

BALDOR® • RELIANCE

Product Information Packet

CEM2514T

20HP,3510RPM,3PH,60HZ,254TC,3928M,OPSB,F

| Part Detail | | | | | | | |
|-------------|-------|----------------|-------|-------------|----------|---------------|------------|
| Revision: | E | Status: | PRD/A | Change #: | | Proprietary: | No |
| Type: | AC | Prod. Type: | 3928M | Elec. Spec: | 39WGX101 | CD Diagram: | CD0180 |
| Enclosure: | OPSB | Mfg Plant: | | Mech. Spec: | 39D102 | Layout: | 39LYD102 |
| Frame: | 254TC | Mounting: | F1 | Poles: | 02 | Created Date: | 08-03-2010 |
| Base: | RG | Rotation: | R | Insulation: | F | Eff. Date: | 11-09-2016 |
| Leads: | 9#12 | | | | | Replaced By: | |
| Literature: | | Elec. Diagram: | | | | | |

| | | | | | | | | | | |
|---------------------------|--------------|--|-------------|----|-----------------------|------|--|-----------|-----------|---|
| Nameplate NP3553L | | | | | | | | | | |
| CAT.NO. | CEM2514T | | | | | | | | | |
| SPEC. | 39D102X101G1 | | | | | | | | | |
| HP | 20 | | | | | | | | | |
| VOLTS | 230/460 | | | | | | | | | |
| AMP | 47/23.5 | | | | | | | | | |
| RPM | 3510 | | | | | | | | | |
| FRAME | 254TC | | | | HZ | 60 | | | PH | 3 |
| SER.F. | 1.15 | | CODE | G | DES | B | | CL | F | |
| NEMA-NOM-EFF | 91 | | PF | 88 | | | | | | |
| RATING | 40C AMB-CONT | | | | | | | | | |
| CC | 010A | | | | USABLE AT 208V | | | 51 | | |
| DE | 6309 | | | | ODE | 6208 | | | | |
| ENCL | OPSB | | SN | | | | | | | |
| VPWM INVERTER READY | | | | | | | | | | |
| CT30-60(2:1) VT3-60(20:1) | | | | | | | | | | |
| | | | | | | | | | | |

| Parts List | | |
|----------------|--|----------|
| Part Number | Description | Quantity |
| SA200897 | SA 39D102X101G1 | 1.000 EA |
| RA188207 | RA 39D102X101G1 | 1.000 EA |
| S/P107-000-005 | SUPER-E PROC'S(254/6 FR.) ZK PLANT - POL | 1.000 EA |
| HA6361A01 | LIFTING LUG FOR 37, 39 & 40 FRAME ZINC | 2.000 EA |
| HA6016 | ADAPTER, CAST CONDUIT BOX | 1.000 EA |
| 09CB3002 | CB W/1.38 LEAD HOLE FOR 37, 39, 307 & 30 | 1.000 EA |
| 51XW2520A12 | .25-20 X .75, TAPTITE II, HEX WSHR SLTD | 2.000 EA |
| HW1001A25 | LOCKWASHER 1/4, ZINC PLT .493 OD, .255 I | 2.000 EA |
| WD1000B17 | T&B CX35TN TERMINAL | 1.000 EA |
| 11XW1032G06 | 10-32 X .38, TAPTITE II, HEX WSHR SLTD U | 1.000 EA |
| 39EP3200A01SP | FR/PU ENDPLATE, MACH | 1.000 EA |
| HA4051A00 | PLASTIC CAP FOR GREASE FITTING | 1.000 EA |
| HW5100A08 | W3118-035 WVY WSHR (WB) | 1.000 EA |
| 39EP3400A01 | STD FACE MTD ENDPLATE 309 BRG | 1.000 EA |
| HA4051A00 | PLASTIC CAP FOR GREASE FITTING | 1.000 EA |
| 10XN2520K28 | 1/4-20 X 1.75" HX HD SCRWGRADE 5, ZINC P | 4.000 EA |
| HW1001A25 | LOCKWASHER 1/4, ZINC PLT .493 OD, .255 I | 4.000 EA |
| XY3816A12 | 3/8-16 FINISHED NUT | 8.000 EA |
| 09CB3501 | CONDUIT BOX LID FOR 09CB3001 & 09CB3002 | 1.000 EA |
| 51XW2520A12 | .25-20 X .75, TAPTITE II, HEX WSHR SLTD | 2.000 EA |
| HW2501G25 | KEY, 3/8 SQ X 2.875 | 1.000 EA |
| LB1115N | LABEL,LIFTING DEVICE (ON ROLLS) | 1.000 EA |
| HW4500A03 | GREASE FITTING, .125 NPT 1610(ALEMITE) 8 | 1.000 EA |
| HW4500A20 | 1/8NPT SL PIPE PLUG | 1.000 EA |

