

**BALDOR® • RELIANCE** 

**Product Information Packet**

**EJMM3709T**

**7.5HP,3520RPM,3PH,60HZ,213JM,3728M,TEFC**

| Part Detail |        |             |            |             |        |               |            |
|-------------|--------|-------------|------------|-------------|--------|---------------|------------|
| Revision:   | -      | Status:     | PRD/A      | Change #:   |        | Proprietary:  | No         |
| Type:       | AC     | Elec. Spec: | 37WGL869   | CD Diagram: | CD0005 | Mfg Plant:    |            |
| Mech. Spec: | 37M031 | Layout:     | 37LYM031   | Poles:      | 02     | Created Date: | 11-18-2020 |
| Base:       | RG     | Eff. Date:  | 12-02-2020 | Leads:      | 9#14   |               |            |

| Specs                           |                         |                                |                       |
|---------------------------------|-------------------------|--------------------------------|-----------------------|
| Catalog Number:                 | EJMM3709T               | Heater Indicator:              | No Heater             |
| Enclosure:                      | TEFC                    | Insulation Class:              | F                     |
| Frame:                          | 213JM                   | Inverter Code:                 | Inverter Ready        |
| Frame Material:                 | Steel                   | KVA Code:                      | J                     |
| Output @ Frequency:             | 7.500 HP @ 60 HZ        | Lifting Lugs:                  | Standard Lifting Lugs |
| Synchronous Speed @ Frequency:  | 3600 RPM @ 60 HZ        | Locked Bearing Indicator:      | Locked Bearing        |
| Voltage @ Frequency:            | 208.0 V @ 60 HZ         | Motor Lead Quantity/Wire Size: | 9 @ 14 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:                    | 3728M                 |
| XP Division:                    | Not Applicable          | Mounting Arrangement:          | F1                    |
| Agency Approvals:               | CSA                     | Power Factor:                  | 84                    |
|                                 | CSA EEV                 | Product Family:                | General Purpose       |
|                                 | UR                      | Pulley End Bearing Type:       | Ball                  |
| Auxillary Box:                  | No Auxillary Box        | Pulley Face Code:              | C-Face                |
| Auxillary Box Lead Termination: | None                    | Pulley Shaft Indicator:        | Tapped & Key          |
| Base Indicator:                 | Rigid                   | Rodent Screen:                 | None                  |
| Bearing Grease Type:            | Polyrex EM (-20F +300F) | Shaft Extension Location:      | Pulley End            |

|                                       |                           |                                    |                     |
|---------------------------------------|---------------------------|------------------------------------|---------------------|
| <b>Blower:</b>                        | None                      | <b>Shaft Ground Indicator:</b>     | No Shaft Grounding  |
| <b>Current @ Voltage:</b>             | 9.000 A @ 460.0 V         | <b>Shaft Rotation:</b>             | Reversible          |
|                                       | 19.000 A @ 208.0 V        | <b>Shaft Slinger Indicator:</b>    | Shaft Slinger       |
|                                       | 18.000 A @ 230.0 V        | <b>Speed Code:</b>                 | Single Speed        |
| <b>Design Code:</b>                   | A                         | <b>Motor Standards:</b>            | NEMA                |
| <b>Drip Cover:</b>                    | No Drip Cover             | <b>Starting Method:</b>            | Direct on line      |
| <b>Duty Rating:</b>                   | CONT                      | <b>Thermal Device - Bearing:</b>   | None                |
| <b>Electrically Isolated Bearing:</b> | Not Electrically Isolated | <b>Thermal Device - Winding:</b>   | None                |
| <b>Feedback Device:</b>               | NO FEEDBACK               | <b>Vibration Sensor Indicator:</b> | No Vibration Sensor |
| <b>Front Face Code:</b>               | Standard                  | <b>Winding Thermal 1:</b>          | None                |
| <b>Front Shaft Indicator:</b>         | None                      | <b>Winding Thermal 2:</b>          | None                |

