

BALDOR® • RELIANCE 

Product Information Packet

VECP4100T

15HP, 1175RPM, 3PH, 60HZ, 284TC, 1046M, TEFC, F

| Part Detail | | | | | | | |
|-------------|--------|-------------|------------|-------------|--------|---------------|------------|
| Revision: | D | Status: | PRD/A | Change #: | | Proprietary: | No |
| Type: | AC | Elec. Spec: | 10WGY561 | CD Diagram: | CD0180 | Mfg Plant: | |
| Mech. Spec: | 10H462 | Layout: | 10LYH462 | Poles: | 06 | Created Date: | 12-13-2017 |
| Base: | N | Eff. Date: | 07-01-2021 | Leads: | 9#10 | | |

| Specs | | | |
|---------------------------------|-------------------------|--------------------------------|-----------------------------|
| Catalog Number: | VECP4100T | Heater Indicator: | No Heater |
| Enclosure: | TEFC | Insulation Class: | F |
| Frame: | 284TC | Inverter Code: | Inverter Duty |
| Frame Material: | Iron | KVA Code: | H |
| Output @ Frequency: | 15.000 HP @ 60 HZ | Lifting Lugs: | Standard Lifting Lugs |
| Synchronous Speed @ Frequency: | 1200 RPM @ 60 HZ | Locked Bearing Indicator: | Locked Bearing |
| Voltage @ Frequency: | 460.0 V @ 60 HZ | Motor Lead Quantity/Wire Size: | 9 @ 10 AWG |
| | 230.0 V @ 60 HZ | Motor Lead Exit: | Ko Box |
| XP Class and Group: | CLI GP A,B,C,D | Motor Lead Termination: | Flying Leads |
| XP Division: | Division II | Motor Type: | 1046M |
| Agency Approvals: | UR | Mounting Arrangement: | F1 |
| | CSA EEV | Power Factor: | 73 |
| | CSA | Product Family: | Super-E Chemical Processing |
| Auxillary Box: | No Auxillary Box | Pulley End Bearing Type: | Ball |
| Auxillary Box Lead Termination: | None | Pulley Face Code: | C-Face |
| Base Indicator: | No Mounting | Pulley Shaft Indicator: | Standard |
| Bearing Grease Type: | Polyrex EM (-20F +300F) | Rodent Screen: | None |
| Blower: | None | Shaft Extension Location: | Pulley End |

| | | | |
|---------------------------------------|---------------------------|------------------------------------|---------------------|
| Constant Torque Speed Range: | 1.3 | Shaft Ground Indicator: | No Shaft Grounding |
| Current @ Voltage: | 21.000 A @ 460.0 V | Shaft Rotation: | Reversible |
| | 42.000 A @ 208.0 V | Shaft Slinger Indicator: | Shaft Slinger |
| | 42.000 A @ 230.0 V | Speed Code: | Single Speed |
| Design Code: | A | Motor Standards: | NEMA |
| Drip Cover: | Drip Cover | Starting Method: | Direct on line |
| Duty Rating: | CONT | Thermal Device - Bearing: | None |
| Electrically Isolated Bearing: | Not Electrically Isolated | Thermal Device - Winding: | None |
| Feedback Device: | NO FEEDBACK | Vibration Sensor Indicator: | No Vibration Sensor |
| Front Face Code: | Standard | Winding Thermal 1: | None |
| Front Shaft Indicator: | None | Winding Thermal 2: | None |
| | | XP Temp Code: | T3C |

