BALDOR • RELIANCE

# Customer information packet

## VEBM3615T-DI

5HP, 1750RPM, 3PH, 60HZ, 184TC, 3642M, TEFC, F1
Class - None
Division - Not Applicable


8/10/2024 3:57:39 PM

## Specifications

| | |
|---|---|
| **Enclosure** | TEFC |
| **Frame** | 184TC |
| **Frame Material** | Steel |
| **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** | 460.0 V @ 60 HZ |
| | 230.0 V @ 60 HZ |
| **Agency Approvals** | CSA |
| | CSA EEV |
| | UR |
| **Ambient Temperature** | 40 °C |
| **Auxillary Box** | No Auxillary Box |
| **Auxillary Box Lead Termination** | None |
| **Base Indicator** | No Mounting |
| **Bearing Grease Type** | Polyrex EM (-20F +300F) |
| **Blower** | None |
| **Current @ Voltage** | 13.900 A @ 208.0 V |
| | 6.700 A @ 460.0 V |
| | 13.400 A @ 230.0 V |
| **Design Code** | B |
| **Drip Cover** | No Drip Cover |
| **Duty Rating** | CONT |
| **Efficiency @ 100% Load** | 89.5 % |
| **Electrically Isolated Bearing** | Not Electrically Isolated |
| **Feedback Device** | NO FEEDBACK |
| **Front Face Code** | Brake Mounting |
| **Front Shaft Indicator** | None |

## Part detail

| | |
|---|---|
| **Revision** | J |
| **Type** | AC |
| **Mech. spec.** | 36Q900 |
| **Base** | |
| **Status** | PRD/A |
| **Elec. spec.** | 36WGS268 |
| **Layout** | 36LYQ900 |
| **Eff. date** | 05-01-2024 |
| **CD Diagram** | CD0005 |
| **Poles** | 04 |
| **Leads** | 9#16 |
| **Proprietary** | False |
| **Created date** | 09-28-2016 |

| | |
|---|---|
| **Heater Indicator** | No Heater |
| **High Voltage Full Load Amps** | 6.7 a |
| **Insulation Class** | F |
| **Inverter Code** | Inverter Ready |
| **KVA Code** | J |
| **Lifting Lugs** | No Lifting Lugs |
| **Locked Bearing Indicator** | Locked Bearing |
| **Motor Lead Exit** | Ko Box |
| **Motor Lead Quantity/Wire Size** | 9 @ 16 AWG |
| **Motor Lead Termination** | Flying Leads |
| **Motor Standards** | NEMA |
| **Motor Type** | 3642M |
| **Mounting Arrangement** | F1 |
| **Number of Poles** | 4 |
| **Overall Length** | 23.09 IN |
| **Power Factor** | 78 |
| **Product Family** | General Purpose |
| **Pulley End Bearing Type** | Ball |
| **Pulley Face Code** | C-Face |
| **Pulley Shaft Indicator** | Standard |
| **Rodent Screen** | None |
| **RoHS Status** | ROHS COMPLIANT |
| **Service Factor** | 1.15 |
| **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** | None |
| **Vibration Sensor Indicator** | No Vibration Sensor |

| | |
|---|---|
| **Winding Thermal 1** | None |
| **Winding Thermal 2** | None |

**Nameplate**

| NP1259L | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **CAT.NO.** | VEBM3615T-DI | | | | | | | | | |
| **SPEC.** | 36Q900S268G1 | | | | | | | | | |
| **HP** | 5 | | | | | | | | | |
| **VOLTS** | 230/460 | | | | | | | | | |
| **AMP** | 13.4/6.7 | | | | | | | | | |
| **RPM** | 1750 | | | | | | | | | |
| **FRAME** | 184TC | | **HZ** | 60 | | | **PH** | 3 | | |
| **SER.F.** | 1.15 | **CODE** | J | **DES** | B | **CL** | F | | | |
| **NEMA-NOM-EFF** | 89.5 | **PF** | 78 | | | | | | | |
| **RATING** | 40C AMB-CONT | | | | | | | | | |
| **CC** | 010A | | | | | | | | | |
| **DE** | 6206 | | **ODE** | 6205 | | | | | | |
| **ENCL** | TEFC | **SN** | | | | | | | | |

