

**BALDOR® • RELIANCE** 

**Product Information Packet**

**EFM3711T**

**10HP,3490RPM,3PH,60HZ,215T,3728M,TEFC,F2**

| Part Detail |        |             |            |             |        |               |            |
|-------------|--------|-------------|------------|-------------|--------|---------------|------------|
| Revision:   | L      | Status:     | PRD/A      | Change #:   |        | Proprietary:  | No         |
| Type:       | AC     | Elec. Spec: | 37WGS864   | CD Diagram: | CD0005 | Mfg Plant:    |            |
| Mech. Spec: | 37A006 | Layout:     | 37LYA006   | Poles:      | 02     | Created Date: | 04-22-2013 |
| Base:       | RG     | Eff. Date:  | 09-06-2019 | Leads:      | 9#14   |               |            |

| Specs                           |                         |                                |                       |
|---------------------------------|-------------------------|--------------------------------|-----------------------|
| Catalog Number:                 | EFM3711T                | Insulation Class:              | F                     |
| Enclosure:                      | TEFC                    | Inverter Code:                 | Inverter Duty         |
| Frame:                          | 215T                    | KVA Code:                      | G                     |
| Frame Material:                 | Steel                   | Lifting Lugs:                  | Standard Lifting Lugs |
| Output @ Frequency:             | 10.000 HP @ 60 HZ       | Locked Bearing Indicator:      | No Locked Bearing     |
| Synchronous Speed @ Frequency:  | 3600 RPM @ 60 HZ        | Motor Lead Quantity/Wire Size: | 9 @ 14 AWG            |
| Voltage @ Frequency:            | 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:                    | 3730M                 |
| XP Division:                    | Not Applicable          | Mounting Arrangement:          | F2                    |
| Agency Approvals:               | UR                      | Power Factor:                  | 88                    |
|                                 | CSA EEV                 | Product Family:                | General Purpose       |
|                                 | CSA                     | Pulley End Bearing Type:       | Ball                  |
| Auxillary Box:                  | No Auxillary Box        | Pulley Face Code:              | Standard              |
| Auxillary Box Lead Termination: | None                    | Pulley Shaft Indicator:        | Standard              |
| Base Indicator:                 | Rigid                   | Rodent Screen:                 | None                  |
| Bearing Grease Type:            | Polyrex EM (-20F +300F) | RoHS Status:                   | ROHS COMPLIANT        |
| Blower:                         | None                    | Shaft Extension Location:      | Pulley End            |

|                                       |                           |                                    |                     |
|---------------------------------------|---------------------------|------------------------------------|---------------------|
| <b>Current @ Voltage:</b>             | 11.600 A @ 460.0 V        | <b>Shaft Ground Indicator:</b>     | No Shaft Grounding  |
|                                       | 23.200 A @ 230.0 V        | <b>Shaft Rotation:</b>             | Reversible          |
|                                       | 24.900 A @ 208.0 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>               | Standard                  | <b>Vibration Sensor Indicator:</b> | No Vibration Sensor |
| <b>Front Shaft Indicator:</b>         | None                      | <b>Winding Thermal 1:</b>          | None                |
| <b>Heater Indicator:</b>              | No Heater                 | <b>Winding Thermal 2:</b>          | None                |

|  |              |  |             |    |                       |      |  |           |           |   |
|--|--------------|--|-------------|----|-----------------------|------|--|-----------|-----------|---|
| <b>Nameplate NP3441L</b>                                 |              |  |             |    |                       |      |  |           |           |   |
| <b>CAT.NO.</b>   | EFM3711T     |  |             |    |                       |      |  |           |           |   |
| <b>SPEC.</b>   | 37A006S864G1 |  |             |    |                       |      |  |           |           |   |
| <b>HP</b>  | 10           |  |             |    |                       |      |  |           |           |   |
| <b>VOLTS</b>   | 230/460      |  |             |    |                       |      |  |           |           |   |
| <b>AMP</b>   | 23.2/11.6    |  |             |    |                       |      |  |           |           |   |
| <b>RPM</b>   | 3490         |  |             |    |                       |      |  |           |           |   |
| <b>FRAME</b>   | 215T         |  |             |    | <b>HZ</b>             | 60   |  |           | <b>PH</b> | 3 |
| <b>SER.F.</b>  | 1.15         |  | <b>CODE</b> | G  | <b>DES</b>            | B    |  | <b>CL</b> | F         |   |
| <b>NEMA-NOM-EFF</b>                                      | 90.2         |  | <b>PF</b>   | 88 |                       |      |  |           |           |   |
| <b>RATING</b>  | 40C AMB-CONT |  |             |    |                       |      |  |           |           |   |
| <b>CC</b>  | 010A         |  |             |    | <b>USABLE AT 208V</b> |      |  | 24.9      |           |   |
| <b>DE</b>  | 6307         |  |             |    | <b>ODE</b>            | 6206 |  |           |           |   |
| <b>ENCL</b>  | TEFC         |  | <b>SN</b>   |    |                       |      |  |           |           |   |
| <b>VPWM INVERTER READY</b><br>CT6-60H(10:1)VT3-60H(20:1) |              |  |             |    |                       |      |  |           |           |   |
|  |              |  |             |    |                       |      |  |           |           |   |

