

# **BALDOR**® • ***RELIANCE***

## **Product Information Packet**

# **BNM3554T-D**

**1.5HP, 1755RPM, 3PH, 60HZ, 143TY, 3534M, TENV**

| Part Detail |        |             |            |             |        |               |            |
|-------------|--------|-------------|------------|-------------|--------|---------------|------------|
| Revision:   | M      | Status:     | PRD/A      | Change #:   |        | Proprietary:  | No         |
| Type:       | AC     | Elec. Spec: | 35WGM613   | CD Diagram: | CD0005 | Mfg Plant:    |            |
| Mech. Spec: | 35X164 | Layout:     | 35LYX164   | Poles:      | 04     | Created Date: | 08-04-2010 |
| Base:       | RG     | Eff. Date:  | 03-27-2017 | Leads:      | 9#18   |               |            |

| Specs                           |                         |                                |                       |
|---------------------------------|-------------------------|--------------------------------|-----------------------|
| Catalog Number:                 | BNM3554T-D              | Heater Indicator:              | No Heater             |
| Enclosure:                      | TENV                    | Insulation Class:              | F                     |
| Frame:                          | 145TY                   | Inverter Code:                 | Inverter Ready        |
| Frame Material:                 | Steel                   | KVA Code:                      | M                     |
| Output @ Frequency:             | 1.500 HP @ 60 HZ        | Lifting Lugs:                  | No Lifting Lugs       |
| Synchronous Speed @ Frequency:  | 1800 RPM @ 60 HZ        | Locked Bearing Indicator:      | No Locked Bearing     |
| Voltage @ Frequency:            | 208.0 V @ 60 HZ         | Motor Lead Quantity/Wire Size: | 9 @ 18 AWG            |
|                                 | 460.0 V @ 60 HZ         | Motor Lead Exit:               | Ko Box                |
|                                 | 230.0 V @ 60 HZ         | Motor Lead Termination:        | Flying Leads          |
| XP Class and Group:             | None                    | Motor Type:                    | 3533M                 |
| XP Division:                    | Not Applicable          | Mounting Arrangement:          | F3                    |
| Agency Approvals:               | CE                      | Power Factor:                  | 76                    |
|                                 | CSA                     | Product Family:                | General Purpose       |
|                                 | UR                      | Product Type:                  | D-SERIES BRAKE MOTORS |
| Auxillary Box:                  | No Auxillary Box        | Pulley End Bearing Type:       | Ball                  |
| Auxillary Box Lead Termination: | None                    | Pulley Face Code:              | Standard              |
| Base Indicator:                 | Rigid                   | Pulley Shaft Indicator:        | Standard              |
| Bearing Grease Type:            | Polyrex EM (-20F +300F) | Rodent Screen:                 | None                  |

|                                       |                           |                                    |                     |
|---------------------------------------|---------------------------|------------------------------------|---------------------|
| <b>Blower:</b>                        | None                      | <b>Shaft Extension Location:</b>   | Pulley End          |
| <b>Current @ Voltage:</b>             | 4.400 A @ 208.0 V         | <b>Shaft Ground Indicator:</b>     | No Shaft Grounding  |
|                                       | 4.200 A @ 230.0 V         | <b>Shaft Rotation:</b>             | Reversible          |
|                                       | 2.100 A @ 460.0 V         | <b>Shaft Slinger Indicator:</b>    | No Slinger          |
| <b>Design Code:</b>                   | B                         | <b>Speed Code:</b>                 | Single Speed        |
| <b>Drip Cover:</b>                    | No Drip Cover             | <b>Motor Standards:</b>            | NEMA                |
| <b>Duty Rating:</b>                   | CONT                      | <b>Starting Method:</b>            | Direct on line      |
| <b>Electrically Isolated Bearing:</b> | Not Electrically Isolated | <b>Thermal Device - Bearing:</b>   | None                |
| <b>Feedback Device:</b>               | NO FEEDBACK               | <b>Thermal Device - Winding:</b>   | None                |
| <b>Front Face Code:</b>               | Brake Mounting            | <b>Vibration Sensor Indicator:</b> | No Vibration Sensor |
| <b>Front Shaft Indicator:</b>         | None                      | <b>Winding Thermal 1:</b>          | None                |
|                                       |                           | <b>Winding Thermal 2:</b>          | None                |

