



Customer information packet

ERHM3162TA

5HP, 3450RPM, 3PH, 60HZ, 145TY, 3540M, OPEN, F1

Class - None

Division - Not Applicable

Specifications

| | |
|--------------------------------|---|
| Enclosure | OPEN |
| Frame | 145TY |
| 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 | 3600 RPM @ 60 HZ |
| Voltage @ Frequency | 230.0 V @ 60 HZ 460.0 V @ 60 HZ |
| Agency Approvals | UR CSA CSA EEV |
| Ambient Temperature | 40 °C |
| Auxillary Box | No Auxillary Box |
| Auxillary Box Lead Termination | None |
| Base Indicator | Resilient |
| Bearing Grease Type | Polyrex EM (-20F +300F) |
| Blower | None |
| Current @ Voltage | 6.100 A @ 460.0 V 13.000 A @ 208.0 V 12.200 A @ 230.0 V |
| Design Code | A |
| Drip Cover | No Drip Cover |
| Duty Rating | CONT |
| Efficiency @ 100% Load | 86.5 % |
| Electrically Isolated Bearing | Not Electrically Isolated |
| Feedback Device | NO FEEDBACK |
| Front Face Code | Terminal Panel |
| Front Shaft Indicator | None |

Part detail

| | |
|--------------|------------|
| Revision | P |
| Type | AC |
| Mech. spec. | 35J829 |
| Base | |
| Status | PRD/A |
| Elec. spec. | 35WGM541 |
| Layout | 35LYJ829 |
| Eff. date | 04-30-2024 |
| CD Diagram | CD0007 |
| Poles | 02 |
| Leads | 12#18 |
| Proprietary | False |
| Created date | 08-05-2010 |

| | |
|-------------------------------|--------------------------|
| Heater Indicator | No Heater |
| High Voltage Full Load Amps | 6.1 a |
| Insulation Class | F |
| Inverter Code | Not Inverter |
| KVA Code | L |
| Lifting Lugs | No Lifting Lugs |
| Locked Bearing Indicator | No Locked Bearing |
| Motor Lead Exit | Terminal Panel |
| Motor Lead Quantity/Wire Size | 12 @ 18 AWG |
| Motor Lead Termination | Flying Leads |
| Motor Standards | NEMA |
| Motor Type | 3540M |
| Mounting Arrangement | F1 |
| Number of Poles | 2 |
| Overall Length | 15.02 IN |
| Power Factor | 89 |
| Product Family | General Purpose |
| Pulley End Bearing Type | Ball |
| Pulley Face Code | Resilient Mount |
| Pulley Shaft Indicator | Standard |
| Rodent Screen | None |
| RoHS Status | ROHS COMPLIANT |
| Service Factor | 1.15 |
| Shaft Diameter | 0.875 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 | Do Not Use Eve-Not Valid |
| Vibration Sensor Indicator | No Vibration Sensor |

| | |
|-----------------------------------|-----------------------------------|
| Winding Thermal 1 | Automatic Thermal Overload |
| Winding Thermal 1 Location | SB |
| Winding Thermal 2 | None |

Nameplate

| NP2601L | | | | | | | | | |
|---------------------|--------------|-----------------------|------|------------|---|-----------|---|--|--|
| CAT.NO. | ERHM3162TA | | | | | | | | |
| SPEC. | 35J829M541G1 | | | | | | | | |
| HP | 5 | | | | | | | | |
| VOLTS | 230/460 | | | | | | | | |
| AMP | 12.2/6.1 | | | | | | | | |
| RPM | 3450 | | | | | | | | |
| FRAME | 143TY | HZ | 60 | PH | 3 | | | | |
| SER.F. | 1.15 | CODE | L | DES | A | CL | F | | |
| NEMA-NOM-EFF | 86.5 | PF | 89 | | | | | | |
| RATING | 40C AMB-CONT | | | | | | | | |
| CC | 010A | USABLE AT 208V | | | | N/A | | | |
| DE | 6205 | ODE | 6203 | | | | | | |
| ENCL | OPEN | SN | | | | | | | |