| Parts List    |  |          |
|---------------|--|----------|
| Part Number   | Description                              | Quantity |
| SA261917      | SA 37A006S864G1                          | 1.000 EA |
| RA248654      | RA 37A006S864G1                          | 1.000 EA |
| 36FN3000C02SP | EXFN, PLASTIC, 5.25 OD, 1.175 ID         | 1.000 EA |
| HW3200A01     | 3/8-16X3/4 I-BLT WELDED F/S              | 1.000 EA |
| 37CB3006      | 37 CB CASTING W/1.38 LEAD HOLE @ 6:00    | 1.000 EA |
| 37GS1000SP    | GASKET, CONDUIT BOX STD., .06 THICK LEXI | 1.000 EA |
| 51XW2520A12   | .25-20 X .75, TAPTITE II, HEX WSHR SLTD  | 2.000 EA |
| 11XW1032G06   | 10-32 X .38, TAPTITE II, HEX WSHR SLTD U | 1.000 EA |
| 37EP3101A01   | FR ENDPLATE, FOR ROUTING PURPOSES        | 1.000 EA |
| HW4500A01     | 1641B(ALEMITE)400 UNIV, GREASE FITT      | 1.000 EA |
| HW5100A06     | W2420-025 WVY WSHR (WB)                  | 1.000 EA |
| 37EP3100A01   | PUEP ASSEMBLY - ROUTING PUPROSES         | 1.000 EA |
| HW4500A01     | 1641B(ALEMITE)400 UNIV, GREASE FITT      | 1.000 EA |
| XY3118A12     | 5/16-18 HEX NUT DIRECTIONAL SERRATION    | 4.000 EA |
| 51XB1214A20   | 12-14X1.25 HXWSSLD SERTYB                | 1.000 EA |
| 07FH4007SP    | PRIMED                                   | 1.000 EA |
| 51XW1032A06   | 10-32 X .38, TAPTITE II, HEX WSHR SLTD S | 3.000 EA |
| 37CB4516      | LIPPED LID FOR 37 FRAME NEC KOBX         | 1.000 EA |
| 37GS1008      | 37 GS FOR CB LID - LEXIDE                | 1.000 EA |
| 51XW0832A07   | 8-32 X .44, TAPTITE II, HEX WSHR SLTD SE | 4.000 EA |
| HW2501F21     | KEY, 5/16 SQ X 2.375                     | 1.000 EA |
| HA7000A02     | KEY RETAINER RING, 1 1/8 DIA, 1 3/8 DIA  | 1.000 EA |
| 85XU0407S04   | 4X1/4 U DRIVE PIN STAINLESS              | 2.000 EA |
| LB1115N       | LABEL,LIFTING DEVICE (ON ROLLS)          | 1.000 EA |

| <b>Parts List (continued)</b> |  |                 |
|-------------------------------|--|-----------------|
| <b>Part Number</b>            | <b>Description</b>                       | <b>Quantity</b> |
| MJ1000A02                     | GREASE, MOBIL POLYREX EM - 124047        | 0.050 LB        |
| MG1000Y03                     | MUNSELL 2.53Y 6.70/ 4.60, GLOSS 20,      | 0.028 GA        |
| HA3104A14                     | THRUBOLT- 5/16-18 X12.125(OHIO)          | 4.000 EA        |
| LC0005E01                     | CONN.DIA./WARNING LABEL (LC0005/LB1119N) | 1.000 EA        |
| NP3441L                       | ALUM SUPER-E VPWM INVERTER READY UL      | 1.000 EA        |
| G0PA1000                      | PKG GRP, PRINT PK1026A06                 | 1.000 EA        |
| MN416A01                      | TAG-INSTAL-MAINT no wire (2100/bx) 4/22  | 1.000 EA        |