**AC Induction Motor Performance Data**
Record # 35063
Typical performance - not guaranteed values

| **Winding:** 36WGS268-R016 | **Type:** 3642M | **Enclosure:** TEFC |
|---|---|---|

| **Nameplate Data** | | | | **460 V, 60 Hz: High Voltage Connection** | |
|---|---|---|---|---|---|
| **Rated Output (HP)** | | | 5 | **Full Load Torque** | 14.9 LB-FT |
| **Volts** | | | 230/460 | **Start Configuration** | direct on line |
| **Full Load Amps** | | | 13.4/6.7 | **Breakdown Torque** | 52.2 LB-FT |
| **R.P.M.** | | | 1750 | **Pull-up Torque** | 31.5 LB-FT |
| **Hz** | 60 | **Phase** | 3 | **Locked-rotor Torque** | 34.9 LB-FT |
| **NEMA Design Code** | B | **KVA Code** | J | **Starting Current** | 49.1 A |
| **Service Factor (S.F.)** | | | 1.15 | **No-load Current** | 3.24 A |
| **NEMA Nom. Eff.** | 89.5 | **Power Factor** | 78 | **Line-line Res. @ 25ºC** | 2.27 Ω |
| **Rating - Duty** | | | 40C AMB-CONT | **Temp. Rise @ Rated Load** | 71°C |
| **S.F. Amps** | | | | **Temp. Rise @ S.F. Load** | 87°C |
| | | | | **Locked-rotor Power Factor** | 39.8 |
| | | | | **Rotor inertia** | 0.391 LB-FT2 |

**Load Characteristics 460 V, 60 Hz, 5 HP**

| **% of Rated Load** | **25** | **50** | **75** | **100** | **125** | **150** | **S.F.** |
|---|---|---|---|---|---|---|---|
| **Power Factor** | 39 | 60 | 72 | 78 | 83 | 83 | 81 |
| **Efficiency** | 85 | 89.7 | 90.6 | 89.6 | 88.6 | 87 | 89 |
| **Speed** | 1789 | 1776 | 1762 | 1750 | 1733 | 1714 | 1740 |
| **Line amperes** | 3.55 | 4.31 | 5.43 | 6.65 | 7.94 | 9.64 | 7.42 |

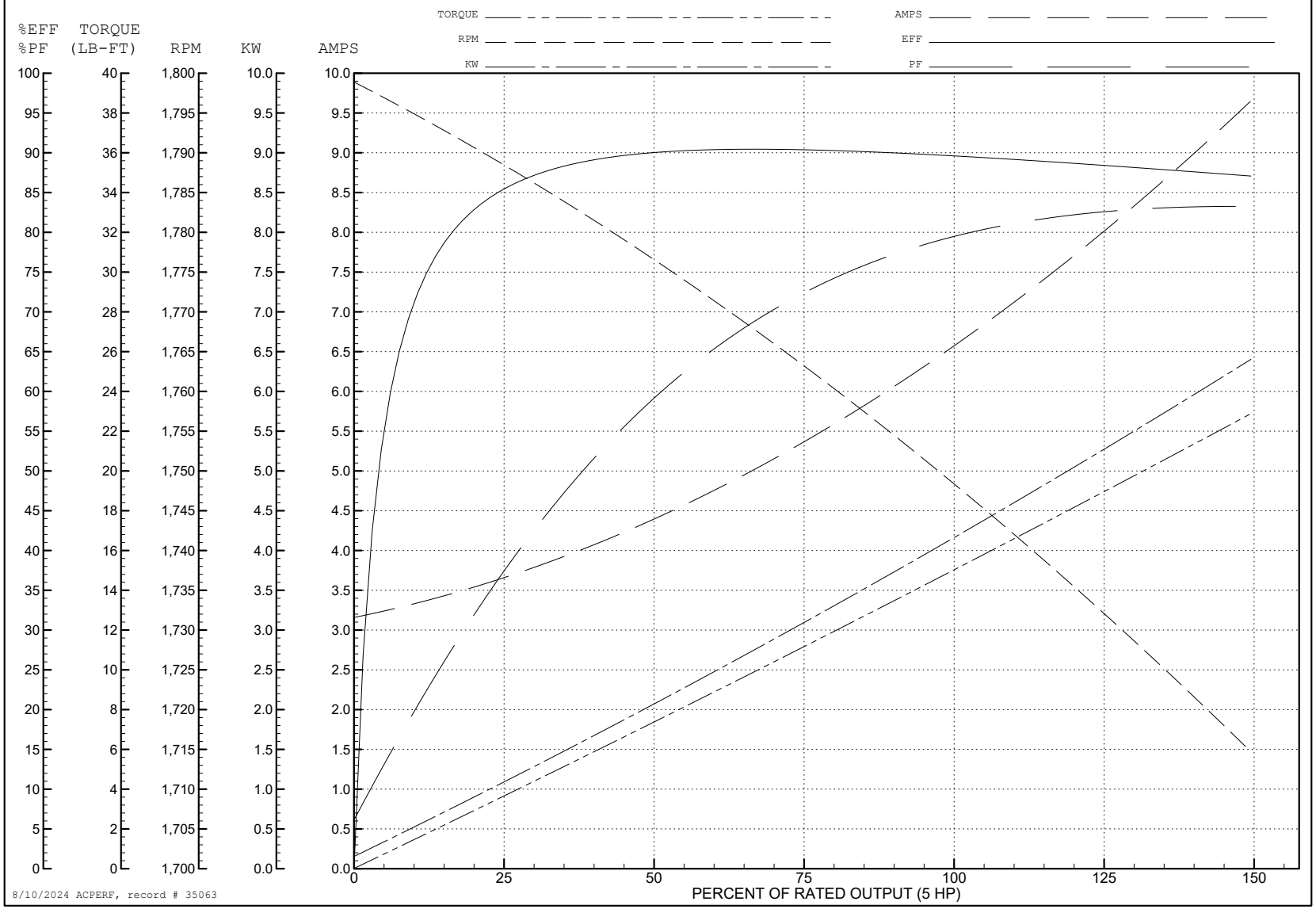
ABB Motors and Mechanical Inc.

