



Customer information packet

VEM3218T

5HP, 1750RPM, 3PH, 60HZ, 184TC, 3640M, ODP, F1

Class - None

Division - Not Applicable

Specifications

| | |
|--------------------------------|---------------------------------------------------------------|
| Enclosure | ODP |
| 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 | 230.0 V @ 60 HZ 460.0 V @ 60 HZ |
| Agency Approvals | CSA EEV CURUSEEV NEMA PREMIUM NEMA_PREMIUM 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 | 14.000 A @ 208.0 V 6.600 A @ 460.0 V 13.200 A @ 230.0 V |
| Design Code | B |
| Drip Cover | Drip Cover |
| Duty Rating | CONT |
| Efficiency @ 100% Load | 89.5 % |
| Electrically Isolated Bearing | Not Electrically Isolated |
| Feedback Device | NO FEEDBACK |

Part detail

| | |
|--------------|------------|
| Revision | P |
| Type | AC |
| Mech. spec. | 36Q489 |
| Base | |
| Status | PRD/A |
| Elec. spec. | 36WGS270 |
| Layout | 36LYQ489 |
| Eff. date | 09-23-2024 |
| CD Diagram | CD0005 |
| Poles | 04 |
| Leads | 9#16 |
| Proprietary | False |
| Created date | 05-05-2015 |

| | |
|-------------------------------|-----------------------|
| Front Face Code | Drip Cover Mounting |
| Front Shaft Indicator | None |
| Heater Indicator | No Heater |
| High Voltage Full Load Amps | 6.6 a |
| Insulation Class | F |
| Inverter Code | Inverter Ready |
| KVA Code | J |
| Lifting Lugs | Standard 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 | 3640M |
| Mounting Arrangement | F1 |
| Number of Poles | 4 |
| Overall Length | 18.03 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 | 1.15 |
| 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

| NP3553LUA | | | | | | | | | |
|----------------------------------|-----------------------------|-------------|------|------------|---|--------------|---|-------|--|
| CAT.NO. | VEM3218T | | | | | | | | |
| SPEC. | 36Q489S270G1 | | | | | | | | |
| HP | 5 | | | | | | | | |
| VOLTS | 230/460 | | | | | | | | |
| AMPS | 13.2/6.6 | | | | | | | | |
| RPM | 1750 | | | | | | | | |
| FRAME | 184TC | HZ | 60 | PH | 3 | | | | |
| SF | 1.15 | CODE | J | DES | B | CLASS | F | | |
| NEMA NOM. EFF | 89.5 | PF | 80 | | | | | | |
| RATING | 40C AMB-CONT | | | | | | | | |
| CC | 010A | | | | | | | | |
| ENCL | ODP | SN | | | | | | | |
| DE | 6206 | ODE | 6205 | | | | | | |
| VPWM INVERTER READY | | | | | | | | | |
| CT30-60(2:1) VT3-60(20:1) | | | | | | | | | |
| USABLE AT | 50HZ 5HP 190/380V 15.6/7.8A | | | | | | | SF1.0 | |

AC Induction Motor Performance Data

Record # 53360

Typical performance - not guaranteed values

| Winding: 36WGS270-R004 | | Type: 3640M | | Enclosure: OPSB | |
|-------------------------------|--------------------------|--------------------|--------------------------------------------------|--------------------------|--|
| Nameplate Data | | | 460 V, 60 Hz: High Voltage Connection | | |
| Rated Output (HP) | 5 | | Full Load Torque | 15.05 LB-FT | |
| Volts | 230/460 | | Start Configuration | direct on line | |
| Full Load Amps | 13.2/6.6 | | Breakdown Torque | 44.8 LB-FT | |
| R.P.M. | 1750 | | Pull-up Torque | 25.5 LB-FT | |
| Hz | 60 Phase | 3 | Locked-rotor Torque | 30.1 LB-FT | |
| NEMA Design Code | B KVA Code | J | Starting Current | 44.8 A | |
| Service Factor (S.F.) | 1.15 | | No-load Current | 2.97 A | |
| NEMA Nom. Eff. | 89.5 Power Factor | 80 | Line-line Res. @ 25°C | 2.632 Ω | |
| Rating - Duty | 40C AMB-CONT | | Temp. Rise @ Rated Load | 44°C | |
| S.F. Amps | | | Temp. Rise @ S.F. Load | 56°C | |
| | | | Locked-rotor Power Factor | 41 | |
| | | | Rotor inertia | 0.372 LB-FT ² | |

