

# ABB BALDOR RELIANCE III

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## Customer information packet

IDVSNM3661T

3HP, 1760RPM, 3PH, 60HZ, 182TC, 0636M, TENV, F1

Class - None

Division - Not Applicable

**Specifications**

|                                       |  |
|---------------------------------------|--|
| <b>Enclosure</b>                      | TENV                                   |
| <b>Frame</b>                          | 182TC                                  |
| <b>Frame Material</b>                 | Iron                                   |
| <b>Frequency</b>                      | 60.00 Hz                               |
| <b>Haz Area Class and Group</b>       | None                                   |
| <b>Haz Area Division</b>              | Not Applicable                         |
| <b>Motor Letter Type</b>              | Three Phase                            |
| <b>Output @ Frequency</b>             | 3.000 HP @ 60 HZ                       |
| <b>Phase</b>                          | 3                                      |
| <b>Synchronous Speed @ Frequency</b>  | 1800 RPM @ 60 HZ                       |
| <b>Voltage @ Frequency</b>            | 230.0 V @ 60 HZ<br>460.0 V @ 60 HZ     |
| <b>Agency Approvals</b>               | UR<br>CSA                              |
| <b>Ambient Temperature</b>            | 40 °C                                  |
| <b>Auxiliary Box</b>                  | NO AUXILLARY BOX                       |
| <b>Auxiliary Box Lead Termination</b> | None                                   |
| <b>Base Indicator</b>                 | Rigid                                  |
| <b>Bearing Grease Type</b>            | Polyrex EM (-20F +300F)                |
| <b>Blower</b>                         | None                                   |
| <b>Current @ Voltage</b>              | 4.300 A @ 460.0 V<br>8.600 A @ 230.0 V |
| <b>Design Code</b>                    | A                                      |
| <b>Drip Cover</b>                     | No Drip Cover                          |
| <b>Duty Rating</b>                    | CONT                                   |
| <b>Efficiency @ 100% Load</b>         | 89.5 %                                 |
| <b>Electrically Isolated Bearing</b>  | Not Electrically Isolated              |
| <b>Feedback Device</b>                | NO FEEDBACK                            |
| <b>Front Face Code</b>                | Encoder/Feedback Device                |
| <b>Front Shaft Indicator</b>          | No Key Or Flat                         |
| <b>Heater Indicator</b>               | No Heater                              |
| <b>High Voltage Full Load Amps</b>    | 4.3 a                                  |

**Part Detail**

|                     |            |
|---------------------|------------|
| <b>Revision</b>     | J          |
| <b>Type</b>         | AC         |
| <b>Mech. spec.</b>  | 06H927     |
| <b>Base</b>         |            |
| <b>Status</b>       | PRD/A      |
| <b>Elec. spec.</b>  | 06WGX370   |
| <b>Layout</b>       | 06LYH927   |
| <b>Eff. date</b>    | 09-30-2025 |
| <b>CD Diagram</b>   | CD0005     |
| <b>Poles</b>        | 04         |
| <b>Leads</b>        | 9#16       |
| <b>Proprietary</b>  | False      |
| <b>Created date</b> | 09-04-2012 |

