

BALDOR • RELIANCE

Customer information packet

EFM3613T

5HP, 3450RPM, 3PH, 60HZ, 184T, 3630M, TEFC, F2

Class - None

Division - Not Applicable

Specifications

| | |
|--------------------------------|---|
| Enclosure | TEFC |
| Frame | 184T |
| Frame Material | Steel |
| Frequency | 60.00 Hz |
| Motor Letter Type | Three Phase |
| Output @ Frequency | 5.000 HP @ 60 HZ |
| Phase | 3 |
| Synchronous Speed @ Frequency | 3600 RPM @ 60 HZ |
| Voltage @ Frequency | 230.0 V @ 60 HZ 460.0 V @ 60 HZ |
| XP Class and Group | None |
| XP Division | Not Applicable |
| Agency Approvals | UR CSA CSA EEV |
| Ambient Temperature | 40 °C |
| Auxillary Box | No Auxillary Box |
| Auxillary Box Lead Termination | None |
| Base Indicator | Rigid |
| Bearing Grease Type | Polyrex EM (-20F +300F) |
| Blower | None |
| Current @ Voltage | 5.900 A @ 460.0 V 11.800 A @ 230.0 V |
| Design Code | A |
| Drip Cover | No Drip Cover |
| Duty Rating | CONT |
| Efficiency @ 100% Load | 88.5 % |
| Electrically Isolated Bearing | Not Electrically Isolated |
| Feedback Device | NO FEEDBACK |
| Front Face Code | Standard |
| Front Shaft Indicator | None |
| Heater Indicator | No Heater |

Part detail

| | |
|--------------|------------|
| Revision | C |
| Type | AC |
| Mech. spec. | 36A006 |
| Base | |
| Status | PRD/A |
| Elec. spec. | 36WGS042 |
| Layout | 36LYA006 |
| Eff. date | 10-23-2017 |
| CD Diagram | CD0005 |
| Poles | 02 |
| Leads | 9#16 |
| Proprietary | False |
| Created date | 04-22-2013 |

| | |
|-------------------------------|---------------------|
| High Voltage Full Load Amps | 5.9 a |
| Insulation Class | F |
| Inverter Code | Inverter Ready |
| KVA Code | L |
| Lifting Lugs | No Lifting Lugs |
| Locked Bearing Indicator | No 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 | 3630M |
| Mounting Arrangement | F2 |
| Number of Poles | 2 |
| Overall Length | 16.55 IN |
| Power Factor | 91 |
| Product Family | General Purpose |
| Pulley End Bearing Type | Ball |
| Pulley Face Code | Standard |
| 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 | 3450 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**NP3441L**

| | | | | | | | |
|---------------------|--------------|-------------|-----------------------|------------|---|-----------|---|
| CAT.NO. | EFM3613T | | | | | | |
| SPEC. | 36A006S042G2 | | | | | | |
| HP | 5 | | | | | | |
| VOLTS | 230/460 | | | | | | |
| AMP | 11.8/5.9 | | | | | | |
| RPM | 3450 | | | | | | |
| FRAME | 184T | | HZ | 60 | | PH | 3 |
| SER.F. | 1.15 | CODE | L | DES | A | CL | F |
| NEMA-NOM-EFF | 88.5 | PF | 91 | | | | |
| RATING | 40C AMB-CONT | | | | | | |
| CC | 010A | | USABLE AT 208V | | | | |
| DE | 6206 | | ODE | 6205 | | | |
| ENCL | TEFC | SN | | | | | |

VPWM INVERTER READY**CT6-60H(10:1)VT3-60H(20:1)**

AC Induction Motor Performance Data

Record # 32158

Typical performance - not guaranteed values

| Winding: 36WGS042-R002 | | Type: 3630M | Enclosure: TEFC | |
|------------------------|-------------------|---------------------------|--|--|
| Nameplate Data | | | 460 V, 60 Hz: High Voltage Connection | |
| Rated Output (HP) | 5 | Full Load Torque | 7.67 LB-FT | |
| Volts | 230/460 | Start Configuration | direct on line | |
| Full Load Amps | 11.8/5.9 | Breakdown Torque | 33.7 LB-FT | |
| R.P.M. | 3450 | Pull-up Torque | 23.5 LB-FT | |
| Hz | 60 Phase | Locked-rotor Torque | 27.5 LB-FT | |
| NEMA Design Code | A KVA Code | Starting Current | 57.2 A | |
| Service Factor (S.F.) | 1.15 | No-load Current | 1.68 A | |
| NEMA Nom. Eff. | 88.5 Power Factor | Line-line Res. @ 25°C | 2.3313 Ω | |
| Rating - Duty | 40C AMB-CONT | Temp. Rise @ Rated Load | 72°C | |
| S.F. Amps | | Temp. Rise @ S.F. Load | 89°C | |
| | | Locked-rotor Power Factor | 45 | |
| | | Rotor inertia | 0.134 LB-FT ² | |

