

BALDOR® • RELIANCE 

Product Information Packet

PFC EQUIPMENT

CEM3774T

10HP,1760RPM,3PH,60HZ,215TC,0748M,TEFC,F

| Part Detail | | | | | | | |
|-------------|--------|-------------|------------|-------------|--------|---------------|------------|
| Revision: | Z | Status: | PRD/A | Change #: | | Proprietary: | No |
| Type: | AC | Elec. Spec: | 07WGY179 | CD Diagram: | CD0005 | Mfg Plant: | |
| Mech. Spec: | 07H058 | Layout: | 07LYH058 | Poles: | 04 | Created Date: | 05-07-2010 |
| Base: | RG | Eff. Date: | 07-11-2019 | Leads: | 9#14 | | |

| Specs | | | |
|---------------------------------|-------------------------|--------------------------------|-----------------------|
| Catalog Number: | CEM3774T | Heater Indicator: | No Heater |
| Enclosure: | TEFC | Insulation Class: | F |
| Frame: | 215TC | Inverter Code: | Inverter Ready |
| Frame Material: | Iron | KVA Code: | H |
| Output @ Frequency: | 10.000 HP @ 60 HZ | Lifting Lugs: | Standard Lifting Lugs |
| Synchronous Speed @ Frequency: | 1800 RPM @ 60 HZ | Locked Bearing Indicator: | Locked Bearing |
| Voltage @ Frequency: | 460.0 V @ 60 HZ | Motor Lead Quantity/Wire Size: | 9 @ 14 AWG |
| | 230.0 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: | UR | Mounting Arrangement: | F1 |
| | CSA EEV | Power Factor: | 83 |
| | CSA | Product Family: | General Purpose |
| Auxillary Box: | No Auxillary Box | Pulley End Bearing Type: | Ball |
| Auxillary Box Lead Termination: | None | Pulley Face Code: | C-Face |
| 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: | 12.200 A @ 460.0 V | Shaft Ground Indicator: | No Shaft Grounding |
| | 24.400 A @ 230.0 V | Shaft Rotation: | Reversible |
| | 26.500 A @ 208.0 V | Shaft Slinger Indicator: | No Slinger |
| Design Code: | B | Speed Code: | Single Speed |
| Drip Cover: | No Drip Cover | Motor Standards: | NEMA |
| Duty Rating: | CONT | Starting Method: | Direct on line |
| Electrically Isolated Bearing: | Not Electrically Isolated | Thermal Device - Bearing: | None |
| Feedback Device: | NO FEEDBACK | Thermal Device - Winding: | None |
| Front Face Code: | Standard | Vibration Sensor Indicator: | No Vibration Sensor |
| Front Shaft Indicator: | None | Winding Thermal 1: | None |
| | | Winding Thermal 2: | None |

| | | | | | | | | | | |
|-----------------------------------|--------------|--|-------------|------------|-----------------------|----|--|--------------|-----------|------|
| Nameplate NP3441LUA | | | | | | | | | | |
| CAT.NO. | CEM3774T | | | | | | | | | |
| SPEC | 07H058Y179G1 | | | | | | | | | |
| HP | 10 | | | | | | | | | |
| VOLTS | 230/460 | | | | | | | | | |
| AMPS | 24.4/12.2 | | | | | | | | | |
| RPM | 1760 | | | | | | | | | |
| FRAME | 215TC | | | | HZ | 60 | | | PH | 3 |
| SF | 1.15 | | CODE | H | DES | B | | CLASS | F | |
| NEMA NOM. EFF | 91.7 | | PF | 83 | | | | | | |
| RATING | 40C AMB-CONT | | | | | | | | | |
| CC | 010A | | | | USABLE AT 208V | | | | | 26.5 |
| ENCL | TEFC | | SER | | | | | | | |
| DE | 6307 | | | ODE | 6206 | | | | | |
| VPWM INVERTER READY | | | | | | | | | | |
| CT6-60H(10:1)VT3-60H(20:1) | | | | | | | | | | |