|                                      |                            |
|--------------------------------------|----------------------------|
| <b>Insulation Class</b>              | F                          |
| <b>Inverter Code</b>                 | Inverter Duty              |
| <b>KVA Code</b>                      | L                          |
| <b>Lifting Lugs</b>                  | Standard Lifting Lugs      |
| <b>Locked Bearing Indicator</b>      | Locked Bearing             |
| <b>Max Speed</b>                     | 6000 rpm                   |
| <b>Motor Lead Exit</b>               | Ko Box                     |
| <b>Motor Lead Quantity/Wire Size</b> | 9 @ 16 AWG                 |
| <b>Motor Lead Termination</b>        | Flying Leads               |
| <b>Motor Standards</b>               | NEMA                       |
| <b>Motor Type</b>                    | 0636M                      |
| <b>Mounting Arrangement</b>          | F1                         |
| <b>Number of Poles</b>               | 4                          |
| <b>Overall Length</b>                | 17.85 IN                   |
| <b>Power Factor</b>                  | 73                         |
| <b>Product Family</b>                | General Purpose            |
| <b>Pulley End Bearing Type</b>       | Ball                       |
| <b>Pulley Face Code</b>              | C-Face                     |
| <b>Pulley Shaft Indicator</b>        | Standard                   |
| <b>Rodent Screen</b>                 | None                       |
| <b>RoHS Status</b>                   | ROHS COMPLIANT             |
| <b>Service Factor</b>                | 1.00                       |
| <b>Shaft Diameter</b>                | 1.125 IN                   |
| <b>Shaft Extension Location</b>      | Pulley End                 |
| <b>Shaft Ground Indicator</b>        | No Shaft Grounding         |
| <b>Shaft Rotation</b>                | Reversible                 |
| <b>Shaft Slinger Indicator</b>       | No Slinger                 |
| <b>Speed</b>                         | 1760 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>      | Normally Closed Thermostat |
| <b>Vibration Sensor Indicator</b>    | No Vibration Sensor        |
| <b>Winding Thermal 1</b>             | None                       |

**Winding Thermal 2**

**None**

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**Nameplate**

| <b>NP4564L</b>        |                |                   |                  |
|-----------------------|----------------|-------------------|------------------|
| <b>CAT.NO.</b>        | IDVSNM3661T    |                   |                  |
| <b>SPEC.</b>          | 06H927X370G1   |                   |                  |
| <b>FRAME</b>          | 182TC          | <b>H.P.</b>       | 3                |
| <b>VOLTS</b>          | 230/460        |                   |                  |
| <b>MAG. CUR.</b>      | 4.8/2.4        | <b>F.L. AMPS</b>  | 8.6/4.3          |
| <b>R.P.M.</b>         | 1760           | <b>R.P.M. MAX</b> | 6000             |
| <b>HZ.</b>            | 60             | <b>PH.</b>        | 3 <b>CLASS</b> F |
| <b>SER.F.</b>         | 1.00           | <b>SL HZ</b>      | 1.2              |
| <b>NEMA NOM. EFF.</b> | 89.5           | <b>WK2</b>        | 0.335            |
| <b>RATING</b>         | 40C AMB-CONT   |                   | <b>ENCL</b> TENV |
| <b>DE</b>             | 6206           | <b>ODE</b>        | 6206             |
| <b>CC</b>             | 010A <b>SN</b> |                   |                  |
|                       | 1.5:1 CHP PWM  |                   |                  |
|                       | 1000:1 CT/VT   |                   |                  |

|            |         |                                       |       |   |       |            |
|------------|---------|---------------------------------------|-------|---|-------|------------|
| NP VOLTS   | 230/460 | MAX SAFE RPM                          | 2700  | WYE CONN EQ CKT OHMS PER PHASE (BASE RATING, 20C) |       |            |
| NP AMPS    | 8.6/4.3 | Base Volt                             | 460   | R1  | 1.900 | X1 5.040   |
| HP         | 3HP     | NL AMPS                               | 2.5   | R2  | 1.350 | X2 4.290   |
| BASE SPEED | 1760    | Slips                                 | 0.87  |   |       | XM 112.000 |
| PHASE/HZ   | 3/60    | WK <sup>2</sup> (lb-ft <sup>2</sup> ) | 0.326 |   |       |            |

### Rated Full Load Data

|            | RPM  | HP  | Torque | Volts | Freq-Hz | Amps |
|------------|------|-----|--------|-------|---------|------|
| Base Speed | 1765 | 3.0 | 9.0    | 460   | 60      | 4.3  |
| Max Speed  | 2647 | 3.0 | 6.0    | 460   | 90      | 3.9  |
| Min Speed  | 0    | 0.0 | 9.0    | 32.46 | 0.87    | 4.3  |

