

BALDOR® • RELIANCE 

Product Information Packet

CEM31115

1HP,3500RPM,3PH,60HZ,56C,3512M,OPSB,F1,N

| Part Detail | | | | | | | |
|-------------|----|-------------|------------|-------------|--------|---------------|------------|
| Revision: | A | Status: | PRD/A | Change #: | | Proprietary: | No |
| Type: | AC | Elec. Spec: | 35WGP987 | CD Diagram: | CD0005 | Mfg Plant: | |
| Mech. Spec: | | Layout: | 35LYQ392 | Poles: | 02 | Created Date: | 03-09-2020 |
| Base: | | Eff. Date: | 11-16-2020 | Leads: | 9#18 | | |

| Specs | | | |
|---------------------------------|-------------------------|---------------------------|--------------------|
| Catalog Number: | CEM31115 | Feedback Device: | NO FEEDBACK |
| Enclosure: | OPSB | Heater Indicator: | No Heater |
| Frame: | 56C | Insulation Class: | F |
| Frame Material: | Steel | Inverter Code: | Inverter Ready |
| Output @ Frequency: | 1.000 HP @ 60 HZ | IP Rating: | NONE |
| Synchronous Speed @ Frequency: | 3600 RPM @ 60 HZ | KVA Code: | K |
| Voltage @ Frequency: | 460.0 V @ 60 HZ | Lifting Lugs: | No Lifting Lugs |
| | 230.0 V @ 60 HZ | Locked Bearing Indicator: | Locked Bearing |
| XP Class and Group: | None | Motor Lead Termination: | Flying Leads |
| XP Division: | Not Applicable | Motor Type: | 3512M |
| Agency Approvals: | CSA | Mounting Arrangement: | F1 |
| | CSA EEV | Power Factor: | 80 |
| | UR | Product Family: | General Purpose |
| Auxillary Box: | No Auxillary Box | Pulley Face Code: | C-Face |
| Auxillary Box Lead Termination: | None | Rodent Screen: | None |
| Base Indicator: | Rigid | Shaft Ground Indicator: | No Shaft Grounding |
| Bearing Grease Type: | Polyrex EM (-20F +300F) | Shaft Rotation: | Reversible |
| Blower: | None | Speed Code: | Single Speed |

| | | | |
|---------------------------------------|---------------------------|------------------------------------|---------------------|
| Current @ Voltage: | 1.450 A @ 460.0 V | Motor Standards: | NEMA |
| | 2.900 A @ 230.0 V | Starting Method: | Direct on line |
| Design Code: | B | Thermal Device - Bearing: | None |
| Drip Cover: | No Drip Cover | Thermal Device - Winding: | None |
| Duty Rating: | CONT | Vibration Sensor Indicator: | No Vibration Sensor |
| Electrically Isolated Bearing: | Not Electrically Isolated | Winding Thermal 1: | None |
| | | Winding Thermal 2: | None |

| | | | | | | | | | | |
|--------------------------|--------------|--|-------------|----|-----------------------|------|--|-----------|-----------|---|
| Nameplate NP1259L | | | | | | | | | | |
| CAT.NO. | CEM31115 | | | | | | | | | |
| SPEC. | 35-0000-0670 | | | | | | | | | |
| HP | 1 | | | | | | | | | |
| VOLTS | 230/460 | | | | | | | | | |
| AMP | 2.9/1.45 | | | | | | | | | |
| RPM | 3500 | | | | | | | | | |
| FRAME | 56C | | | | HZ | 60 | | | PH | 3 |
| SER.F. | 1.15 | | CODE | K | DES | B | | CL | F | |
| NEMA-NOM-EFF | 78.5 | | PF | 80 | | | | | | |
| RATING | 40C AMB-CONT | | | | | | | | | |
| CC | 010A | | | | USABLE AT 208V | | | | | |
| DE | 6205 | | | | ODE | 6203 | | | | |
| ENCL | OPSB | | SN | | | | | | | |