**AC Induction Motor Performance Data**

Record # 53399

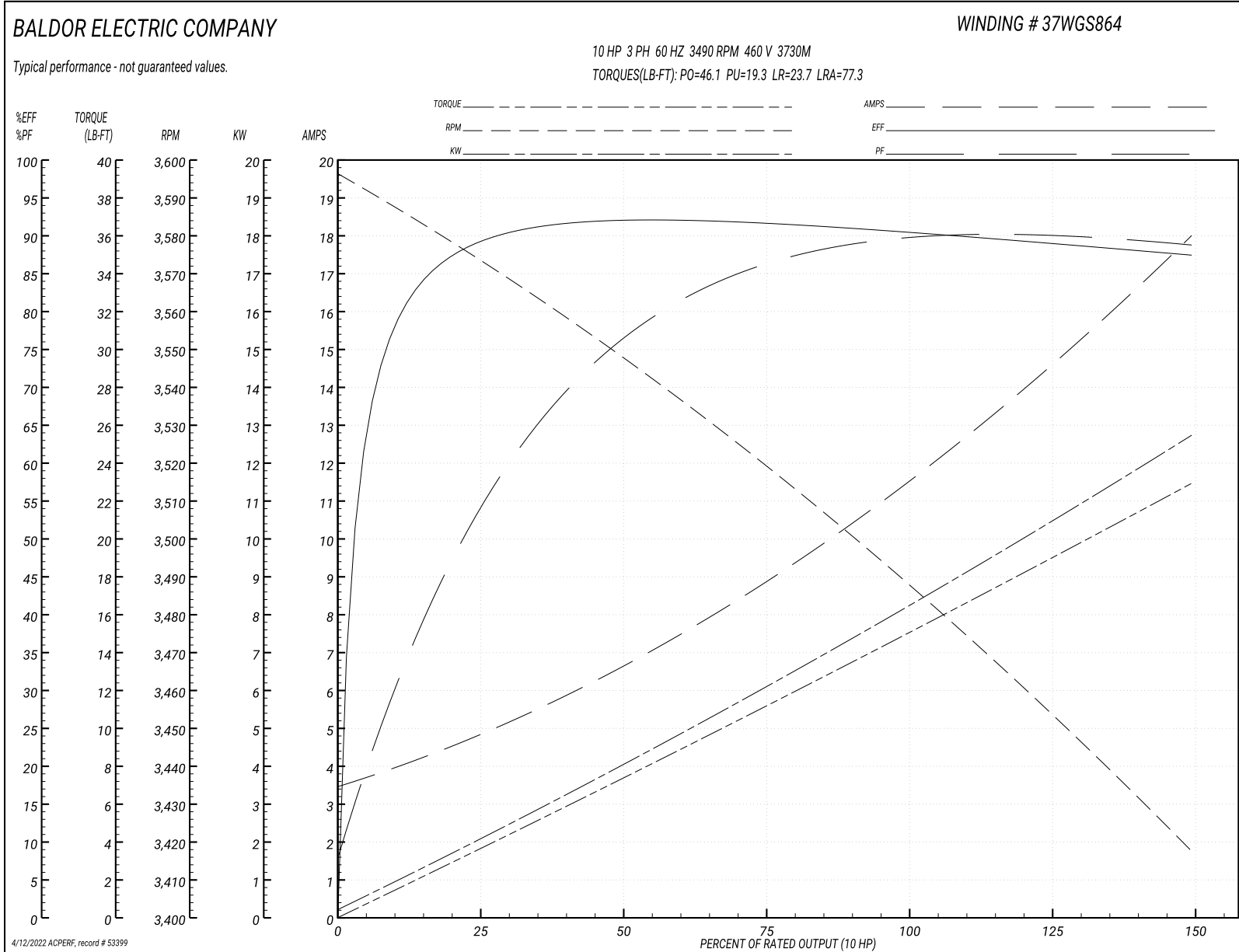
Typical performance - not guaranteed values