| Nameplate NP1372L |              |  |  |      |    |     |                |     |    |   |
|-------------------|--------------|--|--|------|----|-----|----------------|-----|----|---|
| CAT.NO.           | BNM3554T-D   |  |  |      |    |     |                |     |    |   |
| SPEC.             | 35X164M613H1 |  |  |      |    |     |                |     |    |   |
| HP                | 1.5          |  |  |      |    |     |                |     |    |   |
| VOLTS             | 208-230/460  |  |  |      |    |     |                |     |    |   |
| AMP               | 4.4-4.2/2.1  |  |  |      |    |     |                |     |    |   |
| RPM               | 1755         |  |  |      |    |     |                |     |    |   |
| FRAME             | 145TY        |  |  |      |    | HZ  | 60             |     | PH | 3 |
| SER.F.            | 1.15         |  |  | CODE | M  |     | DES            | B   | CL | F |
| NEMA-NOM-EFF      | 86.5         |  |  | PF   | 76 |     |                |     |    |   |
| RATING            | 40C AMB-CONT |  |  |      |    |     |                |     |    |   |
| CC                | 010A         |  |  |      |    |     | USABLE AT 208V | 4.4 |    |   |
| DE                | 6205         |  |  |      |    | ODE | 6203           |     |    |   |
| ENCL              | TENV         |  |  | SN   |    |     |                |     |    |   |
|                   | IP44         |  |  |      |    |     |                |     |    |   |

**AC Induction Motor Performance Data**

Record # 32095 - Typical performance - not guaranteed values

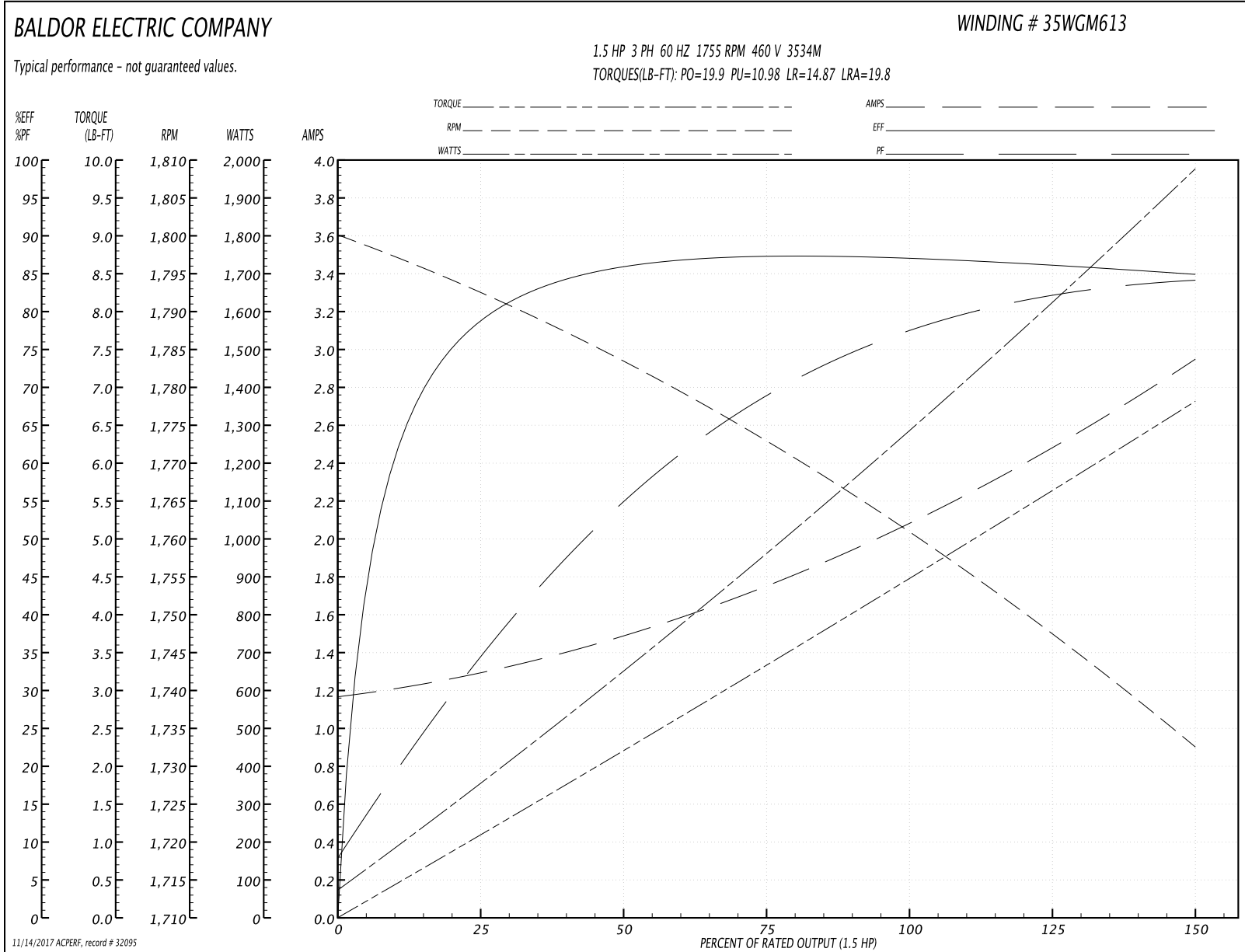
|                               |                    |                        |
|-------------------------------|--------------------|------------------------|
| <b>Winding:</b> 35WGM613-R005 | <b>Type:</b> 3534M | <b>Enclosure:</b> TENV |
|-------------------------------|--------------------|------------------------|

