

BALDOR® • RELIANCE 

Product Information Packet

VHEM2535T

30HP,1775RPM,3PH,60HZ,286HP,1072M,OPEN,F

| Part Detail | | | | | | | |
|-------------|--------|-------------|------------|-------------|--------|---------------|------------|
| Revision: | M | Status: | PRD/A | Change #: | | Proprietary: | No |
| Type: | AC | Elec. Spec: | 10WGZ473 | CD Diagram: | CD0005 | Mfg Plant: | |
| Mech. Spec: | 10F886 | Layout: | 10LYF886 | Poles: | 04 | Created Date: | 10-19-2015 |
| Base: | N | Eff. Date: | 09-11-2019 | Leads: | 9#10 | | |

| Specs | | | |
|---------------------------------|-------------------------|--------------------------------|-----------------------|
| Catalog Number: | VHEM2535T | Heater Indicator: | No Heater |
| Enclosure: | OPEN | Insulation Class: | F |
| Frame: | 286HP | Inverter Code: | Inverter Ready |
| Frame Material: | Iron | KVA Code: | H |
| Output @ Frequency: | 30.000 HP @ 60 HZ | Lifting Lugs: | Standard Lifting Lugs |
| Synchronous Speed @ Frequency: | 1800 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: | None | Motor Lead Termination: | Flying Leads |
| XP Division: | Not Applicable | Motor Type: | 1072M |
| Agency Approvals: | UR | Mounting Arrangement: | F1 |
| | CSA EEV | Power Factor: | 82 |
| | CSA | Product Family: | General Purpose |
| Auxillary Box: | No Auxillary Box | Pulley End Bearing Type: | Ball |
| Auxillary Box Lead Termination: | None | Pulley Face Code: | P-Base |
| Base Indicator: | No Mounting | Pulley Shaft Indicator: | P-Base Groove & Key |
| Bearing Grease Type: | Polyrex EM (-20F +300F) | Rodent Screen: | None |
| Blower: | None | Shaft Extension Location: | Pulley End |

| | | | |
|---------------------------------------|---------------------------|------------------------------------|---------------------|
| Current @ Voltage: | 36.000 A @ 460.0 V | Shaft Ground Indicator: | No Shaft Grounding |
| | 72.000 A @ 230.0 V | Shaft Rotation: | Reversible |
| | 78.000 A @ 208.0 V | Shaft Slinger Indicator: | Shaft Slinger |
| Design Code: | A | Speed Code: | Single Speed |
| Drip Cover: | Drip Cover | Motor Standards: | NEMA |
| Duty Rating: | CONT | Starting Method: | Direct on line |
| Electrically Isolated Bearing: | Not Electrically Isolated | Thermal Device - Bearing: | None |
| Feedback Device: | NO FEEDBACK | Thermal Device - Winding: | None |
| Front Face Code: | Drip Cover Mounting | Vibration Sensor Indicator: | No Vibration Sensor |
| Front Shaft Indicator: | None | Winding Thermal 1: | None |
| | | Winding Thermal 2: | None |

| Nameplate NP2138L | | | | | | | | | | | | |
|-------------------|--------------|----|----------|----------------|----------|------------|-------|-----------|------|--|--------|------|
| CAT.NO. | VHEM2535T | | | P/N | | | | ENCLOSURE | OPEN | | | |
| SPEC. | 10F886Z473G1 | | CC | 010A | | FRAME | 286HP | | S/N | | | |
| HP | 30 | | | CLASS | F | | HZ | 60 | | | | |
| RPM | 1775 | | | PH | 3 | | DES | A | | | | |
| VOLT | 230/460 | | | | KVA-CODE | H | | ODE BRG | 6309 | | DE BRG | 6312 |
| AMP | 72/36 | | | USABLE AT 208V | 78 | | | | | | | |
| RATING | 40C AMB-CONT | | | | GREASE | POLYREX EM | | | | | | |
| NEMA-NOM-EFF | 94.1 | PF | 82 | SER.F. | 1.15 | | | | | | | |
| HTR-VOLTS | | | HTR-AMPS | | | | | | | | | |