|                                   |                              |  |             |            |                       |    |  |              |           |   |
|-----------------------------------|------------------------------|--|-------------|------------|-----------------------|----|--|--------------|-----------|---|
| <b>Nameplate NP3441LUA</b>        |                              |  |             |            |                       |    |  |              |           |   |
| <b>CAT.NO.</b>                    | EJMM3709T                    |  |             |            |                       |    |  |              |           |   |
| <b>SPEC</b>                       | 37M031L869G1                 |  |             |            |                       |    |  |              |           |   |
| <b>HP</b>                         | 7.5                          |  |             |            |                       |    |  |              |           |   |
| <b>VOLTS</b>                      | 208-230/460                  |  |             |            |                       |    |  |              |           |   |
| <b>AMPS</b>                       | 19-18/9                      |  |             |            |                       |    |  |              |           |   |
| <b>RPM</b>                        | 3520                         |  |             |            |                       |    |  |              |           |   |
| <b>FRAME</b>                      | 213JM                        |  |             |            | <b>HZ</b>             | 60 |  |              | <b>PH</b> | 3 |
| <b>SF</b>                         | 1.15                         |  | <b>CODE</b> | J          | <b>DES</b>            | A  |  | <b>CLASS</b> | F         |   |
| <b>NEMA NOM. EFF</b>              | 89.5                         |  | <b>PF</b>   | 84         |                       |    |  |              |           |   |
| <b>RATING</b>                     | 40C AMB-CONT                 |  |             |            |                       |    |  |              |           |   |
| <b>CC</b>                         | 010A                         |  |             |            | <b>USABLE AT 208V</b> |    |  |              |           |   |
| <b>ENCL</b>                       | TEFC                         |  | <b>SER</b>  |            |                       |    |  |              |           |   |
| <b>DE</b>                         | 6309                         |  |             | <b>ODE</b> | 6206                  |    |  |              |           |   |
| <b>VPWM INVERTER READY</b>        |                              |  |             |            |                       |    |  |              |           |   |
| <b>CT6-60H(10:1)VT3-60H(20:1)</b> |                              |  |             |            |                       |    |  |              |           |   |
|                                   | 50HZ 7.5HP 190/380V 22/11.0A |  |             |            |                       |    |  |              | SF1.0     |   |

| Parts List  |  |          |
|-------------|--|----------|
| Part Number | Description                              | Quantity |
| SA388185    | SA 37M031L869G1                          | 1.000 EA |
| RA378534    | RA 37M031L869G1                          | 1.000 EA |
| 36FN3000B02 | EXFN, PLASTIC, 6.00 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 |
| 37EP3101A29 | FR ENDPLATE, FOR ROUTING PURPOSES        | 1.000 EA |
| HW4500A17   | 317400 ALEMITE GREASE RELIEF             | 1.000 EA |
| HW4500A01   | 1641B(ALEMITE)400 UNIV, GREASE FITT      | 1.000 EA |
| HW5100A06   | W2420-025 WVY WSHR (WB)                  | 1.000 EA |
| 37PE3401T11 | PUEP ASSEMBLY FOR ROUTING PURPOSES       | 1.000 EA |
| HW4500A17   | 317400 ALEMITE GREASE RELIEF             | 1.000 EA |
| HW4500A01   | 1641B(ALEMITE)400 UNIV, GREASE FITT      | 1.000 EA |
| 10XN2520A36 | 1/4-20X 2 1/4 HEX HD X                   | 4.000 EA |
| HW1001A25   | LOCKWASHER 1/4, ZINC PLT .493 OD, .255 I | 4.000 EA |
| XY3118A12   | 5/16-18 HEX NUT DIRECTIONAL SERRATION    | 4.000 EA |
| 07FH4007SP  | PRIMED                                   | 1.000 EA |
| 51XW1032A06 | 10-32 X .38, TAPTITE II, HEX WSHR SLTD S | 3.000 EA |
| HW4600A73   | SLINGER 1.748 X 2.375 X 0.250 FACE SEAL  | 1.000 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 |