| Nameplate NP3241 | | | | | | | | | | | |
|------------------|--------------|--------------------|--------------|-----------|----------|-------------------------|----------|------------|--------|----------|----|
| CAT.NO. | VECP4100T | | P/N | | | ENCLOSURE | TEFC | | | | |
| SPEC. | 10H462Y561G1 | CC | 010A | FRAME | 284TC | S/N | | | | | |
| HP | 15 | | CLASS | F | HZ | 60 | DES | A | | | |
| RPM | 1175 | | RPM MAX | 1800 | PH | 3 | KVA-CODE | H | | | |
| VOLT | 230/460 | | MOTOR WEIGHT | 391 | | | | | | | |
| AMP | 42/21 | | SER.F. | 1.15 | PF | 73 | ODE BRG | 6311 | DE BRG | 6311 | |
| RATING | 40C AMB-CONT | | NEMA-NOM-EFF | 91.7 | GREASE | POLYREX EM | | | | | |
| | | | | | INV.TYPE | PWM | | | | | |
| TEMP CODE | T3C | INVERTER-TEMP-CODE | 180 | | | | | | | | |
| TEMP = | 160 | C HP FR | 60 | C HP TO | 90 | | | | | | |
| CT HZ FROM | 1.3 | CT HZ TO | 60 | | | | | | | | |
| HTR-VOLTS | | HTR-AMPS | | HTR-WATTS | | MAX. SPACE HEATER TEMP. | | VT HZ FROM | 0 | VT HZ TO | 60 |

| Parts List | | |
|---------------|--|----------|
| Part Number | Description | Quantity |
| SA349113 | SA 10H462Y561G1 | 1.000 EA |
| RA337711 | RA 10H462Y561G1 | 1.000 EA |
| 09FN3001B02 | EXTERNAL FAN, PLASTIC (COMES W/SCREW FRO | 1.000 EA |
| 10CB1000A09P | KOBX, MACH W/1.50 NPT & PRIMER | 1.000 EA |
| 09GS1010 | GASKET, DWG, LEADWIRE SEPERATOR | 1.000 EA |
| 10XN3118K16 | 5/16-18 X 1' GRADE #5, STL, ZINC PLATE | 4.000 EA |
| HW1001A31 | LOCKWASHER 5/16, ZINC PLT.591 OD, .319 I | 4.000 EA |
| WD1000B16 | T&B CX70TN OR L70P TERMINAL LUG | 1.000 EA |
| 10XN2520K06 | 1/4-20 X 3/8" HX HD SCREWGRADE 5, ZINC P | 1.000 EA |
| HW1001A25 | LOCKWASHER 1/4, ZINC PLT .493 OD, .255 I | 1.000 EA |
| 10XN3816K28 | 3/8-16 X 1.75 HEX HD CAP SCREW, GRADE 5 | 4.000 EA |
| HW1001A38 | LOCKWASHER 3/8, ZINC PLT .688 OD, .382 I | 4.000 EA |
| HW4600B40 | V-RING SLINGER 2.000 X 2.680 X .28 VITON | 1.000 EA |
| HW5100A13 | W4627-047 WVY WSHER | 1.000 EA |
| HW4500A20 | 1/8NPT SL PIPE PLUG | 1.000 EA |
| HA4017A11 | 1/8 X 2.75 GREASE EXT (F/S) | 1.000 EA |
| HA4017A03 | .125 X 1.75 GREASE EXT (F/S) | 1.000 EA |
| HW4019A01 | PIPE COUPLING 1/8 NPT,STEEL,ZINC COATING | 1.000 EA |
| 10XN3118K40 | 5/16-18 X 2.25" HEX HD, GRADE 5 | 4.000 EA |
| 10EP1305A117P | PU ENDPLATE, MACH W/EPOXY | 1.000 EA |
| 10XN3816K28 | 3/8-16 X 1.75 HEX HD CAP SCREW, GRADE 5 | 4.000 EA |
| HW1001A38 | LOCKWASHER 3/8, ZINC PLT .688 OD, .382 I | 4.000 EA |
| HW4500A20 | 1/8NPT SL PIPE PLUG | 1.000 EA |
| HW4600B40 | V-RING SLINGER 2.000 X 2.680 X .28 VITON | 1.000 EA |