| Parts List | | |
|-------------|------------------------------------------|----------|
| Part Number | Description | Quantity |
| SA379817 | SA 35-0000-0670 | 1.000 EA |
| RA369843 | RA 35-0000-0670 | 1.000 EA |
| LC0005E01 | CONN.DIA./WARNING LABEL (LC0005/LB1119N) | 1.000 EA |
| NP1259L | ALUM SUPER-E UL CSA-EEV CC NEMA PREMIUM | 1.000 EA |
| 85XU0407S04 | 4X1/4 U DRIVE PIN STAINLESS | 2.000 EA |
| MN416A01 | TAG-INSTAL-MAINT no wire (2100/bx) 4/22 | 1.000 EA |
| MJ1000A02 | GREASE, MOBIL POLYREX EM - 124047 | 0.050 LB |
| HA3100A12 | THRUBOLT 10-32 X 7.375 | 4.000 EA |
| 35EP3209G00 | MASTER ODE,203 BRG | 1.000 EA |
| HW5100A03 | WAVY WASHER (W1543-017) | 1.000 EA |
| 35EP3402C00 | MASTER DE,205 BRG,OPEN | 1.000 EA |
| 51XN1032A20 | 10-32 X 1 1/4 HX WS SL SR | 2.000 EA |
| 35CB3007 | 35 CB CASTING W/.88 DIA. LEAD HOLE | 1.000 EA |
| 51XB1016A07 | 10-16 X 7/16 HXWSSLD SERTYB | 2.000 EA |
| 11XW1032G06 | 10-32 X .38, TAPTITE II, HEX WSHR SLTD U | 1.000 EA |
| 35CB4521 | 35 LIPPED CB LID (GALV & PHOSPH) | 1.000 EA |
| 51XW0832A07 | 8-32 X .44, TAPTITE II, HEX WSHR SLTD SE | 4.000 EA |
| NS2512A01 | INSULATOR, CONDUIT BOX X | 1.000 EA |
| 35AD2005B01 | BAFFLE PLATE,MOD 35-SLTD BAND MTR TDR | 1.000 EA |
| 35AD2005B01 | BAFFLE PLATE,MOD 35-SLTD BAND MTR TDR | 1.000 EA |
| MG1000Y03 | MUNSELL 2.53Y 6.70/ 4.60, GLOSS 20, | 0.022 GA |
| 35PA1066 | PKG GRP, PRINT PK1008A06 | 1.000 EA |
| HW2501D13 | KEY, 3/16 SQ X 1.375 | 1.000 EA |
| HA7000A04 | KEY RETAINER 0.625 DIA SHAFTS | 1.000 EA |

| Parts List (continued) | | |
|-------------------------------|--------------------|-----------------|
| Part Number | Description | Quantity |
| FE-0000001 | ZRTG FE ASSEMBLY | 1.000 EA |
| PE-0000001 | ZRTG PE ASSEMBLY | 1.000 EA |

AC Induction Motor Performance Data

Record # 81829

Typical performance - not guaranteed values

| Winding: 35WGP987-R009 | | Type: 3512M | | Enclosure: OPEN | |
|-------------------------------|--------------|----------------------------------|--------------------------------------------------|------------------------|--|
| Nameplate Data | | | 460 V, 60 Hz: High Voltage Connection | | |
| Rated Output (HP) | 1 | Full Load Torque | 1.47 LB-FT | | |
| Volts | 230/460 | Start Configuration | direct on line | | |
| Full Load Amps | 2.9/1.45 | Breakdown Torque | 6.11 LB-FT | | |
| R.P.M. | 3500 | Pull-up Torque | 2.3 LB-FT | | |
| Hz | 60 Phase | Locked-rotor Torque | 3.86 LB-FT | | |
| NEMA Design Code | B | Starting Current | 10.8 A | | |
| Service Factor (S.F.) | 1.15 | No-load Current | 0.883 A | | |
| NEMA Nom. Eff. | 78.5 | Line-line Res. @ 25°C | 19.3 Ω | | |
| Rating - Duty | 40C AMB-CONT | Temp. Rise @ Rated Load | 31°C | | |
| S.F. Amps | | Temp. Rise @ S.F. Load | 35°C | | |
| | | Locked-rotor Power Factor | 66 | | |
| | | Rotor inertia | 0.0332 LB-FT ² | | |

Load Characteristics 460 V, 60 Hz, 1 HP

| % of Rated Load | 25 | 50 | 75 | 100 | 125 | 150 | S.F. |
|------------------------|-----------|-----------|-----------|------------|------------|------------|-------------|
| Power Factor | 39 | 58 | 72 | 80 | 85 | 88 | 83 |
| Efficiency | 62.2 | 74.4 | 78.5 | 79.2 | 79.4 | 78.1 | 79.3 |
| Speed | 3575 | 3552 | 3527 | 3499 | 3464 | 3429 | 3478 |
| Line amperes | 0.931 | 1.04 | 1.22 | 1.44 | 1.72 | 2.03 | 1.61 |

Performance Graph at 460V, 60Hz, 1.0HP Typical performance - Not guaranteed values

