

# ABB BALDOR RELIANCE III

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## Customer information packet

### SUM710006-4

100HP, 1165RPM, 3PH, 60HZ, 360TY, TENV, FOOTL

Class - None

Division - Not Applicable

**Specifications**

|                          |                         |
|--------------------------|-------------------------|
| Enclosure                | XPNV                    |
| Frame                    | 360TY                   |
| 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       | 100.000 @ 60 HZ         |
| Phase                    | 3                       |
| Voltage @ Frequency      | 460 V @ 60 HZ           |
| Agency Approvals         | CCSA US                 |
|                          | UL                      |
|                          | CULUS                   |
|                          | CSA                     |
| Base Indicator           | Rigid                   |
| Bearing Grease Type      | Polyrex EM (-20F +300F) |
| Cable Length             | 25 FOOT                 |
| Current @ Voltage        | 122 A @ 460 V           |
| Design Code              | B                       |
| Drip Cover               | No Drip Cover           |
| Duty Rating              | 15 MIN                  |
| Haz Area Temp Code       | T3C                     |
| Heater Indicator         | No Heater               |
| Insulation Class         | F                       |
| Inverter Code            | Not Inverter            |
| IP Rating                | IP68                    |
| KVA Code                 | G                       |
| Lifting Lugs             | Standard Lifting Lugs   |
| Motor Standards          | NEMA                    |
| Motor Type               | M                       |
| Mounting Arrangement     | V1                      |
| Number of Poles          | 6                       |

**Part Detail**

|              |               |
|--------------|---------------|
| Revision     | C             |
| Type         | AC            |
| Mech. spec.  |               |
| Base         |               |
| Status       | PRD/A         |
| Elec. spec.  | W00971A A 001 |
| Layout       | 066930-060    |
| Eff. date    | 12-10-2024    |
| CD Diagram   | 416820-036    |
| Poles        | 06            |
| Leads        |               |
| Proprietary  | False         |
| Created date | 04-09-2015    |

|                                 |                       |
|---------------------------------|-----------------------|
| <b>Overall Length</b>           | <b>47.10 IN</b>       |
| <b>Product Family</b>           | <b>Other</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>2.499 IN</b>       |
| <b>Shaft Rotation</b>           | <b>Reversible</b>     |
| <b>Shaft Slinger Indicator</b>  | <b>No Slinger</b>     |
| <b>Speed Code</b>               | <b>Single Speed</b>   |
| <b>Starting Method</b>          | <b>Direct on line</b> |
| <b>Thermal Device - Winding</b> | <b>None</b>           |

**Nameplate**

|                               |       |     |
|-------------------------------|-------|-----|
| 000613007RC                   |       |     |
| CLASS I GROUP                 | C D X | NO. |
| CLASS II GROUP                | X X X |     |
| OPERATING TEMP CODE           | T3C   |     |
| 000692000MB                   |       |     |
| SUITABLE FOR OPERATION ON PWM |       |     |
| INVERTER EQUIPPED WITH IGBT   |       |     |
| DEVICES AND CAPABLE OF        |       |     |
| CARRIER                       |       |     |
| FREQUENCY OF 2 KHZ MINIMUM    |       |     |
|                               |       |     |
|                               |       |     |