Load Characteristics 460 V, 60 Hz, 5 HP

| % of Rated Load | 25 | 50 | 75 | 100 | 125 | 150 | S.F. |
|------------------------|-----------|-----------|-----------|------------|------------|------------|-------------|
| Power Factor | 42 | 64 | 75 | 80 | 83 | 84 | 82 |
| Efficiency | 85.4 | 89.7 | 90.2 | 89.5 | 88.2 | 86.4 | 88.7 |
| Speed | 1789.2 | 1778.5 | 1766.9 | 1753.8 | 1739.5 | 1722.1 | 1745 |
| Line amperes | 3.33 | 4.14 | 5.26 | 6.59 | 8.05 | 9.68 | 7.47 |

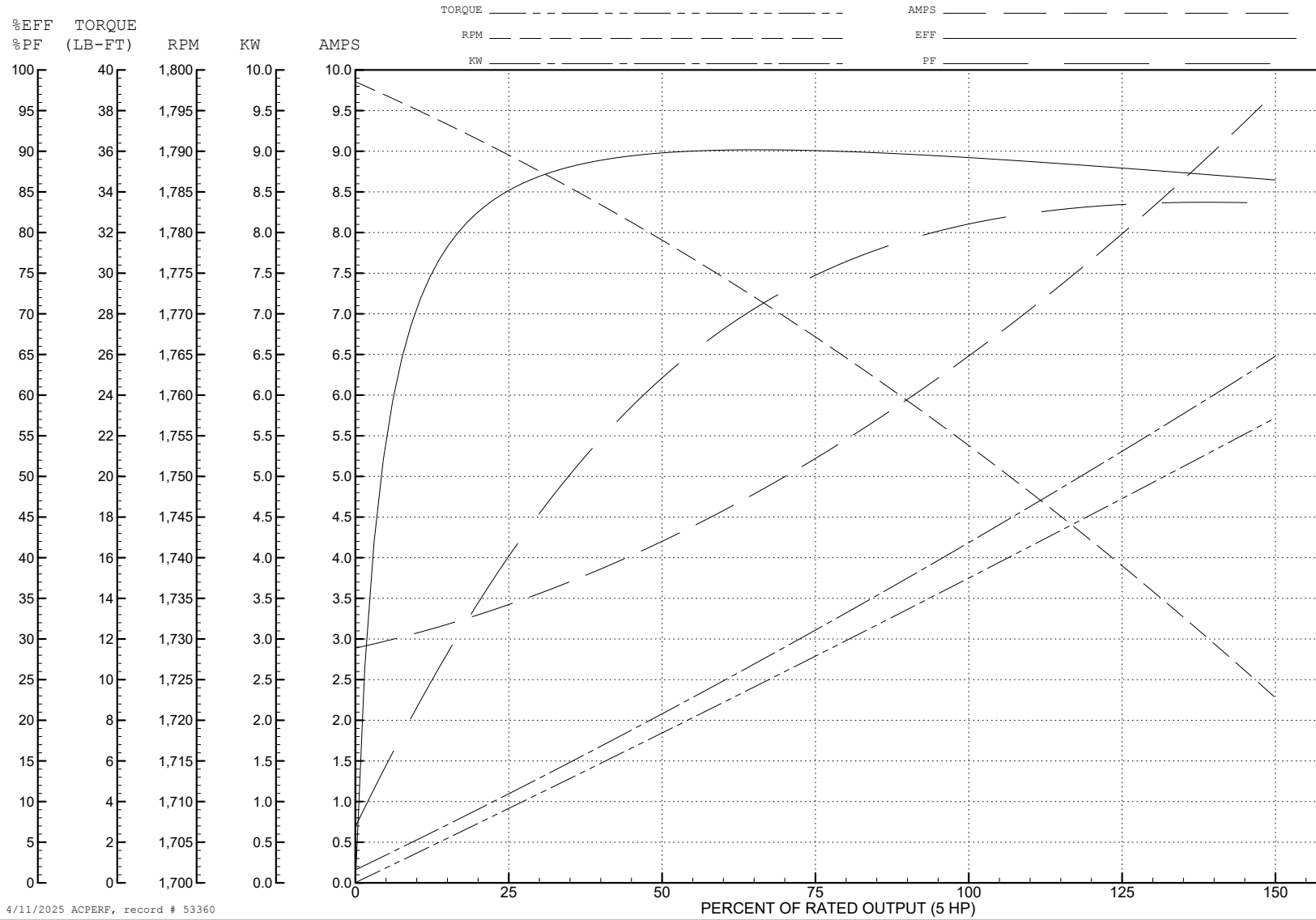
ABB Motors and Mechanical Inc.

