

ABB BALDOR RELIANCE III

Customer information packet

IDM3665T

5HP, 1750RPM, 3PH, 60HZ, 184TC, 0640M, TEBC, F1

Class - None

Division - Not Applicable

Specifications

| | |
|---------------------------------------|---|
| Enclosure | TEBC |
| Frame | 184TC |
| 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 | 5.000 HP @ 60 HZ |
| Phase | 3 |
| Synchronous Speed @ Frequency | 1800 RPM @ 60 HZ |
| Voltage @ Frequency | 230.0 V @ 60 HZ 460.0 V @ 60 HZ |
| Agency Approvals | UR CSA |
| Ambient Temperature | 40 °C |
| Auxiliary Box | NO AUXILLARY BOX |
| Auxiliary Box Lead Termination | None |
| Base Indicator | Rigid |
| Bearing Grease Type | Polyrex EM (-20F +300F) |
| Blower | 115V 1-Phase EXT |
| Current @ Voltage | 13.000 A @ 230.0 V 6.500 A @ 460.0 V |
| Design Code | B |
| Drip Cover | No Drip Cover |
| Duty Rating | CONT |
| Efficiency @ 100% Load | 90.2 % |
| Electrically Isolated Bearing | Not Electrically Isolated |
| Feedback Device | NO FEEDBACK |
| Front Face Code | Encoder/Feedback Device |
| Front Shaft Indicator | None |
| Heater Indicator | No Heater |
| High Voltage Full Load Amps | 6.5 a |

Part Detail

| | |
|---------------------|------------|
| Revision | AB |
| Type | AC |
| Mech. spec. | 06F552 |
| Base | |
| Status | PRD/A |
| Elec. spec. | 06WGW352 |
| Layout | 06LYF552 |
| Eff. date | 09-30-2025 |
| CD Diagram | CD0005 |
| Poles | 04 |
| Leads | 9#16 |
| Proprietary | False |
| Created date | 01-01-0001 |

| | |
|--------------------------------------|----------------------------|
| Insulation Class | H |
| Inverter Code | Inverter Duty |
| KVA Code | J |
| Lifting Lugs | Standard Lifting Lugs |
| Locked Bearing Indicator | Locked Bearing |
| Max Speed | 6000 rpm |
| Motor Lead Exit | Ko Box |
| Motor Lead Quantity/Wire Size | 9 @ 16 AWG |
| Motor Lead Termination | Flying Leads |
| Motor Standards | NEMA |
| Motor Type | 0640M |
| Mounting Arrangement | F1 |
| Number of Poles | 4 |
| Overall Length | 21.71 IN |
| Power Factor | 80 |
| Product Family | General Purpose |
| Pulley End Bearing Type | Ball |
| Pulley Face Code | C-Face |
| Pulley Shaft Indicator | Standard |
| Rodent Screen | None |
| Service Factor | 1.00 |
| Shaft Diameter | 1.125 IN |
| Shaft Extension Location | Pulley End |
| Shaft Ground Indicator | No Shaft Grounding |
| Shaft Rotation | Reversible |
| Shaft Slinger Indicator | No Slinger |
| Speed | 1750 rpm |
| Speed Code | Single Speed |
| Starting Method | Direct on line |
| Thermal Device - Bearing | None |
| Thermal Device - Winding | Normally Closed Thermostat |
| Vibration Sensor Indicator | No Vibration Sensor |
| Winding Thermal 1 | None |
| Winding Thermal 2 | None |