| <b>Winding: 37WGS864-R028</b> |                   | <b>Type: 3730M</b>         |  | <b>Enclosure: TEFC</b>       |        |
|-------------------------------|-------------------|----------------------------|--|------------------------------|--------|
| <b>Nameplate Data</b>         |                   |                            | <b>460 V, 60 Hz:<br/>High Voltage Connection</b> |                              |        |
| <b>Rated Output (HP)</b>      | 10                | <b>Full Load Torque</b>    | 14.94 LB-FT                                      |                              |        |
| <b>Volts</b>                  | 230/460           | <b>Start Configuration</b> | direct on line                                   |                              |        |
| <b>Full Load Amps</b>         | 23.2/11.6         | <b>Breakdown Torque</b>    | 46.1 LB-FT                                       |                              |        |
| <b>R.P.M.</b>                 | 3490              | <b>Pull-up Torque</b>      | 19.3 LB-FT                                       |                              |        |
| <b>Hz</b>                     | 60 <b>Phase</b>   | 3                          | <b>Locked-rotor Torque</b>                       | 23.7 LB-FT                   |        |
| <b>NEMA Design Code</b>       | <b>B KVA Code</b> | G                          | <b>Starting Current</b>                          | 77.3 A                       |        |
| <b>Service Factor (S.F.)</b>  | 1.15              | <b>No-load Current</b>     | 3.66 A   |                              |        |
| <b>NEMA Nom. Eff.</b>         | 90.2              | <b>Power Factor</b>        | 88   | <b>Line-line Res. @ 25°C</b> | 1.05 Ω |
| <b>Rating - Duty</b>          | 40C AMB-CONT      |                            | <b>Temp. Rise @ Rated Load</b>                   | 78°C                         |        |
| <b>S.F. Amps</b>              |                   |                            | <b>Temp. Rise @ S.F. Load</b>                    | 97°C                         |        |
|                               |                   |                            | <b>Locked-rotor Power Factor</b>                 | 33.7                         |        |
|                               |                   |                            | <b>Rotor inertia</b>                             | 0.273 LB-FT <sup>2</sup>     |        |

**Load Characteristics 460 V, 60 Hz, 10 HP**

| <b>% of Rated Load</b> | <b>25</b> | <b>50</b> | <b>75</b> | <b>100</b> | <b>125</b> | <b>150</b> | <b>S.F.</b> |
|------------------------|-----------|-----------|-----------|------------|------------|------------|-------------|
| <b>Power Factor</b>    | 57        | 78        | 85        | 88         | 90         | 89         | 88          |
| <b>Efficiency</b>      | 88.6      | 91.7      | 91.6      | 90.6       | 89.1       | 87.3       | 90          |
| <b>Speed</b>           | 3573      | 3548      | 3520      | 3489       | 3455       | 3417       | 3464        |
| <b>Line amperes</b>    | 4.56      | 6.49      | 8.9       | 11.6       | 14.6       | 17.9       | 13.5        |

Performance Graph at 460V, 60Hz, 10.0HP Typical performance - Not guaranteed values