| Parts List (continued) | | |
|------------------------|--|----------|
| Part Number | Description | Quantity |
| 10XN3118K40 | 5/16-18 X 2.50" HEX HD, GRADE 5 | 4.000 EA |
| 10FH1007A06P | FAN HOUSING MODEL 310 TEFC MOTORS W/EPOX | 1.000 EA |
| 10XN3118K20 | 5/16-18 X 1 1/4 GRADE 5 STEEL ZC PLATED | 3.000 EA |
| HW1001A31 | LOCKWASHER 5/16, ZINC PLT.591 OD, .319 I | 3.000 EA |
| 12FH1500A01P | MACH DRIP COVER 310-312 MTRS | 1.000 EA |
| 10XN3816K36 | 3/8-16 X 2.25 HEX HD CAP SCREW, GRADE 5 | 4.000 EA |
| HW1001A38 | LOCKWASHER 3/8, ZINC PLT .688 OD, .382 I | 4.000 EA |
| 10CB1503A01P | CONDUIT BOX LIPPED LID, MACH W/EPXY PRMR | 1.000 EA |
| 14GS1003 | GASKET CONDUIT BOX LID, NEOP | 1.000 EA |
| 10XN2520K16 | 1/4-20 X 1" HX HD SCRW GRADE 5, ZINC P | 4.000 EA |
| HW1001A25 | LOCKWASHER 1/4, ZINC PLT .493 OD, .255 I | 4.000 EA |
| HW2501H28 | KEY, 1/2 SQ X 3.250 | 1.000 EA |
| MJ5001A27 | 32220KN GRAY SEALER *MIN BUY 4 QTS=1GAL | 0.031 QT |
| MJ5002A01 | SILICON RUBBER SEALANT, 732CL 10.3 OZ TU | 0.026 EA |
| LB1115N | LABEL,LIFTING DEVICE (ON ROLLS) | 1.000 EA |
| LB1002N | LABEL,MARINE DUTY (ON ROLLS) | 1.000 EA |
| PK6014 | STEEL STRAP FOR 309-312 BASELESS MOTORS | 4.000 EA |
| 10XN3816K10 | BOLT, 3/8-16 X 5/8 HHCS YZ | 4.000 EA |
| 10EP1110A44GP6 | FREP, MACH W/PRIMER & GREEN PAINT | 1.000 EA |
| HW4500A21 | 1618BALEMITE FITTING 825 UNIVERSAL | 1.000 EA |
| HW4500A17 | 317400 ALEMITE GREASE RELIEF | 1.000 EA |
| HA4054 | SHORT T-DRAIN FITTING, .125" N.P.T. | 1.000 EA |
| HA4051A00 | PLASTIC CAP FOR GREASE FITTING | 1.000 EA |
| MJ1000A02 | GREASE, MOBIL POLYREX EM - 124047 | 0.130 LB |

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|-------------|--|----------|
| HW4500A17 | 317400 ALEMITE GREASE RELIEF | 1.000 EA |
| HW4500A03 | GREASE FITTING, .125 NPT 1610(ALEMITE) 8 | 1.000 EA |
| HA4054 | SHORT T-DRAIN FITTING, .125" N.P.T. | 1.000 EA |
| HA4051A00 | PLASTIC CAP FOR GREASE FITTING | 1.000 EA |
| HW2500A25 | WOODRUFF KEY USA #1008 #BLOW CARBON STEE | 1.000 EA |
| MG1025N19 | WILKOFAS, 778.50, RELIANCE BLUE-GREEN | 0.070 GA |
| 85XU0407S04 | 4X1/4 U DRIVE PIN STAINLESS | 4.000 EA |
| LB1119N | WARNING LABEL | 1.000 EA |
| LC0181 | CONNECTION LABEL | 1.000 EA |
| NP3241 | SS SUPER-E INV UL CSA-EEV PREM CC | 1.000 EA |
| 12PA1000 | PACKAGING GROUP PRINT PK1024A07 | 1.000 EA |
| LB1449 | DIV-2/NEC WARNING LABEL | 1.000 EA |
| MN416A01 | TAG-INSTAL-MAINT no wire (2100/bx) 4/22 | 1.000 EA |