WINDING # 36WGS270

5 HP 3 PH 60 HZ 1750 RPM 460 V 3640M

Typical performance - not guaranteed values.

TORQUES (LB-FT): PO=44.8 PU=25.5 LR=30.1 LRA=44.8



4/11/2025 ACPERF, record # 53360

AC Induction Motor Performance Data

Record # 86108

Typical performance - not guaranteed values

| Winding: 36WGS270-R004 | | Type: 3640M | | Enclosure: OPSB | |
|-------------------------------|--------------------------|----------------------------|-------------------------------------------------|--------------------------|--|
| Nameplate Data | | | 230 V, 60 Hz: Low Voltage Connection | | |
| Rated Output (HP) | 5 | Full Load Torque | 15.05 LB-FT | | |
| Volts | 230/460 | Start Configuration | direct on line | | |
| Full Load Amps | 13.2/6.6 | Breakdown Torque | 44.8 LB-FT | | |
| R.P.M. | 1750 | Pull-up Torque | 25.5 LB-FT | | |
| Hz | 60 Phase | 3 | Locked-rotor Torque | 30.1 LB-FT | |
| NEMA Design Code | B KVA Code | J | Starting Current | 89.6 A | |
| Service Factor (S.F.) | 1.15 | No-load Current | 5.94 A | | |
| NEMA Nom. Eff. | 89.5 Power Factor | 80 | Line-line Res. @ 25°C | 0.656 Ω | |
| Rating - Duty | 40C AMB-CONT | | Temp. Rise @ Rated Load | 44°C | |
| S.F. Amps | | | Temp. Rise @ S.F. Load | 54°C | |
| | | | Locked-rotor Power Factor | 40.8 | |
| | | | Rotor inertia | 0.372 lb-ft ² | |

Load Characteristics 230 V, 60 Hz, 5 HP

| % of Rated Load | 25 | 50 | 75 | 100 | 125 | 150 | S.F. |
|------------------------|-----------|-----------|-----------|------------|------------|------------|-------------|
| Power Factor | 42 | 64 | 75 | 80 | 83 | 84 | 82 |
| Efficiency | 84.3 | 89.2 | 89.7 | 89.6 | 88.2 | 86.2 | 88.8 |
| Speed | 1789 | 1779 | 1767 | 1754 | 1740 | 1722 | 1746 |
| Line amperes | 6.66 | 8.28 | 10.52 | 13.18 | 16.1 | 19.36 | 14.9 |

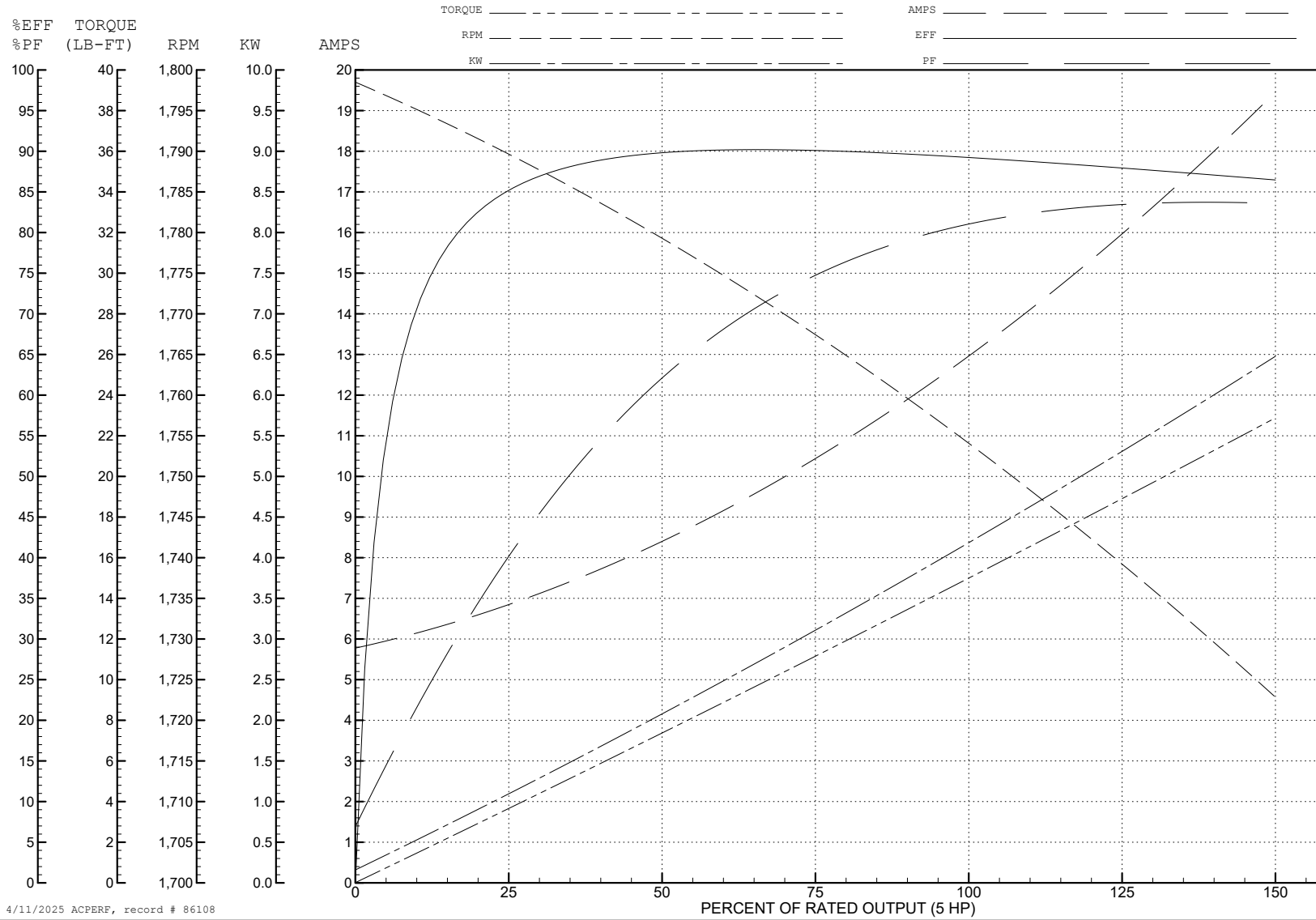
ABB Motors and Mechanical Inc.