WINDING # 36WGS268

5 HP 3 PH 60 HZ 1750 RPM 460 V 3642M

Typical performance - not guaranteed values.

TORQUES(LB-FT): PO=52.2 PU=31.5 LR=34.9 LRA=49.1




8/10/2024 ACPERF, record # 35063

**AC Induction Motor Performance Data**
Record # 93277
Typical performance - not guaranteed values

| **Winding:** 36WGS268-R016 | **Type:** 3642M | **Enclosure:** TEFC |
|---|---|---|

| **Nameplate Data** | | | | **230 V, 60 Hz: Low Voltage Connection** | |
|---|---|---|---|---|---|
| **Rated Output (HP)** | | | 5 | **Full Load Torque** | 14.9 LB-FT |
| **Volts** | | | 230/460 | **Start Configuration** | direct on line |
| **Full Load Amps** | | | 13.4/6.7 | **Breakdown Torque** | 52.2 LB-FT |
| **R.P.M.** | | | 1750 | **Pull-up Torque** | 31.5 LB-FT |
| **Hz** | 60 | **Phase** | 3 | **Locked-rotor Torque** | 34.9 LB-FT |
| **NEMA Design Code** | B | **KVA Code** | J | **Starting Current** | 98.2 A |
| **Service Factor (S.F.)** | | | 1.15 | **No-load Current** | 6.48 A |
| **NEMA Nom. Eff.** | 89.5 | **Power Factor** | 78 | **Line-line Res. @ 25ºC** | 0.567 Ω |
| **Rating - Duty** | | | 40C AMB-CONT | **Temp. Rise @ Rated Load** | 71°C |
| **S.F. Amps** | | | | **Temp. Rise @ S.F. Load** | 86°C |
| | | | | **Locked-rotor Power Factor** | 39.8 |
| | | | | **Rotor inertia** | 0.391 lb-ft² |

**Load Characteristics 230 V, 60 Hz, 5 HP**

| **% of Rated Load** | **25** | **50** | **75** | **100** | **125** | **150** | **S.F.** |
|---|---|---|---|---|---|---|---|
| **Power Factor** | 38 | 60 | 72 | 78 | 83 | 83 | 81 |
| **Efficiency** | 84.9 | 89.6 | 90.5 | 89.6 | 88.5 | 87 | 88.9 |
| **Speed** | 1789 | 1776 | 1762 | 1750 | 1733 | 1714 | 1740 |
| **Line amperes** | 7.1 | 8.62 | 10.86 | 13.3 | 15.88 | 19.28 | 14.8 |