AC Induction Motor Performance Data

Record # 53123

Typical performance - not guaranteed values

| Winding: 35WGM541-R003 | | Type: 3540M | | Enclosure: OPEN | |
|-------------------------------|--------------------------|--------------------|--|--------------------------|--|
| Nameplate Data | | | 460 V, 60 Hz: High Voltage Connection | | |
| Rated Output (HP) | 5 | | Full Load Torque | 7.65 LB-FT | |
| Volts | 230/460 | | Start Configuration | direct on line | |
| Full Load Amps | 12.2/6.1 | | Breakdown Torque | 34.5 LB-FT | |
| R.P.M. | 3450 | | Pull-up Torque | 20.8 LB-FT | |
| Hz | 60 Phase | 3 | Locked-rotor Torque | 32.1 LB-FT | |
| NEMA Design Code | A KVA Code | L | Starting Current | 60.4 A | |
| Service Factor (S.F.) | 1.15 | | No-load Current | 2.21 A | |
| NEMA Nom. Eff. | 86.5 Power Factor | 89 | Line-line Res. @ 25°C | 2.93 Ω | |
| Rating - Duty | 40C AMB-CONT | | Temp. Rise @ Rated Load | 56°C | |
| S.F. Amps | | | Temp. Rise @ S.F. Load | 68°C | |
| | | | Locked-rotor Power Factor | 48.2 | |
| | | | Rotor inertia | 0.111 LB-FT ² | |

Load Characteristics 460 V, 60 Hz, 5 HP

| % of Rated Load | 25 | 50 | 75 | 100 | 125 | 150 | S.F. |
|------------------------|-----------|-----------|-----------|------------|------------|------------|-------------|
| Power Factor | 54 | 76 | 85 | 89 | 91 | 92 | 90 |
| Efficiency | 83.8 | 88.1 | 87.9 | 86.9 | 84.9 | 82.6 | 85.7 |
| Speed | 3564 | 3530 | 3493 | 3452 | 3406 | 3353 | 3424 |
| Line amperes | 2.62 | 3.53 | 4.75 | 6.1 | 7.57 | 9.29 | 6.98 |

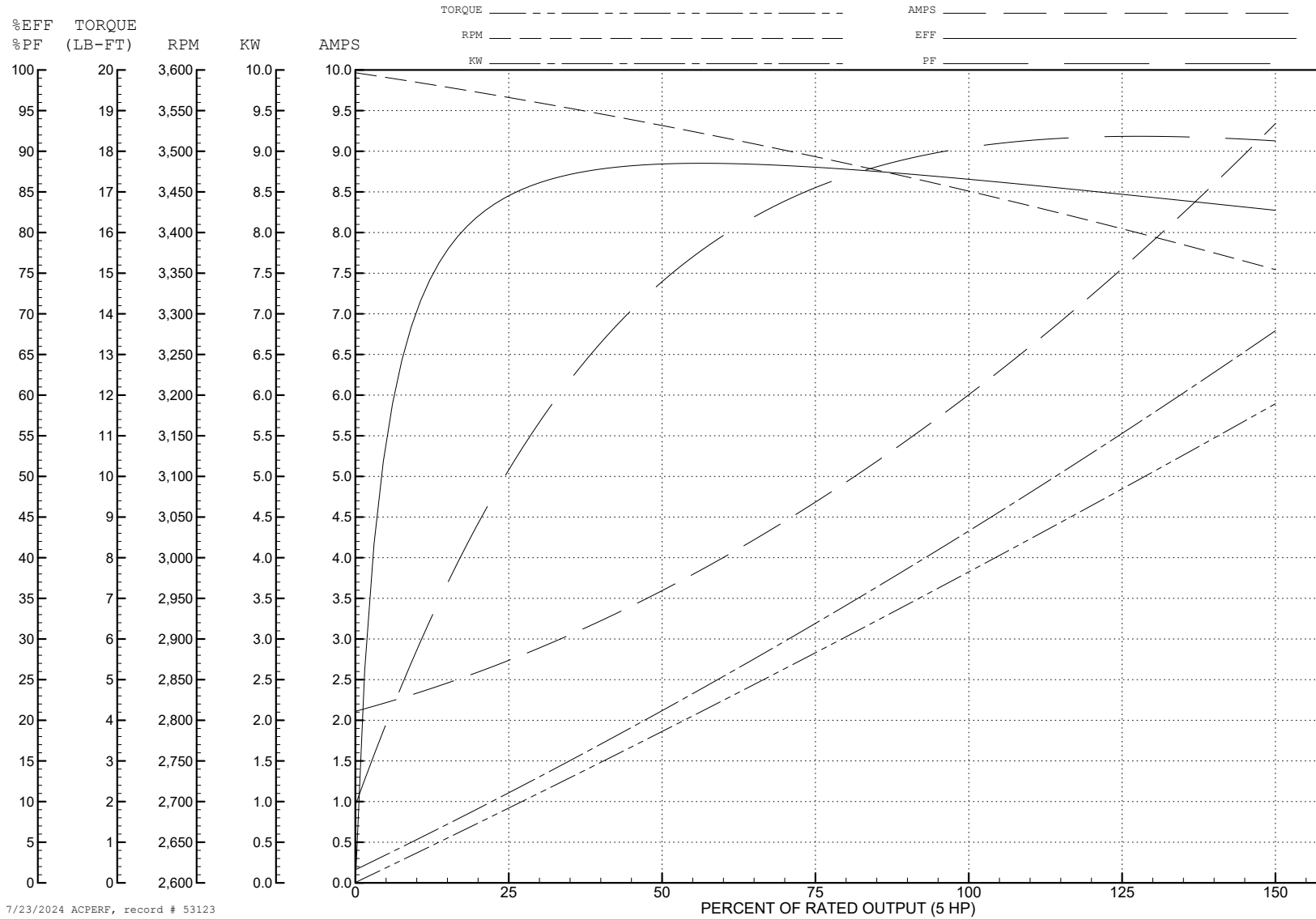
ABB Motors and Mechanical Inc.