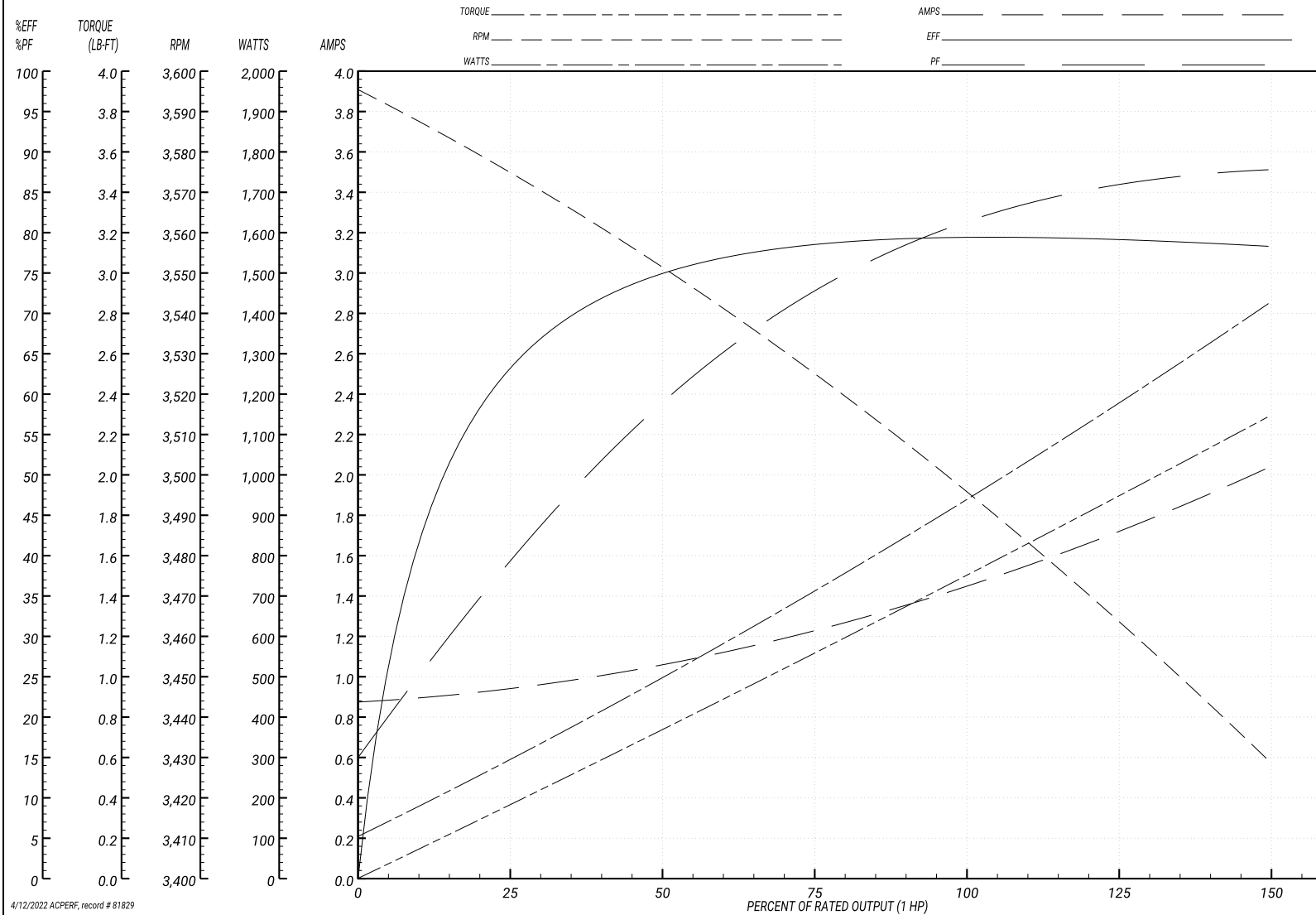
BALDOR ELECTRIC COMPANY

WINDING # 35WGP987

Typical performance - not guaranteed values.