AC Induction Motor Performance Data

Record # 29743

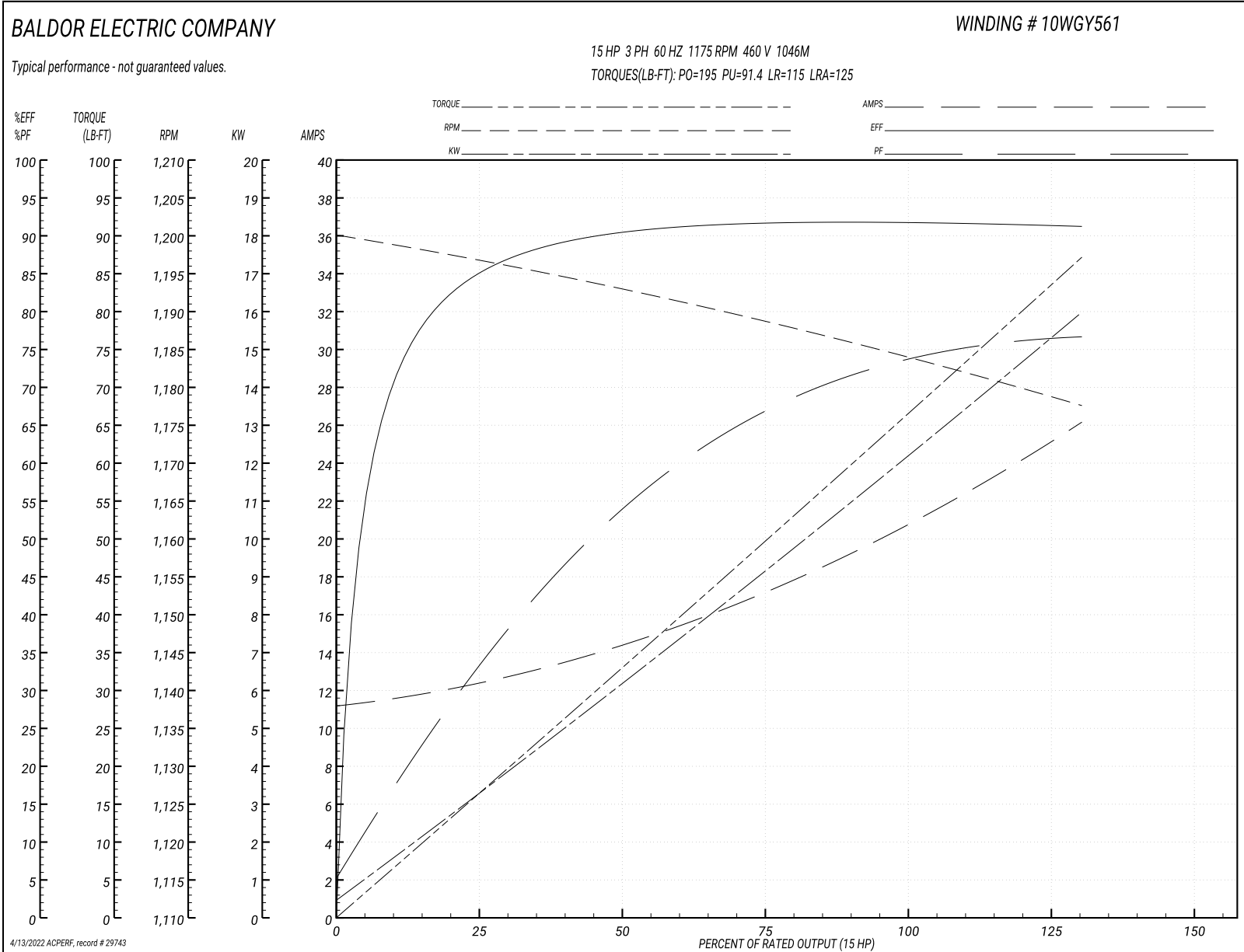
Typical performance - not guaranteed values

