



Customer information packet

SPM4115T

50HP, 1775RPM, 3PH, 60HZ, 326T, 1288M, TEFC, F1

Class - None

Division - Not Applicable

Specifications

| | |
|--------------------------------|---|
| Enclosure | TEFC |
| Frame | 326T |
| 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 | 50.000 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 | CURUSEEV NEMA PREMIUM NEMA_PREMIUM WEEE CSA |
| Ambient Temperature | 40 °C |
| Auxillary Box | No Auxillary Box |
| Auxillary Box Lead Termination | None |
| Base Indicator | Rigid |
| Bearing Grease Type | Polyrex EM (-20F +300F) |
| Blower | None |
| Current @ Voltage | 120.000 A @ 230.0 V 60.000 A @ 460.0 V |
| Design Code | A |
| Drip Cover | No Drip Cover |
| Duty Rating | CONT |
| Efficiency @ 100% Load | 95.4 % |
| Electrically Isolated Bearing | Not Electrically Isolated |
| Feedback Device | NO FEEDBACK |
| Front Shaft Indicator | None |

Part detail

| | |
|--------------|------------|
| Revision | C |
| Type | AC |
| Mech. spec. | 12T116 |
| Base | |
| Status | PRD/A |
| Elec. spec. | 12WGZ340 |
| Layout | 12LYT116 |
| Eff. date | 12-26-2024 |
| CD Diagram | CD0180 |
| Poles | 04 |
| Leads | 9#6 |
| Proprietary | False |
| Created date | 10-03-2023 |

| | |
|-------------------------------|------------------------------|
| Haz Area Temp Code | T3C |
| Heater Indicator | No Heater |
| High Voltage Full Load Amps | 60.0 a |
| Insulation Class | F |
| Inverter Code | Inverter Duty |
| KVA Code | J |
| Lifting Lugs | Standard Lifting Lugs |
| Locked Bearing Indicator | Locked Bearing |
| Max Speed | 2700 rpm |
| Motor Lead Quantity/Wire Size | 9 @ 6 AWG |
| Motor Lead Termination | Flying Leads |
| Motor Standards | NEMA |
| Motor Type | 1288M |
| Mounting Arrangement | F1 |
| Number of Poles | 4 |
| Overall Length | 30.71 IN |
| Power Factor | 84 |
| Product Family | Chemical Processing (Not DC) |
| Pulley End Bearing Type | Ball |
| Pulley Face Code | Standard |
| Pulley Shaft Indicator | Standard |
| Rodent Screen | None |
| RoHS Status | ROHS COMPLIANT |
| Service Factor | 1.15 |
| Shaft Diameter | 2.125 IN |
| Shaft Ground Indicator | No Shaft Grounding |
| Shaft Rotation | Reversible |
| Shaft Slinger Indicator | No Slinger |
| Speed | 1775 rpm |
| Speed Code | Single Speed |
| Starting Method | Direct on line |
| Thermal Device - Bearing | None |
| Thermal Device - Winding | None |
| Vibration Sensor Indicator | No Vibration Sensor |

Winding Thermal 1

None

Winding Thermal 2

None

Nameplate

NP4439B05C23L

| | | | | | | | | | |
|------------------|--------------|---------------------------------|--------------------|----------------|-------------------------------|-------------------------------|--------------|---------------|------|
| CAT # | SPM4115T | SER # | | CC | 010A | WGT | 720 | LBS | |
| SPEC | 12T116Z340 | FRAME | 326T | ENCL | TEFC | IP | 55 | | |
| RATING | 40C AMB-CONT | | | | NEMA NOM. EFF | 95.4 | | | |
| HP | 50 | VOLTS | 230/460 | | | | | | |
| AMPS | 120/60 | RPM | 1775 | HZ | 60 | | | | |
| PH | 3 | CL | F | CODE | J | DES | A | PF | 84 % |
| | | SER.F. | 1.15 | SF AMP | | | | | |
| DE BRG | 6312 | ODE BRG | 6312 | LUBE | POLYREX EM | | | | |
| INV TYPE: | VPWM | SL HZ | 0.8 | CHP | 60 | TO | 90 | 1.5:1 | |
| WK2 | 11.7 | LBFT2 | | MAX RPM | 2700 | CT | 6 | TO | 60 |
| MAG CUR | 42/21 | VT | 3 | TO | 60 | 20:1 | | | |
| | | MEETS INTENT OF IEEE-45 | | | | FOR WEATHER PROTECTION | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | | | | | | | | |
| | | CL I DIV 2 GRPS A,B,C,D | TEMP CODE | T3C | CL I INV TEMP CODE | T3 | TEMP= | 200 | |
| | | CL I ZONE 2 GRPS | IIA,IIB,IIC | TEMP = | 160 | CL II INV TEMP CODE | T3 | TEMP = | 200 |
| | | CL II DIV 2 GRPS F&G | TEMP CODE | T3C | 1.0 SF ON PWM INVERTER | POWER | | | |
| | | CL II ZONE 22 GRPS IIIB | TEMP= | 160 | | | | | |