| Parts List (continued) | | |
|-------------------------------|--|-----------------|
| Part Number | Description | Quantity |
| MJ1000A02 | GREASE, POLYREX EM EXXON (USe 4824-15A) | 0.030 LB |
| HW4500A03 | GREASE FITTING, .125 NPT 1610(ALEMITE) 8 | 1.000 EA |
| HW4500A20 | 1/8NPT SL PIPE PLUG | 1.000 EA |
| MG1000Y03 | MUNSELL 2.53Y 6.70/ 4.60, GLOSS 20, | 0.050 GA |
| 85XU0407S04 | 4X1/4 U DRIVE PIN STAINLESS | 2.000 EA |
| 39AD2002C01 | BAFFLE PLATE,"X" DIM=2.12 OPEN SLOT BAND | 1.000 EA |
| 39AD2002C01 | BAFFLE PLATE,"X" DIM=2.12 OPEN SLOT BAND | 1.000 EA |
| HA3154A09 | TB STUD 3/8-16 X 16.25 | 4.000 EA |
| LB1119N | WARNING LABEL | 1.000 EA |
| LC0181 | CONNECTION LABEL | 1.000 EA |
| NP3553L | ALUM SUPER-E VPWM INVERTER READY UL | 1.000 EA |
| 39PA1000 | PACKAGING GROUP 39 PRINT | 1.000 EA |
| MN416A01 | TAG-INSTAL-MAINT no wire (1200/bx) 11/14 | 1.000 EA |

AC Induction Motor Performance Data

Record # 13049 - Typical performance - not guaranteed values

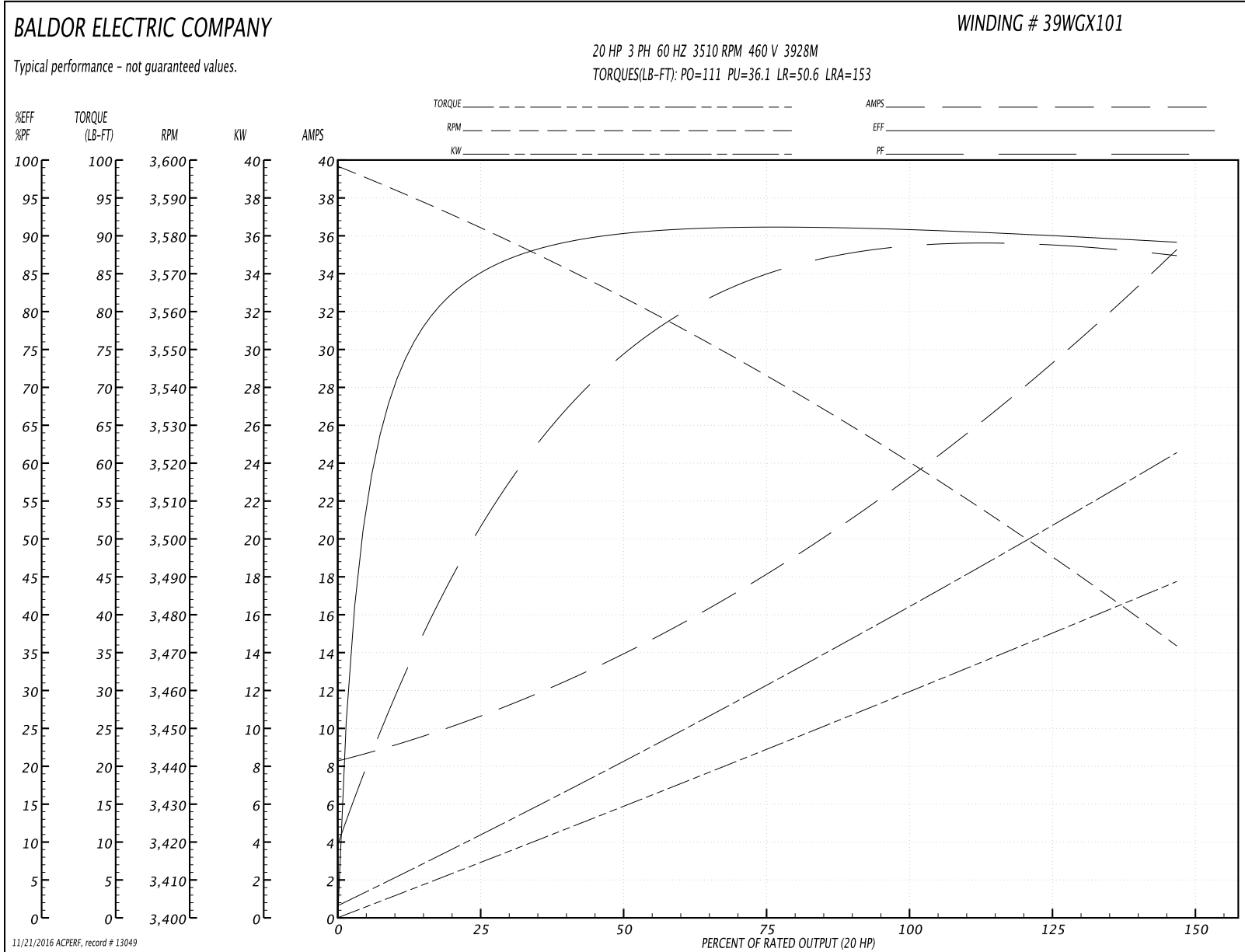
| | | |
|-------------------------------|--------------------|------------------------|
| Winding: 39WGX101-R004 | Type: 3928M | Enclosure: OPSB |
|-------------------------------|--------------------|------------------------|

