON  
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 DATE 12/20/05

**A-C MOTOR**  
**PERFORMANCE**  
**CURVES**  
**A36W/G1S12-R001**  
 ISSUE DATE 03/5/18



416820-002

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



(N.P. 1575-B)

416820-002

|                                      |                              |                   |
|--------------------------------------|------------------------------|-------------------|
| REV. DESC: LOADED TO BUS, C/R 335225 |                              |                   |
| REV. LTR: -                          | VERSION: 00                  | TDR: 000000538207 |
| FILE: \MGA\00000\661                 | REVISED: 10:47:51 04/30/2010 |                   |
| MTL: -                               | BY: RAGRA                    |                   |

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CONN DIAG - STANDARD 9 LEAD, DELTA-CONNECTED

SH 1 of 1

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