

BALDOR • RELIANCE

Customer information packet

SUM72504SM-4

25HP, 1760RPM, 3PH, 60HZ, 250TY, XPNV, V1

Class - CLI GP C,D

Division - Not Applicable

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8/11/2024 4:44:21 AM

Specifications

| | |
|--------------------------|-------------------------|
| Enclosure | XPNV |
| Frame | 250TY |
| Frame Material | Iron |
| Frequency | 60.00 Hz |
| Haz Area Class and Group | CLI GP C,D |
| Haz Area Division | Not Applicable |
| Motor Letter Type | Three Phase |
| Phase | 3 |
| Agency Approvals | C UR US CCSA US |
| Base Indicator | Rigid |
| Bearing Grease Type | Polyrex EM (-20F +300F) |
| Cable Length | 25 FOOT |
| Design Code | B |
| Drip Cover | No Drip Cover |
| Duty Rating | CONT |
| Haz Area Temp Code | T3C |
| Heater Indicator | No Heater |
| Insulation Class | F |
| Inverter Code | Not Inverter |
| IP Rating | NONE |
| KVA Code | G |
| Lifting Lugs | Standard Lifting Lugs |
| Motor Standards | NEMA |
| Motor Type | M |
| Mounting Arrangement | V1 |
| Number of Poles | 4 |
| Product Family | Pump - Centrifugal |
| Pulley End Bearing Type | Ball |
| Pulley Face Code | Standard |
| Service Factor | 1.15 |
| Shaft Diameter | 1.437 IN |

Part detail

| | |
|--------------|------------|
| Revision | C |
| Type | AC |
| Mech. spec. | |
| Base | |
| Status | PRD/A |
| Elec. spec. | 85911 |
| Layout | 619738-006 |
| Eff. date | 02-16-2023 |
| CD Diagram | 416820-036 |
| Poles | /// |
| Leads | |
| Proprietary | False |
| Created date | 05-21-2021 |

| | |
|---------------------------------|----------------------------|
| Shaft Rotation | Reversible |
| Shaft Slinger Indicator | No Slinger |
| Speed Code | Single Speed |
| Starting Method | Direct on line |
| Thermal Device - Winding | Normally Closed Thermostat |

Nameplate**000613007MN**

| | | | | | | |
|--------------------|------------------------------|----------------------------------|---------------|------------------------------|---------------|----------------|
| CAT NO | SUM72504SM-4 | SPEC NO. | S25-CWS0-0007 | | | |
| HP | 25 | AMPS | 62/31 | VOLTS 230/460 | DESIGN | B |
| FRAME SIZE | 250TY | RPM | 1760 | HZ 60 | AMB 40 | SF 1.15 |
| D.E. BRG. | 60BC03JPP30A | PH | 3 | DUTY | 15 MIN | INSUL F |
| O.D.E. BRG. | 40BC02JPG30A | TYPE | P | ENCL | TENV | CODE G |
| | | POWER FACTOR | | NEMA-NOM-EFF | | |
| | | MAX CORR KVAR | | GUARANTEED EFFICIENCY | | |
| | | NEMA NOM/CSA QUOTED EFF @ | | 100% LOAD | | |
| SER.NO. | | MOTOR WEIGHT | | LBS. | | |
| | FINAL CONN VOLTAGE = 460 *15 | | | | | |
| | MIN IN AIR ;SUB. IN SEWAGE / | | | | | |
| | WATER ONLY | | | | | |

000613007RC

| | | | |
|----------------------------|-------|------------|--|
| CLASS I GROUP | C D X | NO. | |
| CLASS II GROUP | X X X | | |
| OPERATING TEMP CODE | T3C | | |

000613007MR

| | | | | | | | | | |
|--------------------|------------------------------|----------------------------------|---------------|------------------------------|---------|---------------|----|-----------|------|
| CAT NO | SUM72504SM-4 | SPEC NO. | S25-CWS0-0007 | | | | | | |
| HP | 25 | AMPS | 62/31 | VOLTS | 230/460 | DESIGN | B | | |
| FRAME SIZE | 250TY | RPM | 1760 | HZ | 60 | AMB | 40 | SF | 1.15 |
| D.E. BRG. | 60BC03JPP30A | PH | 3 | DUTY | 15 MIN | INSUL | F | | |
| O.D.E. BRG. | 40BC02JPG30A | TYPE | P | ENCL | TENV | CODE | G | | |
| | | POWER FACTOR | | NEMA-NOM-EFF | | | | | |
| | | MAX CORR KVAR | | GUARANTEED EFFICIENCY | | | | | |
| | | NEMA NOM/CSA QUOTED EFF @ | | 100% LOAD | | | | | |
| SER.NO. | | MOTOR WEIGHT | | LBS. | | | | | |
| | FINAL CONN VOLTAGE = 460 *15 | | | | | | | | |
| | MIN IN AIR ;SUB. IN SEWAGE / | | | | | | | | |
| | WATER ONLY | | | | | | | | |