| Parts List | | |
|-------------|---|----------|
| Part Number | Description | Quantity |
| SA309025 | SA 10F886Z473G1 | 1.000 EA |
| RA296363 | RA 10F886Z473G1 | 1.000 EA |
| 10CB3003A04 | KO BOX, MACH W/2.00 NPT LD HL & #26 DRAI | 1.000 EA |
| 09GS1000SP | GASKET-CONDUIT BOX, 1/16 THICK LEXIDE | 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 |
| 51XF2520A08 | SCREW, HEX SER SLT HD, ZN 1/4-20 X .50 L | 1.000 EA |
| 10EP1201A01 | FREP, MACH W/309 BRG | 1.000 EA |
| 10AD2002 | AIR DEFLECTOR, 310 OPEN P-BASE | 1.000 EA |
| 12XN1032A08 | 10-32X1/2 HEX HD SLTD | 3.000 EA |
| HW1001A10 | WASHER, #10 SPLT LK, ZN X | 3.000 EA |
| 10XN3816K52 | 3/8-16 X 3-1/4 HEX HEAD CAP SCREW GRD 5 | 4.000 EA |
| HW1001A38 | LOCKWASHER 3/8, ZINC PLT .688 OD, .382 I | 4.000 EA |
| HW4600B41 | V-RING SLINGER 2.125 X 2.880 X 0.280 | 1.000 EA |
| HW5100A11 | W3917-042 WVY WSHR (WB) | 1.000 EA |
| 10XN3118K80 | .31-18 X 5.0 HEX HD CAP SCREW, GRADE 5 | 4.000 EA |
| HW1001A31 | LOCKWASHER 5/16, ZINC PLT.591 OD, .319 I | 4.000 EA |
| 10EP1507A02 | ENDPLATE, MACH W/312 BRG W/SLINGER RECES | 1.000 EA |
| 10XN3816K44 | 3/8-16 X 2.75 HEX HD CAP SCREW, GRADE 5 | 4.000 EA |
| HW1001A38 | LOCKWASHER 3/8, ZINC PLT .688 OD, .382 I | 4.000 EA |
| 10FH1500A01 | DRIP COVER, MACH | 1.000 EA |
| HW3201A12 | .50-13 EYEBOLT W/2.25 SHANK | 2.000 EA |
| HW1001A50 | LOCKWASHER 1/2, ZINC PLT.,.879 OD, .509 I | 2.000 EA |

| Parts List (continued) | | |
|------------------------|--|----------|
| Part Number | Description | Quantity |
| HW1000A50 | 1/2 SAE FLAT WASHERS | 2.000 EA |
| 10CB3501 | CONDUIT BOX LID FOR 10CB3003, 10CB3004 & | 1.000 EA |
| 14GS1001 | GASKET, CONDUIT BOX LID 314 FRAME | 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 |
| HW2501E11 | KEY, 1/4 SQ X 1.125 | 1.000 EA |
| LB1182 | WARNING LABEL FOR MOTORS WITH EYENUTS | 2.000 EA |
| HW4500A03 | GREASE FITTING, .125 NPT 1610(ALEMITE) 8 | 1.000 EA |
| HW4500A17 | 317400 ALEMITE GREASE RELIEF | 1.000 EA |
| HA4051A00 | PLASTIC CAP FOR GREASE FITTING | 1.000 EA |
| MG1025G05 | WILKOFAS, 789.227, MED. GRAY CHAR. MET. | 0.200 GA |
| MJ1000A02 | GREASE, MOBIL POLYREX EM - 124047 | 0.130 LB |
| HW4500A03 | GREASE FITTING, .125 NPT 1610(ALEMITE) 8 | 1.000 EA |
| HW4500A17 | 317400 ALEMITE GREASE RELIEF | 1.000 EA |
| HA4051A00 | PLASTIC CAP FOR GREASE FITTING | 1.000 EA |
| 85XU0407S04 | 4X1/4 U DRIVE PIN STAINLESS | 4.000 EA |
| LB1119N | WARNING LABEL | 1.000 EA |
| LC0005 | CONN.DIA.,TY M,9-LD,DUAL VOLT,REVERSING | 1.000 EA |
| NP2138L | ALUM SUPER-E UL CSA-EEV PREM CC (300 | 1.000 EA |
| 12PA1030 | PACKAGING GROUP PRINT PK1024A06 | 1.000 EA |
| PK6538 | 2X4 X 11 SPACER | 2.000 EA |
| MN416A01 | TAG-INSTAL-MAINT no wire (1200/bx) 3/19 | 1.000 EA |