| Nameplate Data | | | | 460 V, 60 Hz: High Voltage Connection | |
|-----------------------|--------------|--------------|----|--|--------------------------|
| Rated Output (HP) | 20 | | | Full Load Torque | 29.6 LB-FT |
| Volts | 230/460 | | | Start Configuration | direct on line |
| Full Load Amps | 47/23.5 | | | Breakdown Torque | 111 LB-FT |
| R.P.M. | 3510 | | | Pull-up Torque | 36.1 LB-FT |
| Hz | 60 | Phase | 3 | Locked-rotor Torque | 50.6 LB-FT |
| NEMA Design Code | B | KVA Code | G | Starting Current | 153 A |
| Service Factor (S.F.) | 1.15 | | | No-load Current | 8.61 A |
| NEMA Nom. Eff. | 91 | Power Factor | 88 | Line-line Res. @ 25°C | 0.512 Ω |
| Rating - Duty | 40C AMB-CONT | | | Temp. Rise @ Rated Load | 44°C |
| S.F. Amps | | | | Temp. Rise @ S.F. Load | 54°C |
| | | | | Locked-rotor Power Factor | 30 |
| | | | | Rotor inertia | 0.715 LB-FT ² |

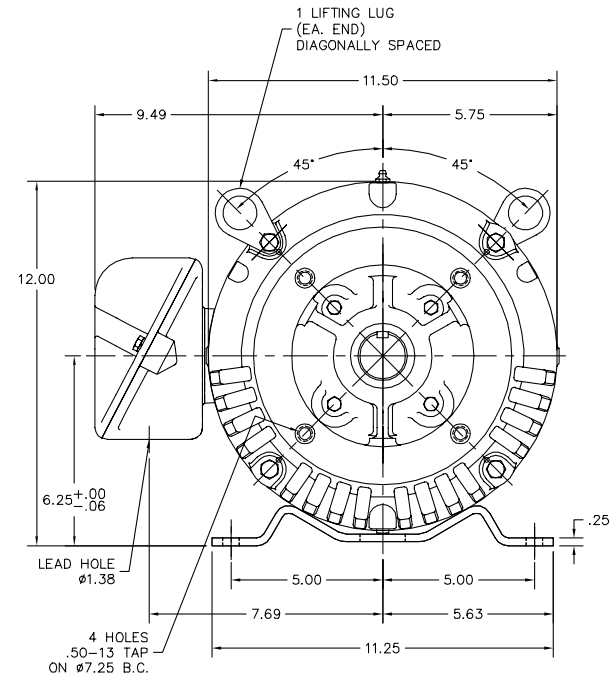
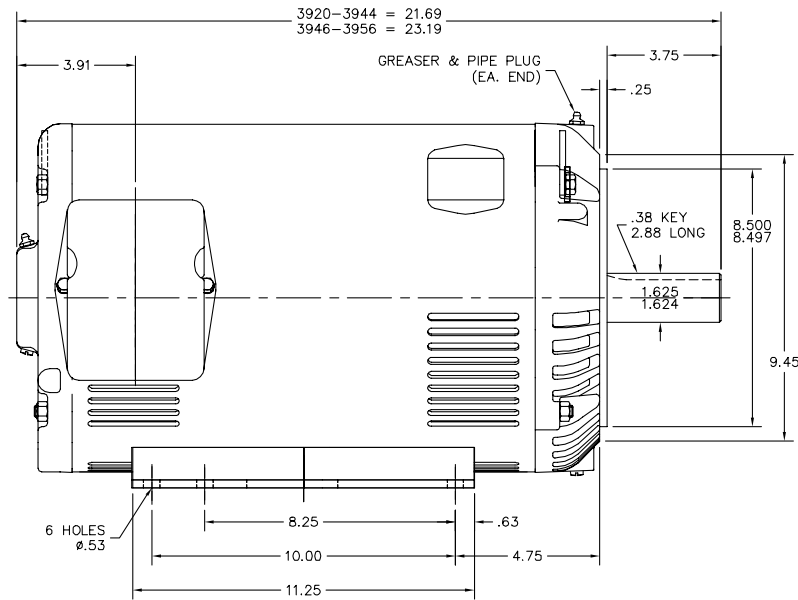
Load Characteristics 460 V, 60 Hz, 20 HP