**000613007MS**

|                        |                         |                    |                     |               |             |                   |
|------------------------|-------------------------|--------------------|---------------------|---------------|-------------|-------------------|
| <b>CAT.NO.</b>         | SUM710006-4             |                    | <b>SPEC NO.</b>     | P36G2702      |             |                   |
| <b>SER.NO.</b>         |                         |                    | <b>FRAME SIZE</b>   | X0360TY       |             |                   |
|                        | <b>HP</b>               | <b>RPM</b>         | <b>VOLTS</b>        | <b>AMPS</b>   | <b>HZ</b>   | <b>S.F.</b>       |
|                        | 100                     | 1165               | 460                 | 122.          | 6-60        | 1.00              |
|                        | 100                     | 1165               | 460                 | 122.          | 60          | 1.15              |
| <b>CONSTANT HP RPM</b> |                         | @                  | <b>HZ</b>           | <b>CODE</b>   | G           |                   |
| <b>TYPE</b>            | P                       | <b>INSUL.CLASS</b> | F                   | <b>TORQUE</b> | 10:1_VT     | <b>DESIGN</b> B   |
| <b>D.E. BRG.</b>       | 90BJ33J30X              |                    | <b>ENCL</b>         | TENV          | <b>DUTY</b> | 15MIN <b>PH</b> 3 |
| <b>O.D.E. BRG.</b>     | 50BC03JG30X             |                    | <b>MOTOR WEIGHT</b> |               | <b>AMB</b>  | 40                |
|                        | *15 MIN IN AIR ;SUB. IN |                    |                     |               |             |                   |
|                        | SEWAGE / WATER ONLY     |                    |                     |               |             |                   |
|                        | P36G2702G               |                    |                     |               |             |                   |

**000613007MS**

|                        |                         |                    |                     |               |             |                   |
|------------------------|-------------------------|--------------------|---------------------|---------------|-------------|-------------------|
| <b>CAT.NO.</b>         | SUM710006-4             |                    | <b>SPEC NO.</b>     | P36G2702      |             |                   |
| <b>SER.NO.</b>         |                         |                    | <b>FRAME SIZE</b>   | X0360TY       |             |                   |
|                        | <b>HP</b>               | <b>RPM</b>         | <b>VOLTS</b>        | <b>AMPS</b>   | <b>HZ</b>   | <b>S.F.</b>       |
|                        | 100                     | 1165               | 460                 | 122.          | 6-60        | 1.00              |
|                        | 100                     | 1165               | 460                 | 122.          | 60          | 1.15              |
| <b>CONSTANT HP RPM</b> |                         | @                  | <b>HZ</b>           | <b>CODE</b>   | G           |                   |
| <b>TYPE</b>            | P                       | <b>INSUL.CLASS</b> | F                   | <b>TORQUE</b> | 10:1_VT     | <b>DESIGN</b> B   |
| <b>D.E. BRG.</b>       | 90BJ33J30X              |                    | <b>ENCL</b>         | TENV          | <b>DUTY</b> | 15MIN <b>PH</b> 3 |
| <b>O.D.E. BRG.</b>     | 50BC03JG30X             |                    | <b>MOTOR WEIGHT</b> |               | <b>AMB</b>  | 40                |
|                        | *15 MIN IN AIR ;SUB. IN |                    |                     |               |             |                   |
|                        | SEWAGE / WATER ONLY     |                    |                     |               |             |                   |
|                        | P36G2702G               |                    |                     |               |             |                   |

