

BALDOR® • RELIANCE 

Product Information Packet

EM2539T-5

40HP, 1770RPM, 3PH, 60HZ, 324T, 4064M, OPSB, F1

| Part Detail | | | | | | | |
|-------------|--------|-------------|------------|-------------|--------|---------------|------------|
| Revision: | V | Status: | PRD/A | Change #: | | Proprietary: | No |
| Type: | AC | Elec. Spec: | 40WGx786 | CD Diagram: | CD0006 | Mfg Plant: | |
| Mech. Spec: | 40J002 | Layout: | 40LYJ002 | Poles: | 04 | Created Date: | 11-19-2010 |
| Base: | RG | Eff. Date: | 06-26-2020 | Leads: | 3#8 | | |

| Specs | | | |
|---------------------------------|-------------------------|--------------------------------|-----------------------|
| Catalog Number: | EM2539T-5 | KVA Code: | H |
| Enclosure: | OPSB | Lifting Lugs: | Standard Lifting Lugs |
| Frame: | 324T | Locked Bearing Indicator: | No Locked Bearing |
| Frame Material: | Steel | Motor Lead Quantity/Wire Size: | 3 @ 8 AWG |
| Output @ Frequency: | 40.000 HP @ 60 HZ | Motor Lead Exit: | Ko Box |
| Synchronous Speed @ Frequency: | 1800 RPM @ 60 HZ | Motor Lead Termination: | Flying Leads |
| Voltage @ Frequency: | 575.0 V @ 60 HZ | Motor Type: | 4064M |
| Agency Approvals: | CSA | Mounting Arrangement: | F1 |
| | CSA EEV | Power Factor: | 81 |
| | UR | Product Family: | General Purpose |
| Auxillary Box: | No Auxillary Box | Pulley End Bearing Type: | Ball |
| Auxillary Box Lead Termination: | None | Pulley Face Code: | Standard |
| Base Indicator: | Rigid | Pulley Shaft Indicator: | Standard |
| Bearing Grease Type: | Polyrex EM (-20F +300F) | Rodent Screen: | None |
| Blower: | None | Shaft Extension Location: | Pulley End |
| Current @ Voltage: | 40.000 A @ 575.0 V | Shaft Ground Indicator: | No Shaft Grounding |
| Design Code: | A | Shaft Rotation: | Reversible |
| Drip Cover: | No Drip Cover | Shaft Slinger Indicator: | No Slinger |

| | | | |
|---------------------------------------|---------------------------|------------------------------------|---------------------|
| Duty Rating: | CONT | Speed Code: | Single Speed |
| Electrically Isolated Bearing: | Not Electrically Isolated | Motor Standards: | NEMA |
| Feedback Device: | NO FEEDBACK | Starting Method: | Direct on line |
| Front Face Code: | Standard | Thermal Device - Bearing: | None |
| Front Shaft Indicator: | None | Thermal Device - Winding: | None |
| Heater Indicator: | No Heater | Vibration Sensor Indicator: | No Vibration Sensor |
| Insulation Class: | F | Winding Thermal 1: | None |
| Inverter Code: | Inverter Ready | Winding Thermal 2: | None |

| | | | | | | | | | | | |
|--------------------------|--------------|--|----------|----------------|------|-------------------------|---------|------------|---------|--------|------|
| Nameplate NP3554L | | | | | | | | | | | |
| CAT.NO. | EM2539T-5 | | | P/N | | | | ENCL | OPSB | | |
| SPEC. | 40J002X786G1 | | CC | 010A | | FRAME | 324T | | SER.NO. | | |
| HP | 40 | | CLASS | F | | HZ | 60 | | | | |
| RPM | 1770 | | PH | 3 | | DES | A | | | | |
| VOLTS | 575 | | | CODE | H | | ODE BRG | 6309 | | DE BRG | 6312 |
| AMPS | 40 | | | USABLE AT 208V | | | | | | | |
| RATING | 40C AMB-CONT | | | NEMA-NOM-EFF | 94.1 | | GREASE | POLYREX EM | | | |
| PF | 81 | | SER.F. | 1.15 | | VPWM INVERTER READY | | | | | |
| HTR-VOLTS | | | HTR-AMPS | | | MAX. SPACE HEATER TEMP. | | | | | |