Load Characteristics 460 V, 60 Hz, 5 HP

| % of Rated Load | 25 | 50 | 75 | 100 | 125 | 150 | S.F. |
|-----------------|--------|--------|--------|--------|--------|------|------|
| Power Factor | 62 | 81 | 88 | 91 | 93 | 93 | 92 |
| Efficiency | 84.1 | 88.9 | 89.4 | 88.7 | 87.3 | 85.8 | 87.9 |
| Speed | 3568.7 | 3537.4 | 3504.2 | 3465.8 | 3428.2 | 3385 | 3443 |
| Line amperes | 2.24 | 3.26 | 4.47 | 5.85 | 7.26 | 8.8 | 6.7 |

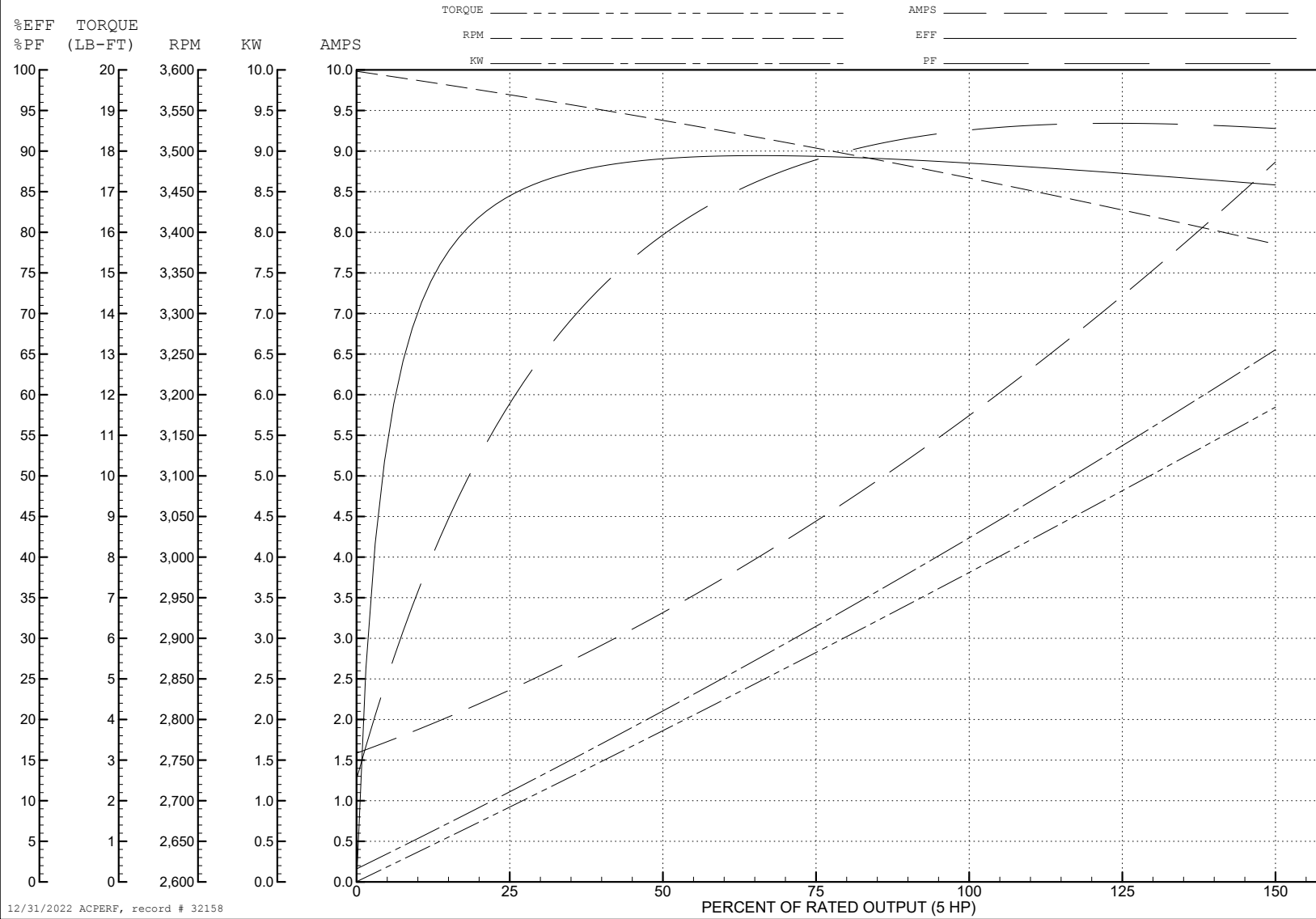
ABB Motors and Mechanical Inc.