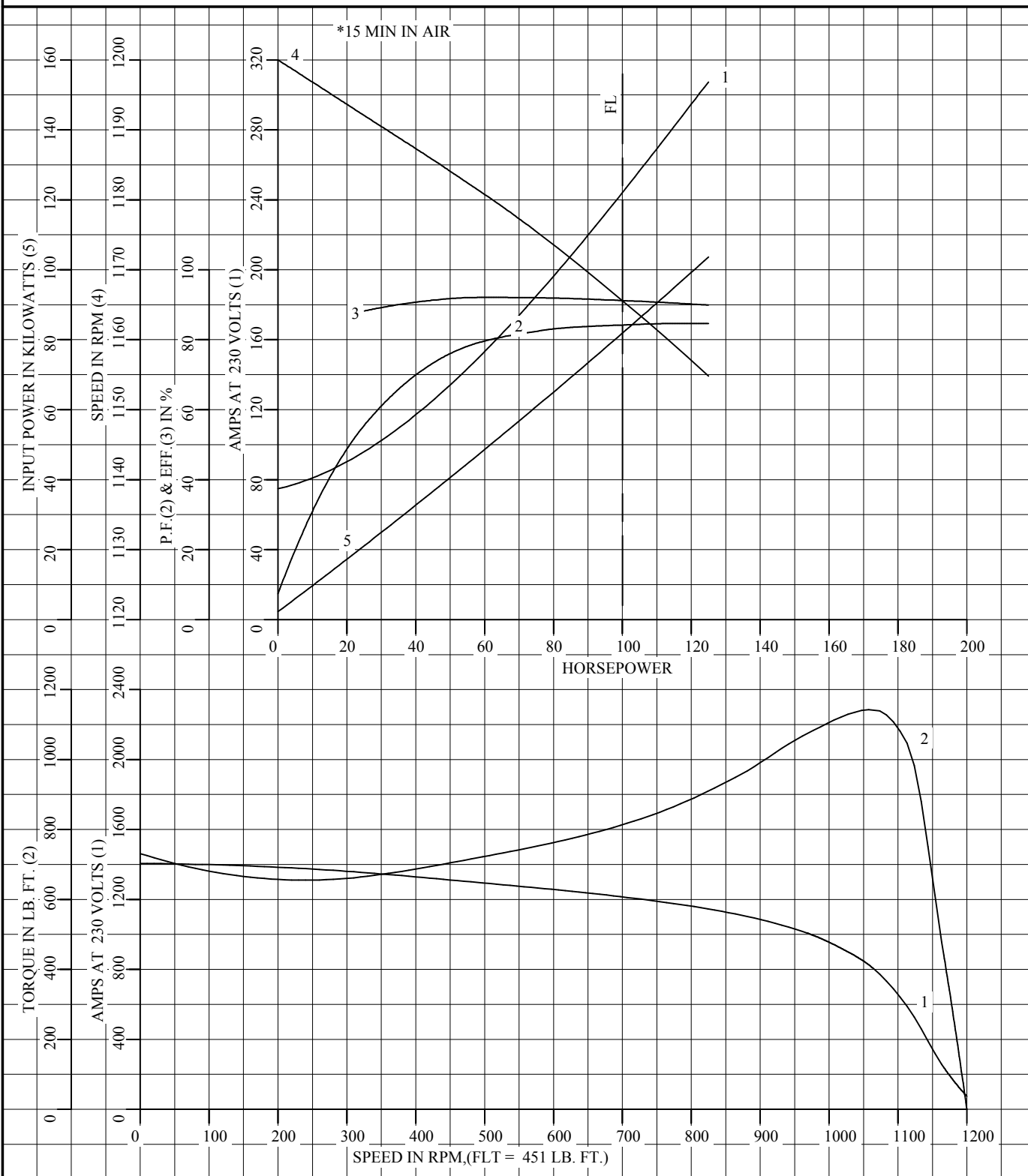
**Parts List**

| Part number | Description                              | Quantity |
|-------------|------------------------------------------|----------|
| SA297282    | SA P36G2702                              | 1.000 ea |
| RA283476    | RA P36G2702                              | 1.000 ea |
| 424476003WL | WIRING DIAGRAM MEDIUMA                   | 1.000 ea |
| 000613007RC | C UL US NAMEPLATE FOR HAZARDOUS LOC      | 1.000 ea |
| 000692000MB | BALDOR RELIANCE MOTOR DATA NAMEPLATE     | 1.000 ea |
| 000613007MS | NP, MEDIUM AC,INVERTER DUTY CSA,STD INDU | 1.000 ea |
| 000692000EJ | NAME PLATE                               | 1.000 ea |
| 000692000WC | WARNING FLAMMABLE VAPORS MAY BE PRESENT  | 2.000 ea |
| 000613007MS | NP, MEDIUM AC,INVERTER DUTY CSA,STD INDU | 1.000 ea |
| 000901001AA | LABEL WARNING                            | 1.000 ea |
| 034692002AE | HCSP 1/4" 304 S.S.                       | 2.000 ea |
| 032018018EG | HHCS 5/8-11X2-1/4 316 SS                 | 8.000 ea |
| 032130020EC | HSHCS 5/8-11X2-1/2 304                   | 8.000 ea |
| 032620020JD | HSSS 10-24X5/8L 304S.S.                  | 1.000 ea |