| Parts List | | |
|-------------|--|----------|
| Part Number | Description | Quantity |
| SA211182 | SA 40J002X786G1 | 1.000 EA |
| RA198405 | RA 40J002X786G1 | 1.000 EA |
| HA6361A01 | LIFTING LUG FOR 37, 39 & 40 FRAME ZINC | 2.000 EA |
| HA6017 | CAST ADAPTER, 40,42 KOBX | 1.000 EA |
| 19XW3118A12 | .31-18 X .75 HEX WASHER HEAD TAPTITE II | 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 |
| 10CB3001 | CONDUIT BOX CAST W/2.500 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 |
| 40EP3200A02 | STD FREP OPEN 309 BRG | 1.000 EA |
| HW5100A11 | W3917-042 WVY WSHR (WB) | 1.000 EA |
| 40EP3201A01 | PU ENDPLATE, MACH - OPEN - FOR 312 BRG | 1.000 EA |
| XY3816A12 | 3/8-16 FINISHED NUT | 4.000 EA |
| 10CB3500SP | CONDUIT BOX LID, CAST | 1.000 EA |
| 51XW2520A12 | .25-20 X .75, TAPTITE II, HEX WSHR SLTD | 4.000 EA |
| HW2501H33 | KEY, 1/2 SQ X 3.875 | 1.000 EA |
| LB1115N | LABEL,LIFTING DEVICE (ON ROLLS) | 1.000 EA |
| MN416A01 | TAG-INSTAL-MAINT no wire (2100/bx) 4/22 | 1.000 EA |
| HA4051A00 | PLASTIC CAP FOR GREASE FITTING | 1.000 EA |
| HW4500A03 | GREASE FITTING, .125 NPT 1610(ALEMITE) 8 | 1.000 EA |
| HW4500A20 | 1/8NPT SL PIPE PLUG | 1.000 EA |
| MJ1000A02 | GREASE, MOBIL POLYREX EM - 124047 | 0.050 LB |

| Parts List (continued) | | |
|-------------------------------|--|-----------------|
| Part Number | Description | Quantity |
| 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 |
| MG1000Y03 | MUNSELL 2.53Y 6.70/ 4.60, GLOSS 20, | 0.030 GA |
| 85XU0407S04 | 4X1/4 U DRIVE PIN STAINLESS | 4.000 EA |
| 40AD2002A01 | LEXAN BAFFLE 40 FR OPEN | 1.000 EA |
| 40AD2002A01 | LEXAN BAFFLE 40 FR OPEN | 1.000 EA |
| HA3113A13 | THRUBOLT 3/8-16 X 19.750 W/4.00 THD LENG | 4.000 EA |
| LB1119N | WARNING LABEL | 1.000 EA |
| LC0006 | CONNECTION LABEL | 1.000 EA |
| NP3554L | SS SUPER-E UL CSA-EEV PREM CC | 1.000 EA |
| 40PA1000 | PACKAGING GROUP | 1.000 EA |