WINDING # 36WGS042

5 HP 3 PH 60 HZ 3450 RPM 460 V 3630M

Typical performance - not guaranteed values.

TORQUES (LB-FT): PO=33.7 PU=23.5 LR=27.5 LRA=57.2



12/31/2022 ACPERF, record # 32158

AC Induction Motor Performance Data

Record # 50850

Typical performance - not guaranteed values

| Winding: 36WGS042-R002 | | Type: 3630M | Enclosure: TEFC | |
|------------------------|-------------------|--------------|--|--------------------------|
| Nameplate Data | | | 480 V, 60 Hz: High Voltage Connection | |
| Rated Output (HP) | | 5 | Full Load Torque | 7.64 LB-FT |
| Volts | | 230/460 | Start Configuration | direct on line |
| Full Load Amps | | 11.8/5.9 | Breakdown Torque | 37.2 LB-FT |
| R.P.M. | | 3450 | Pull-up Torque | 26.4 LB-FT |
| Hz | 60 Phase | 3 | Locked-rotor Torque | 30.9 LB-FT |
| NEMA Design Code | A KVA Code | L | Starting Current | 60.6 A |
| Service Factor (S.F.) | | 1.15 | No-load Current | 1.91 A |
| NEMA Nom. Eff. | 88.5 Power Factor | 91 | Line-line Res. @ 25°C | 2.26 Ω |
| Rating - Duty | | 40C AMB-CONT | Temp. Rise @ Rated Load | 71°C |
| S.F. Amps | | | Temp. Rise @ S.F. Load | 85°C |
| | | | Locked-rotor Power Factor | 45.7 |
| | | | Rotor inertia | 0.134 LB-FT ² |

Load Characteristics 480 V, 60 Hz, 5 HP

| % of Rated Load | 25 | 50 | 75 | 100 | 125 | 150 | S.F. |
|-----------------|------|------|------|------|------|------|------|
| Power Factor | 56 | 77 | 86 | 90 | 92 | 93 | 91 |
| Efficiency | 83.3 | 88.5 | 89.4 | 88.7 | 87.6 | 86 | 88 |
| Speed | 3571 | 3541 | 3511 | 3475 | 3440 | 3400 | 3454 |
| Line amperes | 2.39 | 3.32 | 4.43 | 5.71 | 7.03 | 8.46 | 6.5 |