WINDING # 35WGM541

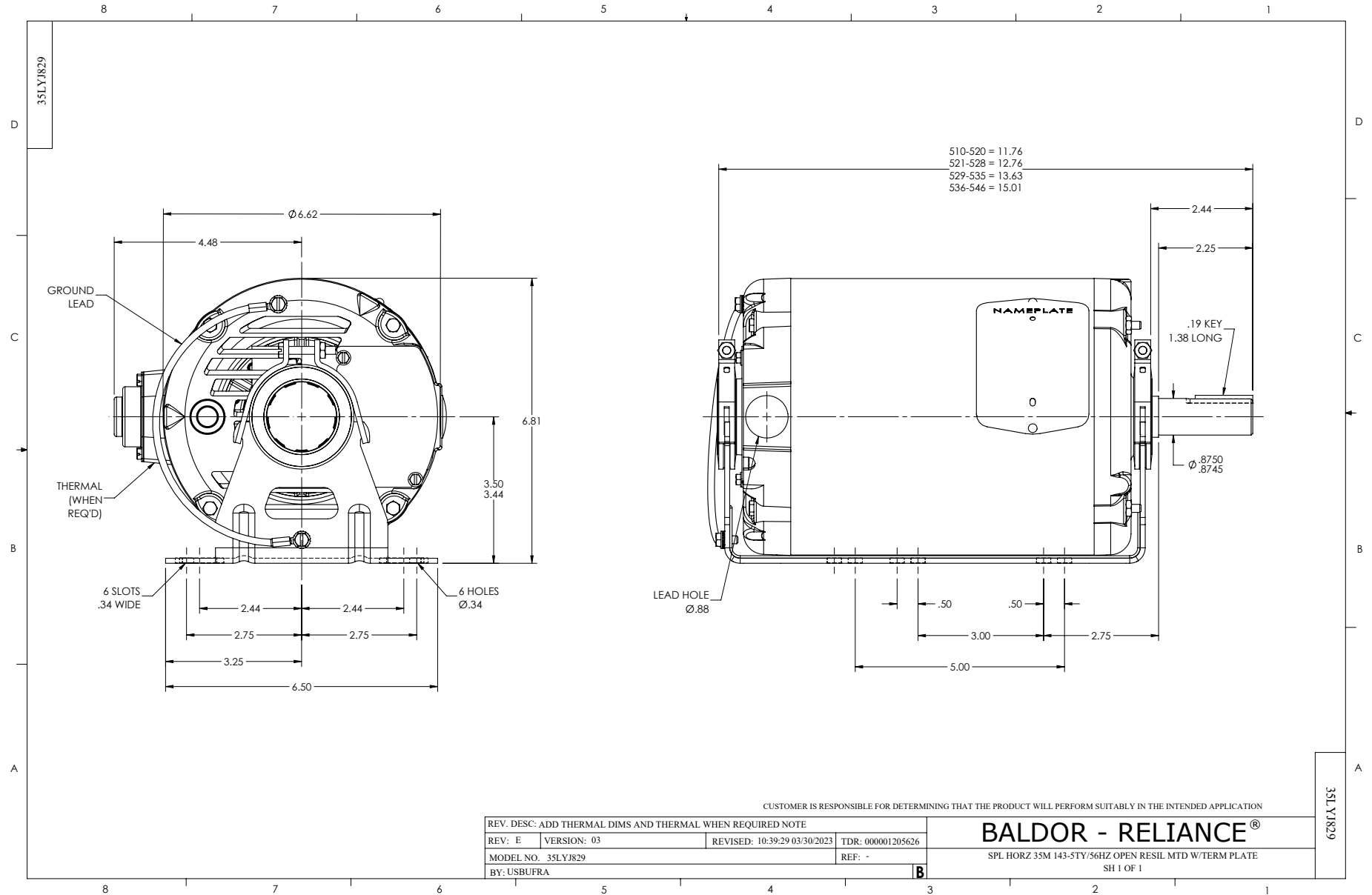
Typical performance - not guaranteed values.