AC induction motor performance data

Record #85911 - Typical performance - not guaranteed values

| | |
|-----------|-----------|
| Winding | 09WGA0208 |
| Type | 0944M |
| Enclosure | TENV |

Nameplate data

| | | | |
|----------------|------|--------------|---------|
| Rated Output | | | 25 |
| Volts | | | 230/460 |
| Full Load Amps | | | 62/31 |
| R.P.M. | | | 1760 |
| Hz | 60 | Phase | 3 |
| KVA Code | | | G |
| S.F. | | | 1.15 |
| NEMA Nom. Eff. | 91.7 | Power Factor | 86 |
| Duty | | | 15 MIN |
| S.F. Amps | | | |

460 V, 60 Hz:

High Voltage Connection

| | |
|---------------------------|-------------------------|
| Full Load Torque | 74.8 LB-FT |
| Start Configuration | direct on line |
| Breakdown Torque | 217 LB-FT |
| Pull-up Torque | 113 LB-FT |
| Locked-rotor Torque | 140 LB-FT |
| Starting Current | 177 A |
| No-load Current | 10.28 |
| Line-line Res. @ 25°C | 0.407 Ω |
| Temp. Rise @ Rated Load | 40°C |
| Temp. Rise @ S.F. Load | 49°C |
| Locked-rotor Power Factor | 41.8 |
| Rotor inertia | 1.92 lb-ft ² |

Load Characteristics 460 V, 60 Hz, 25 HP

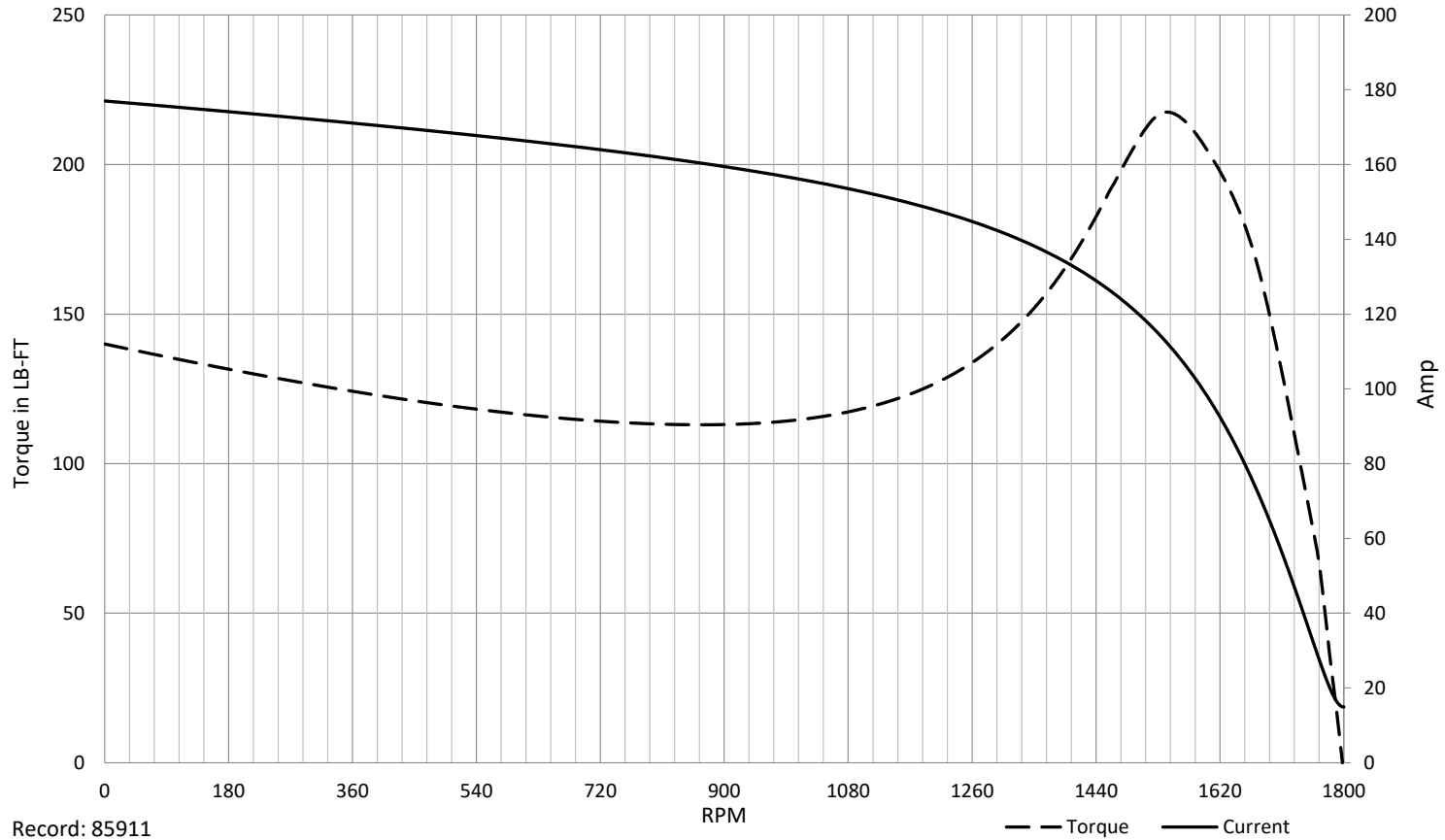
| % of Rated Load | NL | 25 | 50 | 75 | 100 | 125 | 150 | SF |
|-----------------|-------|-------|-------|-------|-------|-------|-------|------|
| Power Factor | 18 | 61 | 79 | 85 | 86 | 87 | 87 | 87 |
| Efficiency | 0 | 79 | 87.7 | 90.6 | 91.7 | 91.5 | 90.5 | 91.6 |
| Speed | 1798 | 1789 | 1779 | 1770 | 1758 | 1746 | 1730 | 1751 |
| Line amperes | 10.28 | 12.68 | 17.54 | 23.66 | 30.66 | 38.18 | 46.39 | 35.2 |

