

BALDOR • RELIANCE

Customer information packet

VHECP4104T

30HP, 1760RPM, 3PH, 60HZ, 286HP, 1056M, TEFC, F

Class - None

Division - Not Applicable

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Specifications

| | |
|--------------------------------|--|
| Enclosure | TEFC |
| Frame | 286HP |
| Frame Material | Iron |
| Frequency | 60.00 Hz |
| Haz Area Class and Group | None |
| Haz Area Division | Not Applicable |
| Motor Letter Type | Three Phase |
| Output @ Frequency | 30.000 HP @ 60 HZ |
| Phase | 3 |
| Synchronous Speed @ Frequency | 1800 RPM @ 60 HZ |
| Voltage @ Frequency | 460.0 V @ 60 HZ 230.0 V @ 60 HZ |
| Agency Approvals | CSA CSA EEV UR |
| Ambient Temperature | 40 °C |
| Auxillary Box | No Auxillary Box |
| Auxillary Box Lead Termination | None |
| Base Indicator | No Mounting |
| Bearing Grease Type | Polyrex EM (-20F +300F) |
| Blower | None |
| Current @ Voltage | 76.000 A @ 230.0 V 78.000 A @ 208.0 V 38.000 A @ 460.0 V |
| Design Code | A |
| Drip Cover | Drip Cover |
| Duty Rating | CONT |
| Efficiency @ 100% Load | 93.6 % |
| Electrically Isolated Bearing | Not Electrically Isolated |
| Feedback Device | NO FEEDBACK |
| Front Face Code | Standard |
| Front Shaft Indicator | None |

Part detail

| | |
|--------------|------------|
| Revision | K |
| Type | AC |
| Mech. spec. | 10F352 |
| Base | |
| Status | PRD/A |
| Elec. spec. | 10WGY538 |
| Layout | 10LYF352 |
| Eff. date | 07-19-2023 |
| CD Diagram | CD0180 |
| Poles | 04 |
| Leads | 9#8 |
| Proprietary | False |
| Created date | 08-24-2017 |

| | |
|-------------------------------|-----------------------------|
| Heater Indicator | No Heater |
| High Voltage Full Load Amps | 38.0 a |
| Insulation Class | F |
| Inverter Code | Inverter Ready |
| KVA Code | J |
| Lifting Lugs | Vertical Lifting Lugs |
| Locked Bearing Indicator | Locked Bearing |
| Motor Lead Exit | Ko Box |
| Motor Lead Quantity/Wire Size | 9 @ 8 AWG |
| Motor Lead Termination | Flying Leads |
| Motor Standards | NEMA |
| Motor Type | 1056M |
| Mounting Arrangement | F1 |
| Number of Poles | 4 |
| Overall Length | 30.69 IN |
| Power Factor | 80 |
| Product Family | Super-E Chemical Processing |
| Pulley End Bearing Type | Ball |
| Pulley Face Code | P-Base |
| Pulley Shaft Indicator | P-Base Groove & Key |
| Rodent Screen | None |
| Service Factor | 1.15 |
| Shaft Diameter | 1.125 IN |
| Shaft Extension Location | Pulley End |
| Shaft Ground Indicator | No Shaft Grounding |
| Shaft Rotation | Reversible |
| Shaft Slinger Indicator | Shaft Slinger |
| Speed | 1760 rpm |
| Speed Code | Single Speed |
| Starting Method | Direct on line |
| Thermal Device - Bearing | NONE (OLD) |
| Thermal Device - Winding | None |
| Vibration Sensor Indicator | No Vibration Sensor |
| Winding Thermal 1 | None |

Winding Thermal 2

None

Nameplate

| NP1260 | | | | | | | | | |
|---------------------|---------------|-------------|------|------------|---|-----------|---|--|--|
| CAT.NO. | VHECP4104T | | | | | | | | |
| SPEC. | 10F352Y538G2 | | | | | | | | |
| HP | 30 | | | | | | | | |
| VOLTS | 230/460 | | | | | | | | |
| AMP | 76/38 | | | | | | | | |
| RPM | 1760 | | | | | | | | |
| FRAME | 286HP | HZ | 60 | PH | 3 | | | | |
| SER.F. | 1.15 | CODE | J | DES | A | CL | F | | |
| NEMA-NOM-EFF | 93.6 | PF | 80 | | | | | | |
| RATING | 40C AMB-CONT | | | | | | | | |
| CC | 010A | | | | | | | | |
| DE | 6311 | ODE | 6309 | | | | | | |
| ENCL | TEFC | SN | | | | | | | |
| | SFA 84.8/42.4 | | | | | | | | |