AC Induction Motor Performance Data

Record # 54996 - Typical performance - not guaranteed values

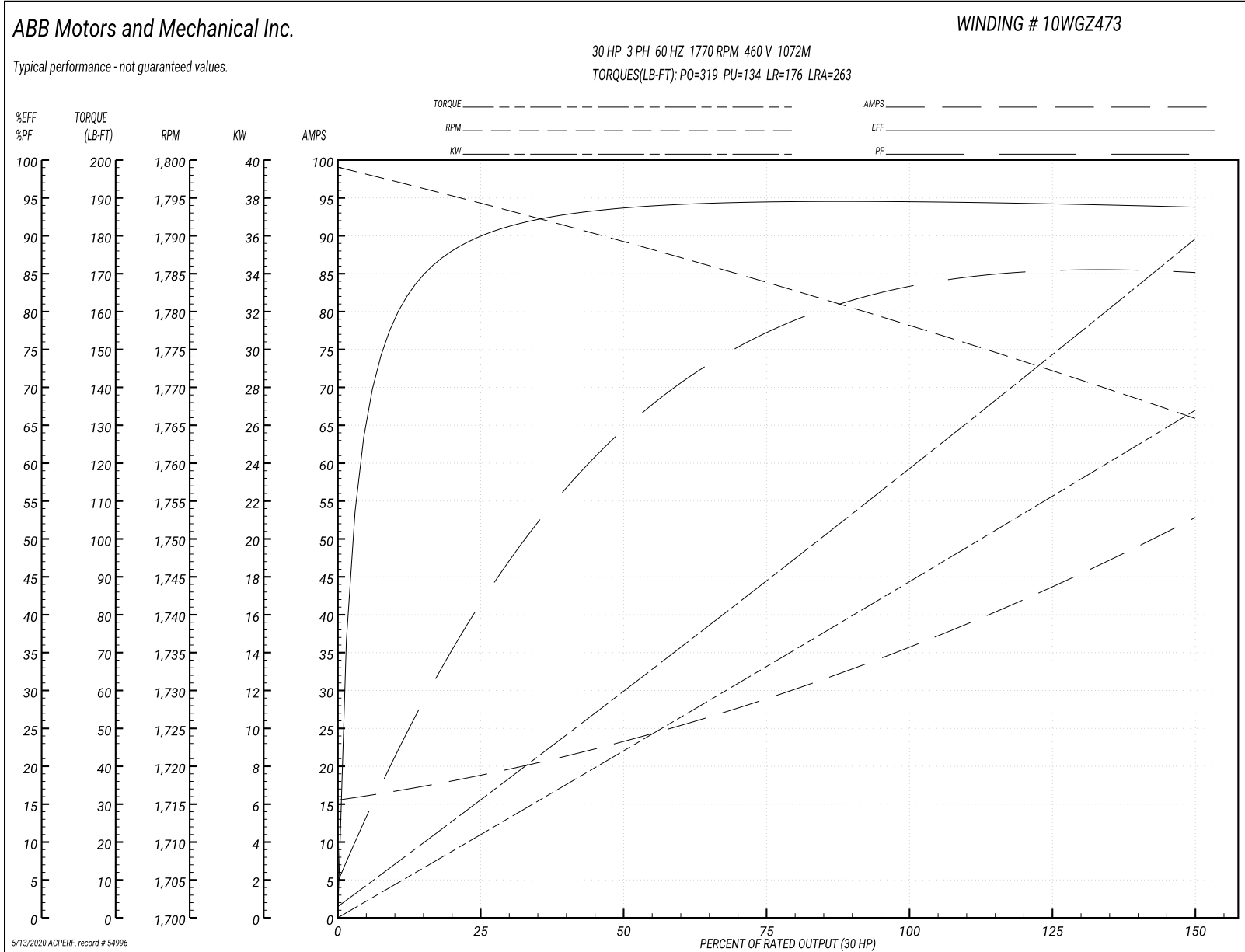
| | | |
|-------------------------------|--------------------|------------------------|
| Winding: 10WGZ473-R001 | Type: 1072M | Enclosure: OPEN |
|-------------------------------|--------------------|------------------------|

| Nameplate Data | | | | 460 V, 60 Hz: High Voltage Connection | |
|-----------------------|--------------|--------------|---|--|----------------|
| Rated Output (HP) | 30 | | | Full Load Torque | 88.8 LB-FT |
| Volts | 230/460 | | | Start Configuration | direct on line |
| Full Load Amps | 72/36 | | | Breakdown Torque | 319 LB-FT |
| R.P.M. | 1770 | | | Pull-up Torque | 134 LB-FT |
| Hz | 60 | Phase | 3 | Locked-rotor Torque | 176 LB-FT |
| NEMA Design Code | B | KVA Code | H | Starting Current | 263 A |
| Service Factor (S.F.) | 1.15 | | | No-load Current | 16.1 A |
| NEMA Nom. Eff. | 0 | Power Factor | 0 | Line-line Res. @ 25°C | 0.1944 Ω |
| Rating - Duty | 40C AMB-CONT | | | Temp. Rise @ Rated Load | 45°C |
| S.F. Amps | | | | Temp. Rise @ S.F. Load | 54°C |
| | | | | Locked-rotor Power Factor | 30.8 |