| Parts List | | |
|-------------|------------------------------------------|----------|
| Part Number | Description | Quantity |
| SA194690 | SA 07H058Y179G1 | 1.000 EA |
| RA182276 | RA 07H058Y179G1 | 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 |
| 37FE1100A41 | FR ENDPLATE ASSEMBLY FOR ROUTING | 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 |
| 37PE1300A10 | PUEP ASSEMBLY FOR ROUTING | 1.000 EA |
| HW4500A17 | 317400 ALEMITE GREASE RELIEF | 1.000 EA |
| HW4500A01 | 1641B(ALEMITE)400 UNIV, GREASE FITT | 1.000 EA |
| 10XN2520A30 | HEX HD CAP SCREW-STD THD-.25 X 20 THD PE | 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 | 09 GS FOR 09CB3501 LID - LEXIDE | 1.000 EA |
| 51XW2520A12 | .25-20 X .75, TAPTITE II, HEX WSHR SLTD | 2.000 EA |

| Parts List (continued) | | |
|-------------------------------|------------------------------------------|-----------------|
| Part Number | Description | Quantity |
| 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 |
| 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 |
| NP3441LUA | ALUM SUPER-E VPWM INV READY UL CSA-EEV C | 1.000 EA |
| 07PA1011 | PKG GRP, 07 CAST IRON PK1181 | 1.000 EA |
| MN416A01 | TAG-INSTAL-MAINT no wire (1200/bx) 3/19 | 1.000 EA |

AC Induction Motor Performance Data

Record # 32060 - Typical performance - not guaranteed values

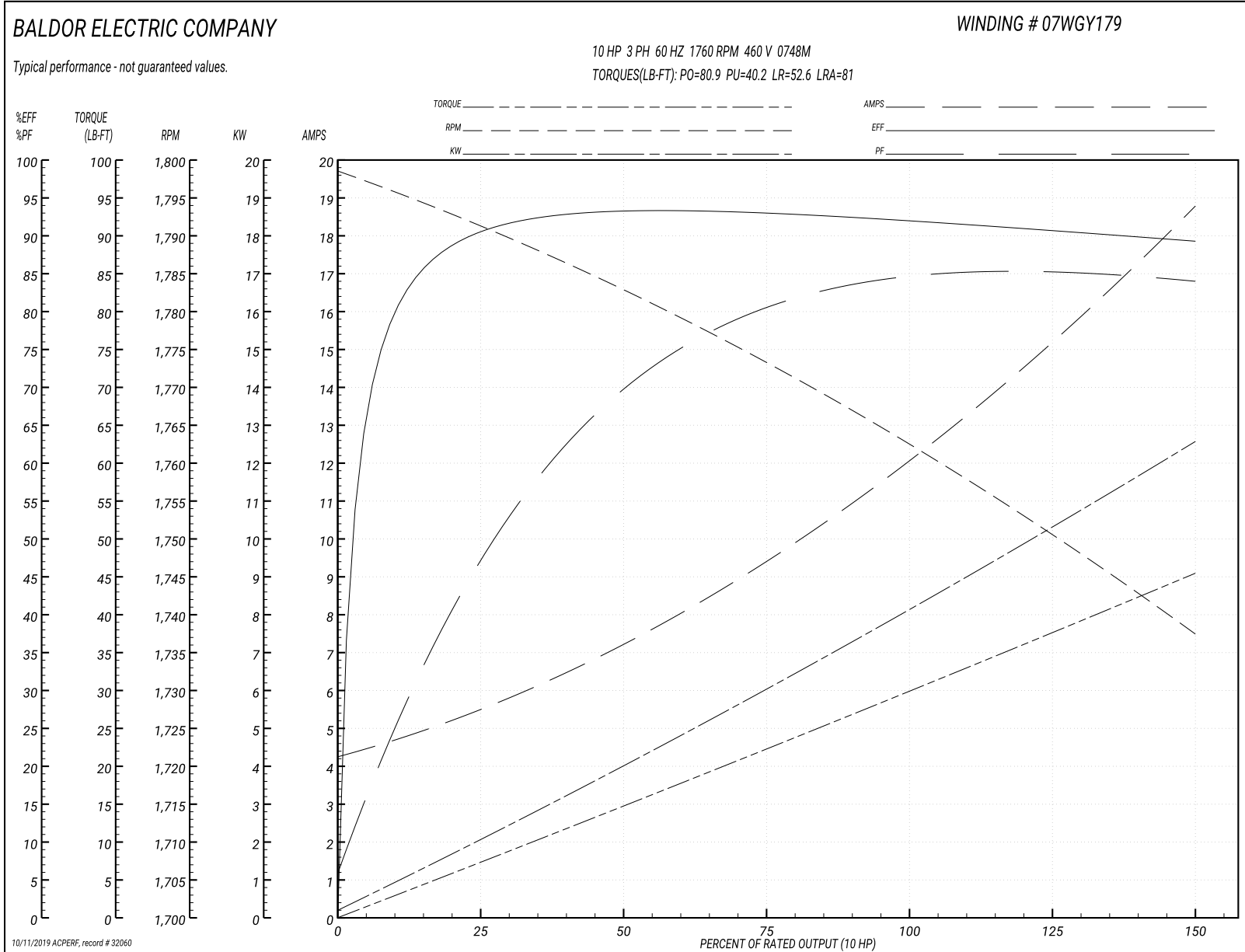
| | | |
|-------------------------------|--------------------|------------------------|
| Winding: 07WGY179-R005 | Type: 0748M | Enclosure: TEFC |
|-------------------------------|--------------------|------------------------|