AC Induction Motor Performance Data

Record # 32189

Typical performance - not guaranteed values

| Winding: 10WGY538-R004 | | Type: 1056M | Enclosure: TEFC | |
|------------------------|-------------------|---------------------------|--|--|
| Nameplate Data | | | 460 V, 60 Hz: High Voltage Connection | |
| Rated Output (HP) | 30 | Full Load Torque | 88.7 LB-FT | |
| Volts | 230/460 | Start Configuration | direct on line | |
| Full Load Amps | 76/38 | Breakdown Torque | 330 LB-FT | |
| R.P.M. | 1760 | Pull-up Torque | 142 LB-FT | |
| Hz | 60 Phase | Locked-rotor Torque | 178 LB-FT | |
| NEMA Design Code | A KVA Code | Starting Current | 270 A | |
| Service Factor (S.F.) | 1.15 | No-load Current | 17.9 A | |
| NEMA Nom. Eff. | 93.6 Power Factor | Line-line Res. @ 25°C | 0.19377 Ω | |
| Rating - Duty | 40C AMB-CONT | Temp. Rise @ Rated Load | 64°C | |
| S.F. Amps | | Temp. Rise @ S.F. Load | 76°C | |
| | | Locked-rotor Power Factor | 30.9 | |
| | | Rotor inertia | 4.47 LB-FT ² | |

Load Characteristics 460 V, 60 Hz, 30 HP

| % of Rated Load | 25 | 50 | 75 | 100 | 125 | 150 | S.F. |
|-----------------|--------|--------|--------|--------|--------|--------|------|
| Power Factor | 41 | 63 | 73 | 80 | 82 | 85 | 81 |
| Efficiency | 87.6 | 92.3 | 93.5 | 93.7 | 93.4 | 92.9 | 93.5 |
| Speed | 1792.2 | 1787.6 | 1782.4 | 1776.5 | 1770.3 | 1762.1 | 1773 |
| Line amperes | 19.8 | 24.3 | 30.7 | 37.6 | 45.6 | 55.2 | 42.4 |

