

**BALDOR® • RELIANCE** 

**Product Information Packet**

**EM3774T-8G**

**10HP,1760RPM,3PH,60HZ,215T,0748M,TEFC,F1**

| Part Detail |        |             |            |             |        |               |            |
|-------------|--------|-------------|------------|-------------|--------|---------------|------------|
| Revision:   | H      | Status:     | PRD/A      | Change #:   |        | Proprietary:  | No         |
| Type:       | AC     | Elec. Spec: | 07WGY762   | CD Diagram: | CD0006 | Mfg Plant:    |            |
| Mech. Spec: | 07L783 | Layout:     | 07LYL783   | Poles:      | 04     | Created Date: | 09-11-2013 |
| Base:       | RG     | Eff. Date:  | 07-12-2019 | Leads:      | 3#10   |               |            |

| Specs                           |                         |                                |                       |
|---------------------------------|-------------------------|--------------------------------|-----------------------|
| Catalog Number:                 | EM3774T-8G              | Inverter Code:                 | Inverter Ready        |
| Enclosure:                      | TEFC                    | IP Rating:                     | NONE                  |
| Frame:                          | 215T                    | KVA Code:                      | H                     |
| Frame Material:                 | Iron                    | Lifting Lugs:                  | Standard Lifting Lugs |
| Output @ Frequency:             | 10.000 HP @ 60 HZ       | Locked Bearing Indicator:      | Locked Bearing        |
| Synchronous Speed @ Frequency:  | 1800 RPM @ 60 HZ        | Motor Lead Quantity/Wire Size: | 3 @ 10 AWG            |
| Voltage @ Frequency:            | 200.0 V @ 60 HZ         | Motor Lead Exit:               | Ko Box                |
| XP Class and Group:             | None                    | Motor Lead Termination:        | Flying Leads          |
| XP Division:                    | Not Applicable          | Motor Type:                    | 0748M                 |
| Agency Approvals:               | CSA                     | Mounting Arrangement:          | F1                    |
|                                 | CSA EEV                 | Power Factor:                  | 83                    |
|                                 | UR                      | Product Family:                | General Purpose       |
| 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                  |
| Blower:                         | None                    | Shaft Extension Location:      | Pulley End            |
| Current @ Voltage:              | 28.000 A @ 200.0 V      | Shaft Ground Indicator:        | Shaft Grounding       |

|                                       |                           |                                    |                     |
|---------------------------------------|---------------------------|------------------------------------|---------------------|
| <b>Design Code:</b>                   | B                         | <b>Shaft Rotation:</b>             | Reversible          |
| <b>Drip Cover:</b>                    | No Drip Cover             | <b>Shaft Slinger Indicator:</b>    | No Slinger          |
| <b>Duty Rating:</b>                   | CONT                      | <b>Speed Code:</b>                 | Single Speed        |
| <b>Electrically Isolated Bearing:</b> | Not Electrically Isolated | <b>Motor Standards:</b>            | NEMA                |
| <b>Feedback Device:</b>               | NO FEEDBACK               | <b>Starting Method:</b>            | Direct on line      |
| <b>Front Face Code:</b>               | Standard                  | <b>Thermal Device - Bearing:</b>   | None                |
| <b>Front Shaft Indicator:</b>         | None                      | <b>Thermal Device - Winding:</b>   | None                |
| <b>Heater Indicator:</b>              | No Heater                 | <b>Vibration Sensor Indicator:</b> | No Vibration Sensor |
| <b>Insulation Class:</b>              | H                         | <b>Winding Thermal 1:</b>          | None                |
|                                       |                           | <b>Winding Thermal 2:</b>          | None                |