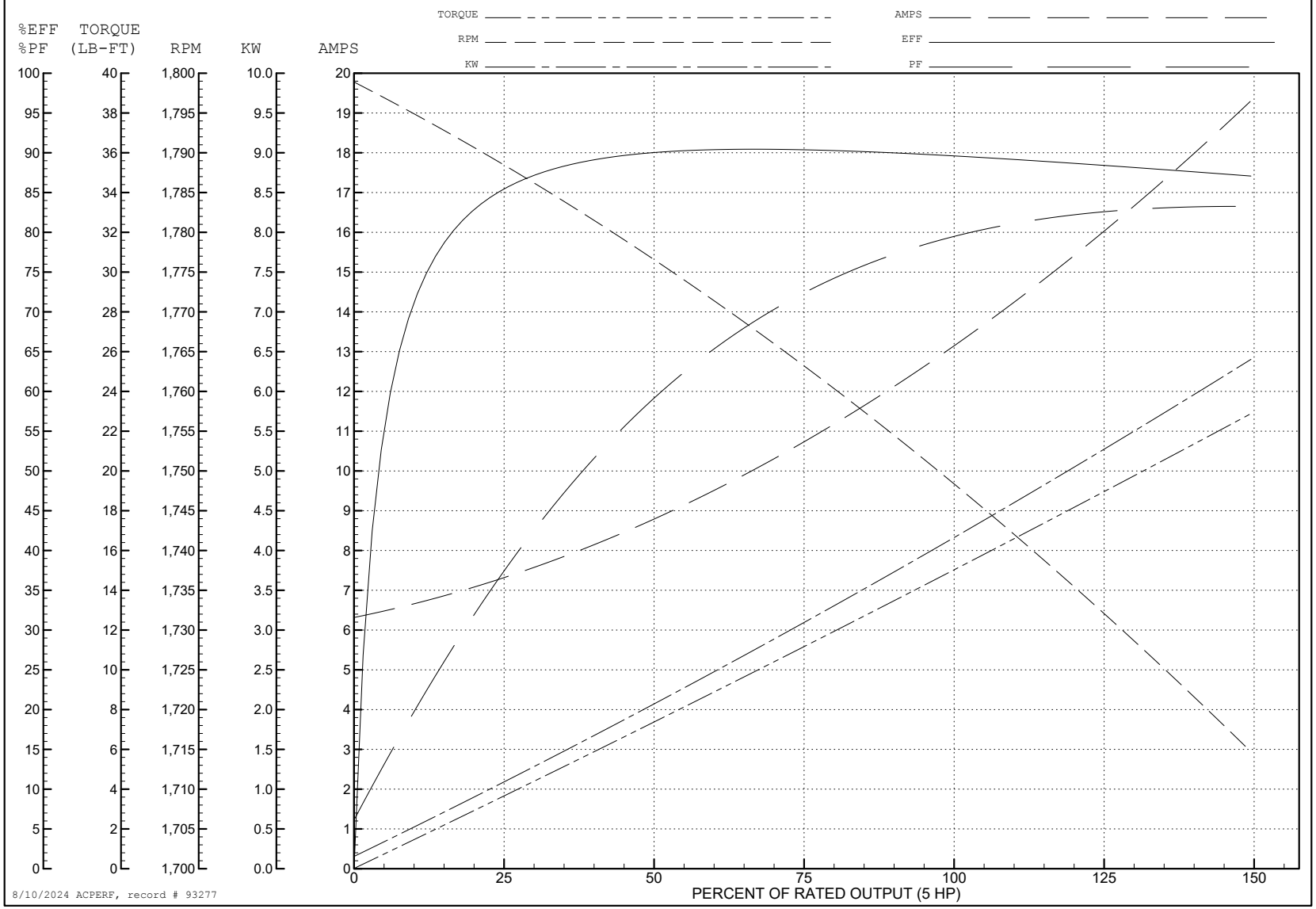
ABB Motors and Mechanical Inc.