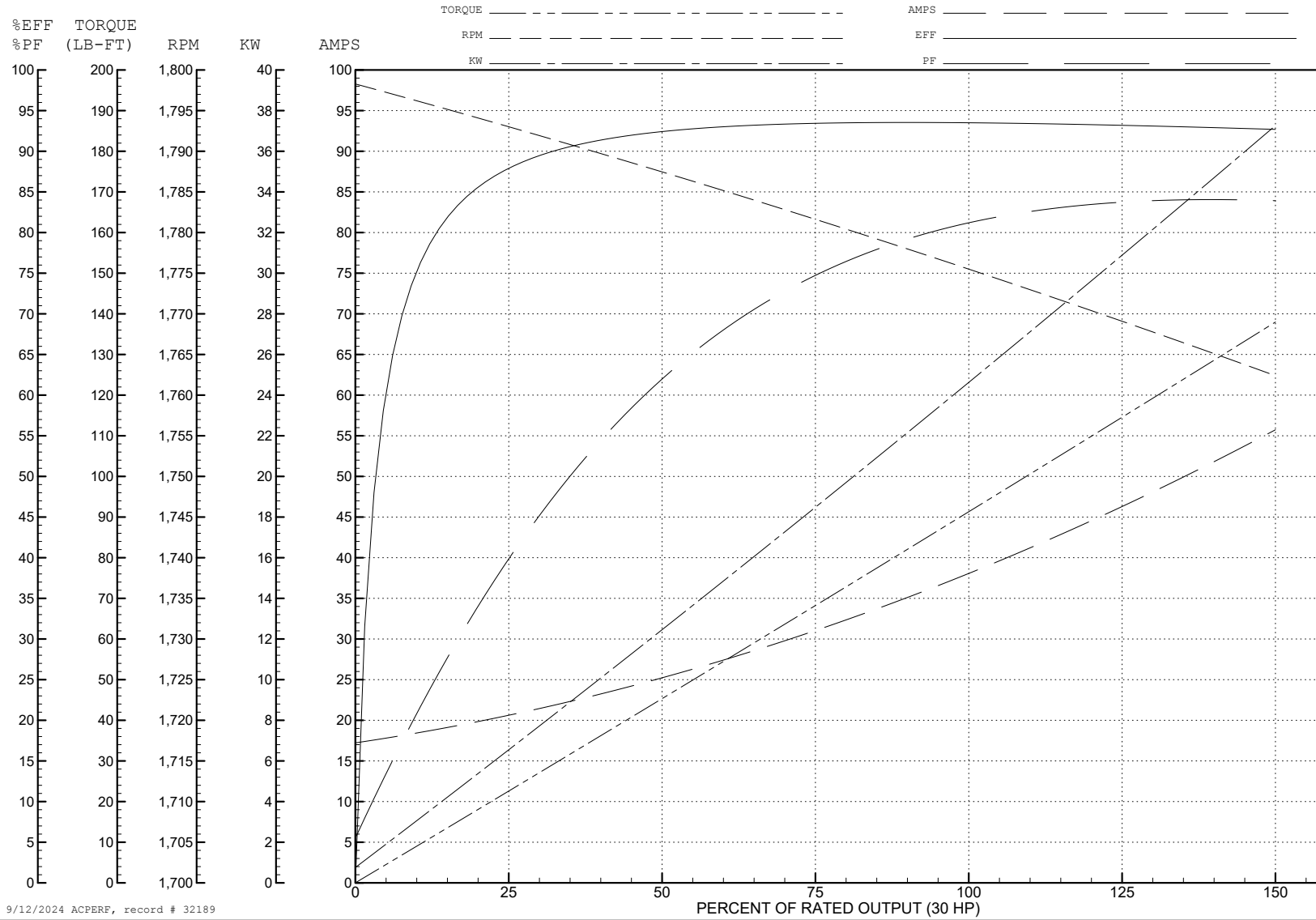
ABB Motors and Mechanical Inc.

WINDING # 10WGY538

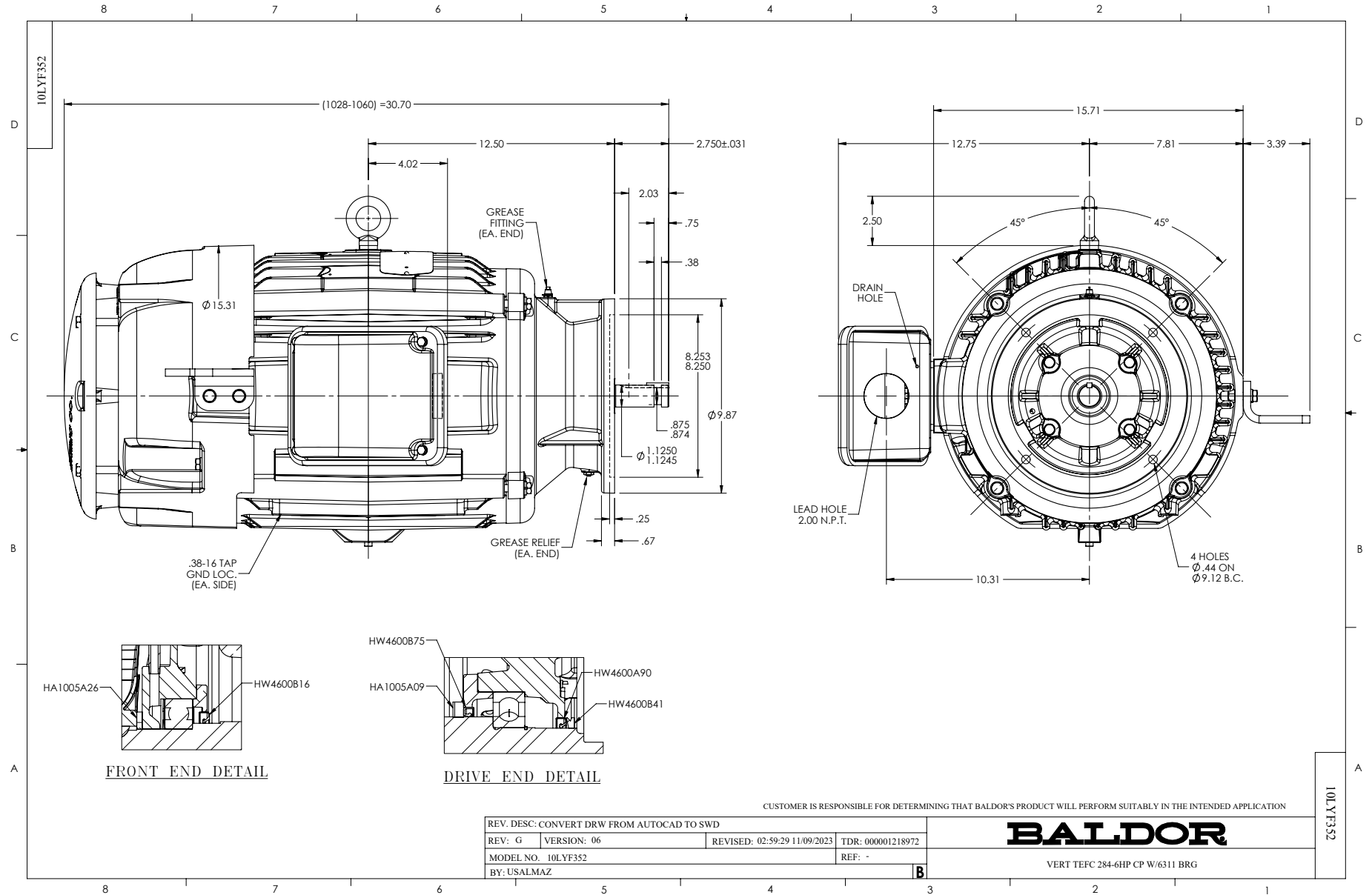
Typical performance - not guaranteed values.