| 034141300AC | RETAINING RING                           | 1.000 ea |
| 064262008J  | SEAL 360 SUBMERSIBLE                     | 1.000 ea |
| 700385014AB | CCA #1 25' 320/360                       | 1.000 ea |
| 034141325AC | RETAINING RING                           | 1.000 ea |
| 034692003AE | PPLG 3/8" 304 S.S.                       | 2.000 ea |
| 064262012G  | SEAL                                     | 1.000 ea |
| 413412004B  | SUBM MOISTURE PROBE                      | 2.000 ea |
| 413412005X  | LEAD WIRE ASSY                           | 1.000 ea |
| 413480001R  | RESISTOR ASSEMBLY-BLANKET                | 1.000 ea |
| 421900192FU | ORING                                    | 1.000 ea |
| 421900240FU | ORING                                    | 1.000 ea |
| 004824018AF | SHELL ROTELLA OIL 10W                    | 7.311 lb |
| 603762061A  | BRASS,SLINGER,X360TY,EXI,7BY             | 1.000 ea |
| 801173002A  | BRKT,DE,360SUB                           | 1.000 ea |
| 801174002A  | MTGPLT 360 801174-1WCA                   | 1.000 ea |
| 032018006BM | HHCS 5/16-18X3/4 PLTGRN.                 | 1.000 ea |
| 004824007K  | SPECIAL PAINT                            | 0.100 ea |