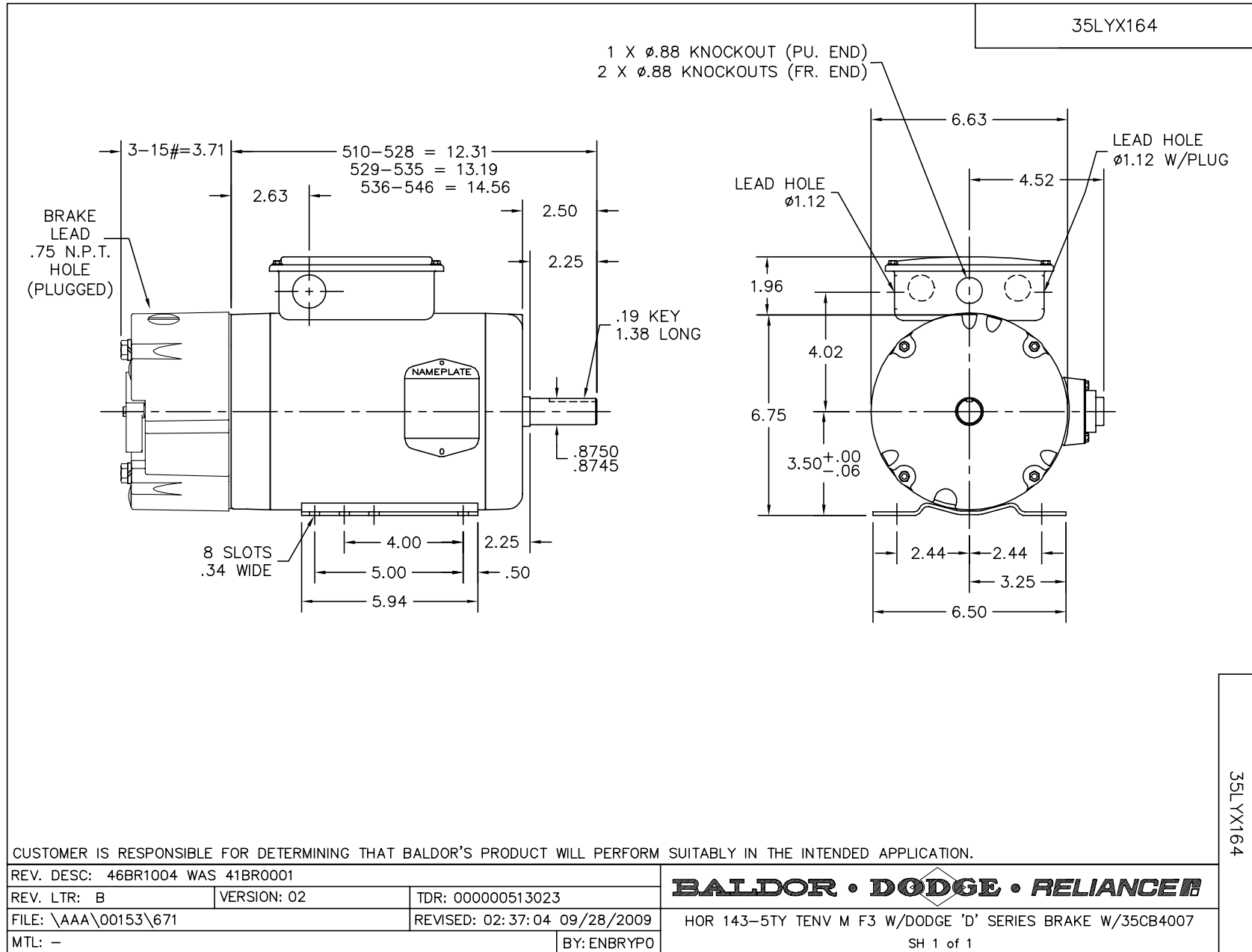
| Nameplate Data        |              |              |    | 460 V, 60 Hz:<br>High Voltage Connection |                          |
|-----------------------|--------------|--------------|----|--|--------------------------|
| Rated Output (HP)     | 1.5          |              |    | Full Load Torque                         | 4.49 LB-FT               |
| Volts                 | 208-230/460  |              |    | Start Configuration                      | direct on line           |
| Full Load Amps        | 4.4-4.2/2.1  |              |    | Breakdown Torque                         | 19.9 LB-FT               |
| R.P.M.                | 1755         |              |    | Pull-up Torque                           | 10.98 LB-FT              |
| Hz                    | 60           | Phase        | 3  | Locked-rotor Torque                      | 14.87 LB-FT              |
| NEMA Design Code      | B            | KVA Code     | M  | Starting Current                         | 19.8 A                   |
| Service Factor (S.F.) | 1.15         |              |    | No-load Current                          | 1.18 A                   |
| NEMA Nom. Eff.        | 86.5         | Power Factor | 76 | Line-line Res. @ 25°C                    | 8.98 Ω                   |
| Rating - Duty         | 40C AMB-CONT |              |    | Temp. Rise @ Rated Load                  | 88°C                     |
| S.F. Amps             |              |              |    | Temp. Rise @ S.F. Load                   | 104°C                    |
|                       |              |              |    | Locked-rotor Power Factor                | 48.1                     |
|                       |              |              |    | Rotor inertia                            | 0.201 LB-FT <sup>2</sup> |