**AC Induction Motor Performance Data**

Record # 59174

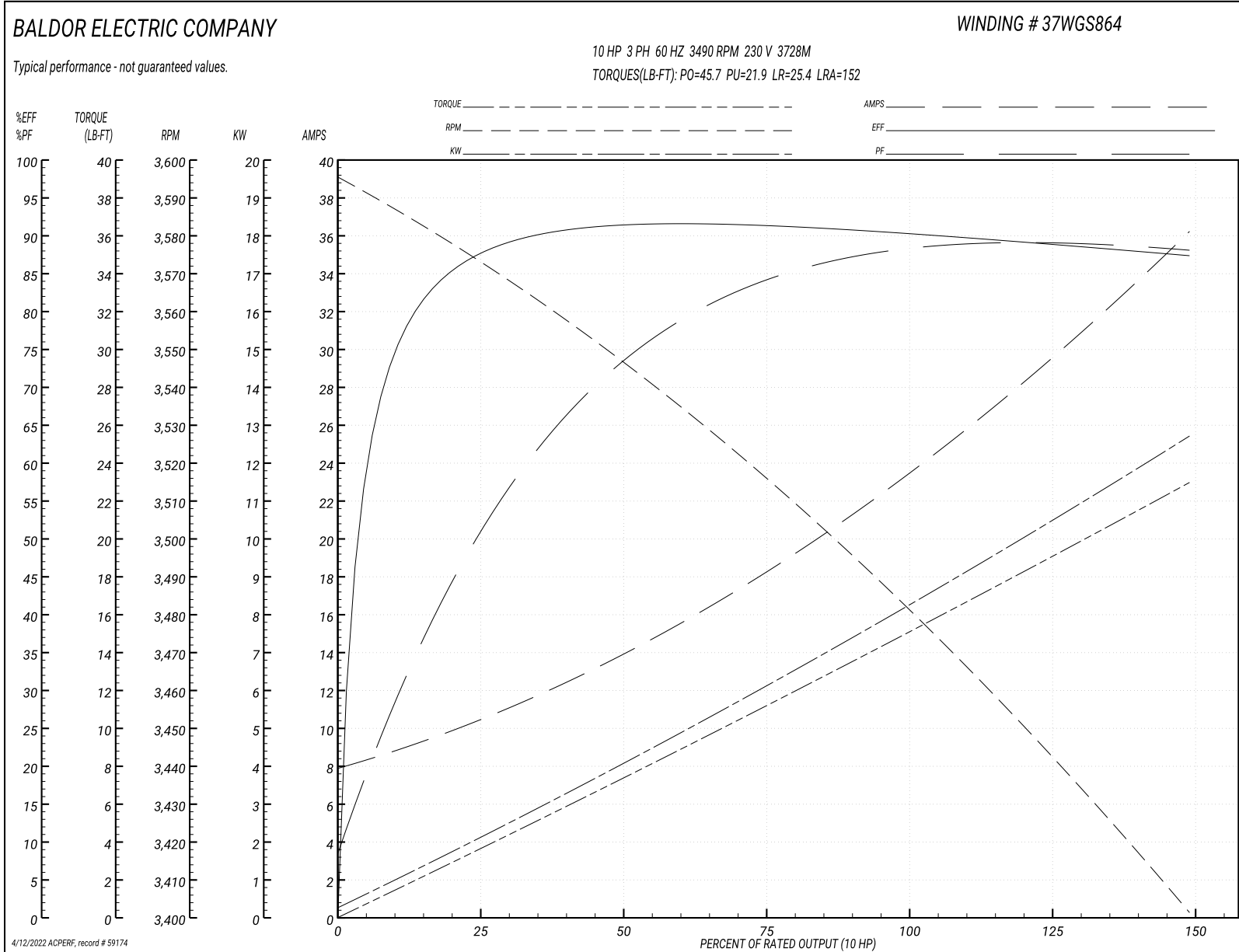
Typical performance - not guaranteed values

| <b>Winding: 37WGS864-R028</b> |                   | <b>Type: 3728M</b>         |   | <b>Enclosure: TEFC</b>       |         |
|-------------------------------|-------------------|----------------------------|---|------------------------------|---------|
| <b>Nameplate Data</b>         |                   |                            | <b>230 V, 60 Hz:<br/>Low Voltage Connection</b> |                              |         |
| <b>Rated Output (HP)</b>      | 10                | <b>Full Load Torque</b>    | 15 LB-FT  |                              |         |
| <b>Volts</b>                  | 230/460           | <b>Start Configuration</b> | direct on line                                  |                              |         |
| <b>Full Load Amps</b>         | 23.6/11.8         | <b>Breakdown Torque</b>    | 45.7 LB-FT                                      |                              |         |
| <b>R.P.M.</b>                 | 3490              | <b>Pull-up Torque</b>      | 21.9 LB-FT                                      |                              |         |
| <b>Hz</b>                     | 60 <b>Phase</b>   | 3                          | <b>Locked-rotor Torque</b>                      | 25.4 LB-FT                   |         |
| <b>NEMA Design Code</b>       | <b>B KVA Code</b> | <b>G</b>                   | <b>Starting Current</b>                         | 152 A                        |         |
| <b>Service Factor (S.F.)</b>  | 1.15              |                            | <b>No-load Current</b>                          | 8.25 A                       |         |
| <b>NEMA Nom. Eff.</b>         | 90.2              | <b>Power Factor</b>        | 87  | <b>Line-line Res. @ 25°C</b> | 0.248 Ω |
| <b>Rating - Duty</b>          | 40C AMB-CONT      |                            | <b>Temp. Rise @ Rated Load</b>                  | 79°C                         |         |
| <b>S.F. Amps</b>              |                   |                            | <b>Temp. Rise @ S.F. Load</b>                   | 98°C                         |         |
|                               |                   |                            | <b>Locked-rotor Power Factor</b>                | 33.1                         |         |
|                               |                   |                            | <b>Rotor inertia</b>                            | 0.255 LB-FT <sup>2</sup>     |         |

