

BALDOR® • RELIANCE 

Product Information Packet

FPM2538T

40//30HP,3500//2910RPM,3PH,60//50HZ,286T

| Part Detail | | | | | | | |
|-------------|-------|-------------|------------|-------------|--------|---------------|------------|
| Revision: | B | Status: | PRD/A | Change #: | | Proprietary: | No |
| Type: | AC | Elec. Spec: | 39WGX928 | CD Diagram: | CD0104 | Mfg Plant: | |
| Mech. Spec: | 39L35 | Layout: | 39LYL035 | Poles: | 02 | Created Date: | 03-13-2017 |
| Base: | RG | Eff. Date: | 08-22-2018 | Leads: | 12#10 | | |

| Specs | | | |
|---------------------------------|-------------------|--------------------------------|-----------------------|
| Catalog Number: | FPM2538T | Front Shaft Indicator: | None |
| Enclosure: | ODP | Heater Indicator: | No Heater |
| Frame: | 286TS | Insulation Class: | F |
| Frame Material: | Steel | Inverter Code: | Not Inverter |
| Output @ Frequency: | 30.000 HP @ 50 HZ | KVA Code: | G |
| | 40.000 HP @ 60 HZ | Lifting Lugs: | Standard Lifting Lugs |
| Synchronous Speed @ Frequency: | 3000 RPM @ 50 HZ | Locked Bearing Indicator: | No Locked Bearing |
| Voltage @ Frequency: | 380.0 V @ 50 HZ | Motor Lead Quantity/Wire Size: | 12 @ 10 AWG |
| | 230.0 V @ 60 HZ | Motor Lead Exit: | Ko Box |
| | 190.0 V @ 50 HZ | Motor Lead Termination: | Flying Leads |
| | 460.0 V @ 60 HZ | Motor Type: | 3954M |
| XP Class and Group: | None | Mounting Arrangement: | F1 |
| XP Division: | Not Applicable | Power Factor: | 91 |
| Agency Approvals: | UL | Product Family: | Fire Pump Motor |
| | CSA EEV | Pulley End Bearing Type: | Ball |
| Auxillary Box: | No Auxillary Box | Pulley Face Code: | Standard |
| Auxillary Box Lead Termination: | None | Pulley Shaft Indicator: | Standard |
| Base Indicator: | Rigid | Rodent Screen: | None |

| | | | |
|---------------------------------------|---------------------------|------------------------------------|-----------------------|
| Bearing Grease Type: | Polyrex EM (-20F +300F) | Shaft Extension Location: | Pulley End |
| Blower: | None | Shaft Ground Indicator: | No Shaft Grounding |
| Current @ Voltage: | 90.000 A @ 230.0 V | Shaft Rotation: | Reversible |
| | 84.000 A @ 190.0 V | Shaft Slinger Indicator: | No Slinger |
| | 45.000 A @ 460.0 V | Speed Code: | Single Speed |
| | 42.000 A @ 380.0 V | Motor Standards: | NEMA |
| Design Code: | B | Starting Method: | Wye Start - Delta Run |
| Drip Cover: | No Drip Cover | Thermal Device - Bearing: | None |
| Duty Rating: | CONT | Thermal Device - Winding: | None |
| Electrically Isolated Bearing: | Not Electrically Isolated | Vibration Sensor Indicator: | No Vibration Sensor |
| Feedback Device: | NO FEEDBACK | Winding Thermal 1: | None |
| Front Face Code: | Standard | Winding Thermal 2: | None |

