

BALDOR® • RELIANCE™

Customer information packet

SUM71004SM-4

10HP, 1765RPM, 3PH, 60HZ, 210TY, XPNV, V1
Class - CLI GP C,D
Division - Not Applicable

Specifications

| | |
|--------------------------|-------------------------|
| Enclosure | XPNV |
| Frame | 210TY |
| 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 | CCSA US |
| Base Indicator | Rigid |
| Bearing Grease Type | Polyrex EM (-20F +300F) |
| Cable Length | NO CABLE |
| 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 | H |
| 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 | 1.250 IN |
| Shaft Rotation | Reversible |

Part detail

| | |
|--------------|------------|
| Revision | A |
| Type | AC |
| Mech. spec. | |
| Base | |
| Status | PRD/A |
| Elec. spec. | 86077 |
| Layout | 619738-004 |
| Eff. date | 09-15-2021 |
| CD Diagram | 416820-001 |
| Poles | /// |
| Leads | |
| Proprietary | False |
| Created date | 08-10-2021 |

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

Nameplate

| 000613007MN | | | | | | | | | |
|--------------------|------------------------------|----------------------------------|---------------|------------------------------|---------|---------------|----|-----------|------|
| CAT NO | SUM71004SM-4 | SPEC NO. | S21-CWS0-0010 | | | | | | |
| HP | 10 | AMPS | 25/12.5 | VOLTS | 230/460 | DESIGN | B | | |
| FRAME SIZE | 210TY | RPM | 1765 | HZ | 60 | AMB | 40 | SF | 1.15 |
| D.E. BRG. | 60BC02JPP30A | PH | 3 | DUTY | 15MIN | INSUL | F | | |
| O.D.E. BRG. | 30BC02JPG30A | TYPE | P | ENCL | TENV | CODE | H | | |
| | | POWER FACTOR | | NEMA-NOM-EFF | | | | | |
| | | MAX CORR KVAR | | GUARANTEED EFFICIENCY | | | | | |
| | | NEMA NOM/CSA QUOTED EFF @ | | 100% LOAD | | | | | |
| SER.NO. | | MOTOR WEIGHT | 356 | LBS. | | | | | |
| | FINAL CONN VOLTAGE = 460 | | | | | | | | |
| | *15MIN IN AIR ;SUB. IN WATER | | | | | | | | |
| | ONLY | | | | | | | | |

000613007RC

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

000613007MR

| | | | | | | | |
|--------------------|------------------------------|----------------------------------|---------------|------------------------------|---------|---------------|----|
| CAT NO | SUM71004SM-4 | SPEC NO. | S21-CWS0-0010 | | | | |
| HP | 10 | AMPS | 25/12.5 | VOLTS | 230/460 | DESIGN | B |
| FRAME SIZE | 210TY | RPM | 1765 | HZ | 60 | AMB | 40 |
| | | SF | 1.15 | | | | |
| D.E. BRG. | 60BC02JPP30A | PH | 3 | DUTY | 15MIN | INSUL | F |
| O.D.E. BRG. | 30BC02JPG30A | TYPE | P | ENCL | TENV | CODE | H |
| | | POWER FACTOR | | NEMA-NOM-EFF | | | |
| | | MAX CORR KVAR | | GUARANTEED EFFICIENCY | | | |
| | | NEMA NOM/CSA QUOTED EFF @ | | 100% LOAD | | | |
| SER.NO. | | MOTOR WEIGHT | 356 | LBS. | | | |
| | FINAL CONN VOLTAGE = 460 | | | | | | |
| | *15MIN IN AIR ;SUB. IN WATER | | | | | | |
| | ONLY | | | | | | |

AC induction motor performance data

Record #86077 - Typical performance - not guaranteed values

| | |
|-----------|-----------|
| Winding | 07WGA0017 |
| Type | 0738M |
| Enclosure | TENV |

Nameplate data

| | | | |
|----------------|------|--------------|---------|
| Rated Output | | | 10 |
| Volts | | | 230/460 |
| Full Load Amps | | | 25/12.5 |
| R.P.M. | | | 1765 |
| Hz | 60 | Phase | 3 |
| KVA Code | | | H |
| S.F. | | | 1.15 |
| NEMA Nom. Eff. | 90.2 | Power Factor | 82 |
| Duty | | | 15 MIN |
| S.F. Amps | | | |