|                            |              |  |             |    |                       |      |  |           |           |   |
|----------------------------|--------------|--|-------------|----|-----------------------|------|--|-----------|-----------|---|
| <b>Nameplate NP3441L</b>   |              |  |             |    |                       |      |  |           |           |   |
| <b>CAT.NO.</b>             | EM3774T-8G   |  |             |    |                       |      |  |           |           |   |
| <b>SPEC.</b>               | 07L783Y762G1 |  |             |    |                       |      |  |           |           |   |
| <b>HP</b>                  | 10           |  |             |    |                       |      |  |           |           |   |
| <b>VOLTS</b>               | 200          |  |             |    |                       |      |  |           |           |   |
| <b>AMP</b>                 | 28           |  |             |    |                       |      |  |           |           |   |
| <b>RPM</b>                 | 1760         |  |             |    |                       |      |  |           |           |   |
| <b>FRAME</b>               | 215T         |  |             |    | <b>HZ</b>             | 60   |  |           | <b>PH</b> | 3 |
| <b>SER.F.</b>              | 1.15         |  | <b>CODE</b> | H  | <b>DES</b>            | B    |  | <b>CL</b> | H         |   |
| <b>NEMA-NOM-EFF</b>        | 91.7         |  | <b>PF</b>   | 83 |                       |      |  |           |           |   |
| <b>RATING</b>              | 40C AMB-CONT |  |             |    |                       |      |  |           |           |   |
| <b>CC</b>                  | 010A         |  |             |    | <b>USABLE AT 208V</b> |      |  |           |           |   |
| <b>DE</b>                  | 6307         |  |             |    | <b>ODE</b>            | 6206 |  |           |           |   |
| <b>ENCL</b>                | TEFC         |  | <b>SN</b>   |    |                       |      |  |           |           |   |
| <b>VPWM INVERTER READY</b> |              |  |             |    |                       |      |  |           |           |   |
| CT6-60H(10:1)VT3-60H(20:1) |              |  |             |    |                       |      |  |           |           |   |
|                            |              |  |             |    |                       |      |  |           |           |   |

| Parts List  |  |          |
|-------------|--|----------|
| Part Number | Description                              | Quantity |
| SA269065    | SA 07L783Y762G1                          | 1.000 EA |
| RA255719    | RA 07L783Y762G1                          | 1.000 EA |
| 37FN3002C01 | EXFN, PLASTIC, 6.00 OD, 1.155 ID         | 1.000 EA |
| HW3201A05   | 3/8-16 EYEBOLT                           | 1.000 EA |
| 09CB3002SP  | CB W/1.38 LEAD HOLE FOR 37, 39, 307 & 30 | 1.000 EA |
| 09GS1000SP  | GASKET-CONDUIT BOX, 1/16 THICK LEXIDE    | 1.000 EA |
| 51XW2520A12 | .25-20 X .75, TAPTITE II, HEX WSHR SLTD  | 2.000 EA |
| 59XW2520G07 | .25-20X.44,HEX SER WSHR,TAPTITE 2,GREEN  | 1.000 EA |
| 37EP1100A01 | FR ENDPLATE MACH                         | 1.000 EA |
| HW4500A01   | 1641B(ALEMITE)400 UNIV, GREASE FITT      | 1.000 EA |
| HW5100A06   | W2420-025 WVY WSHR (WB)                  | 1.000 EA |
| 37EP1101A09 | SPL PULLEY EP ENCL 37 307 BRG.           | 1.000 EA |
| HW4500A01   | 1641B(ALEMITE)400 UNIV, GREASE FITT      | 1.000 EA |
| 10XN2520A26 | 1/4-20X 1 5/8 HEX HD                     | 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 |
| 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 |
| 09CB3501SP  | CONDUIT BOX LID FOR 09CB3001 & 09CB3002  | 1.000 EA |
| 09GS1013SP  | GS FOR 09CB3501, 12CB1500 & 12CB1503 LID | 1.000 EA |
| 51XW2520A12 | .25-20 X .75, TAPTITE II, HEX WSHR SLTD  | 2.000 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 |

| <b>Parts List (continued)</b> |  |                 |
|-------------------------------|--|-----------------|
| <b>Part Number</b>            | <b>Description</b>                       | <b>Quantity</b> |
| 85XU0407S04                   | 4X1/4 U DRIVE PIN STAINLESS              | 2.000 EA        |
| LB1115N                       | LABEL,LIFTING DEVICE (ON ROLLS)          | 1.000 EA        |
| LB1459                        | AEGIS SGR LABEL "AEGISLBL-100"           | 1.000 EA        |
| MJ1000A02                     | GREASE, MOBIL POLYREX EM - 124047        | 0.050 LB        |
| HA3104A32                     | THRUBOLT- 5/16-18 X12.750                | 4.000 EA        |
| MG1000Y03                     | MUNSELL 2.53Y 6.70/ 4.60, GLOSS 20,      | 0.036 GA        |
| LC0005E01                     | CONN.DIA./WARNING LABEL (LC0005/LB1119N) | 1.000 EA        |
| NP3441L                       | ALUM SUPER-E VPWM INVERTER READY UL      | 1.000 EA        |
| 07PA1011                      | PKG GRP, 07 CAST IRON PK1181             | 1.000 EA        |
| 10XL3808A28                   | 3/8 X 1 3/4" LAG SCREW                   | 2.000 EA        |
| MN416A01                      | TAG-INSTAL-MAINT no wire (2100/bx) 4/22  | 1.000 EA        |