YR

AC Induction Motor Performance Data

Record # 107565

Typical performance - not guaranteed values

| Winding: 12WGZ340-R001 | | Type: 1288M | | Enclosure: TEFC | |
|-------------------------------|--------------------------|--------------------|--|------------------------|--|
| Nameplate Data | | | 460 V, 60 Hz: High Voltage Connection | | |
| Rated Output (HP) | 50 | | Full Load Torque | 147.7 LB-FT | |
| Volts | 230/460 | | Start Configuration | direct on line | |
| Full Load Amps | 120/60 | | Breakdown Torque | 506 LB-FT | |
| R.P.M. | 1775 | | Pull-up Torque | 272 LB-FT | |
| Hz | 60 Phase | 3 | Locked-rotor Torque | 269 LB-FT | |
| NEMA Design Code | A KVA Code | J | Starting Current | 436 A | |
| Service Factor (S.F.) | 1.15 | | No-load Current | 21.8 A | |
| NEMA Nom. Eff. | 95.4 Power Factor | 84 | Line-line Res. @ 25°C | 0.094907 Ω | |
| Rating - Duty | 40C AMB-CONT | | Temp. Rise @ Rated Load | 57°C | |
| S.F. Amps | | | Temp. Rise @ S.F. Load | 70°C | |
| | | | Locked-rotor Power Factor | 25.3 | |

Load Characteristics 460 V, 60 Hz, 50 HP

| % of Rated Load | 25 | 50 | 75 | 100 | 125 | 150 | S.F. |
|------------------------|-----------|-----------|-----------|------------|------------|------------|-------------|
| Power Factor | 49 | 71 | 81 | 85 | 86 | 87 | 86 |
| Efficiency | 93.3 | 95.5 | 95.9 | 95.7 | 95.2 | 94.6 | 95.4 |
| Speed | 1794.8 | 1790 | 1784.7 | 1779.7 | 1772.9 | 1766.3 | 1776 |
| Line amperes | 25.7 | 34.4 | 45.4 | 57.7 | 71.2 | 85.5 | 65.8 |