AC Induction Motor Performance Data

Record # 32859

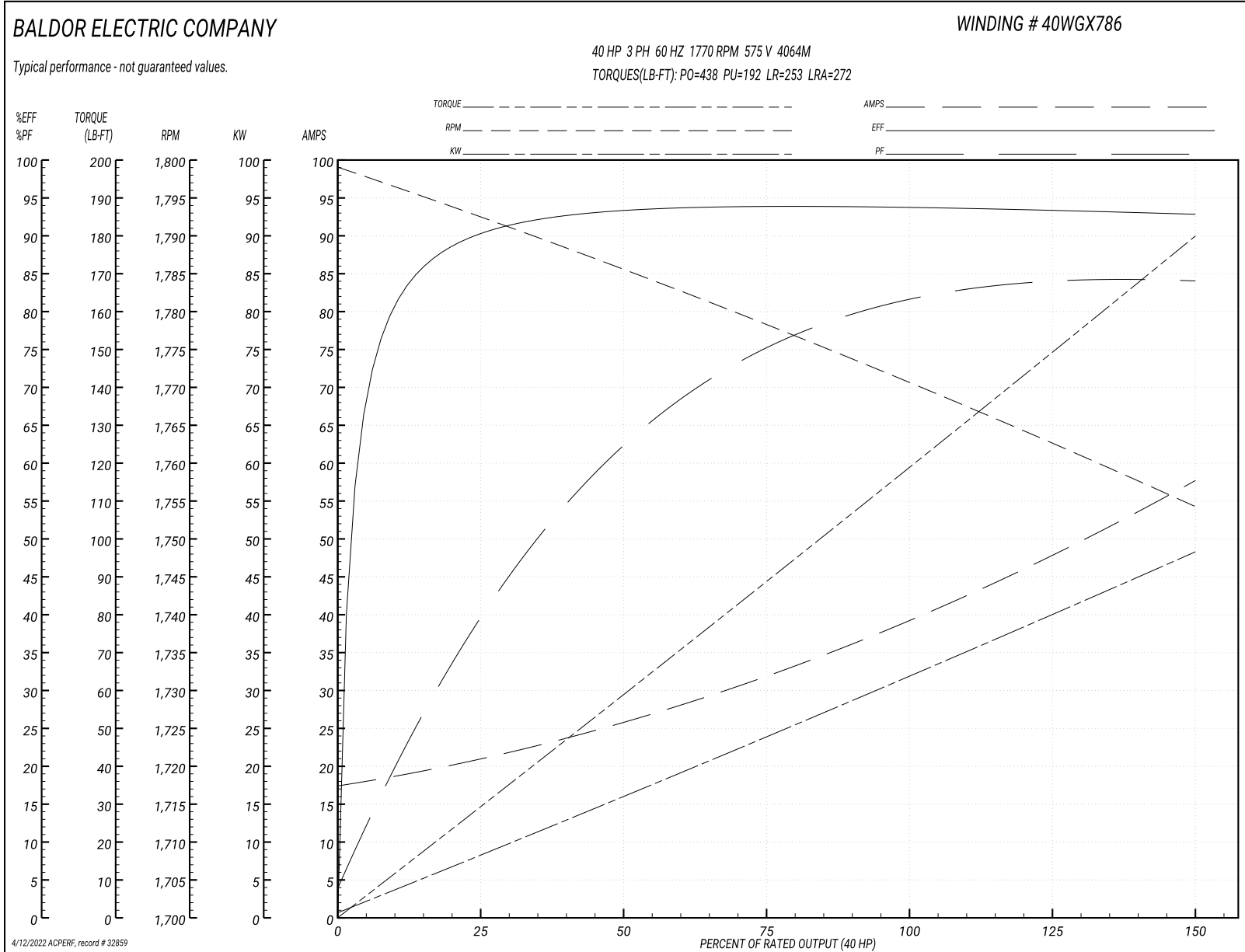
Typical performance - not guaranteed values