Load Characteristics 460 V, 60 Hz, 1.5 HP

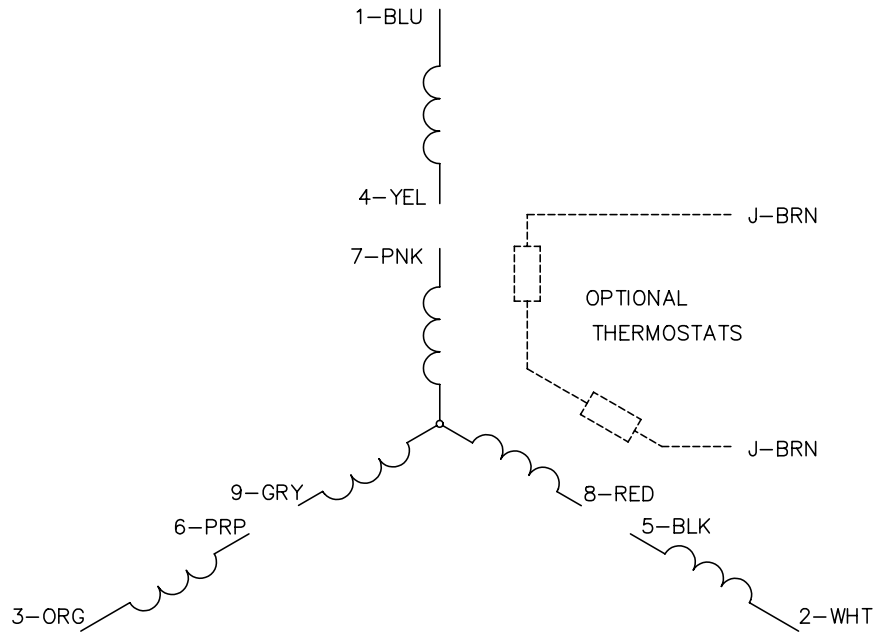
| % of Rated Load | 25   | 50   | 75   | 100  | 125  | 150  | S.F. |
|-----------------|------|------|------|------|------|------|------|
| Power Factor    | 36   | 56   | 69   | 77   | 82   | 85   | 79   |
| Efficiency      | 78.6 | 85.5 | 87.4 | 87.1 | 86.3 | 84.8 | 88.4 |
| Speed           | 1794 | 1784 | 1772 | 1760 | 1747 | 1733 | 1757 |
| Line amperes    | 1.28 | 1.48 | 1.76 | 2.1  | 2.5  | 2.94 | 2.3  |

Performance Graph at 460V, 60Hz, 1.5HP Typical performance - Not guaranteed values

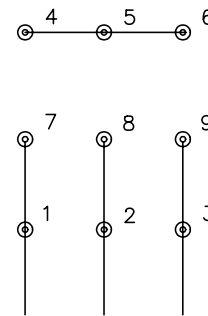




CD0005

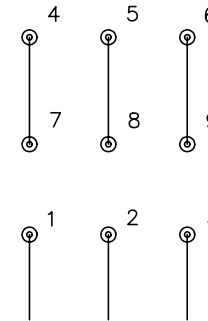


LOW VOLTAGE  
(2Y)



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 |
| 90000                                     |         | FILE: AAA00005140       | MDL: -       |
|   |         | MTL: -                  |              |

**BALDOR ELECTRIC Co.**

3PH, DV, 9 LEADS

CD0005