### Load Performance at Base Speed

|           | RPM  | HP  | Torque | Volts | Freq-Hz | Amps |
|-----------|------|-----|--------|-------|---------|------|
| No Load   | 1799 | 0.0 | 0.0    | 460   | 60      | 2.5  |
| 1/4       | 1791 | 0.8 | 2.3    | 460   | 60      | 2.7  |
| 1/2       | 1783 | 1.5 | 4.5    | 460   | 60      | 3.0  |
| 3/4       | 1774 | 2.3 | 6.7    | 460   | 60      | 3.6  |
| Full Load | 1765 | 3.0 | 9.0    | 460   | 60      | 4.3  |
| O/L       | 1726 | 6.0 | 18.3   | 460   | 60      | 7.9  |

| Blower Data | Volts | Ph/Hz | FL Amps | LR Amps | Frame | CFM |
|-------------|-------|-------|---------|---------|-------|-----|
|             |       |       |         |         |       |     |

Remarks: Calculated Data  
Vector PWM Inverter Duty



DR BY HDO  
CK BY  
APP BY HDO  
DATE 1/13/2016

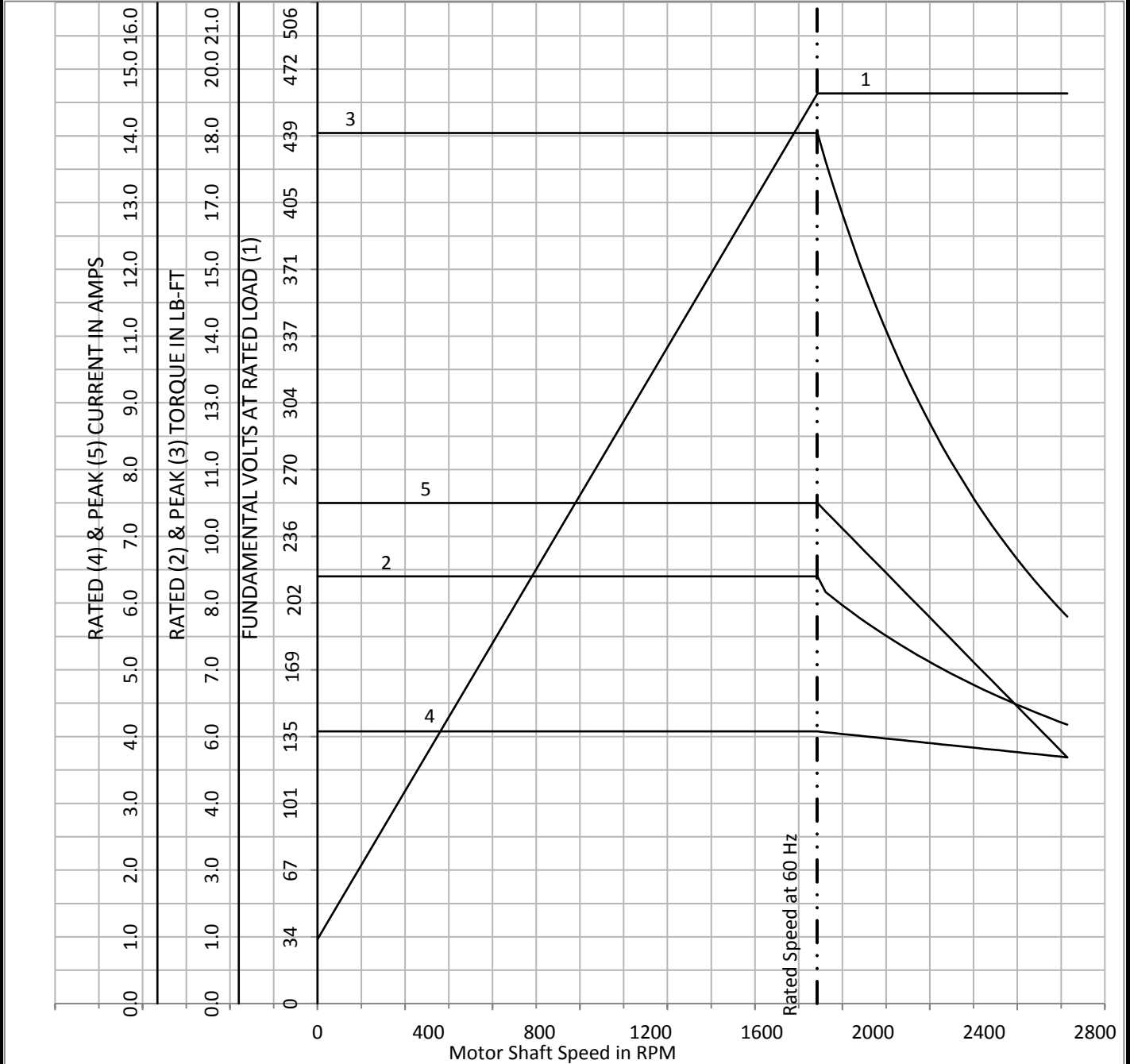
**A-C MOTOR** **06WGX370**  
**PERFORMANCE**  
**CURVES**