| Nameplate NP3454L | | | | | | | | | | | |
|-------------------|--------------|----------|------|-----------|------|-------|---------|----------|------------|------|------|
| CAT.NO. | FPM2538T | | | CUST P/N | | | | I.P. | 23 | | |
| SPEC. | 39L035X928H2 | | | SER.NO. | | | | FRAME | 286TS | | |
| HZ | 60 | HP | 40 | RPM | 3500 | HZ | 50 | HP | 30 | RPM | 2910 |
| VOLTS | 230/460 | | | CODE | G | VOLTS | 190/380 | | | CODE | G |
| AMPS | 90/45 | | | DES | B | AMPS | 84/42 | | | DES | B |
| EFF | 91.7 | SER.F. | 1.15 | PF | 91 | EFF | 91 | SER.F. | 1.15 | PF | 91 |
| RATING | 40C AMB-CONT | | | DE BRG | 6311 | | | GREASE | POLYREX EM | | |
| BLANK | | | | ODE BRG | 6208 | | | MTR. WT. | 280 | | |
| | | | | CLASS | F | | | PH | 3 | | |
| | | | | ENCL | ODP | | | CC | 010A | | |
| HTR-VOLTS | | HTR-AMPS | | HTR-WATTS | | | | | | | |

| Parts List | | |
|---------------|--|----------|
| Part Number | Description | Quantity |
| SA335518 | SA 39L035X928H2 | 1.000 EA |
| RA323729 | RA 39L035X928H2 | 1.000 EA |
| HA6361A01 | LIFTING LUG FOR 37, 39 & 40 FRAME ZINC | 2.000 EA |
| 09CB2800A01 | ADAPTER MACH FOR 09CB3000 AND 10CB3000 | 1.000 EA |
| 84XN3118J08 | 5/16-18 X 1/2 SOC HD CAP SCREW | 2.000 EA |
| HW1001A31 | LOCKWASHER 5/16, ZINC PLT.591 OD, .319 I | 2.000 EA |
| WD1000B25 | GND LUG, BURNDY L125HP OR T&B L125HP-BB | 1.000 EA |
| 19XW3118G08 | .31-18X.50,HEX WSHR HD,TAPTITE 2,GREEN | 1.000 EA |
| 10CB3000SP | KOBX, CAST W/2.00 LEAD HOLE | 1.000 EA |
| 19XW3118A12 | .31-18 X .75 HEX WASHER HEAD TAPTITE II | 4.000 EA |
| HW1001A31 | LOCKWASHER 5/16, ZINC PLT.591 OD, .319 I | 4.000 EA |
| 39EP3200A01SP | FR/PU ENDPLATE, MACH | 1.000 EA |
| HW5100A08 | W3118-035 WVY WSHR (WB) | 1.000 EA |
| 39EP3202A01 | ENDPLATE MACH | 1.000 EA |
| XY3816A12 | 3/8-16 FINISHED NUT | 8.000 EA |
| 10CB3500SP | CONDUIT BOX LID, CAST | 1.000 EA |
| 51XW2520A12 | .25-20 X .75, TAPTITE II, HEX WSHR SLTD | 4.000 EA |
| HW2501G17 | KEY, 3/8 SQ X 1.875 | 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 |
| HA4051A00 | PLASTIC CAP FOR GREASE FITTING | 1.000 EA |
| MJ1000A02 | GREASE, MOBIL POLYREX EM - 124047 | 0.030 LB |
| HW4500A03 | GREASE FITTING, .125 NPT 1610(ALEMITE) 8 | 1.000 EA |

| Parts List (continued) | | |
|-------------------------------|--|-----------------|
| Part Number | Description | Quantity |
| HW4500A20 | 1/8NPT SL PIPE PLUG | 1.000 EA |
| HA4051A00 | PLASTIC CAP FOR GREASE FITTING | 1.000 EA |
| MG1025R44 | WILKOFASST, 784.109, CARMINE RED #3002 | 0.050 GA |
| 85XU0407S04 | 4X1/4 U DRIVE PIN STAINLESS | 2.000 EA |
| HA3154A04 | THRUBOLT STUD 3/8-16 X 18.750 | 4.000 EA |
| 39AD2002A01 | BAFFLE PLATE 39 OPEN, SLOTTED BAND MTRS | 1.000 EA |
| 39AD2002A01 | BAFFLE PLATE 39 OPEN, SLOTTED BAND MTRS | 1.000 EA |
| LB1119N | WARNING LABEL | 1.000 EA |
| LC0104A01 | CONNECTION DIAGRAM | 1.000 EA |
| NP3454L | ALUM FIRE PUMP MOTOR(LEGACY/BALDOR ONLY) | 1.000 EA |
| 40PA1000 | PACKAGING GROUP | 1.000 EA |
| MN416A01 | TAG-INSTAL-MAINT no wire (1200/bx) 3/19 | 1.000 EA |