460 V, 60 Hz:

High Voltage Connection

| | |
|---------------------------|----------------|
| Full Load Torque | 29.74 LB-FT |
| Start Configuration | direct on line |
| Breakdown Torque | 83.88 LB-FT |
| Pull-up Torque | 29.9 LB-FT |
| Locked-rotor Torque | 45.11 LB-FT |
| Starting Current | 87.77 A |
| No-load Current | 4.92 |
| Line-line Res. @ 25°C | 1.25 Ω |
| Temp. Rise @ Rated Load | 15°C |
| Temp. Rise @ S.F. Load | 18°C |
| Locked-rotor Power Factor | 37.1 |
| Rotor inertia | 0.934 lb-ft² |

Load Characteristics 460 V, 60 Hz, 10 HP

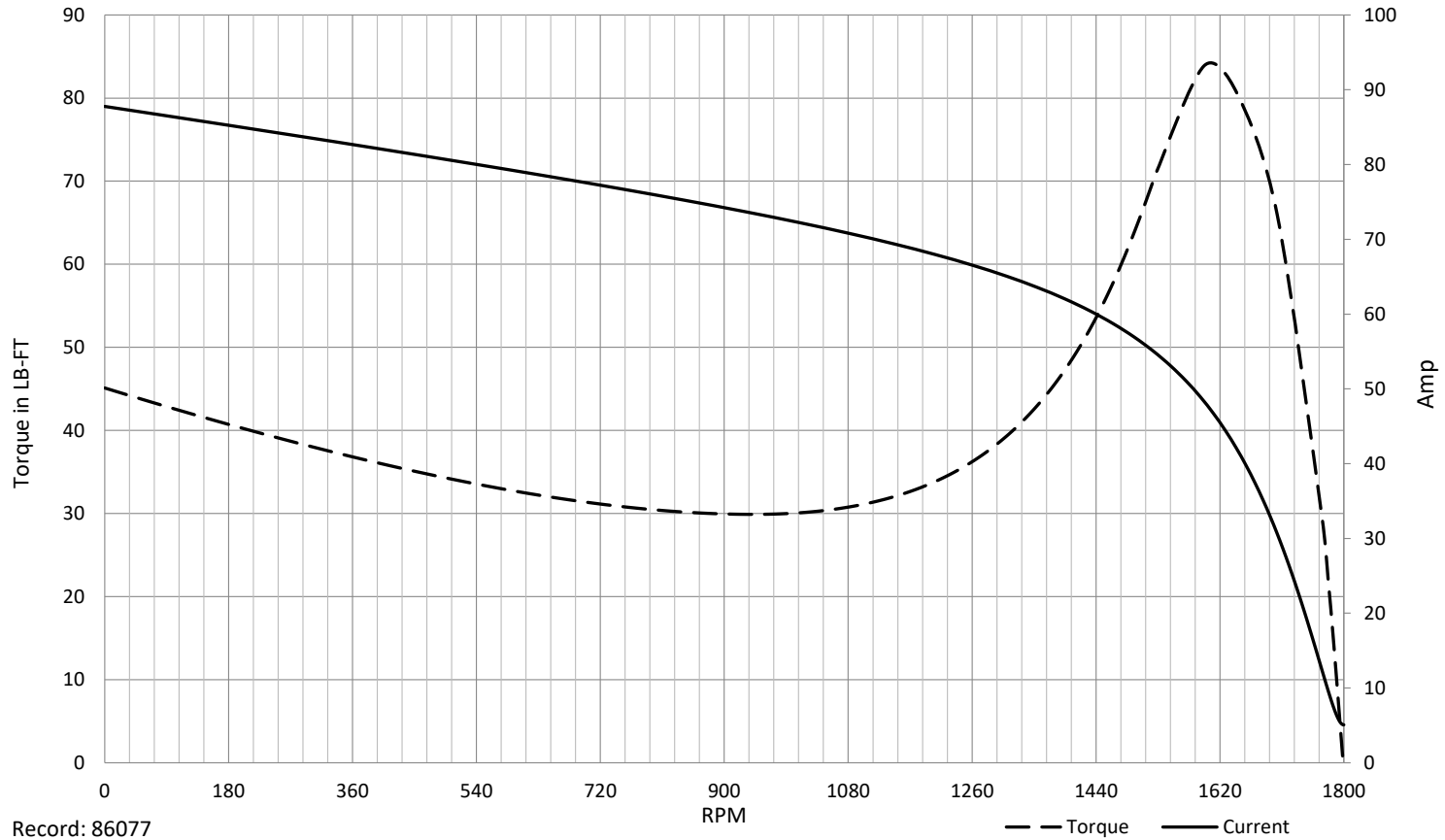
| % of Rated Load | NL | 25 | 50 | 75 | 100 | 125 | 150 | SF |
|-----------------|------|------|------|------|-------|-------|-------|------|
| Power Factor | 6 | 47 | 68 | 78 | 82 | 84 | 84 | 83 |
| Efficiency | 0 | 88.1 | 90.8 | 91.9 | 90.9 | 90 | 88.6 | 90.4 |
| Speed | 1799 | 1792 | 1785 | 1777 | 1768 | 1758 | 1747 | 1762 |
| Line amperes | 4.92 | 5.73 | 7.53 | 9.86 | 12.49 | 15.44 | 18.79 | 14.3 |