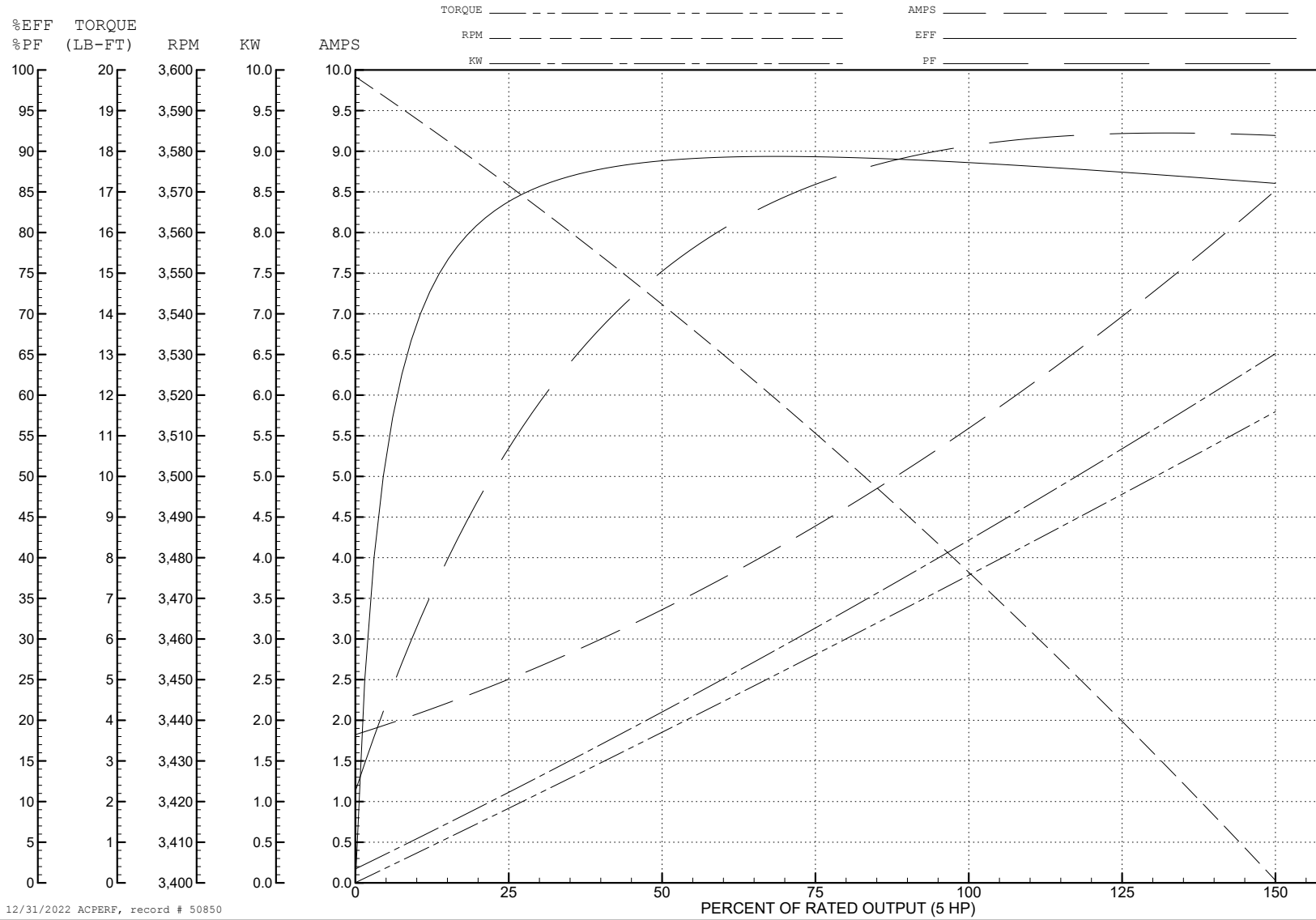
ABB Motors and Mechanical Inc.

WINDING # 36WGS042

Typical performance - not guaranteed values.

5 HP 3 PH 60 HZ 3450 RPM 480 V 3630M

TORQUES (LB-FT): PO=37.2 PU=26.4 LR=30.9 LRA=60.6



12/31/2022 ACPERF, record # 50850

AC Induction Motor Performance Data

Record # 51386

Typical performance - not guaranteed values

| Winding: 36WGS042-R002 | | Type: 3630M | Enclosure: TEFC | |
|------------------------|-------------------|---------------------------|---|--|
| Nameplate Data | | | 207 V, 60 Hz: Low Voltage Connection | |
| Rated Output (HP) | 5 | Full Load Torque | 7.73 LB-FT | |
| Volts | 230/460 | Start Configuration | direct on line | |
| Full Load Amps | 11.8/5.9 | Breakdown Torque | 26.7 LB-FT | |
| R.P.M. | 3450 | Pull-up Torque | 18.2 LB-FT | |
| Hz | 60 Phase | Locked-rotor Torque | 21.3 LB-FT | |
| NEMA Design Code | A KVA Code | Starting Current | 100 A | |
| Service Factor (S.F.) | 1.15 | No-load Current | 2.7 A | |
| NEMA Nom. Eff. | 88.5 Power Factor | Line-line Res. @ 25°C | 0.566 Ω | |
| Rating - Duty | 40C AMB-CONT | Temp. Rise @ Rated Load | 78°C | |
| S.F. Amps | | Temp. Rise @ S.F. Load | 99°C | |
| | | Locked-rotor Power Factor | 44 | |
| | | Rotor inertia | 0.134 LB-FT ² | |