AC Induction Motor Performance Data

Record # 54883 - Typical performance - not guaranteed values

| | | |
|-------------------------------|--------------------|------------------------|
| Winding: 39WGX928-R001 | Type: 3954M | Enclosure: OPSB |
|-------------------------------|--------------------|------------------------|

| Nameplate Data | | | | 460 V, 60 Hz: High Voltage Connection | |
|-----------------------|------------------|--------------|----|--|-------------------------|
| Rated Output (HP) | 40//30 | | | Full Load Torque | 60.6 LB-FT |
| Volts | 230/460//190/380 | | | Start Configuration | direct on line |
| Full Load Amps | 90/45//84/42 | | | Breakdown Torque | 191 LB-FT |
| R.P.M. | 3500//2910 | | | Pull-up Torque | 71.3 LB-FT |
| Hz | 60//50 | Phase | 3 | Locked-rotor Torque | 90.5 LB-FT |
| NEMA Design Code | B | KVA Code | G | Starting Current | 285 A |
| Service Factor (S.F.) | 1.15 | | | No-load Current | 10.5 A |
| NEMA Nom. Eff. | 91.7 | Power Factor | 91 | Line-line Res. @ 25°C | 0.23 Ω |
| Rating - Duty | 40C AMB-CONT | | | Temp. Rise @ Rated Load | 63°C |
| S.F. Amps | | | | Temp. Rise @ S.F. Load | 79°C |
| | | | | Locked-rotor Power Factor | 27.2 |
| | | | | Rotor inertia | 1.38 LB-FT ² |

Load Characteristics 460 V, 60 Hz, 40 HP

| % of Rated Load | 25 | 50 | 75 | 100 | 125 | 150 | S.F. |
|-----------------|------|------|------|------|------|------|------|
| Power Factor | 68 | 85 | 90 | 91 | 91 | 90 | 91 |
| Efficiency | 93.2 | 94 | 93.4 | 91.9 | 90.3 | 88.5 | 91 |
| Speed | 3580 | 3557 | 3532 | 3503 | 3471 | 3436 | 3484 |
| Line amperes | 15.3 | 23.9 | 34 | 45.3 | 57.7 | 70.7 | 52.7 |

Performance Graph at 460V, 60Hz, 40.0HP Typical performance - Not guaranteed values