| Nameplate Data | | | | 460 V, 60 Hz: High Voltage Connection | |
|-----------------------|--------------|--------------|----|------------------------------------------|-------------------------|
| Rated Output (HP) | 10 | | | Full Load Torque | 29.8 LB-FT |
| Volts | 230/460 | | | Start Configuration | direct on line |
| Full Load Amps | 24.4/12.2 | | | Breakdown Torque | 80.9 LB-FT |
| R.P.M. | 1760 | | | Pull-up Torque | 40.2 LB-FT |
| Hz | 60 | Phase | 3 | Locked-rotor Torque | 52.6 LB-FT |
| NEMA Design Code | B | KVA Code | H | Starting Current | 81 A |
| Service Factor (S.F.) | 1.15 | | | No-load Current | 4.44 A |
| NEMA Nom. Eff. | 91.7 | Power Factor | 83 | Line-line Res. @ 25°C | 1.08 Ω |
| Rating - Duty | 40C AMB-CONT | | | Temp. Rise @ Rated Load | 64°C |
| S.F. Amps | | | | Temp. Rise @ S.F. Load | 80°C |
| | | | | Locked-rotor Power Factor | 35 |
| | | | | Rotor inertia | 1.18 LB-FT ² |

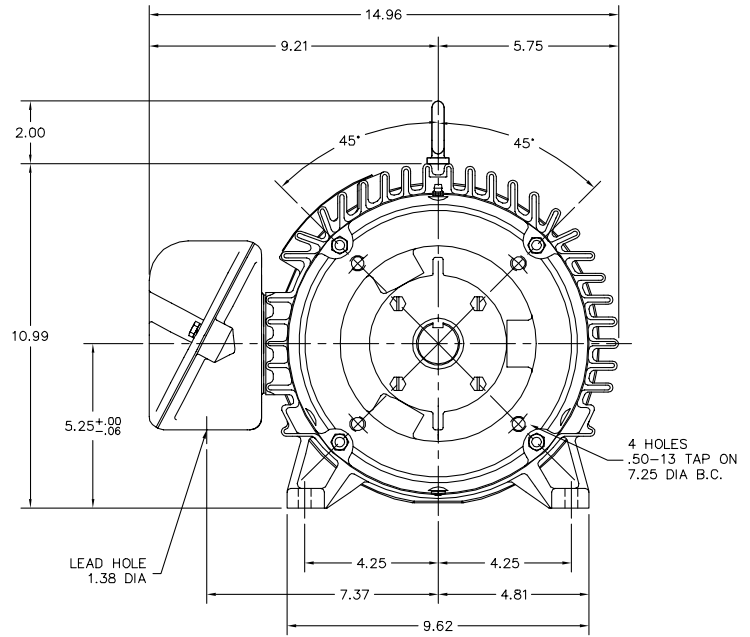
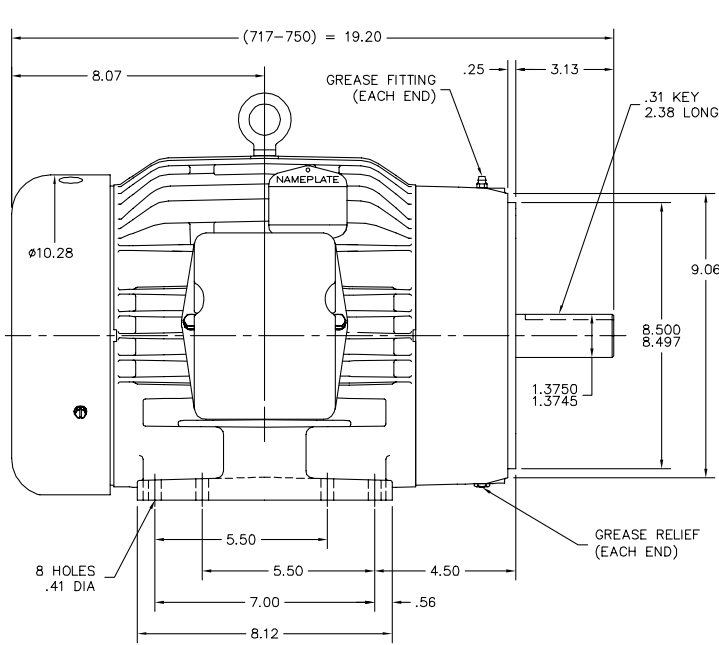
Load Characteristics 460 V, 60 Hz, 10 HP

| % of Rated Load | 25 | 50 | 75 | 100 | 125 | 150 | S.F. |