Load Characteristics 207 V, 60 Hz, 5 HP

| % of Rated Load | 25 | 50 | 75 | 100 | 125 | 150 | S.F. |
|-----------------|------|------|------|------|------|------|------|
| Power Factor | 73 | 87 | 92 | 94 | 94 | 94 | 94 |
| Efficiency | 85.8 | 89.5 | 89.3 | 88 | 86.1 | 84.3 | 86.9 |
| Speed | 3563 | 3525 | 3485 | 3439 | 3392 | 3338 | 3411 |
| Line amperes | 4.17 | 6.68 | 9.54 | 12.8 | 16.1 | 19.9 | 14.8 |

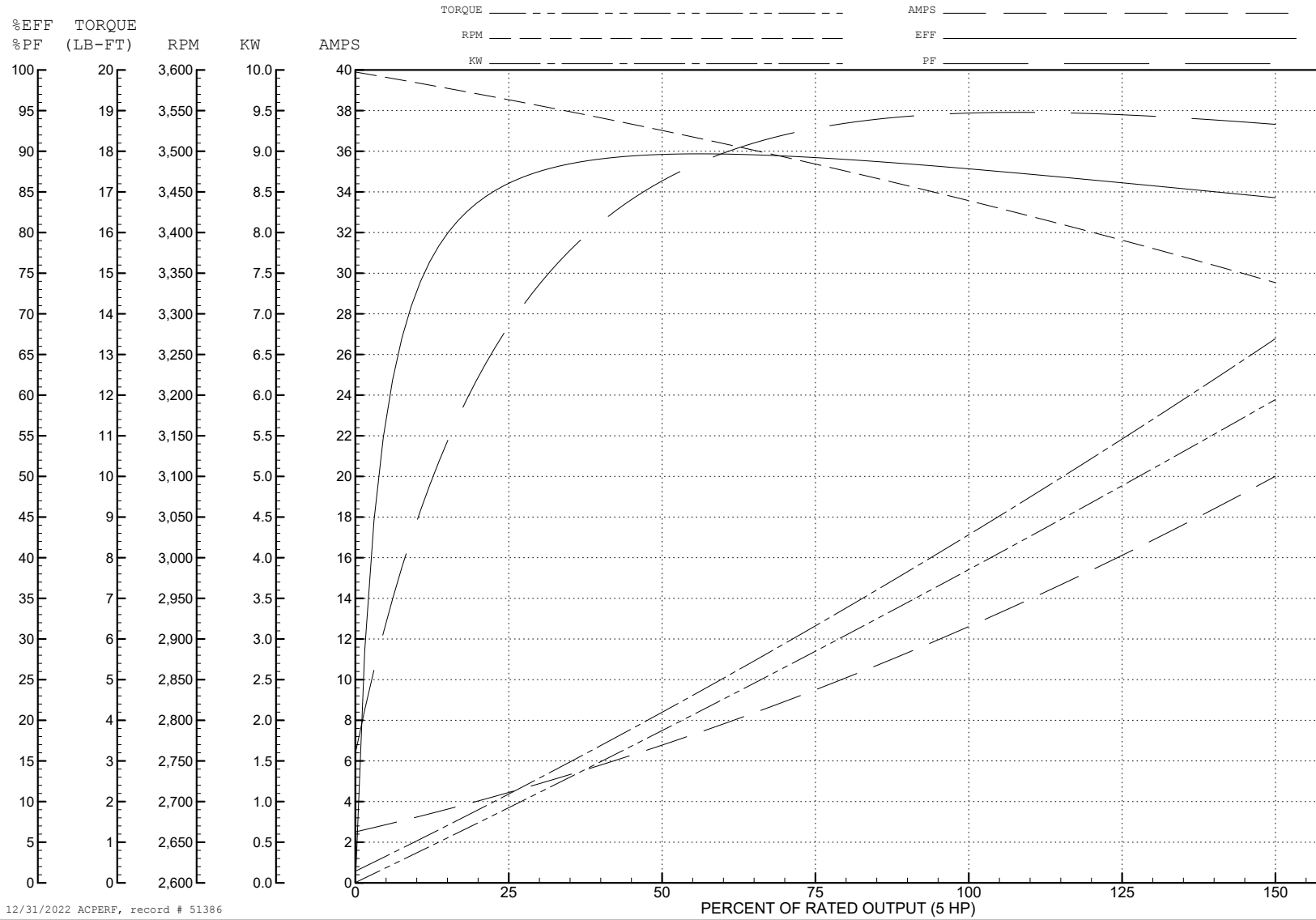
ABB Motors and Mechanical Inc.