SPEED TORQUE / SPEED CURRENT CURVES

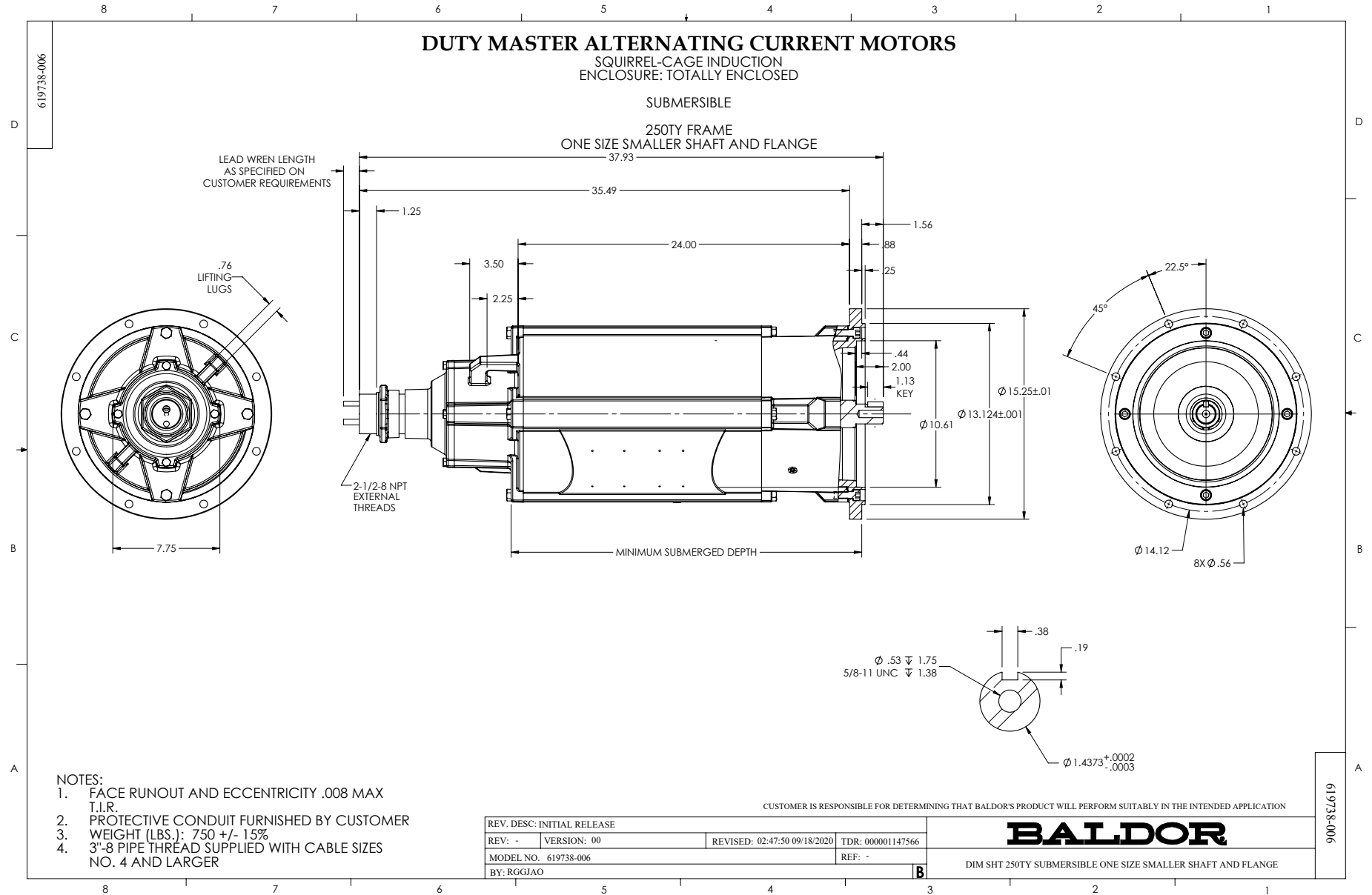


09WGA0208

25HP 460V 60HZ

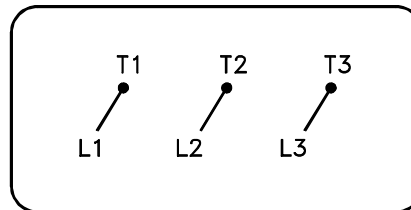


Record: 85911



416820-036

A-C MOTOR
CONNECTION DIAGRAM
STANDARD 3 LEAD CONNECTED



(N.P. 1575-BA)

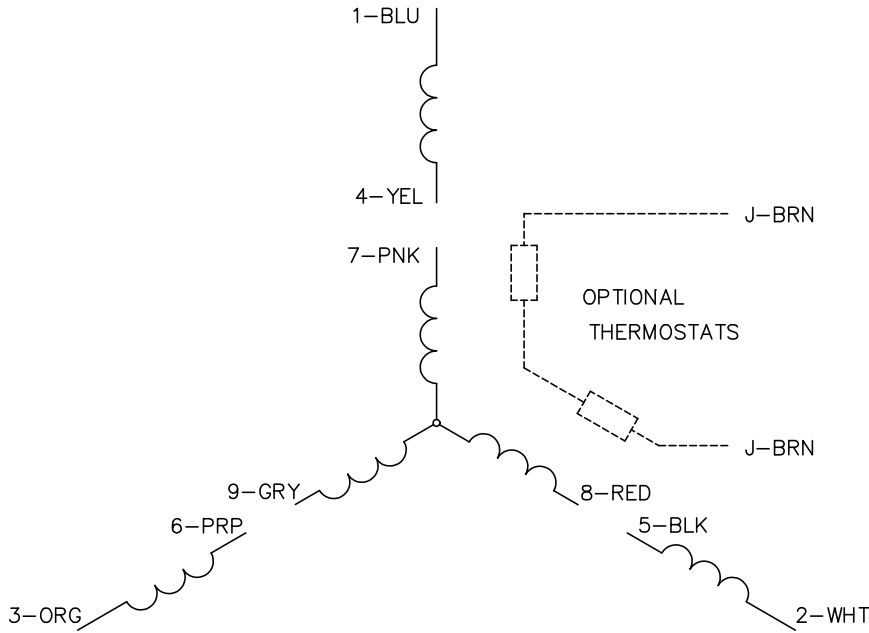
416820-036

| | | |
|--------------------------------------|--------------------------------|-------------------|
| REV. DESC: LOADED TO BUS, C/R 335225 | | |
| REV. LTR: - | VERSION: 00 | TDR: 000000538207 |
| FILE: \MGA\00000\682 | REVISED: 11: 54: 06 04/30/2010 | |
| MTL: - | BY: RAGRA | |

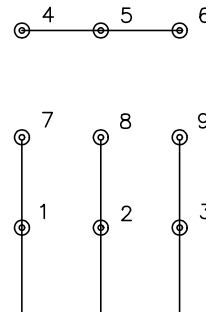
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CONN DIAG - STANDARD 3 LEAD
SH 1 of 1

CD0005

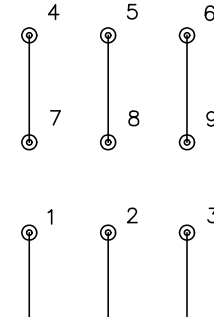


LOW VOLTAGE (2Y)



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.

CD0005

REV. DESC: REVISE TO SHOW OPTIONAL COLORS

REV. LTR: E BY: JLP REVISED: 01/19/99 10:15 TDR: 0171435

500000

FILE: AAA00005140

MDL: -

MTL: -

BALDOR ELECTRIC Co.

3PH, DV, 9 LEADS