| Parts List (continued) |  |          |
|------------------------|--|----------|
| Part Number            | Description                              | Quantity |
| HW2501D13              | KEY, 3/16 SQ X 1.375                     | 1.000 EA |
| HA7000A01              | KEY RETAINER 7/8" DIA SHAFT              | 1.000 EA |
| LB1115N                | LABEL,LIFTING DEVICE (ON ROLLS)          | 1.000 EA |
| 85XU0407S04            | 4X1/4 U DRIVE PIN STAINLESS              | 2.000 EA |
| MJ1000A02              | GREASE, MOBIL POLYREX EM - 124047        | 0.050 LB |
| 51XB1214A20            | 12-14X1.25 HXWSSLD SERTYB                | 1.000 EA |
| 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 |
| NP3441LUA              | ALUM SUPER-E VPWM INV READY UL CSA-EEV C | 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 # 85603

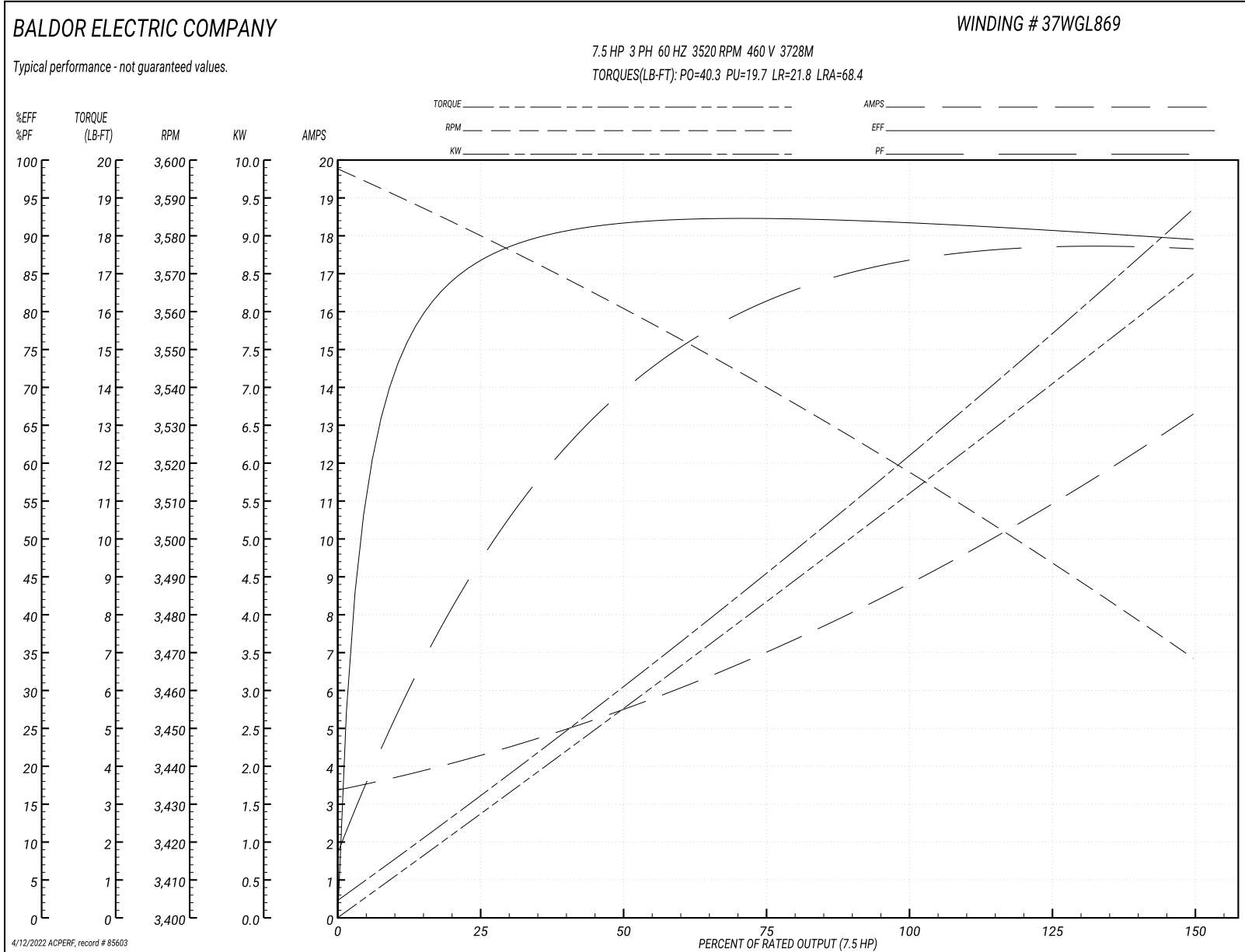
Preliminary Data Sheet

| <b>Winding: 37WGL869-R001</b> |                          | <b>Type: 3728M</b>             |  | <b>Enclosure: TEFC</b> |                          |
|-------------------------------|--------------------------|--------------------------------|--|------------------------|--------------------------|
| <b>Nameplate Data</b>         |                          |                                | <b>460 V, 60 Hz:<br/>High Voltage Connection</b> |                        |                          |
| <b>Rated Output (HP)</b>      | 7.5                      | <b>Full Load Torque</b>        |  | 11.2 LB-FT             |                          |
| <b>Volts</b>                  | 208-230/460              | <b>Start Configuration</b>     |  | direct on line         |                          |