NP VOLTS 230/460  
NP AMPS 8.6/4.3  
HP 3HP  
BASE SPEED 1760  
PHASE/HZ 3/60

MAX SAFE RPM 2700  
Base Volt 460  
NL AMPS 2.47  
Slips 0.87  
WK2 (lb-ft) 0.326

WYE CONN EQ CKT OHMS PER PHASE (BASE RATING, 20C)  
R1 1.900 X1 5.040  
R2 1.350 X2 4.290  
XM 112.000

Vector PWM Inverter Duty  
Variable Speed AC Motor Curves



Calculated Data

Data Valid For Nameplate Speed Range only

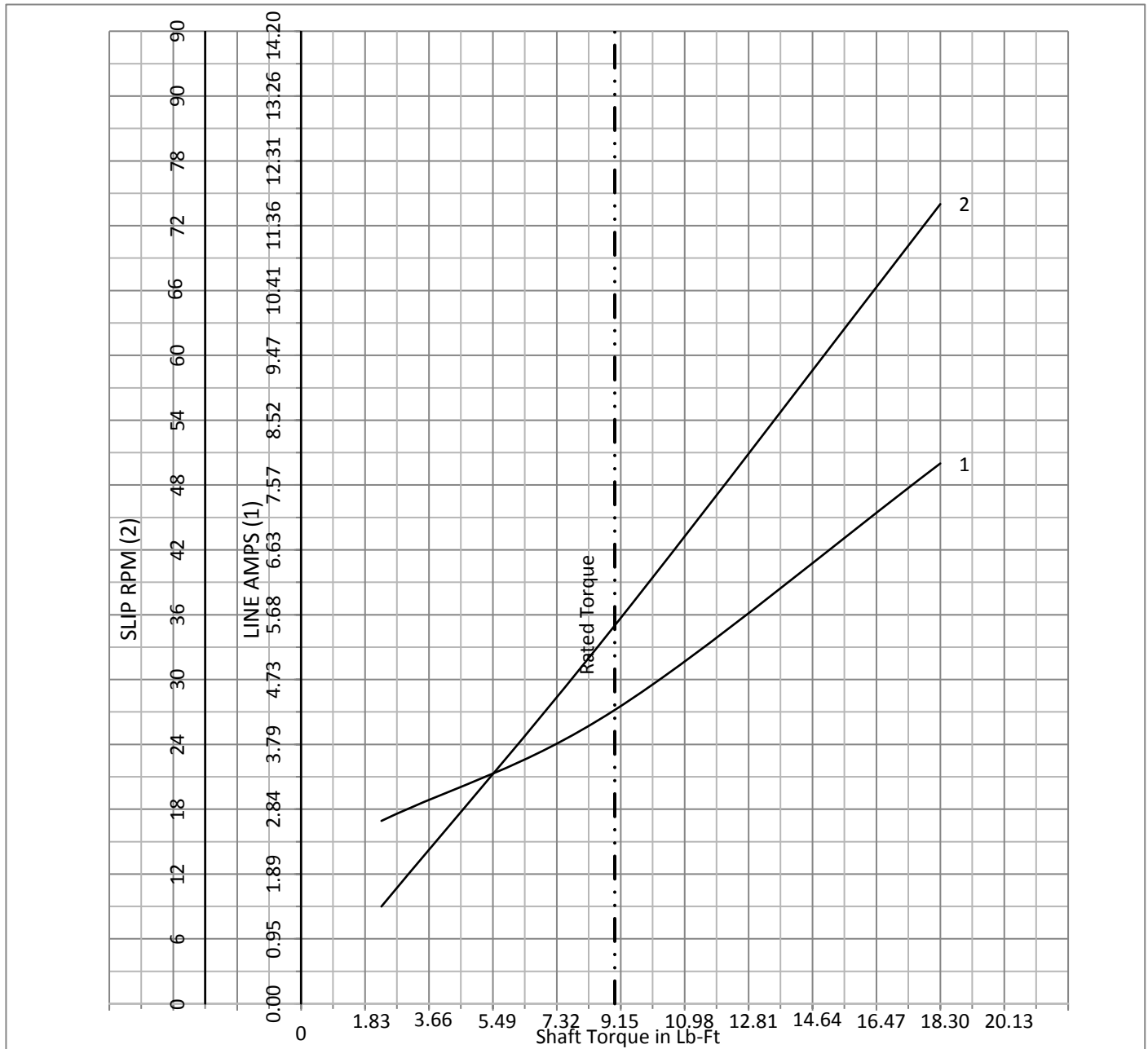


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DATE 1/13/2016

**A-C MOTOR**  
**PERFORMANCE**  
**CURVES**  
**06WGX370**

|            |         |              |       |   |       |    |         |
|------------|---------|--------------|-------|---|-------|----|---------|
| NP VOLTS   | 230/460 | MAX SAFE RPM | 2700  | WYE CONN EQ CKT OHMS PER PHASE (BASE RATING, 20C) |       |    |         |
| NP AMPS    | 8.6/4.3 | Base Volt    | 460   | R1  | 1.900 | X1 | 5.040   |
| HP         | 3HP     | NL AMPS      | 2.47  | R2  | 1.350 | X2 | 4.290   |
| BASE SPEED | 1760    | Slips        | 0.87  |   |       | XM | 112.000 |
| PHASE/HZ   | 3/60    | WK2 (lb-ft2) | 0.326 |   |       |    |         |