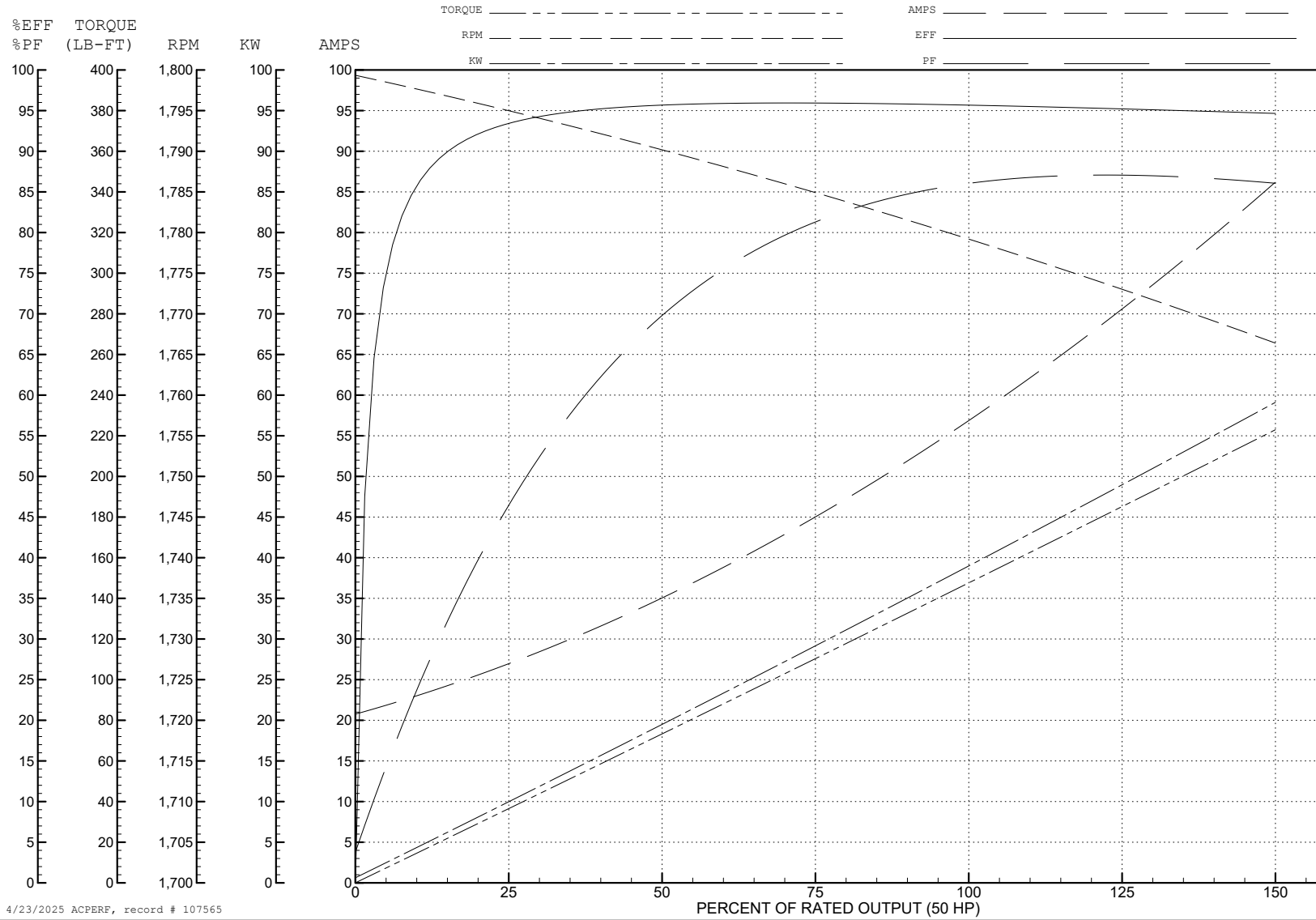
ABB Motors and Mechanical Inc.

WINDING # 12WGZ340

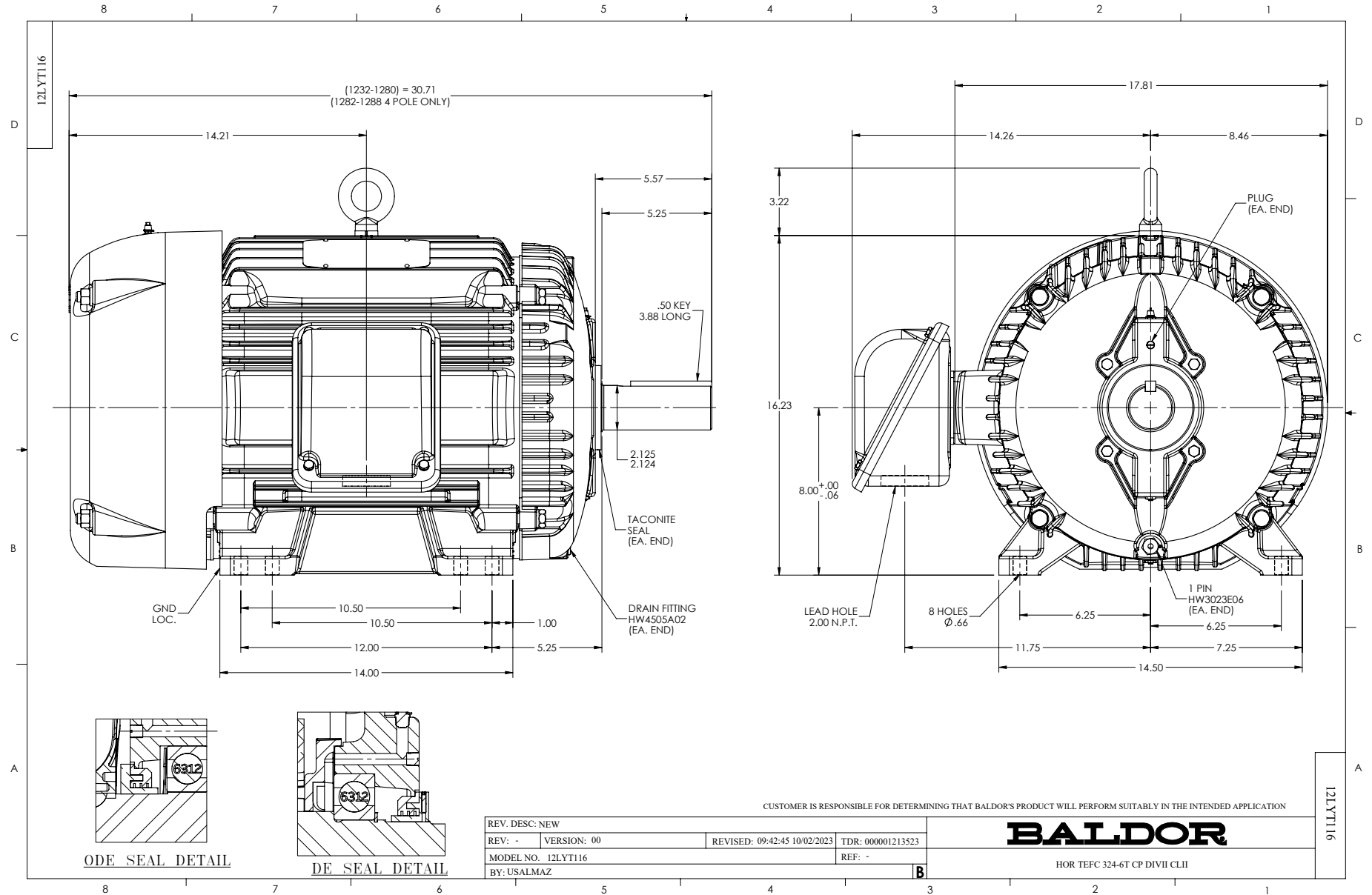
Typical performance - not guaranteed values.