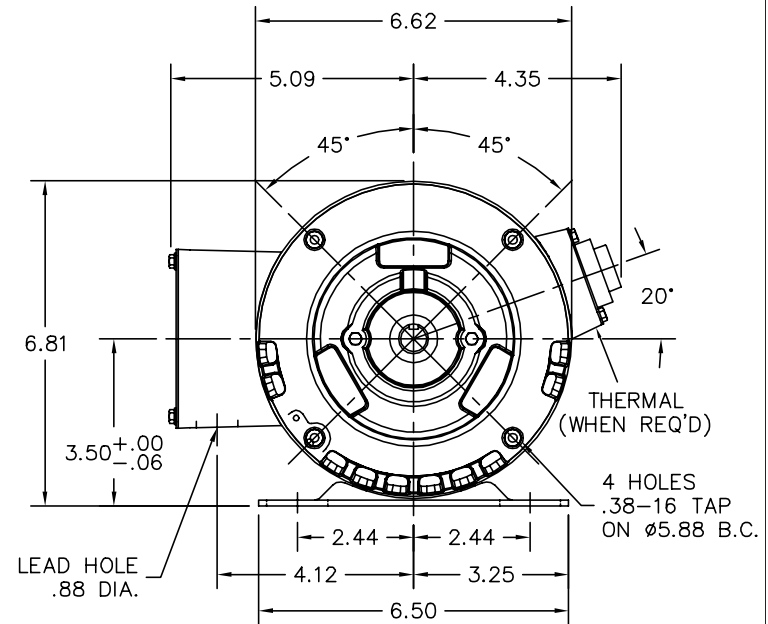
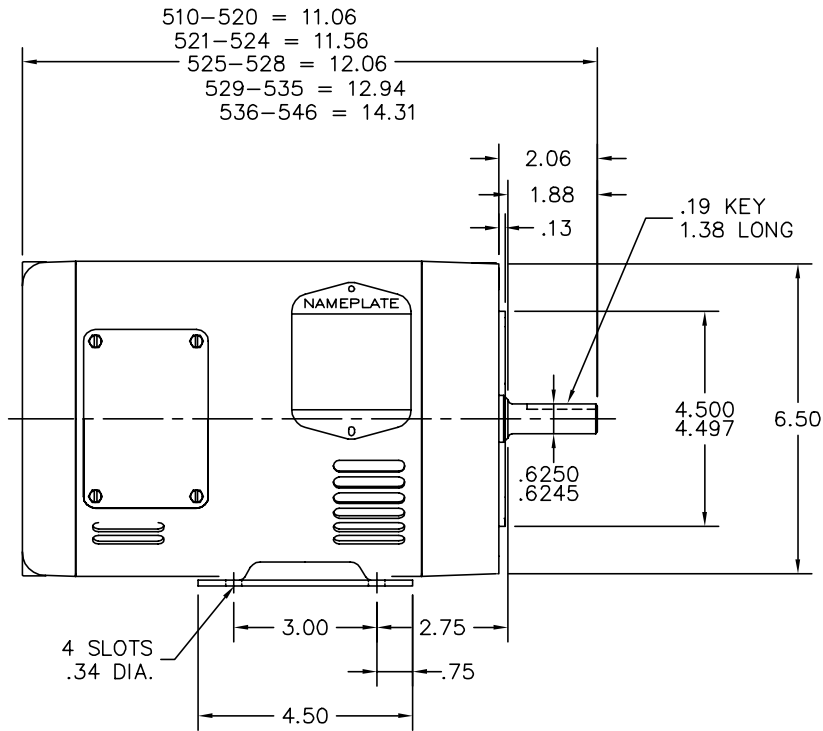
1 HP 3 PH 60 HZ 3500 RPM 460 V 3512M

TORQUES(LB-FT): PO=6.11 PU=2.3 LR=3.86 LRA=10.8



4/12/2022 ACPERF, record # 81829

35LYQ392



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

| | | |
|------------------------------|------------------------------|-------------------|
| REV. DESC: REPLACE ENDPLATES | | |
| REV. LTR: A | VERSION: 01 | TDR: 000001041474 |
| FILE: \AAA\00055\996 | REVISED: 09:05:40 09/06/2017 | BY: USJOBUR22 |
| MTL: AAA00055996 | © □ | |

BALDOR

HORZ 56C OPSB 35M SLOTTED BAND

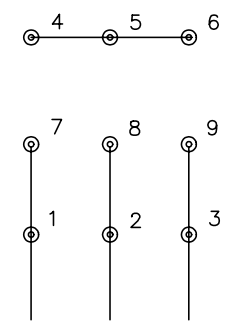
SH 1 of 1

35LYQ392

CD0005

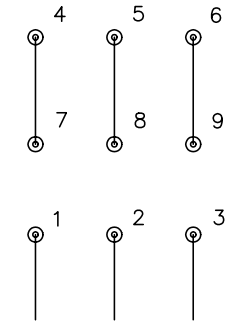


LOW VOLTAGE (2Y)



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 |
| 9000D | | FILE: AAA00005140 | MDL: - |
| | | MTL: - | |

BALDOR ELECTRIC Co.

3PH, DV, 9 LEADS

CD0005

Marketing maintained PDF of MN416:

<http://www.baldor.com/support/Literature/Load.ashx/MN416?ManNumber=MN416>