**AC Induction Motor Performance Data**

Record # 50378

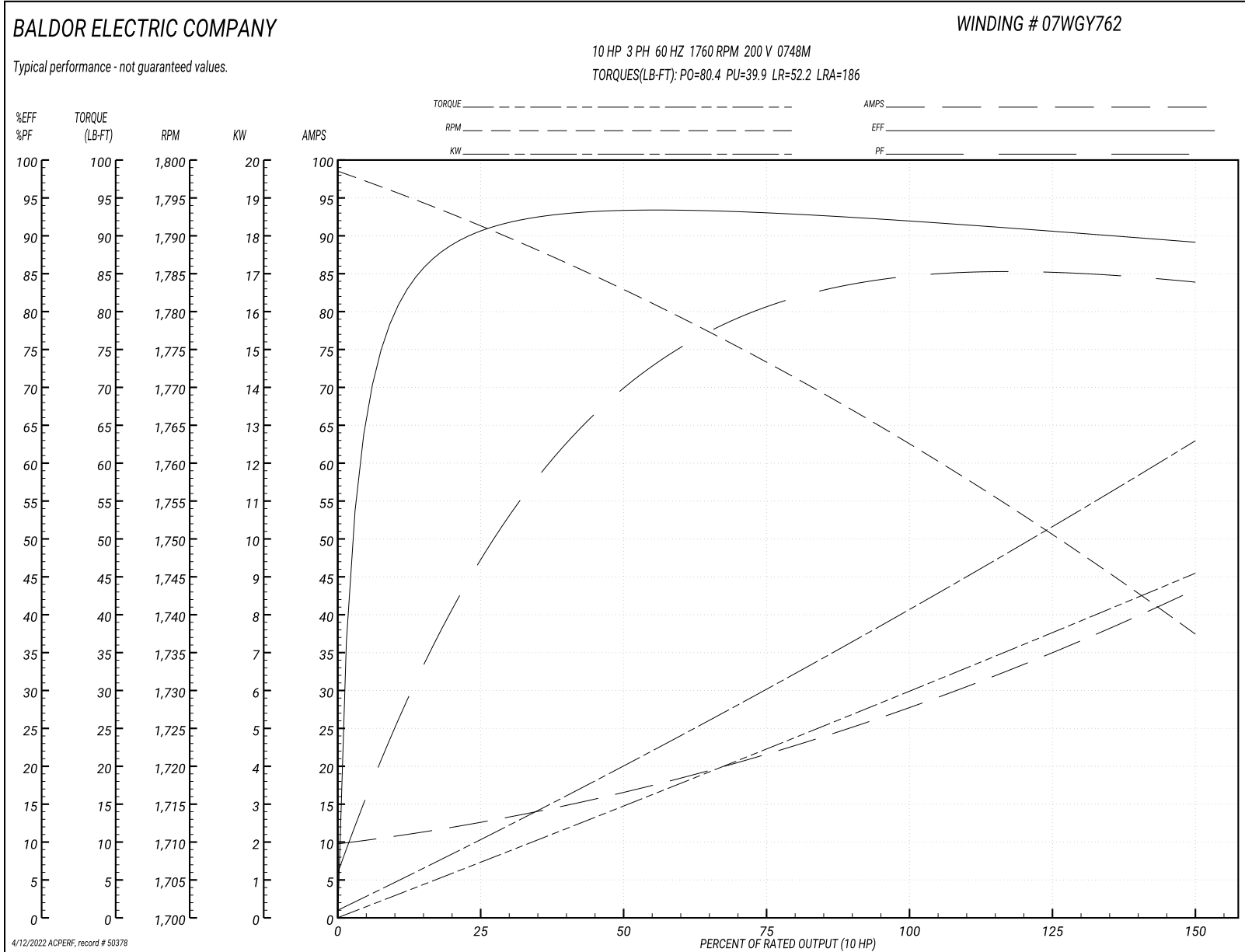
Typical performance - not guaranteed values