WINDING # 36WGS270

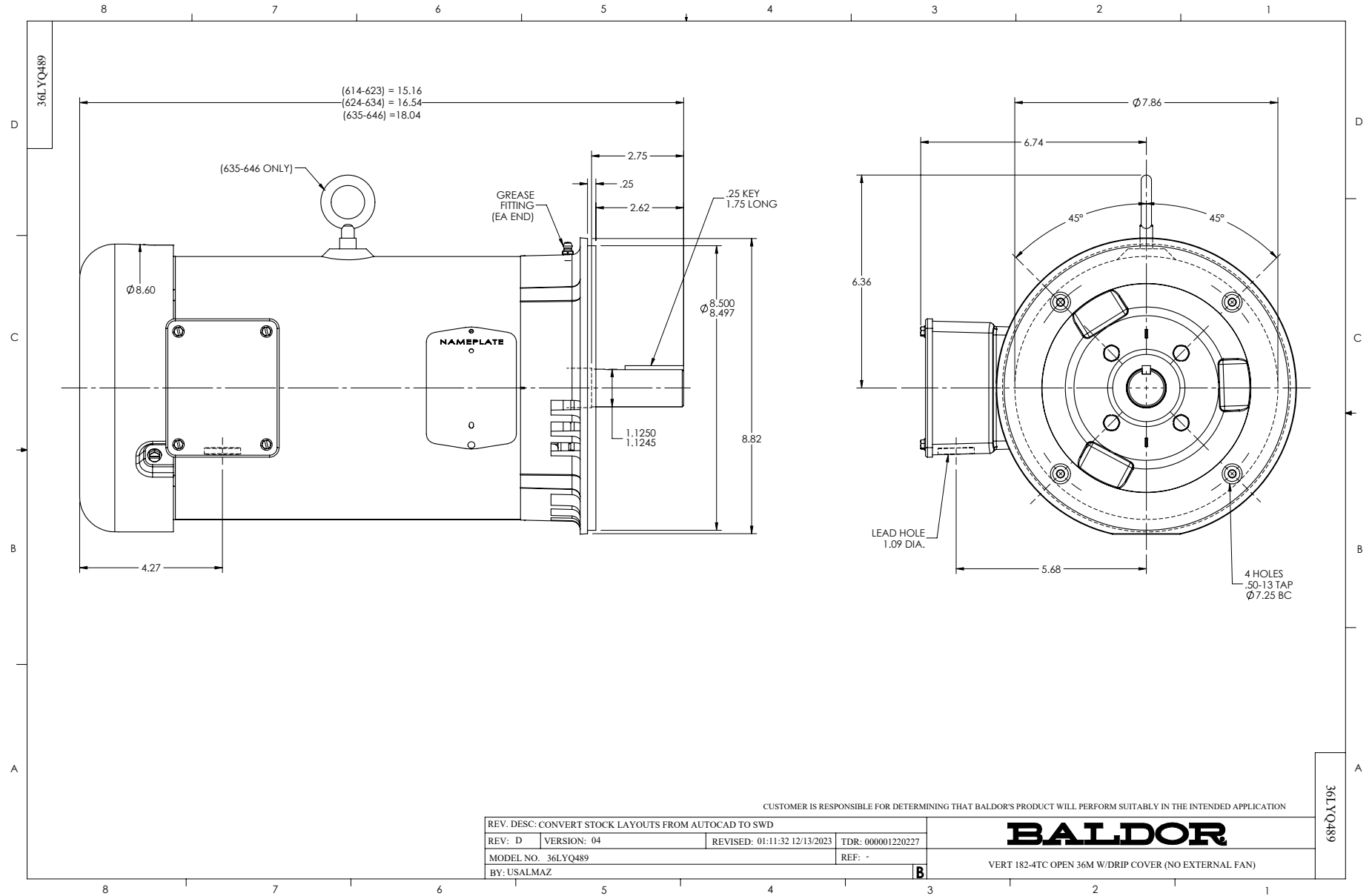
5 HP 3 PH 60 HZ 1750 RPM 230 V 3640M

Typical performance - not guaranteed values.

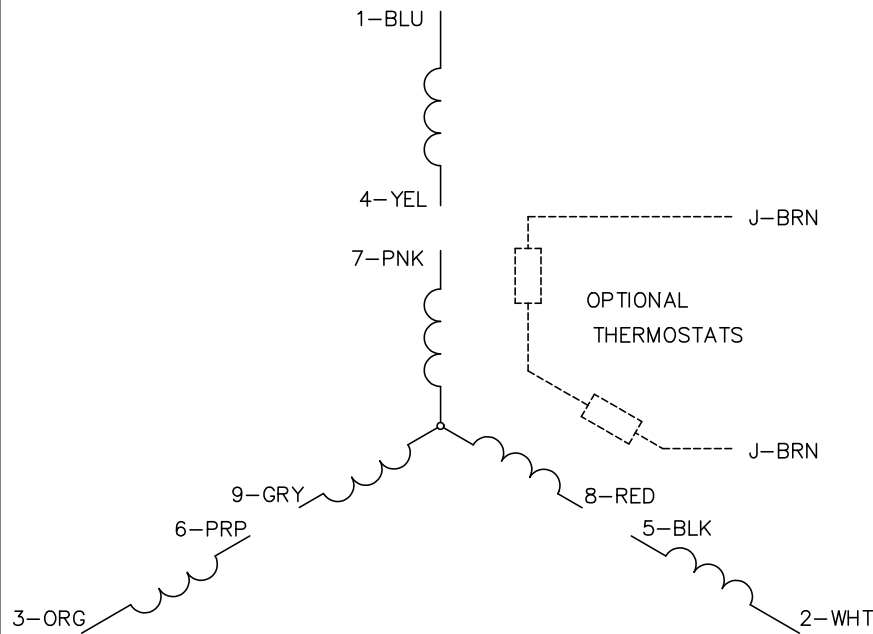
TORQUES (LB-FT): PO=44.8 PU=25.5 LR=30.1 LRA=89.6



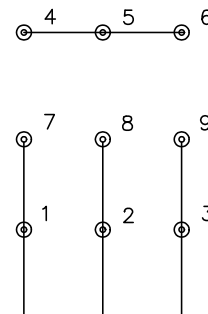
4/11/2025 ACPERF, record # 86108



CD0005

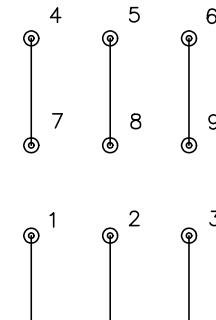


LOW VOLTAGE
(2Y)



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.

| | | | |
|-------------------------------------------|---------|-------------------------|--------------|
| REV. DESC: REVISE TO SHOW OPTIONAL COLORS | | | |
| REV. LTR: E | BY: JLP | REVISED: 01/19/99 10:15 | TDR: 0171435 |
| S00000 | | FILE: AAA00005140 | MDL: - |
| | | MTL: - | |

BALDOR ELECTRIC Co.

3PH, DV, 9 LEADS

CD0005