Nameplate

| NP4009L | | | | | | | | | |
|-----------------------|--------------|-------------------|-----------|--------------|-----------|----|-------------|-----|--|
| CAT.NO. | IDM3665T | | | | | | | | |
| SPEC. | 06F552W352G1 | | | | | | | | |
| FRAME | 184TC | H.P. | 5 TE | | | | | | |
| VOLTS | 230/460 | | | | | | | | |
| MAG. CUR. | 6.8/3.4 | F.L. AMPS | 13/6.5 | | | | | | |
| R.P.M. | 1750 | R.P.M. MAX | 6000 | | | | | | |
| HZ. | 60 | PH. | 3 | CLASS | H | | | | |
| SER.F. | 1.00 | DES. | B | SL HZ | 1.7 | | | | |
| NEMA NOM. EFF. | 90.2 | WK2 | 0.37 | | | | | | |
| BLOWER | V | 115 | PH | 1 | HZ | 60 | AMPS | .26 | |
| RATING | 40C AMB-CONT | | | | | | | | |
| DE | 6206 | ODE | 6205 | | | | | | |
| CC | 010A | SN | | | | | | | |
| | 1000:1 CT/VT | | | | | | | | |



AC Induction Motor Performance Data
 Record # 20655
 Typical performance - not guaranteed values

| | | |
|--------------------------|--------------------|------------------------|