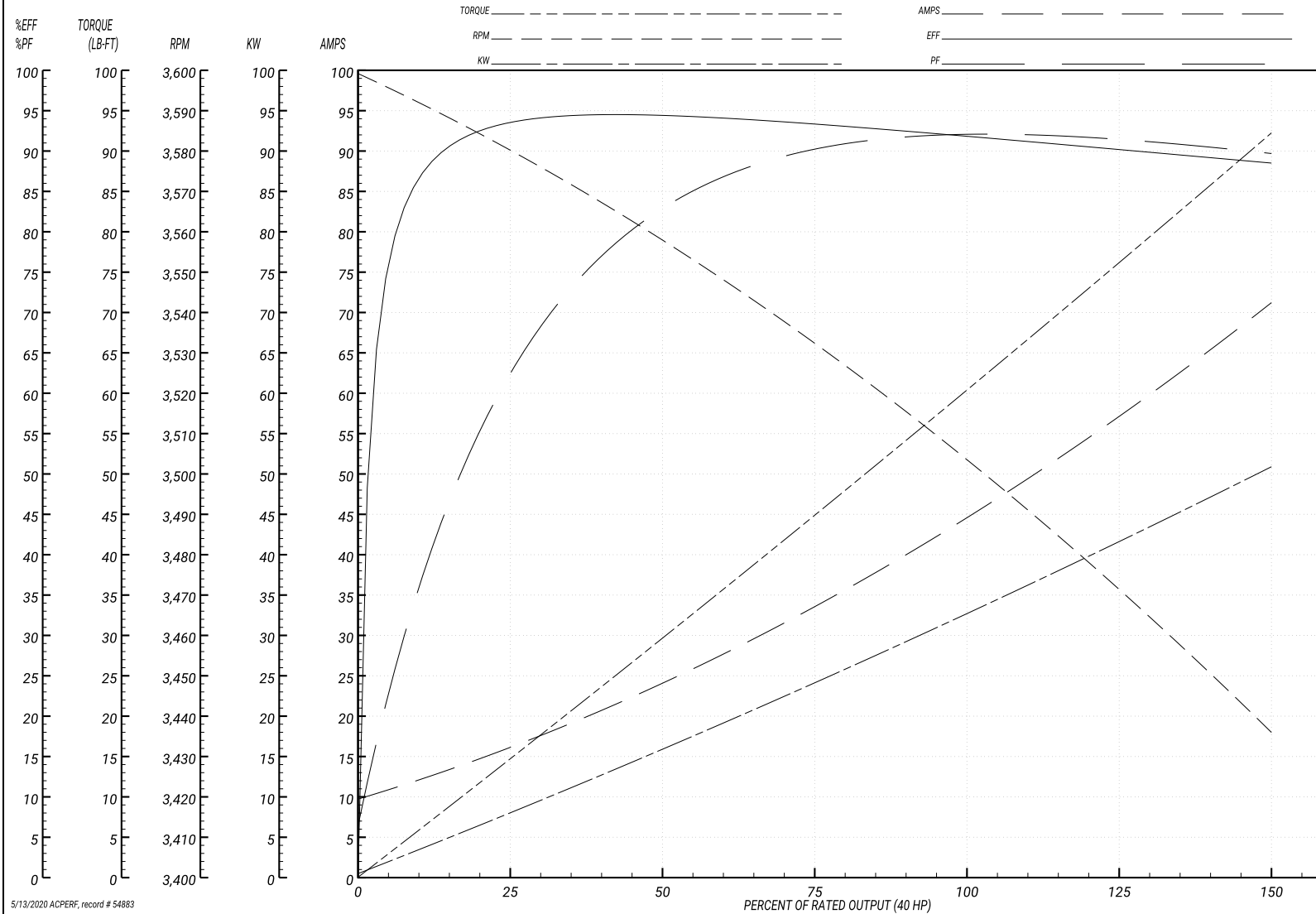
ABB Motors and Mechanical Inc.

WINDING # 39WGX928

Typical performance - not guaranteed values.

40 HP 3 PH 60 HZ 3503 RPM 460 V 3954M

TORQUES(LB-FT): PO=191 PU=71.3 LR=90.5 LRA=285



5/13/2020 ACPERF, record # 54883

AC Induction Motor Performance Data

Record # 54884 - Typical performance - not guaranteed values

| | | |
|-------------------------------|--------------------|------------------------|
| Winding: 39WGX928-R001 | Type: 3954M | Enclosure: OPSB |
|-------------------------------|--------------------|------------------------|

| Nameplate Data | | | | 380 V, 50 Hz: High Voltage Connection | |
|-----------------------|------------------|--------------|----|--|-------------------------|
| Rated Output (HP) | 40//30 | | | Full Load Torque | 54.6 LB-FT |
| Volts | 230/460//190/380 | | | Start Configuration | direct on line |
| Full Load Amps | 90/45//84/42 | | | Breakdown Torque | 184 LB-FT |
| R.P.M. | 3500//2910 | | | Pull-up Torque | 75.2 LB-FT |
| Hz | 60//50 | Phase | 3 | Locked-rotor Torque | 95.4 LB-FT |
| NEMA Design Code | B | KVA Code | G | Starting Current | 278 A |
| Service Factor (S.F.) | 1.15 | | | No-load Current | 10.2 A |
| NEMA Nom. Eff. | 91.7 | Power Factor | 91 | Line-line Res. @ 25°C | 0.23 Ω |
| Rating - Duty | 40C AMB-CONT | | | Temp. Rise @ Rated Load | 55°C |
| S.F. Amps | | | | Temp. Rise @ S.F. Load | 70°C |
| | | | | Locked-rotor Power Factor | 30.6 |
| | | | | Rotor inertia | 1.38 LB-FT ² |