|-----------------|------|------|------|------|------|------|------|
| Power Factor | 50 | 71 | 80 | 83 | 85 | 85 | 84 |
| Efficiency | 90.4 | 92.5 | 92.9 | 92.3 | 90.9 | 89.1 | 91.5 |
| Speed | 1791 | 1782 | 1774 | 1763 | 1751 | 1737 | 1756 |
| Line amperes | 5.24 | 7.1 | 9.42 | 12.2 | 15.2 | 18.7 | 14 |

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



07LYH058



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

| | | |
|----------------------------------------|------------------------------|-------------------|
| REV. DESC: OMIT GROUND LUG FROM LAYOUT | | |
| REV. LTR: M | VERSION: 03 | TDR: 000000569767 |
| FILE: \AAA\00016\842 | REVISED: 08:57:45 12/03/2010 | BY: ENMATRO |
| MTL: - | | |

BALDOR
 HORZ 213-5TC TEFC 307M SUPER-E
 SH 1 of 1

07LYH058

CD0005

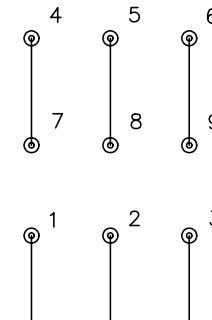


LOW VOLTAGE
(2Y)



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 |
| 900000 | | FILE: AAA00005140 | MDL: - |
| | | MTL: - | |

BALDOR ELECTRIC Co.

3PH, DV, 9 LEADS

CD0005

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