|             |                          |           |
|-------------|--------------------------|-----------|
| 033775004EA | DRSCR #6-1/4 304 S.S.    | 10.000 ea |
| 032018016EG | HHCS 5/8-11X2 316S.S.    | 4.000 ea  |
| 421900124FU | ORING                    | 1.000 ea  |
| 034180024GD | KEY 1/2X1/2X3L 303 S.S.  | 1.000 ea  |
| 421900240FU | ORING                    | 1.000 ea  |
| 801171002A  | BRKT, ODE, 360 SUB       | 1.000 ea  |
| 004824015A  | GREASE POLYREX EM        | 0.600 lb  |
| 032018010CG | HHCS 3/8-16X1-1/4L 316SS | 3.000 ea  |
| 032018018EG | HHCS 5/8-11X2-1/4 316 SS | 8.000 ea  |
| B3630-9     | SUBM THERMOSTAT TAG      | 1.000 ea  |
| B-3664002   | TAG, (NON REGREASABLE)   | 1.000 ea  |

|                                                                                                                                               |              |                    |                       |                                                                    |                      |                      |
|-----------------------------------------------------------------------------------------------------------------------------------------------|--------------|--------------------|-----------------------|--------------------------------------------------------------------|----------------------|----------------------|
| REL.<br>S.O.                                                                                                                                  | FRAME        | HP                 | TYPE                  | PHASE/<br>HERTZ                                                    | RPM                  | VOLTS                |
|                                                                                                                                               | 360TY        | 100                | P                     | 3/60                                                               | 1165                 | 230                  |
| AMPS                                                                                                                                          | DUTY         | AMB °C/<br>INSUL.  | S.F.                  | NEMA<br>DESIGN                                                     | CODE<br>LETTER       | ENCL.                |
| 244                                                                                                                                           | *            | 40/F               | 1.15                  | B                                                                  | G                    | SUB                  |
| E/S                                                                                                                                           | ROTOR        | TEST<br>S.O.       | TEST<br>DATE          | STATOR RES. @25 °C<br>OHMS (BETWEEN LINES)                         |                      |                      |
| -                                                                                                                                             | 418141-70-AE | ---                | ---                   | .0219                                                              |                      |                      |
| PERFORMANCE                                                                                                                                   |              |                    |                       |                                                                    |                      |                      |
| LOAD                                                                                                                                          | HP           | AMPERES            | RPM                   | INPUT<br>KW                                                        | %<br>POWER<br>FACTOR | %<br>EFFI-<br>CIENCY |
| NO LOAD                                                                                                                                       | 0            | 74.9               | 1200                  | 2.20                                                               | 7.38                 | 0                    |
| 1/4                                                                                                                                           | 25.1         | 95.8               | 1192                  | 21.2                                                               | 55.5                 | 88.2                 |
| 2/4                                                                                                                                           | 50.0         | 134                | 1184                  | 40.7                                                               | 76.0                 | 91.7                 |
| 3/4                                                                                                                                           | 75.0         | 185                | 1175                  | 60.8                                                               | 82.4                 | 92.0                 |
| 4/4                                                                                                                                           | 100          | 244                | 1166                  | 81.8                                                               | 84.2                 | 91.2                 |
| 5/4                                                                                                                                           | 125          | 307                | 1155                  | 104                                                                | 84.7                 | 89.9                 |
|                                                                                                                                               |              |                    |                       |                                                                    |                      |                      |
| SPEED TORQUE                                                                                                                                  |              |                    |                       |                                                                    |                      |                      |
|                                                                                                                                               |              | RPM                | TORQUE<br>% FULL LOAD | TORQUE<br>LB.-FT.                                                  | AMPERES              |                      |
| LOCKED ROTOR                                                                                                                                  |              | 0                  | 162                   | 731                                                                | 1406                 |                      |
| PULL UP                                                                                                                                       |              | 240                | 145                   | 655                                                                | 1376                 |                      |
| BREAKDOWN                                                                                                                                     |              | 1063               | 254                   | 1143                                                               | 808                  |                      |
| FULL LOAD                                                                                                                                     |              | 1166               | 100                   | 451                                                                | 244                  |                      |
| AMPERES SHOWN FOR 230. VOLT CONNECTION. IF OTHER VOLTAGE CONNECTIONS ARE AVAILABLE, THE<br>AMPERES WILL VARY INVERSELY WITH THE RATED VOLTAGE |              |                    |                       |                                                                    |                      |                      |
| REMARKS: CALCULATED DATA<br>*15 MIN IN AIR                                                                                                    |              |                    |                       |                                                                    |                      |                      |
|                                                            |              | DR. BY P.B. GREENE |                       | A-C MOTOR<br>PERFORMANCE DATA W00971-A-A001<br>ISSUE DATE 01/29/01 |                      |                      |
|                                                                                                                                               |              | CK. BY W.L. SMITH  |                       |                                                                    |                      |                      |
|                                                                                                                                               |              | APP. BY W.L. SMITH |                       |                                                                    |                      |                      |
|                                                                                                                                               |              | DATE 01/29/01      |                       |                                                                    |                      |                      |

|                  |                   |               |                           |
|------------------|-------------------|---------------|---------------------------|
| REL S.O.         | RPM 1165          | S.F. 1.15     | ROTOR 418141-70-AE        |
| FRAME 360TY      | VOLTS 230         | NEMA DESIGN B | TEST S.O. CALCULATED DATA |
| HP 100           | AMPS 244          | CODE LETTER G | TEST DATE ---             |
| TYPE P           | DUTY *            | ENCLOSURE SUB | STATOR RES. @ 25 °C .0219 |
| PHASE/HERTZ 3/60 | AMB °C/INSUL 40/F | E/S -         | OHMS (BETWEEN LINES)      |



AMPERES SHOWN FOR 230 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 P.B. GREENE  
CK. BY W.L. SMITH  
APP. BY W.L. SMITH  
DATE 01/29/01