**Load Characteristics 230 V, 60 Hz, 10 HP**

| <b>% of Rated Load</b> | <b>25</b> | <b>50</b> | <b>75</b> | <b>100</b> | <b>125</b> | <b>150</b> | <b>S.F.</b> |
|------------------------|-----------|-----------|-----------|------------|------------|------------|-------------|
| <b>Power Factor</b>    | 53        | 74        | 84        | 87         | 88         | 89         | 88          |
| <b>Efficiency</b>      | 86.7      | 91        | 91.4      | 90.6       | 89.1       | 87.3       | 90          |
| <b>Speed</b>           | 3575      | 3547      | 3516      | 3482       | 3445       | 3401       | 3464        |
| <b>Line amperes</b>    | 9.88      | 13.7      | 18.2      | 23.6       | 29.5       | 36         | 27.1        |

Performance Graph at 230V, 60Hz, 10.0HP Typical performance - Not guaranteed values



**AC Induction Motor Performance Data**

Record # 69805

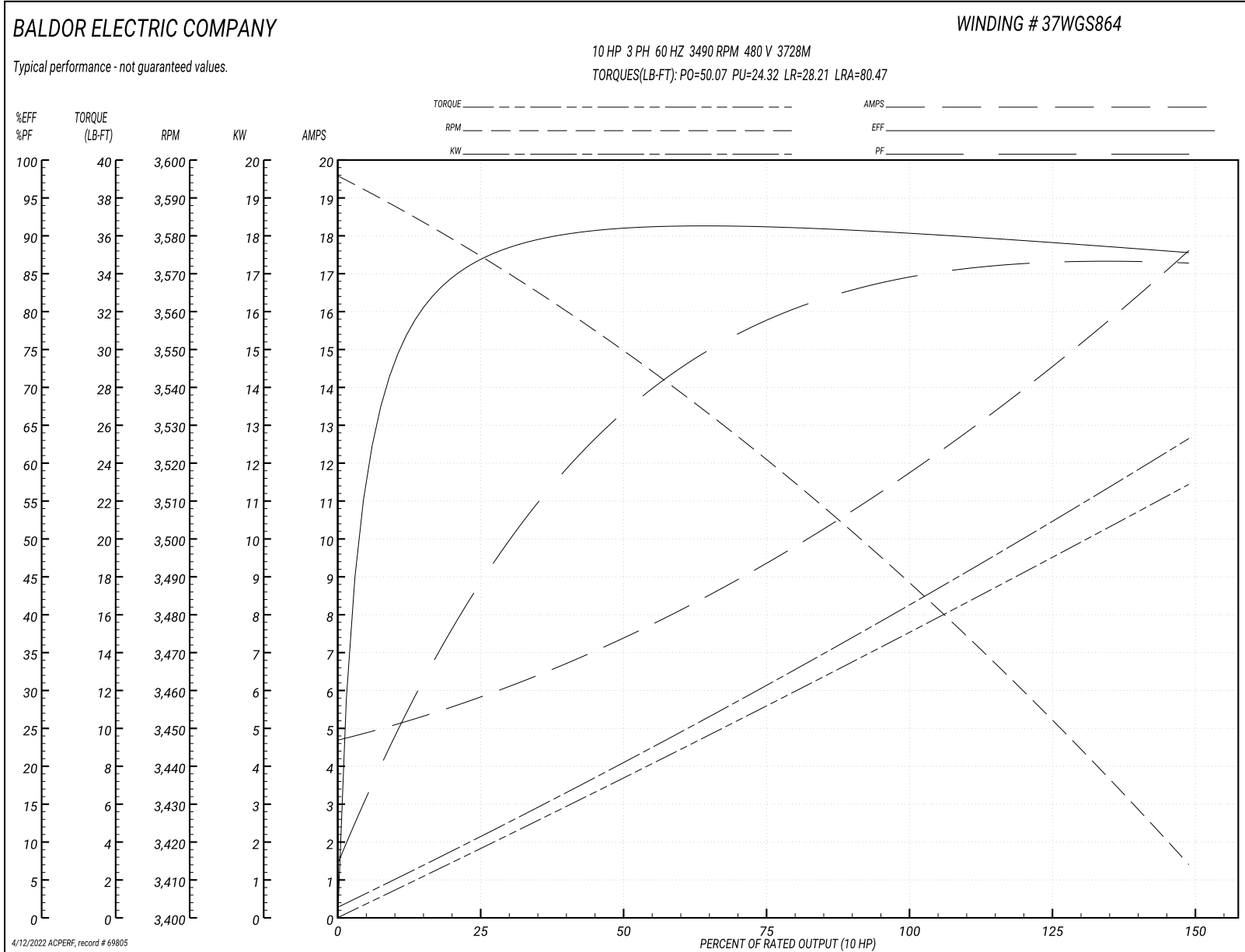
Typical performance - not guaranteed values