30 HP 3 PH 60 HZ 1760 RPM 460 V 1056M

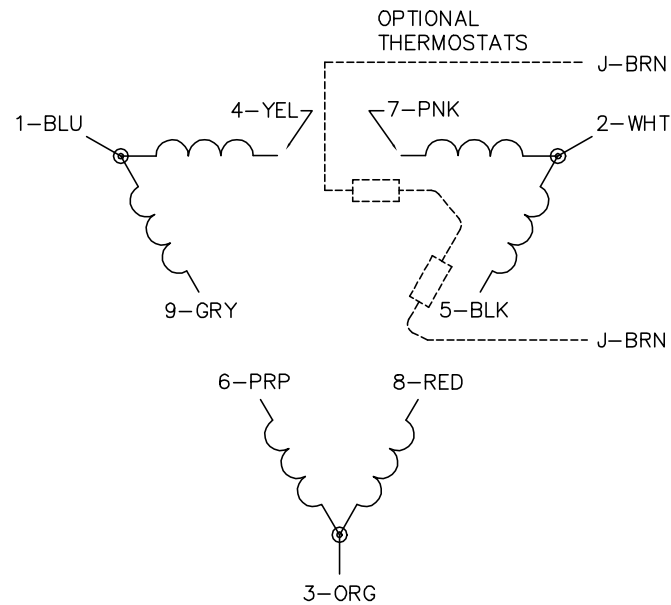
TORQUES (LB-FT): PO=330 PU=142 LR=178 LRA=270



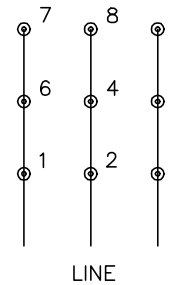
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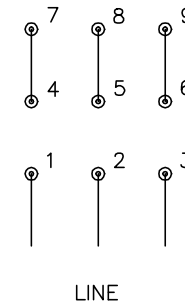
CD0180



LOW VOLTAGE
(2D)



HIGH VOLTAGE
(1D)



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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|-----------------------------------|--------------------------------|-------------------|
| REV. DESC: ADD CLASS CONN00000007 | | |
| REV. LTR: D | VERSION: 01 | TDR: 000001099922 |
| FILE: \AAA\00005\148 | REVISED: 10: 25: 29 02/19/2019 | BY: ENBRIRO |
| MTL: - | © □ | |

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3PH, DV, 9 LEADS, DELTA CONNECTION

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