| <b>Full Load Amps</b>         | 19-18/9                  | <b>Breakdown Torque</b>        |  | 40.3 LB-FT             |                          |
| <b>R.P.M.</b>                 | 3520                     | <b>Pull-up Torque</b>          |  | 19.7 LB-FT             |                          |
| <b>Hz</b>                     | 60 <b>Phase</b>          | 3                              | <b>Locked-rotor Torque</b>                       |                        | 21.8 LB-FT               |
| <b>NEMA Design Code</b>       | A <b>KVA Code</b>        | J                              | <b>Starting Current</b>                          |                        | 68.4 A                   |
| <b>Service Factor (S.F.)</b>  | 1.15                     | <b>No-load Current</b>         |  | 3.52 A                 |                          |
| <b>NEMA Nom. Eff.</b>         | 89.5 <b>Power Factor</b> | 84                             | <b>Line-line Res. @ 25°C</b>                     |                        | 1.19 Ω                   |
| <b>Rating - Duty</b>          | 40C AMB-CONT             | <b>Temp. Rise @ Rated Load</b> |  | 50°C                   |                          |
| <b>S.F. Amps</b>              | 21-20/10                 | <b>Temp. Rise @ S.F. Load</b>  |  | 63°C                   |                          |
|                               |                          |                                | <b>Locked-rotor Power Factor</b>                 |                        | 38.1                     |
|                               |                          |                                | <b>Rotor inertia</b>                             |                        | 0.255 lb-ft <sup>2</sup> |