| <b>Winding: 37WGS864-R028</b> |                   | <b>Type: 3728M</b>         |  | <b>Enclosure: TEFC</b>   |  |
|-------------------------------|-------------------|----------------------------|--|--------------------------|--|
| <b>Nameplate Data</b>         |                   |                            | <b>480 V, 60 Hz:<br/>High Voltage Connection</b> |                          |  |
| <b>Rated Output (HP)</b>      | 10                | <b>Full Load Torque</b>    | 14.97 LB-FT                                      |                          |  |
| <b>Volts</b>                  | 230/460           | <b>Start Configuration</b> | direct on line                                   |                          |  |
| <b>Full Load Amps</b>         | 23.6/11.8         | <b>Breakdown Torque</b>    | 50.07 LB-FT                                      |                          |  |
| <b>R.P.M.</b>                 | 3490              | <b>Pull-up Torque</b>      | 24.32 LB-FT                                      |                          |  |
| <b>Hz</b>                     | 60 <b>Phase</b>   | 3                          | <b>Locked-rotor Torque</b>                       | 28.21 LB-FT              |  |
| <b>NEMA Design Code</b>       | <b>B KVA Code</b> | G                          | <b>Starting Current</b>                          | 80.47 A                  |  |
| <b>Service Factor (S.F.)</b>  | 1.15              |                            | <b>No-load Current</b>                           | 4.85 A                   |  |
| <b>NEMA Nom. Eff.</b>         | 90.2              | <b>Power Factor</b>        | 87   |                          |  |
| <b>Rating - Duty</b>          | 40C AMB-CONT      |                            | <b>Temp. Rise @ Rated Load</b>                   | 78°C                     |  |
| <b>S.F. Amps</b>              |                   |                            | <b>Temp. Rise @ S.F. Load</b>                    | 97°C                     |  |
|                               |                   |                            | <b>Locked-rotor Power Factor</b>                 | 33.1                     |  |
|                               |                   |                            | <b>Rotor inertia</b>                             | 0.255 LB-FT <sup>2</sup> |  |

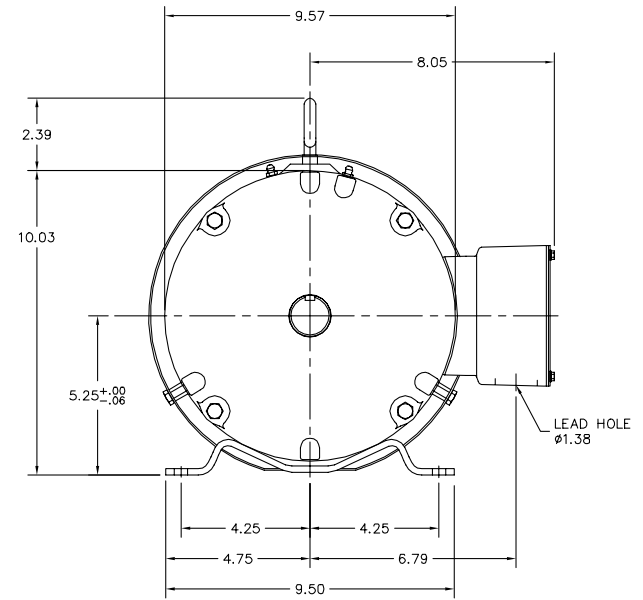
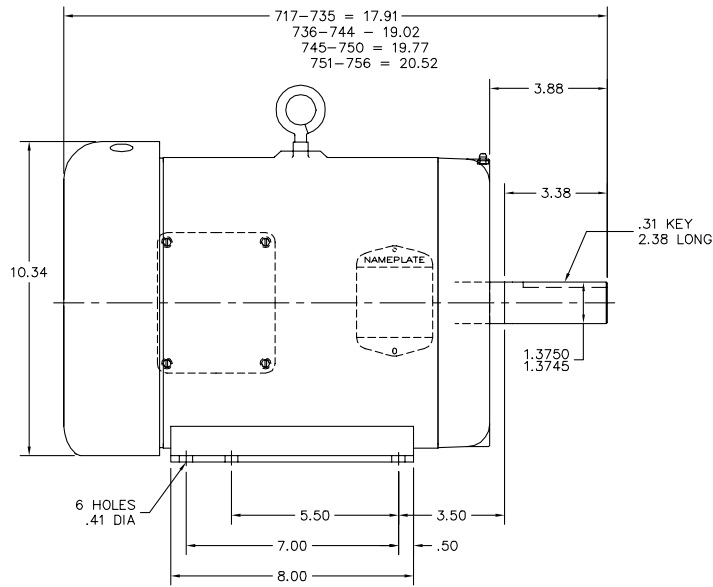
**Load Characteristics 480 V, 60 Hz, 10 HP**