Load Characteristics 380 V, 50 Hz, 30 HP

| % of Rated Load | 25 | 50 | 75 | 100 | 125 | 150 | S.F. |
|-----------------|------|------|------|------|------|------|------|
| Power Factor | 66 | 84 | 89 | 91 | 91 | 91 | 91 |
| Efficiency | 93.5 | 94 | 93.1 | 91.6 | 89.9 | 87.9 | 90.6 |
| Speed | 2982 | 2961 | 2939 | 2913 | 2885 | 2855 | 2896 |
| Line amperes | 14.4 | 22 | 31.1 | 41.3 | 52.5 | 64.1 | 48 |

Performance Graph at 380V, 50Hz, 30.0HP Typical performance - Not guaranteed values

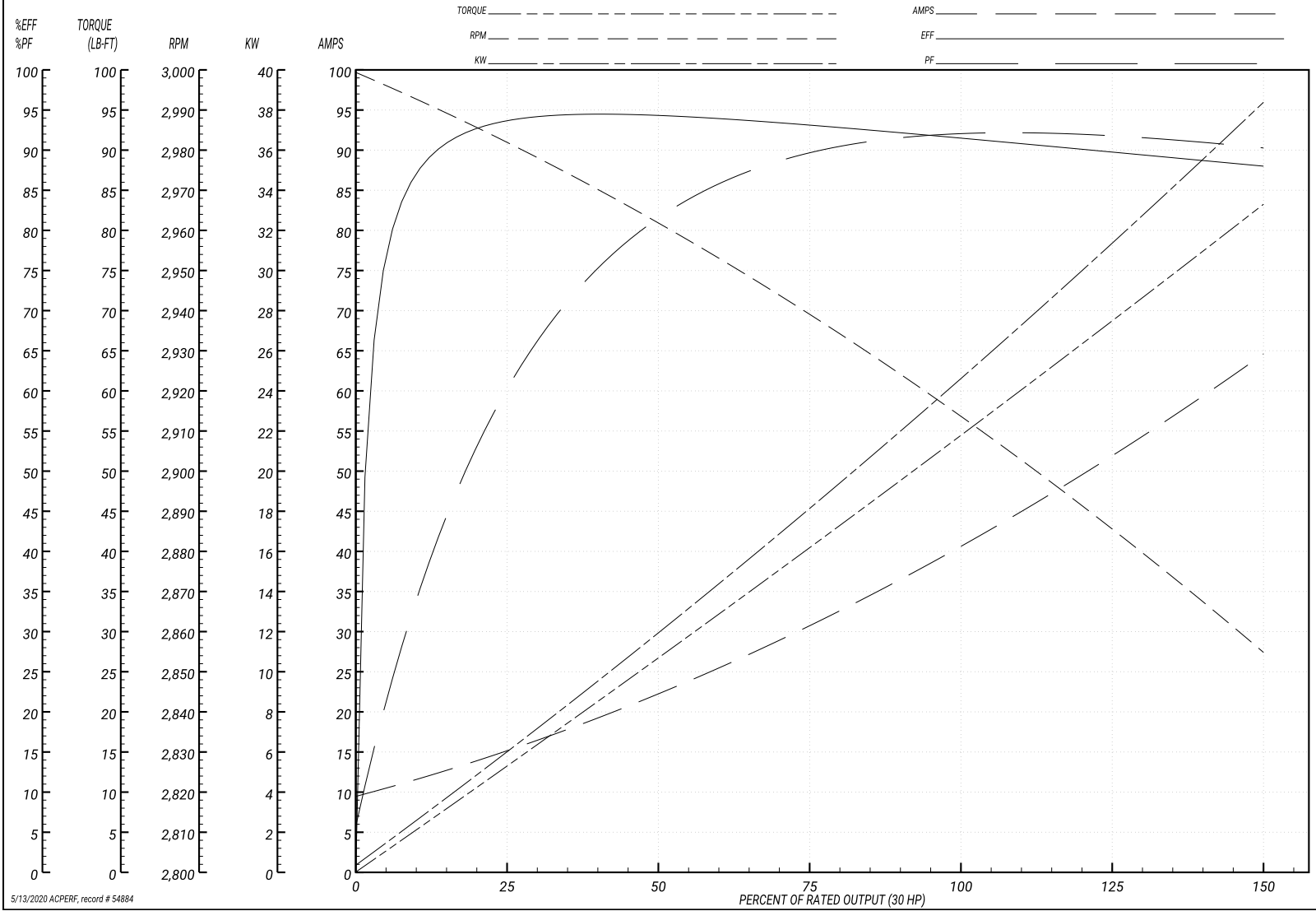
ABB Motors and Mechanical Inc.