5 HP 3 PH 60 HZ 3450 RPM 460 V 3540M

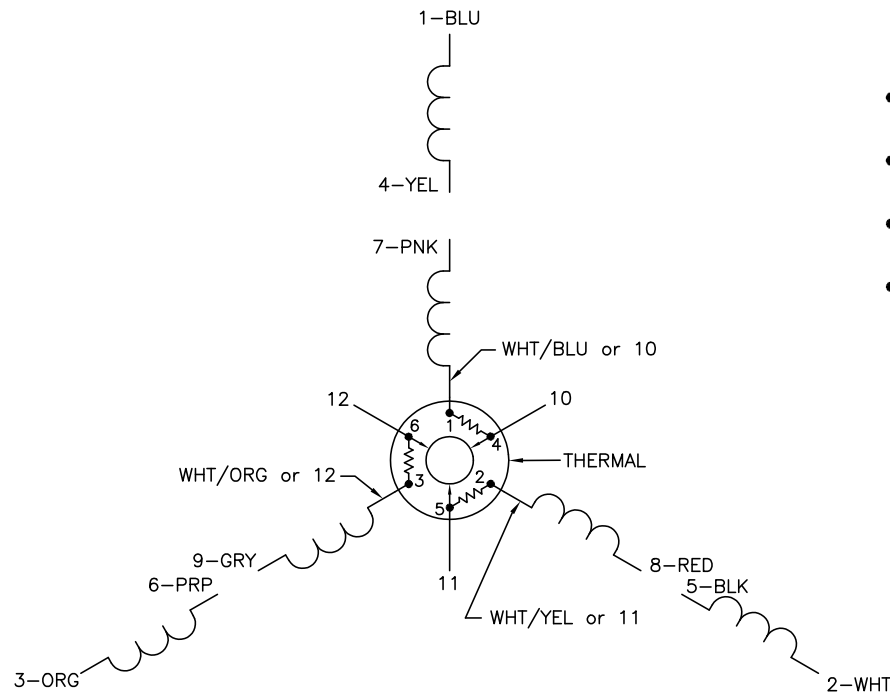
TORQUES (LB-FT): PO=34.5 PU=20.8 LR=32.1 LRA=60.4



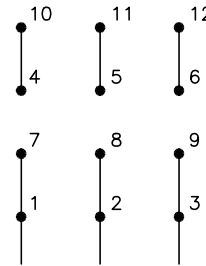
7/23/2024 ACPERF, record # 53123



CD0007

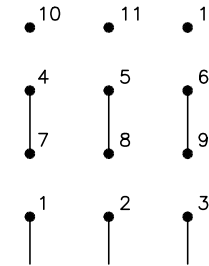


LOW VOLTAGE
(2Y)



LINE

HIGH VOLTAGE
(1Y)



LINE

NOTES:

1. INTERCHANGE ANY TWO LINE LEADS TO REVERSE ROTATION.
2. ACTUAL NUMBER OF INTERNAL PARALLEL CIRCUITS MAY VARY.
3. LEAD COLORS ARE OPTIONAL. LEADS MUST ALWAYS BE NUMBERED AS SHOWN.

CD0007

| | | | |
|----------------------------------|---------|------------------------|--------------|
| REV. DESC: ADDED "CK" PLANT CODE | | | |
| REV. LTR: E | BY: EAH | REVISED: 05/06/99 17:1 | TDR: 0181040 |
| L00000 | | FILE: AAA00008370 | MDL: - |
| | | MTL: - | |

BALDOR ELECTRIC Co.

3PH, DV, THERMAL, 12 LEADS