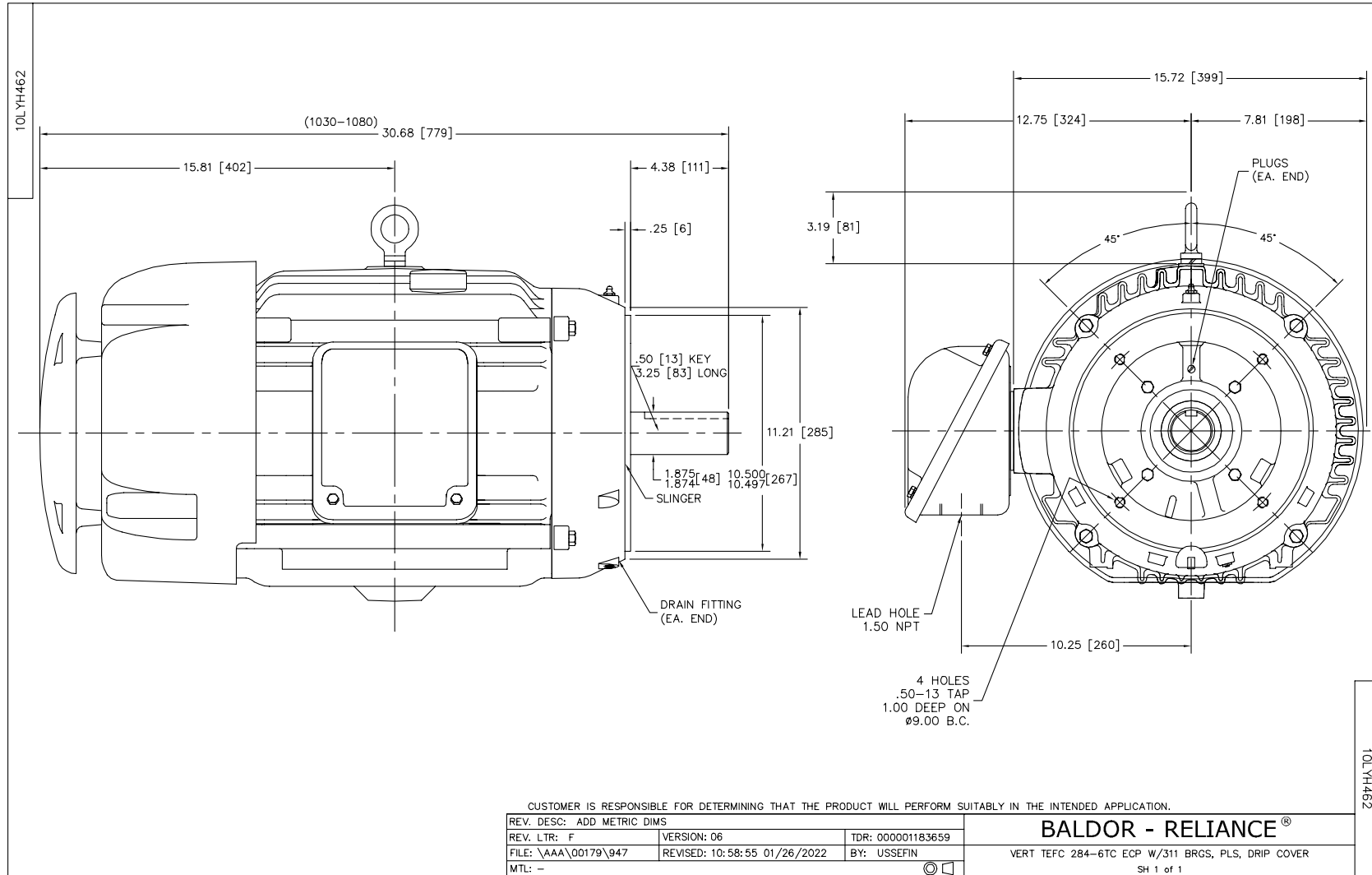
| Winding: 10WGY561-R001 | | Type: 1046M | | Enclosure: TEFC | |
|-------------------------------|--------------------------|----------------------------------|--|------------------------|--|
| Nameplate Data | | | 460 V, 60 Hz: High Voltage Connection | | |
| Rated Output (HP) | 15 | Full Load Torque | 66.5 LB-FT | | |
| Volts | 230/460 | Start Configuration | direct on line | | |
| Full Load Amps | 42/21 | Breakdown Torque | 195 LB-FT | | |
| R.P.M. | 1175 | Pull-up Torque | 91.4 LB-FT | | |
| Hz | 60 Phase | 3 | Locked-rotor Torque | 115 LB-FT | |
| NEMA Design Code | A KVA Code | H | Starting Current | 125 A | |
| Service Factor (S.F.) | 1.15 | No-load Current | 11.3 A | | |
| NEMA Nom. Eff. | 91.7 Power Factor | 73 | Line-line Res. @ 25°C | 0.56099 Ω | |
| Rating - Duty | 40C AMB-CONT | Temp. Rise @ Rated Load | 49°C | | |
| S.F. Amps | | Temp. Rise @ S.F. Load | 59°C | | |
| | | Locked-rotor Power Factor | 33 | | |
| | | Rotor inertia | 5.63 LB-FT ² | | |