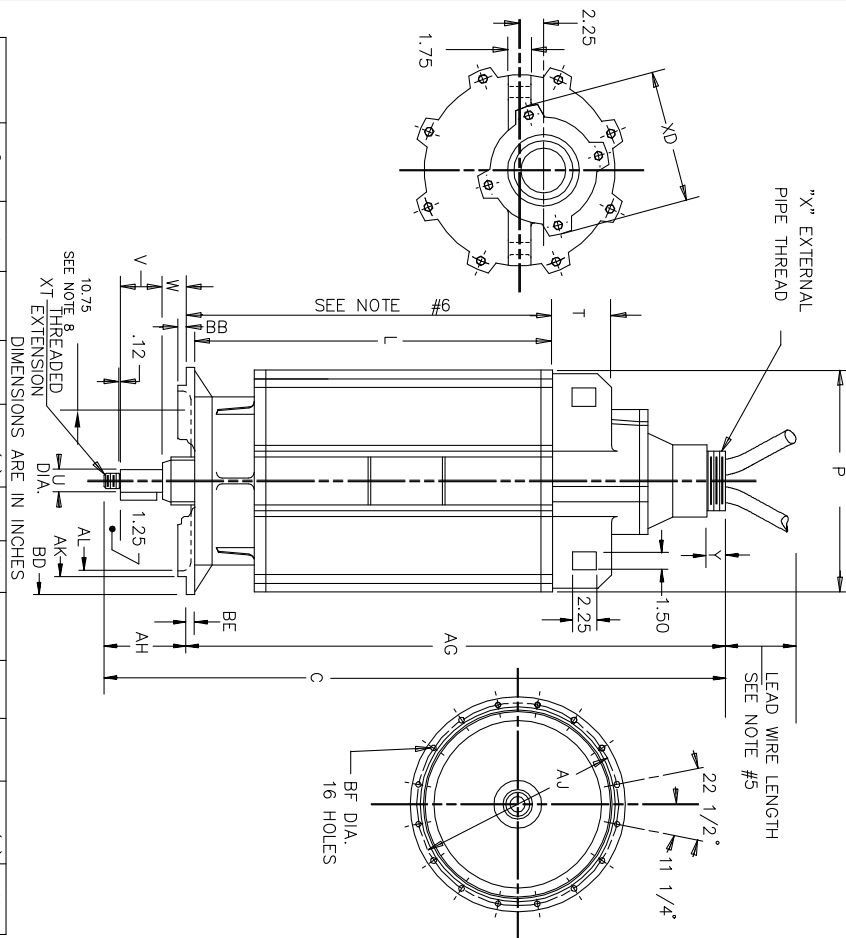
**A-C MOTOR  
PERFORMANCE  
CURVES**

W00971-A-A001

ISSUE DATE 01/29/01 Page 9 of 11

DUTY MASTER ALTERNATING CURRENT MOTORS  
SQUIRREL-CAGE INDUCTION  
ENCLOSURE: TOTALLY ENCLOSED SUBMERSIBLE  
FRAME 360TY THRU L360TY

066930-060

[illegible][illegible]

- 1) SPECIAL DIMENSIONS APPLYING TO THIS ORDER ON THIS LINE.  
2) "BD" VARIES +.010.  
3) "U" VARIES +.0000, -.0005.  
4) "AR" VARIES +.000, -.002  
5) LEAD WIRE LENGTH AS SPECIFIED ON SALES ORDER.  
6) MINIMUM SUBMERGED DEPTH
- FACE RUNOUT AND ECCENTRICITY .008 MAX. T.I.R.  
PROTECTIVE CONDUIT FURNISHED BY CUSTOMER.

FACE RUNOUT AND ECCENTRICITY .008 MAX. T.I.R.  
PROTECTIVE CONDUIT FURNISHED BY CUSTOMER.

066930-060

CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT BALDOR'S PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION.

|                                      |                              |                   |
|--------------------------------------|------------------------------|-------------------|
| REV. DESC: UPDATE NOTES, LOAD TO BUS |                              |                   |
| REV. LTR: -                          | VERSION: 00                  | TDR: 000000921348 |
| FILE: \RGG\00024\962                 | REVISED: 09:19:59 04/20/2015 | BY: RGGWT         |
| MTL: -                               |                              |                   |

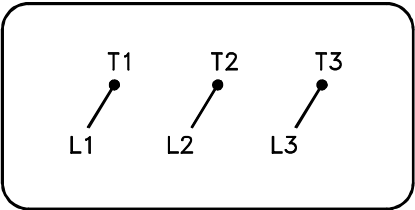
# BALDOR

DIM SHT 360TY/L360TY SUBMERSIBLE

SH 1 of 1

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