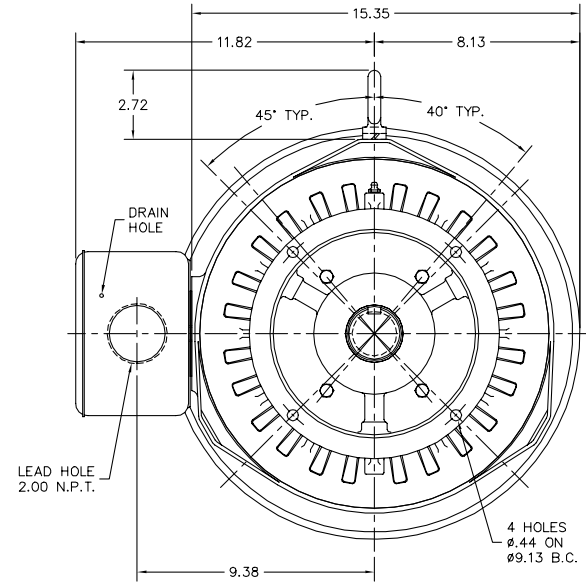
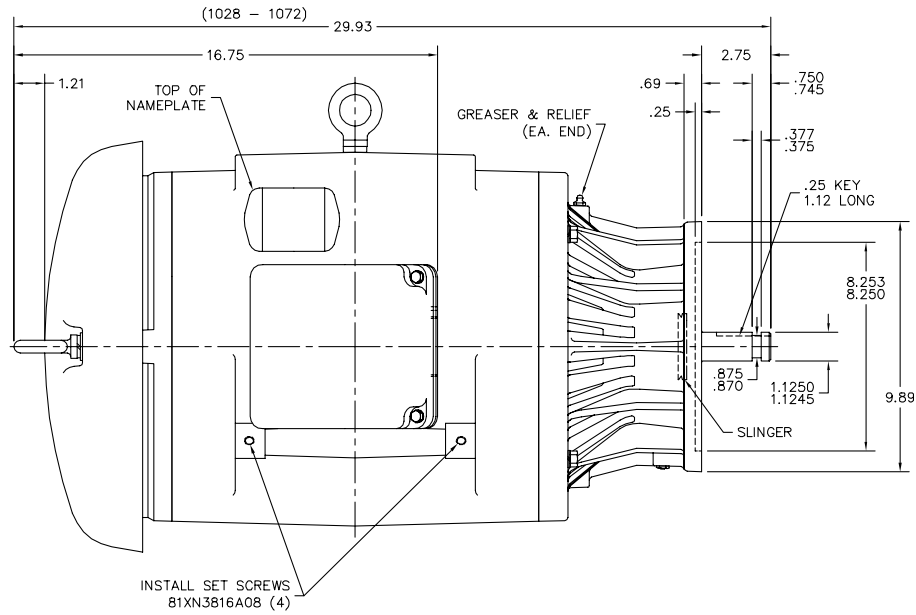
Load Characteristics 460 V, 60 Hz, 30 HP

| % of Rated Load | 25 | 50 | 75 | 100 | 125 | 150 | S.F. |
|-----------------|--------|--------|--------|--------|--------|------|------|
| Power Factor | 44 | 65 | 77 | 82 | 85 | 86 | 84 |
| Efficiency | 90.1 | 93.6 | 94.5 | 94.5 | 94.2 | 93.6 | 94.3 |
| Speed | 1794.4 | 1789.5 | 1783.6 | 1778.1 | 1771.9 | 1766 | 1774 |
| Line amperes | 18.2 | 22.7 | 29.3 | 36.3 | 44.1 | 52.5 | 41 |

Performance Graph at 460V, 60Hz, 30.0HP Typical performance - Not guaranteed values



10LYF886



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

| | | |
|--------------------------------|------------------------------|-------------------|
| REV. DESC: UPDATED DESCRIPTION | | |
| REV. LTR: C | VERSION: 03 | TDR: 000000855727 |
| FILE: \AAA\00123\482 | REVISED: 12:37:21 05/29/2014 | BY: ENNINDO |
| MTL: - | | |

BALDOR
VERT OPEN 284-6HP W/312 BRG
SH 1 of 1

10LYF886

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

900000

FILE: AAA00005140

MDL: -

MTL: -

BALDOR ELECTRIC Co.

3PH, DV, 9 LEADS

CD0005

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