| <b>Winding: 07WGY762-R003</b> |                   | <b>Type: 0748M</b>               |   | <b>Enclosure: TEFC</b> |  |
|-------------------------------|-------------------|----------------------------------|---|------------------------|--|
| <b>Nameplate Data</b>         |                   |                                  | <b>200 V, 60 Hz:<br/>Single Voltage Motor</b> |                        |  |
| <b>Rated Output (HP)</b>      | 10                | <b>Full Load Torque</b>          | 29.8 LB-FT                                    |                        |  |
| <b>Volts</b>                  | 200               | <b>Start Configuration</b>       | direct on line                                |                        |  |
| <b>Full Load Amps</b>         | 28                | <b>Breakdown Torque</b>          | 80.4 LB-FT                                    |                        |  |
| <b>R.P.M.</b>                 | 1760              | <b>Pull-up Torque</b>            | 39.9 LB-FT                                    |                        |  |
| <b>Hz</b>                     | 60 Phase          | <b>Locked-rotor Torque</b>       | 52.2 LB-FT                                    |                        |  |
| <b>NEMA Design Code</b>       | B KVA Code        | <b>Starting Current</b>          | 186 A   |                        |  |
| <b>Service Factor (S.F.)</b>  | 1.15              | <b>No-load Current</b>           | 10.2 A  |                        |  |
| <b>NEMA Nom. Eff.</b>         | 91.7 Power Factor | <b>Line-line Res. @ 25°C</b>     | 0.207 Ω                                       |                        |  |
| <b>Rating - Duty</b>          | 40C AMB-CONT      | <b>Temp. Rise @ Rated Load</b>   | 65°C  |                        |  |
| <b>S.F. Amps</b>              |                   | <b>Temp. Rise @ S.F. Load</b>    | 81°C  |                        |  |
|                               |                   | <b>Locked-rotor Power Factor</b> | 35.2  |                        |  |
|                               |                   | <b>Rotor inertia</b>             | 1.18 LB-FT <sup>2</sup>                       |                        |  |