| Winding: 06WGW352 | Type: 0640M | Enclosure: TEFC |
|--------------------------|--------------------|------------------------|

| Nameplate Data | | | | General Characteristics at 460 V, 60 Hz: High Volt Connection | |
|-------------------|--------------|----------|----|--|-----------|
| Rated Output (HP) | 5 | | | Full Load Torque | 15 LB-FT |
| Volts | 230/460 | | | Start Configuration | DOL |
| Full Load Amps | 13/6.5 | | | Break Down Torque | 50 LB-FT |
| R.P.M. | 1750 | | | Pull-Up Torque | 30 LB-FT |
| Hz | 60 | Phase | 3 | Locked-rotor Torque | 32 LB-FT |
| NEMA Design Code | B | KVA Code | J | Starting Current | 48 Amps |
| Service Factor | 1.00 | | | No-load Current | 3.4 Amps |
| NEMA Nom. Eff. | 90.2 | P.F. | 80 | Line-line Res. @ 25°C. | 2.61 Ohms |
| Rating - Duty | 40C AMB-CONT | | | Temp. Rise @ Rated Load | 47°C |
| S.F. Amps | | | | Temp. Rise @ S.F. Load | |

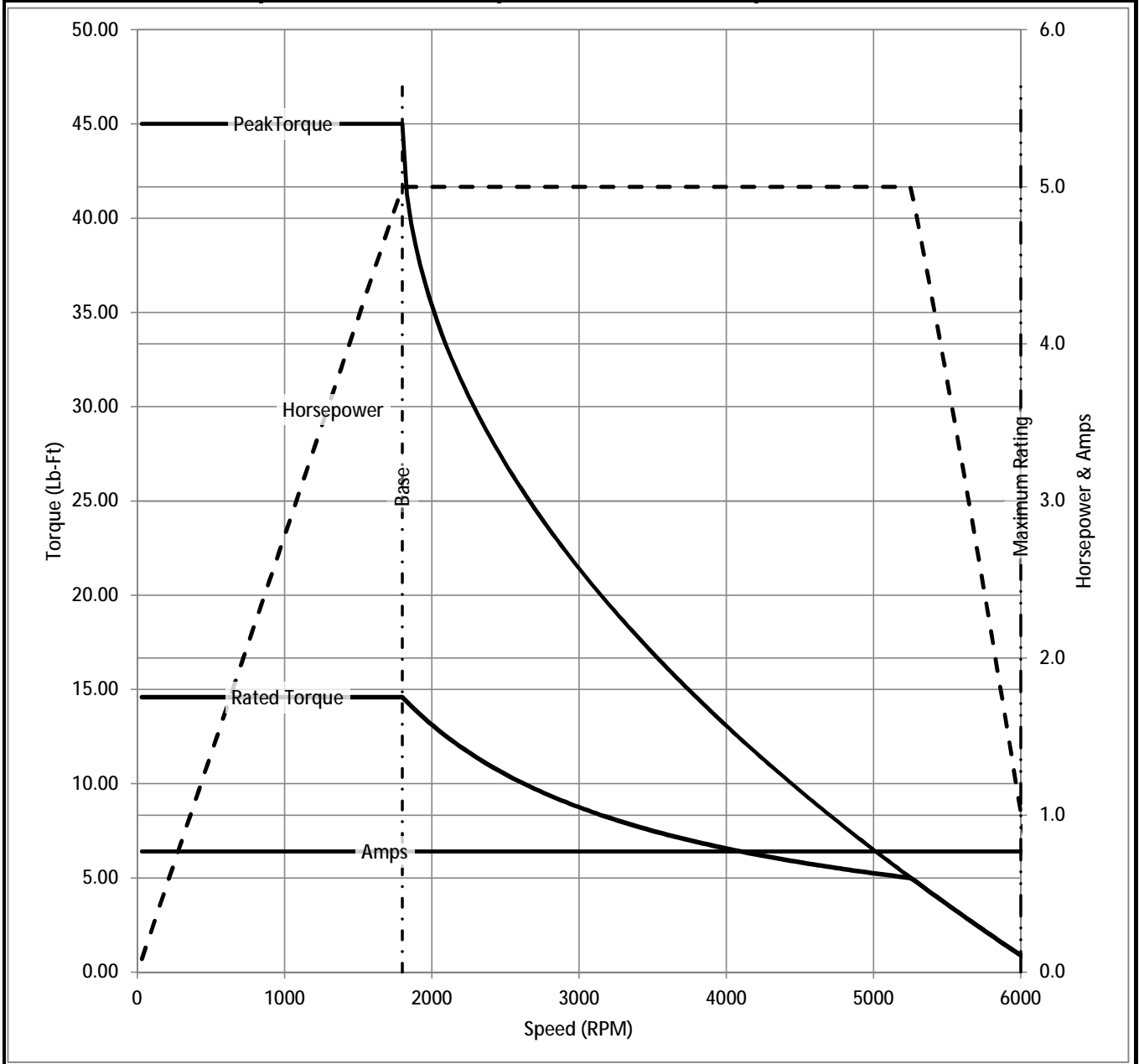
Load Characteristics at 460 Volts, 60 Hz, 5 HP