WINDING # 36WGS268

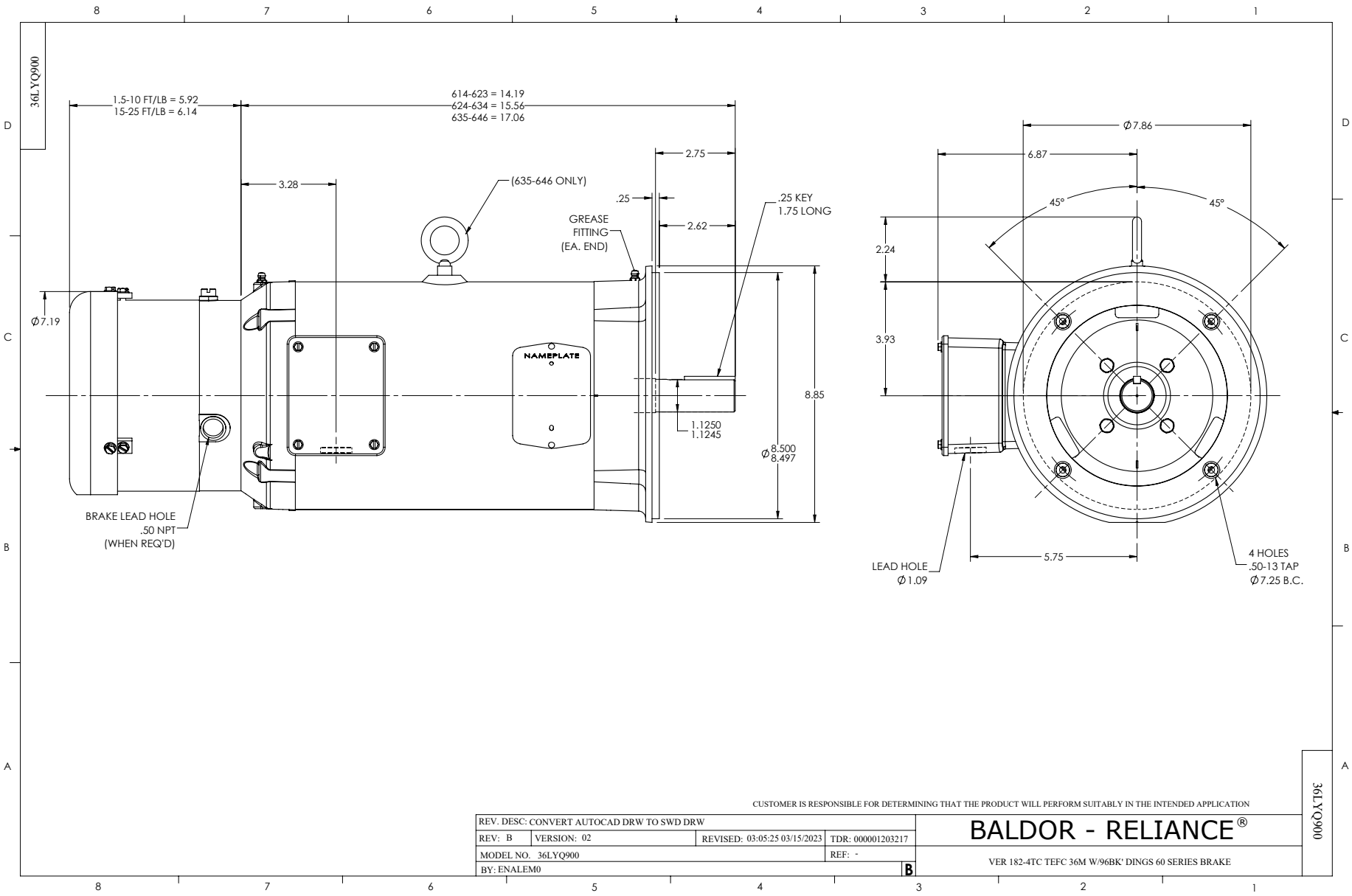
5 HP 3 PH 60 HZ 1750 RPM 230 V 3642M

Typical performance - not guaranteed values.