**Load Characteristics 200 V, 60 Hz, 10 HP**

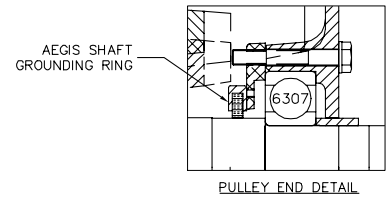
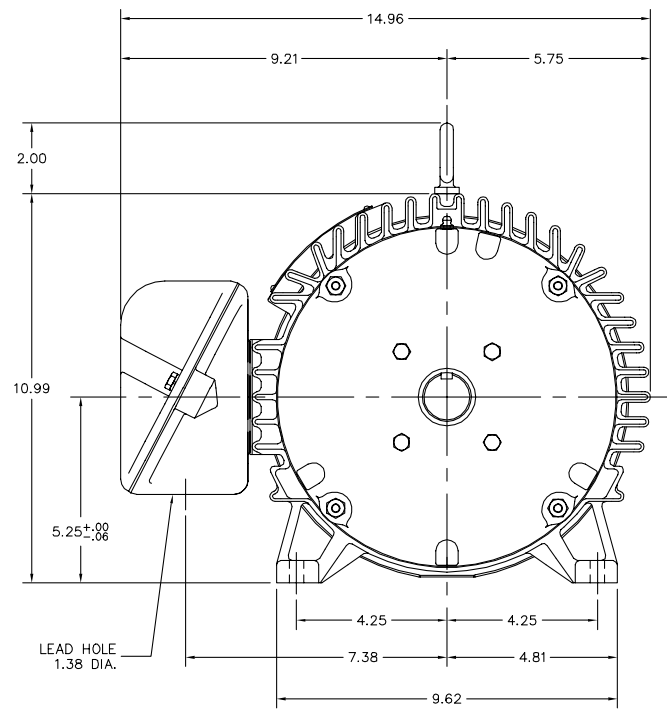
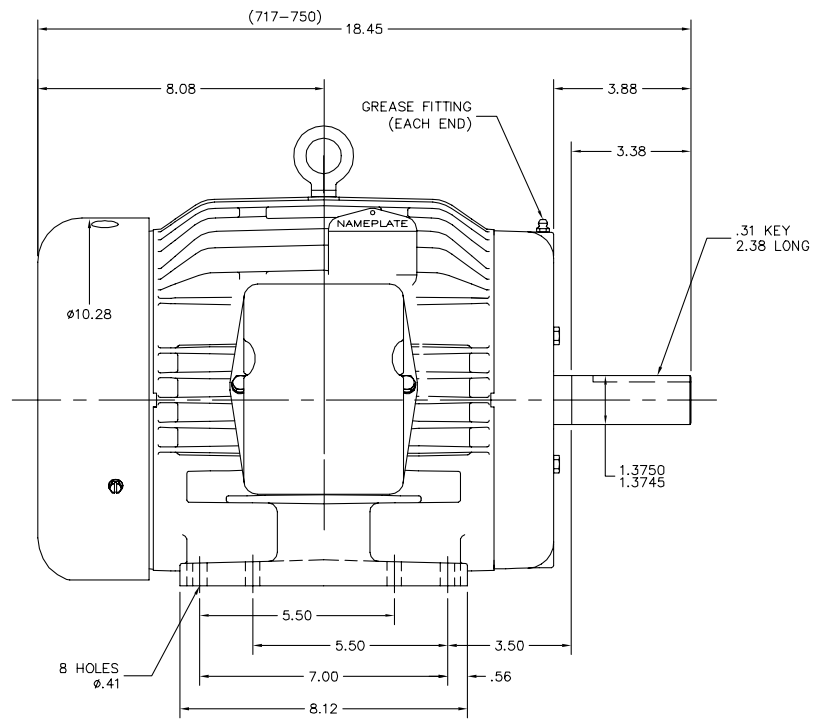
| <b>% of Rated Load</b> | <b>25</b> | <b>50</b> | <b>75</b> | <b>100</b> | <b>125</b> | <b>150</b> | <b>S.F.</b> |
|------------------------|-----------|-----------|-----------|------------|------------|------------|-------------|
| <b>Power Factor</b>    | 50        | 71        | 80        | 83         | 85         | 85         | 84          |
| <b>Efficiency</b>      | 90.4      | 92.6      | 93.1      | 92.2       | 90.9       | 89         | 91.4        |
| <b>Speed</b>           | 1791      | 1782      | 1774      | 1763       | 1751       | 1737       | 1756        |
| <b>Line amperes</b>    | 12        | 16.3      | 21.7      | 28         | 35.1       | 43.1       | 32.3        |

Performance Graph at 200V, 60Hz, 10.0HP Typical performance - Not guaranteed values





07LYL783



PULLEY END DETAIL

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

|                                      |                              |                   |
|--------------------------------------|------------------------------|-------------------|
| REV. DESC: CHANGED SHAFT TO 07SH1E10 |                              |                   |
| REV. LTR: A                          | VERSION: 01                  | TDR: 000000859913 |
| FILE: \AAA\00180\432                 | REVISED: 12:28:48 06/25/2014 | BY: ENCHALO       |
| MTL: -                               |                              |                   |

**BALDOR**

HORZ 213-5T TEFC M, LOCKED BRG, INTERNAL AEGIS SHAFT GROUND

SH 1 of 1

07LYL783

CD0006



NOTES:

1. THREE LEAD MOTOR MAY BE EITHER WYE CONNECTED OR DELTA CONNECTED.
2. INTERCHANGE ANY TWO LINE LEADS TO REVERSE ROTATION.
3. OPTIONAL THERMOSTATS ARE PROVIDED WHEN SPECIFIED.
4. ACTUAL NUMBER OF INTERNAL PARALLEL CIRCUITS MAY VARY.
5. LEAD COLORS ARE OPTIONAL. LEADS MUST BE NUMBERED AS SHOWN.

CD0006

|                                   |                              |                   |
|-----------------------------------|------------------------------|-------------------|
| REV. DESC: ADD CLASS CONN00000007 |                              |                   |
| REV. LTR: E                       | VERSION: 01                  | TDR: 000001099922 |
| FILE: \AAA\00005\141              | REVISED: 10:24:49 02/19/2019 | BY: ENBRIRO       |
| MTL: -                            | © □                          |                   |

**BALDOR - RELIANCE®**

3PH, SV, 3 LEADS, WYE OR DELTA CONNECTED

SH 1 of 1