| % of Rated Load | 25 | 50 | 75 | 100 | 125 | 150 | S.F. |
|-----------------|------|------|------|------|------|------|------|
| Power Factor | 39 | 61 | 75 | 82 | 86 | 88 | |
| Efficiency | 84.1 | 89.4 | 90.4 | 90.2 | 89.4 | 88.3 | |
| Speed | 1789 | 1778 | 1767 | 1755 | 1742 | 1729 | |
| Line Amperes | 3.6 | 4.3 | 5.2 | 6.4 | 7.2 | 9 | |

Baldor Electric Company Fort Smith, Arkansas



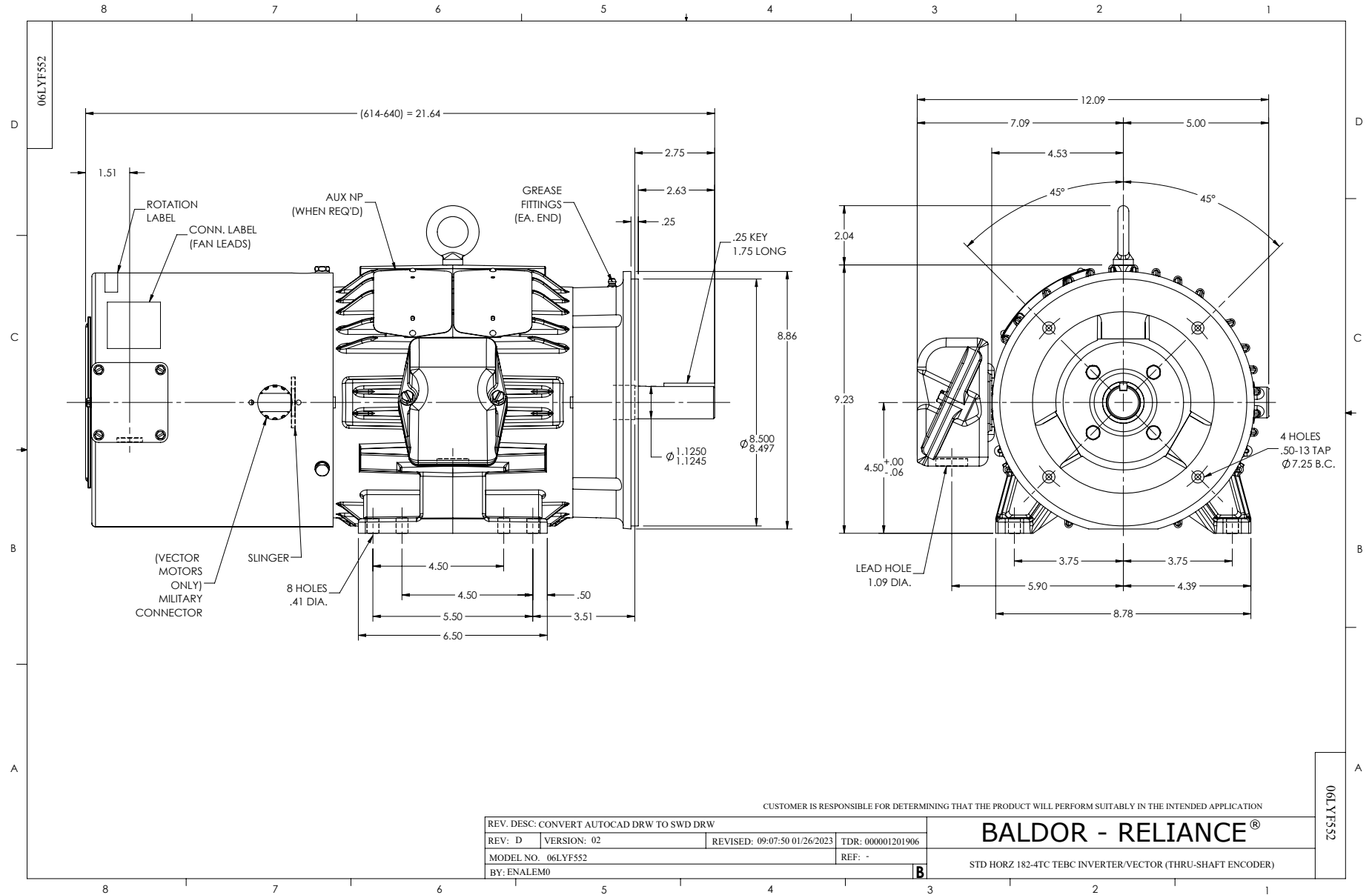
| | | | | | | | | | |
|------------|----------|--------------------------|---------|---------------------------------------|-------|---|-------|----|--------|
| Catalog | IDM3665T | NP VOLTS | 230/460 | ENCLOSURE | TEBC | WYE CONN EQ CKT OHMS PER PHASE (BASE RATING, 20C) | | | |
| FRAME | 184TC | NP AMPS | 13/6.5 | Base Volts | 460 | R1 | 1.200 | X1 | 2.786 |
| HP | 5 HP | DUTY | Cont | Base AMPS | 6.4 | R2 | 0.977 | X2 | 2.177 |
| BASE SPEED | 1800 | MAX SAFE RPM | 6000 | Slip Hz | 1.50 | | | XM | 78.683 |
| PHASE/HZ | 3/60 | AMB ⁰ C/INSUL | 40/H | WK ² (lb-ft ²) | 0.372 | | | | |



Remarks: Calculated Data

The circuit diagram illustrates a wye-connected motor winding. It includes resistors R1, X1, and X2 in the main line. A branch contains RFE and XM in parallel. Another branch contains R2/S. The input voltage is labeled V_{PH}.

| | | | | |
|--|--------|------------------|--|------------------|
| <p>BALDOR A MEMBER OF THE ABB GROUP</p> | DR BY | <u>ENR</u> | <p>06F552W352G1</p> <p>A-C MOTOR PERFORMANCE CURVES</p> | |
| | CK BY | | | |
| | APP BY | <u>ENR</u> | | |
| | DATE | <u>2/26/2013</u> | | |
| | | | ISSUE DATE | <u>2/26/2013</u> |



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