| <b>% of Rated Load</b> | <b>25</b> | <b>50</b> | <b>75</b> | <b>100</b> | <b>125</b> | <b>150</b> | <b>S.F.</b> |
|------------------------|-----------|-----------|-----------|------------|------------|------------|-------------|
| <b>Power Factor</b>    | 46        | 67        | 78        | 83         | 86         | 87         | 85          |
| <b>Efficiency</b>      | 85.9      | 90.5      | 91.2      | 90.5       | 89.3       | 87.6       | 89.8        |
| <b>Speed</b>           | 3577      | 3550      | 3521      | 3489       | 3454       | 3414       | 3468        |
| <b>Line amperes</b>    | 5.56      | 7.29      | 9.34      | 11.81      | 14.5       | 17.52      | 13.4        |

Performance Graph at 480V, 60Hz, 10.0HP Typical performance - Not guaranteed values



37LYA006



37LYA006

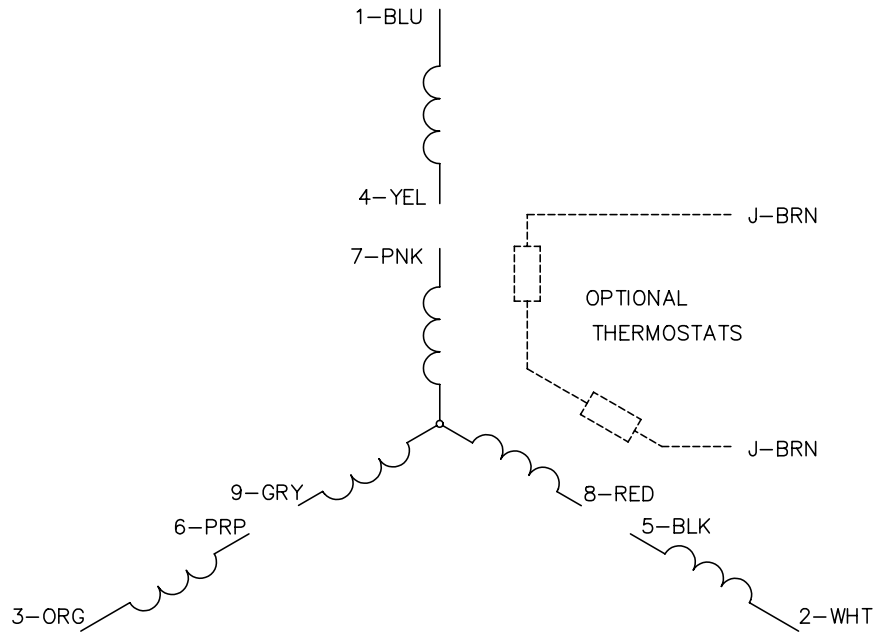
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT THE PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION.

|   |                              |                   |
|---|------------------------------|-------------------|
| REV. DESC: REMOVE LEADER FOR "GREASE FITTING" | VERSION: 01                  | TDR: 000001136146 |
| REV. LTR: E                                   | REVISED: 10:02:31 03/27/2020 | BY: ENJESMO       |
| FILE: \AAA\00033\062                          |                              |                   |
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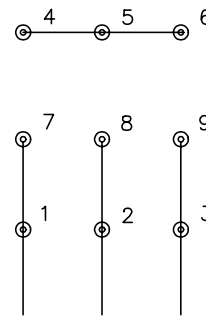
**BALDOR - RELIANCE**®

STD HORZ 213-ST TEFC 37M F2  
SH 1 of 1

CD0005

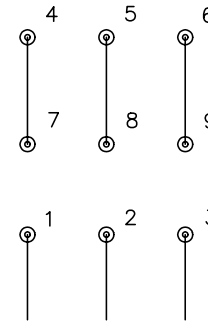


LOW VOLTAGE  
(2Y)



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