WINDING # 39WGX928

Typical performance - not guaranteed values.

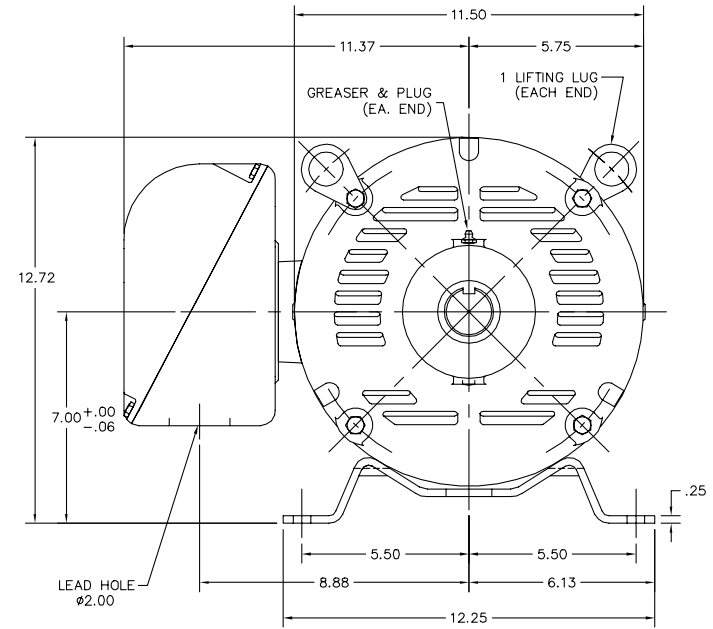
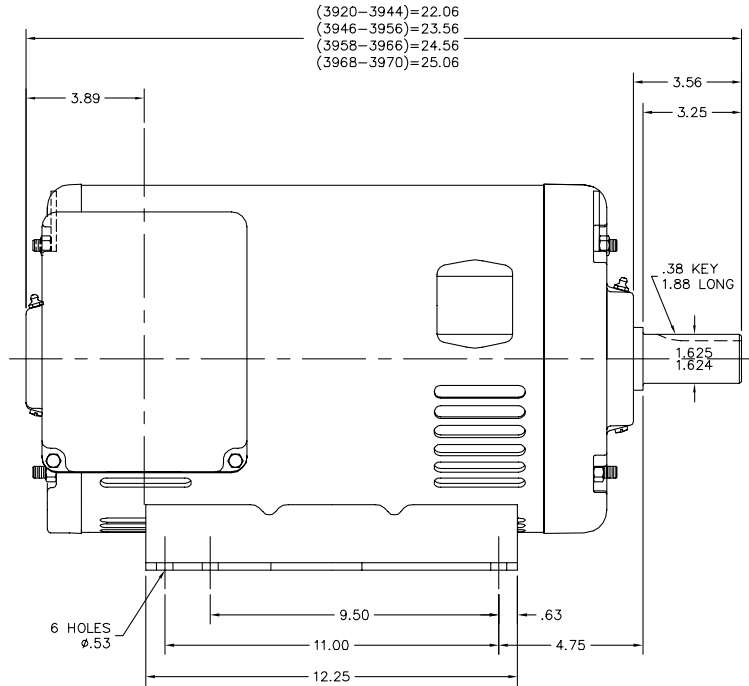
30 HP 3 PH 50 HZ 2913 RPM 380 V 3954M