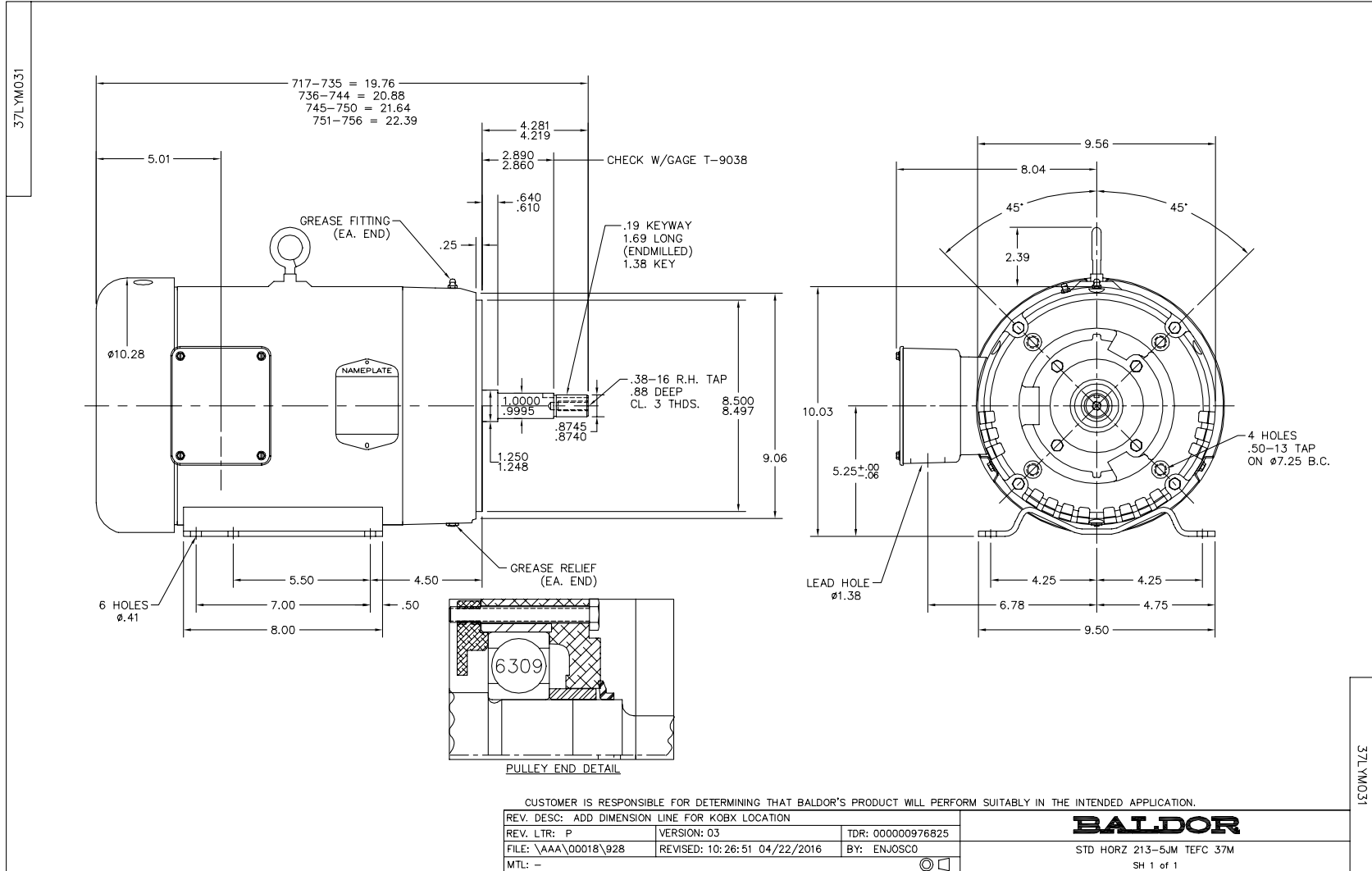
**Load Characteristics 460 V, 60 Hz, 7.5 HP**

| <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>    | 49        | 71        | 81        | 86         | 88         | 89         | 87          |
| <b>Efficiency</b>      | 83.9      | 89.7      | 91        | 90.9       | 90.2       | 89.2       | 90.3        |
| <b>Speed</b>           | 3580      | 3560      | 3540      | 3518       | 3494       | 3468       | 3500        |
| <b>Line amperes</b>    | 4.1       | 5.4       | 7.06      | 8.96       | 11         | 13.2       | 10.2        |

Performance Graph at 460V, 60Hz, 7.5HP 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