WINDING # 36WGS042

Typical performance - not guaranteed values.

5 HP 3 PH 60 HZ 3450 RPM 207 V 3630M

TORQUES (LB-FT): PO=26.7 PU=18.2 LR=21.3 LRA=100



12/31/2022 ACPERF, record # 51386

AC Induction Motor Performance Data

Record # 59341

Typical performance - not guaranteed values

| Winding: 36WGS042-R002 | | Type: 3630M | Enclosure: TEFC | |
|------------------------|-------------------|---------------------------|---|--|
| Nameplate Data | | | 230 V, 60 Hz: Low Voltage Connection | |
| Rated Output (HP) | 5 | Full Load Torque | 7.67 LB-FT | |
| Volts | 230/460 | Start Configuration | direct on line | |
| Full Load Amps | 11.8/5.9 | Breakdown Torque | 33.7 LB-FT | |
| R.P.M. | 3450 | Pull-up Torque | 23.5 LB-FT | |
| Hz | 60 Phase | Locked-rotor Torque | 27.5 LB-FT | |
| NEMA Design Code | A KVA Code | Starting Current | 114 A | |
| Service Factor (S.F.) | 1.15 | No-load Current | 3.36 A | |
| NEMA Nom. Eff. | 88.5 Power Factor | Line-line Res. @ 25°C | 0.576 Ω | |
| Rating - Duty | 40C AMB-CONT | Temp. Rise @ Rated Load | 72°C | |
| S.F. Amps | | Temp. Rise @ S.F. Load | 88°C | |
| | | Locked-rotor Power Factor | 45.4 | |
| | | Rotor inertia | 0.134 LB-FT ² | |

Load Characteristics 230 V, 60 Hz, 5 HP

| % of Rated Load | 25 | 50 | 75 | 100 | 125 | 150 | S.F. |
|-----------------|------|------|------|------|------|------|------|
| Power Factor | 62 | 81 | 88 | 91 | 93 | 94 | 92 |
| Efficiency | 84.1 | 88.9 | 89.4 | 88.7 | 87.3 | 85.8 | 87.9 |
| Speed | 3569 | 3537 | 3504 | 3466 | 3428 | 3385 | 3443 |
| Line amperes | 4.48 | 6.52 | 8.94 | 11.7 | 14.5 | 17.6 | 13.4 |