SPEED TORQUE / SPEED CURRENT CURVES



07WGA0017

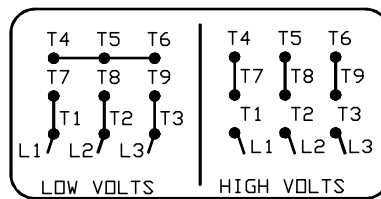
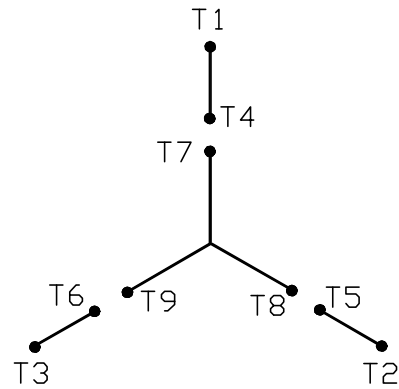
10HP 460V 60HZ



Record: 86077

416820-001

A-C MOTOR
 CONNECTION DIAGRAM
 STANDARD 9 LEAD Y CONNECTED



(N. P. 1575-A)

416820-001

| | | |
|---|--------------------------------|-------------------|
| REV. DESC: FONT CHANGE FOR PDF SEARCHABLE | | |
| REV. LTR: A | VERSION: 01 | TDR: 000001009382 |
| FILE: \MGA\00000\659 | REVISED: 10: 33: 07 12/21/2016 | BY: MGHMTT |
| MTL: - | © □ | |

BALDOR

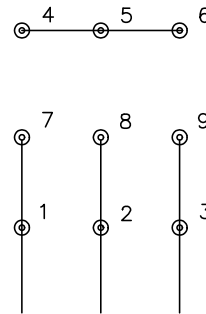
CONN DIAG - STANDARD 9 LEAD, Y CONNECTED

SH 1 of 1

CD0005

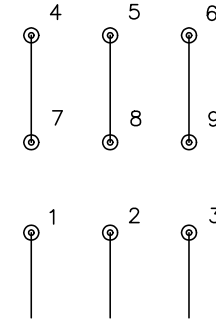


LOW VOLTAGE
(2Y)



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.

| | | | |
|---|---------|-------------------------|--------------|
| REV. DESC: REVISE TO SHOW OPTIONAL COLORS | | | |
| REV. LTR: E | BY: JLP | REVISED: 01/19/99 10:15 | TDR: 0171435 |
| S00000 | | FILE: AAA00005140 | MDL: - |
| | | MTL: - | |

BALDOR ELECTRIC Co.

3PH, DV, 9 LEADS

CD0005