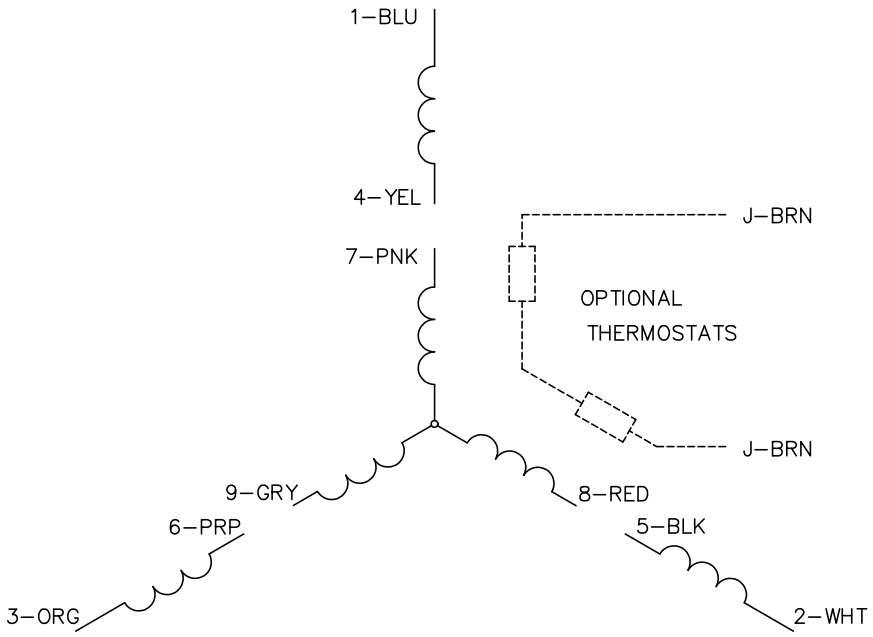
TORQUES(LB-FT): PO=52.2 PU=31.5 LR=34.9 LRA=98.2

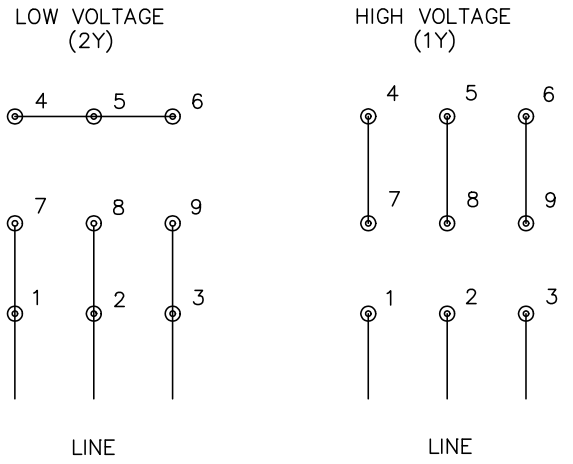



8/10/2024 ACPERF, record # 93277


36LYQ900
1.5-10 FT/LB = 5.92
15-25 FT/LB = 6.14
614-623 = 14.19
624-634 = 15.56
635-646 = 17.06
3.28
(635-646 ONLY)
2.75
.25
2.62
.25 KEY
1.75 LONG
GREASE
FITTING
(EA. END)
Ø7.19
NAMEPLATE
8.85
1.1250
1.1245
Ø8.500
8.497
BRAKE LEAD HOLE
.50 NPT
(WHEN REQ'D)
Ø7.86
6.87
45°
45°
2.24
3.93
5.75
LEAD HOLE
Ø1.09
4 HOLES
.50-13 TAP
Ø7.25 B.C.
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT THE PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION
REV. DESC: CONVERT AUTOCAD DRW TO SWD DRW
REV: B
VERSION: 02
REVISED: 03:05:25 03/15/2023
TDR: 000001203217
MODEL NO. 36LYQ900
REF: -
BY: ENALEM0
B
BALDOR - RELIANCE®
VER 182-4TC TEFC 36M W/96BK' DINGS 60 SERIES BRAKE
36LYQ900

CD0005




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 | | | BALDOR ELECTRIC Co. |
| REV. LTR: E | BY: JLP | REVISED: 01/19/99 10:15 | TDR: 0171435 |
| CD0005 | | FILE: AAA00005140 | MDL: – |
| | | MTL: – | 3PH, DV, 9 LEADS |