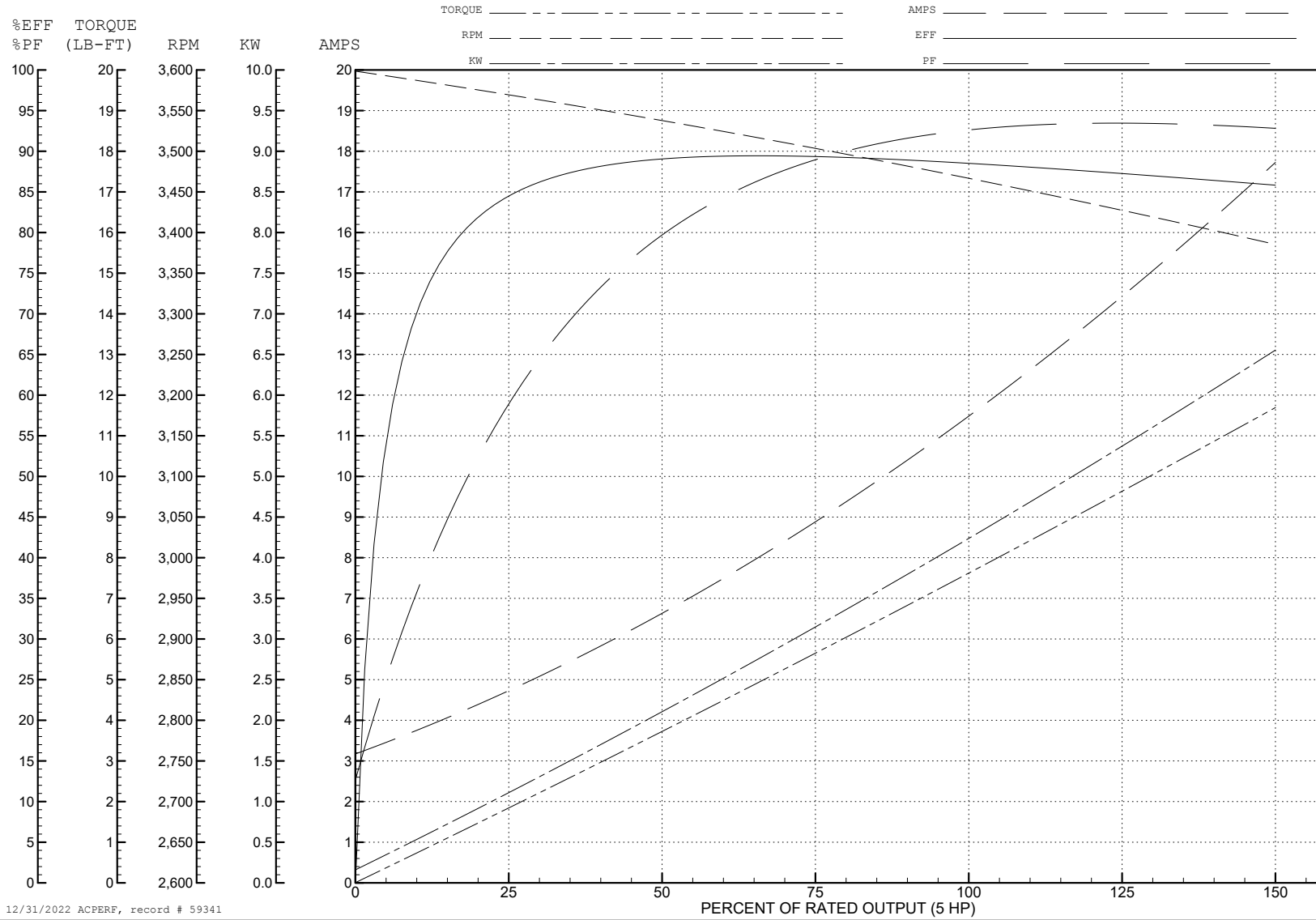
ABB Motors and Mechanical Inc.