Load Characteristics 460 V, 60 Hz, 15 HP

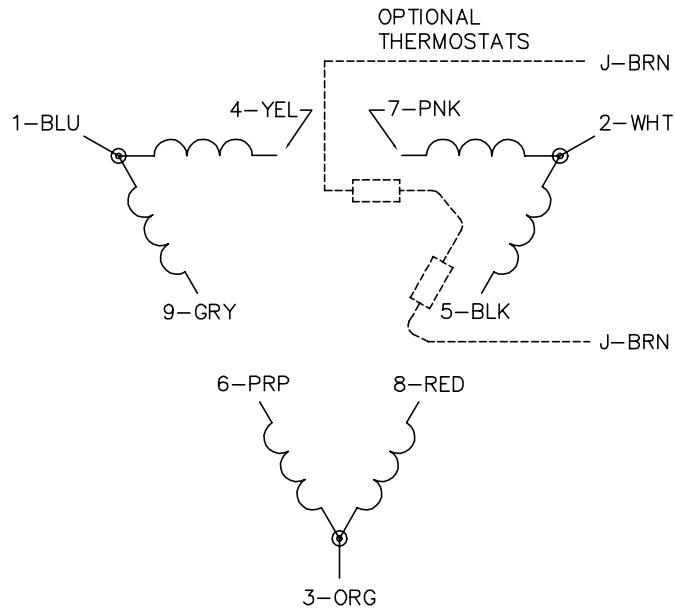
| % of Rated Load | 25 | 50 | 75 | 100 | 125 | 150 | S.F. |
|------------------------|-----------|-----------|-----------|------------|------------|------------|-------------|
| Power Factor | 34 | 54 | 66 | 73 | 76 | 77 | 75 |
| Efficiency | 85 | 90.6 | 91.8 | 92 | 91.5 | 91.3 | 91.7 |
| Speed | 1197 | 1193 | 1188.7 | 1183.9 | 1179 | 1177.5 | 1181 |
| Line amperes | 12.2 | 14.3 | 17.3 | 20.8 | 25.1 | 26.1 | 23.4 |

Performance Graph at 460V, 60Hz, 15.0HP Typical performance - Not guaranteed values

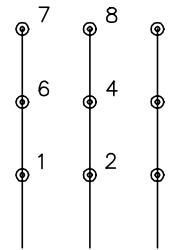




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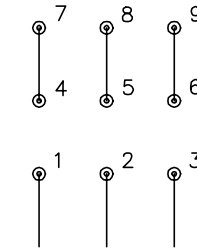


LOW VOLTAGE
(2D)



LINE

HIGH VOLTAGE
(1D)



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.

CD0180

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3PH, DV, 9 LEADS, DELTA CONNECTION

SH 1 of 1

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