| % of Rated Load | 25 | 50 | 75 | 100 | 125 | 150 | S.F. |
|-----------------|------|------|------|------|------|------|-------|
| Power Factor | 52 | 74 | 83 | 87 | 89 | 89 | 88 |
| Efficiency | 84.7 | 90.1 | 91.2 | 91 | 90.1 | 89.1 | 90.5 |
| Speed | 3581 | 3563 | 3544 | 3522 | 3496 | 3472 | 3506 |
| Line amperes | 10.2 | 13.9 | 18.1 | 23.3 | 29.1 | 35 | 26.78 |

Performance Graph at 460V, 60Hz, 20.0HP Typical performance - Not guaranteed values



39LYD102



39LYD102

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

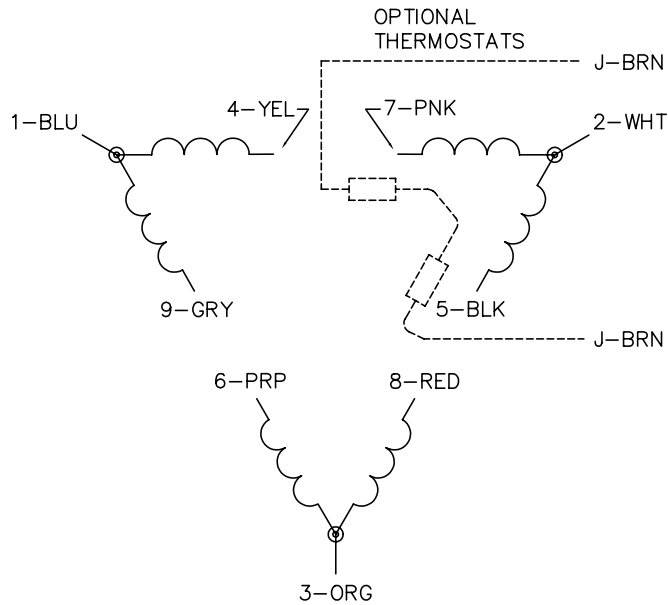
| | | |
|--------------------------------|------------------------------|-------------------|
| REV. DESC: UPDATED DESCRIPTION | | |
| REV. LTR: J | VERSION: 05 | TDR: 000000855149 |
| FILE: \AAA\00015\156 | REVISED: 02:06:59 05/23/2014 | BY: ENNINDO |
| MTL: - | | |

BALDOR

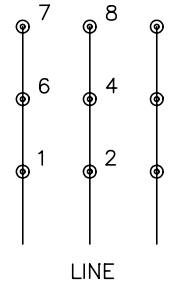
HORZ OPSB 254-6TC

SH 1 of 1

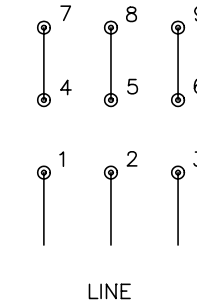
CD0180



LOW VOLTAGE
(2D)



HIGH VOLTAGE
(1D)



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: C BY: JLP

REVISED: 01/21/99 2:28

TDR: 0171435

0810D0

FILE: AAA00005148

MDL: -

MTL: -

BALDOR ELECTRIC Co.

3PH, DV, 9 LEADS, DELTA CONNECTION

CD0180