50 HP 3 PH 60 HZ 1775 RPM 460 V 1288M

TORQUES (LB-FT): PO=506 PU=272 LR=269 LRA=436



4/23/2025 ACPERF, record # 107565



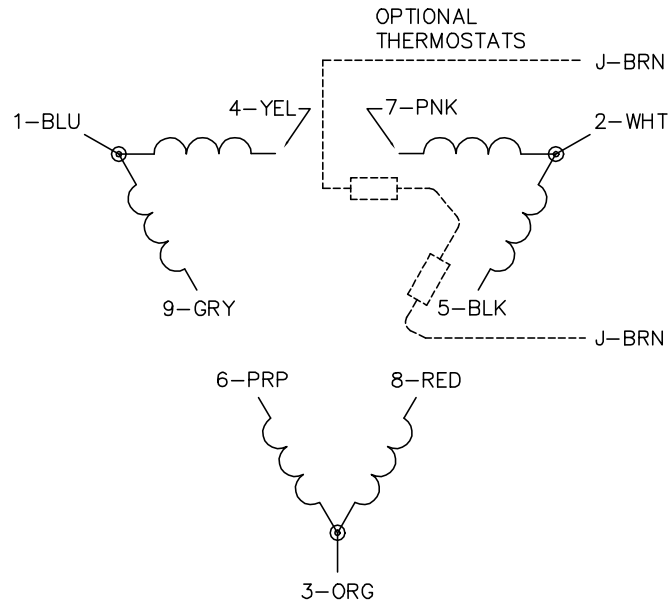
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT BALDOR'S PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION

| | | | |
|--------------------|-------------|------------------------------|-------------------|
| REV. DESC: NEW | | | |
| REV: - | VERSION: 00 | REVISED: 09:42:45 10/02/2023 | TDR: 000001213523 |
| MODEL NO. 12LYT116 | | REF: - | |
| BY: USALMAZ | | | |

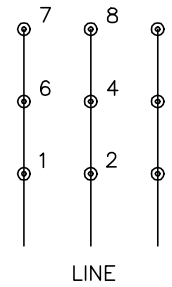
BALDOR

HOR TEFC 324-6T CP DIVII CLII

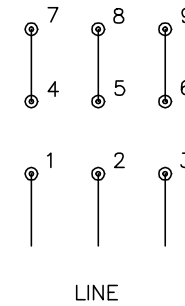
CD0180



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: - | © □ | |

BALDOR - RELIANCE®

3PH, DV, 9 LEADS, DELTA CONNECTION

SH 1 of 1