WINDING # 36WGS042

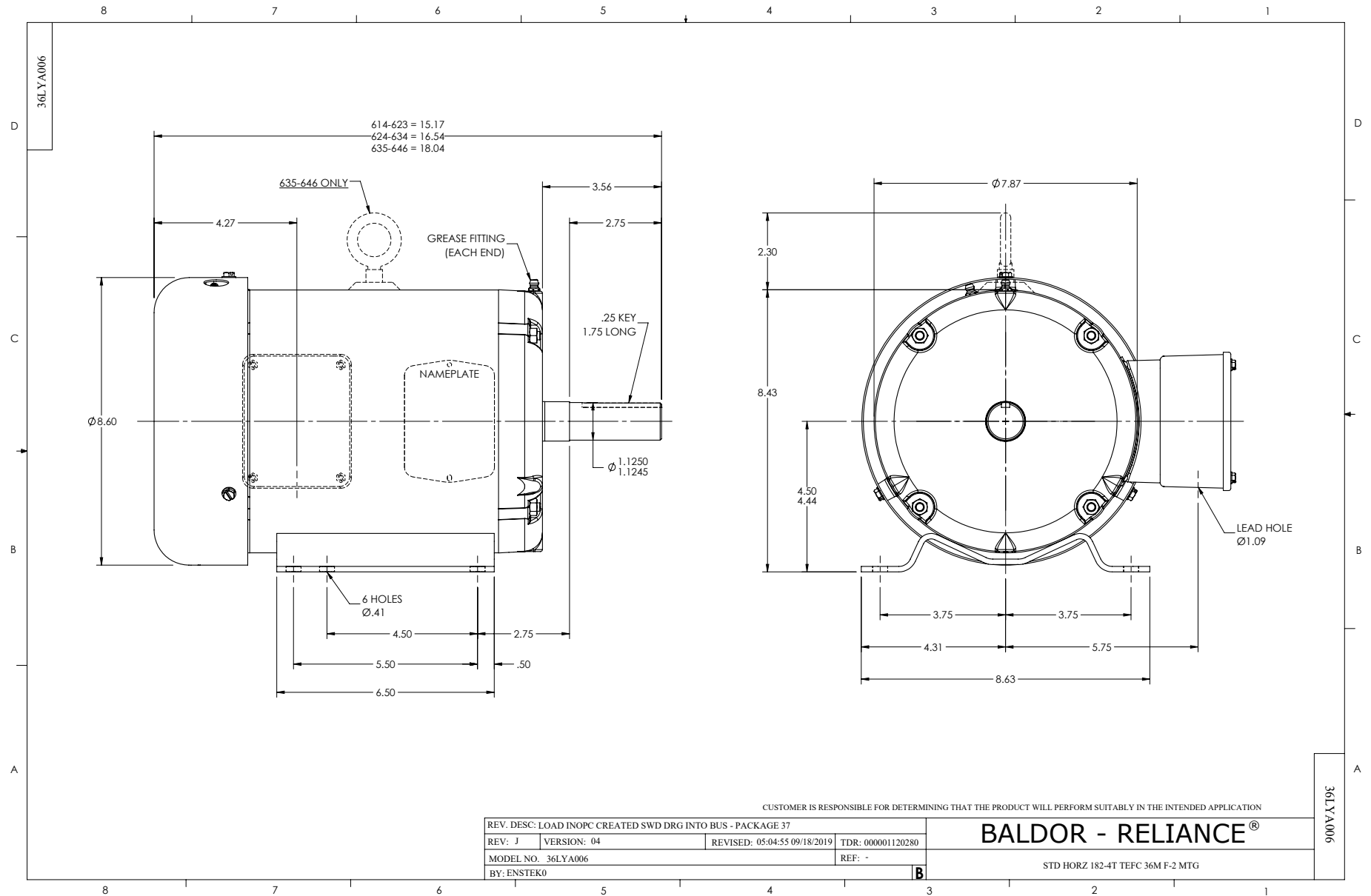
5 HP 3 PH 60 HZ 3450 RPM 230 V 3630M

Typical performance - not guaranteed values.

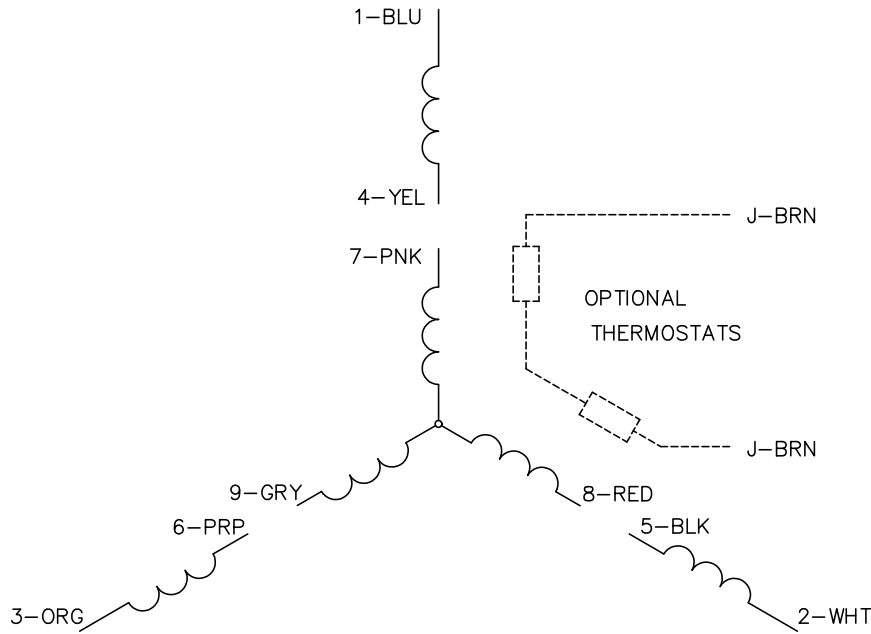
TORQUES (LB-FT): PO=33.7 PU=23.5 LR=27.5 LRA=114



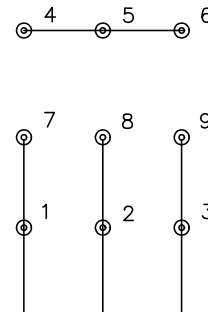
12/31/2022 ACPERF, record # 59341



CD0005

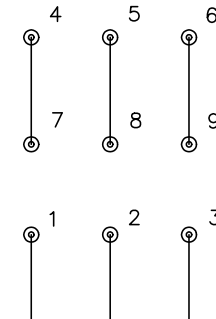


LOW VOLTAGE
(2Y)



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 |
| S00000 | | FILE: AAA00005140 | MDL: - |
| | | MTL: - | |

BALDOR ELECTRIC Co.

3PH, DV, 9 LEADS