TORQUES(LB-FT): PO=184 PU=75.2 LR=95.4 LRA=278



5/13/2020 ACPERF, record # 54884

39LYL035



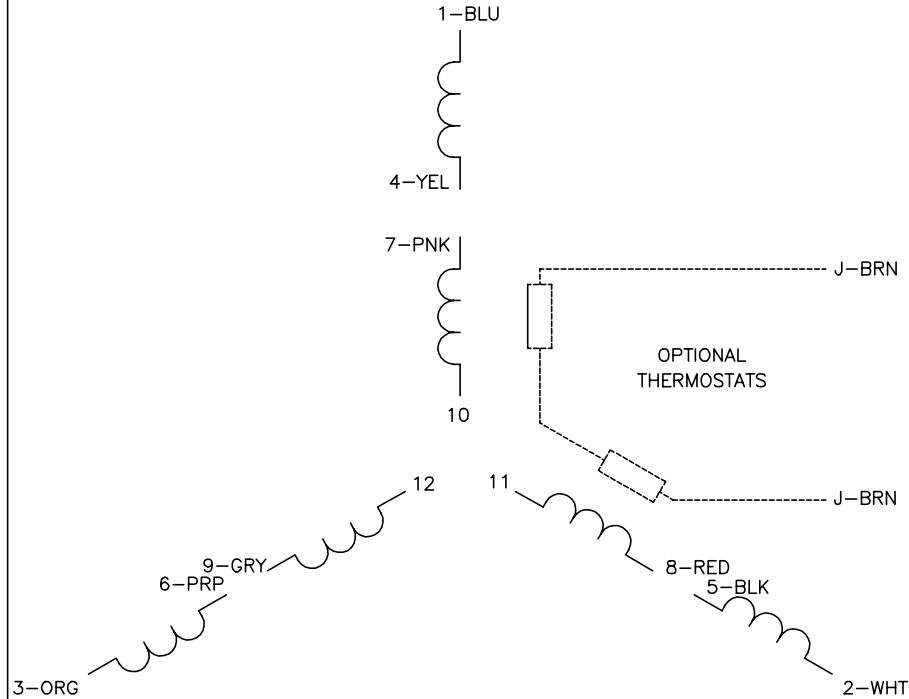
39LYL035

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

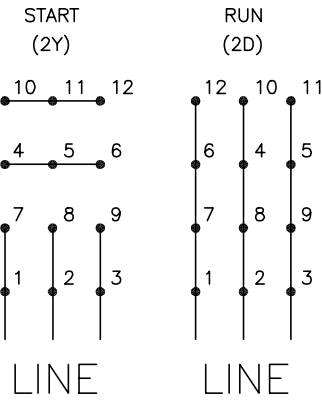
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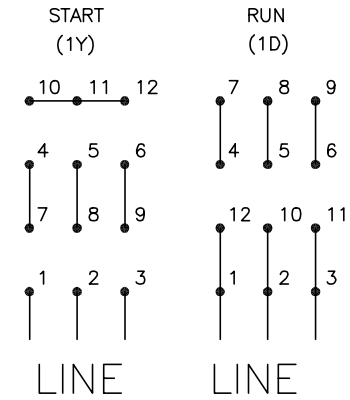
CD0104



LOW VOLTAGE



HIGH VOLTAGE



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.

CD0104

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BALDOR - RELIANCE®

3PH, DV, 12 LEADS, Y START/D RUN

SH 1 of 1

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