Vector PWM Inverter Duty  
Variable Speed AC Motor Curves



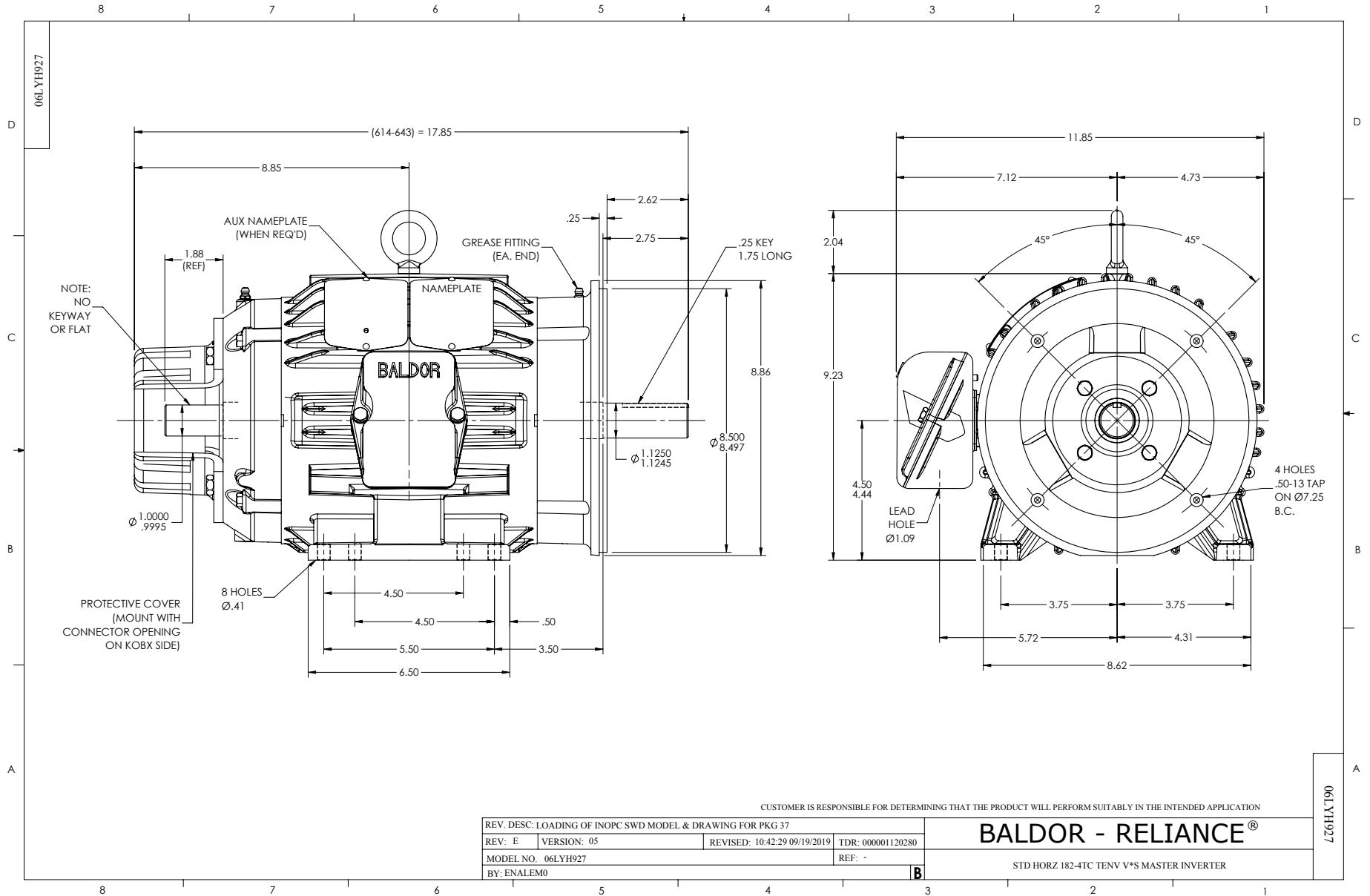
Calculated Data

Data Valid For Nameplate Speed Range only



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 APP BY HDO  
 DATE 1/13/2016

**A-C MOTOR** 06WGX370  
**PERFORMANCE**  
**CURVES**



CD0005

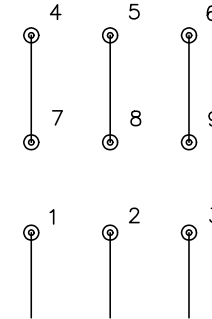


LOW VOLTAGE  
(2Y)



LINE

HIGH VOLTAGE  
(1Y)



LINE

**NOTES:**

1. INTERCHANGE ANY TWO LINE LEADS TO REVERSE ROTATION.
2. OPTIONAL THERMOSTATS ARE PROVIDED WHEN SPECIFIED.
3. ACTUAL NUMBER OF INTERNAL PARALLEL CIRCUITS MAY BE A MULTIPLE OF THOSE SHOWN ABOVE.
4. LEAD COLORS ARE OPTIONAL. LEADS MUST ALWAYS BE NUMBERED AS SHOWN.

CD0005

REV. DESC: REVISE TO SHOW OPTIONAL COLORS

REV. LTR: E | BY: JLP | REVISED: 01/19/99 10:15 | TDR: 0171435

500000

FILE: AAA00005140

MDL: -

MTL: -

**BALDOR ELECTRIC Co.**

3PH, DV, 9 LEADS