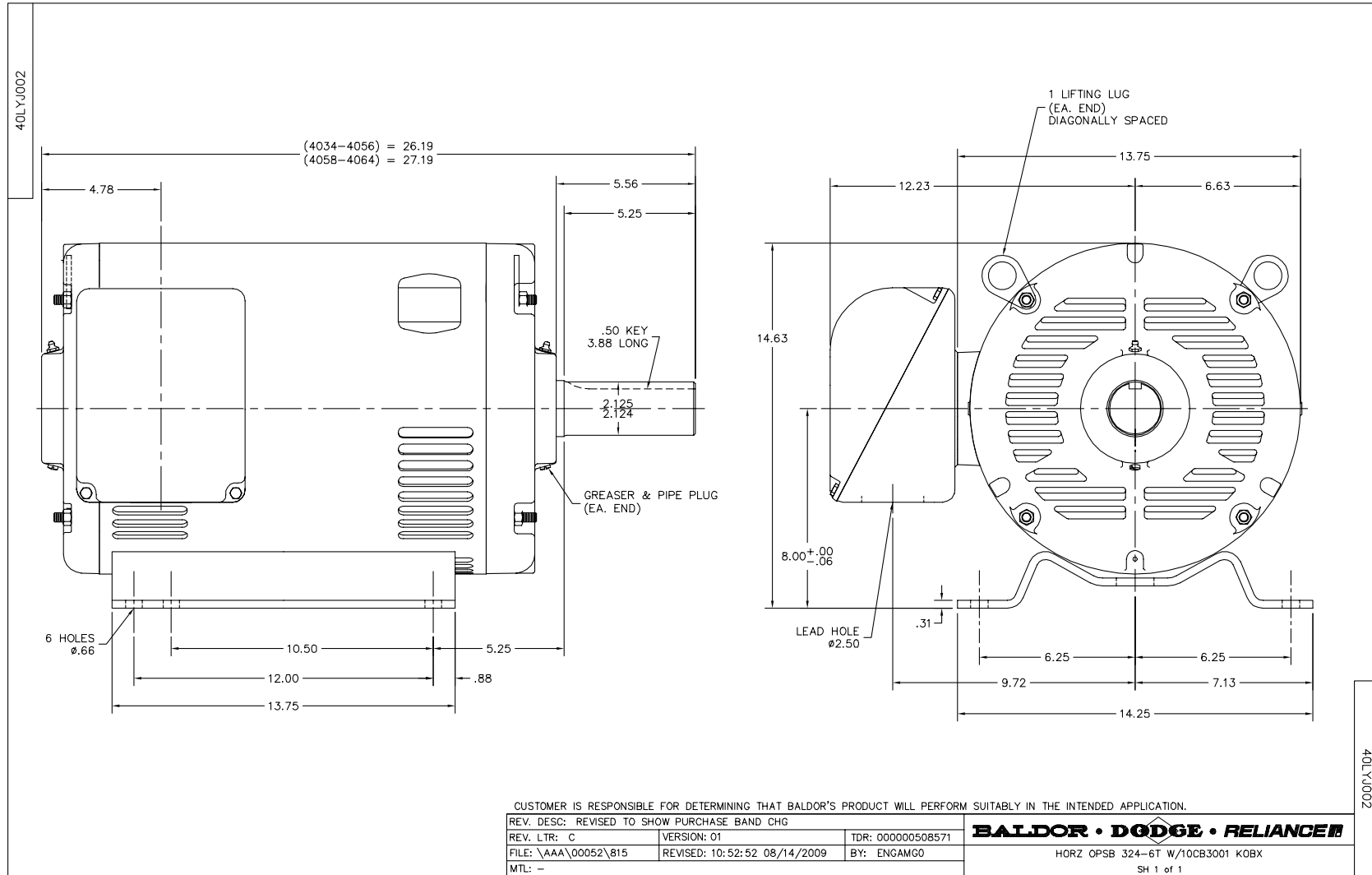
| Winding: 40WGX786-R001 | | Type: 4064M | | Enclosure: OPSB | |
|-------------------------------|--------------------------|----------------------------|---|-------------------------|--|
| Nameplate Data | | | 575 V, 60 Hz: Single Voltage Motor | | |
| Rated Output (HP) | 40 | Full Load Torque | 119 LB-FT | | |
| Volts | 575 | Start Configuration | direct on line | | |
| Full Load Amps | 40 | Breakdown Torque | 438 LB-FT | | |
| R.P.M. | 1770 | Pull-up Torque | 192 LB-FT | | |
| Hz | 60 Phase | 3 | Locked-rotor Torque | 253 LB-FT | |
| NEMA Design Code | A KVA Code | H | Starting Current | 272 A | |
| Service Factor (S.F.) | 1.15 | No-load Current | 17.9 A | | |
| NEMA Nom. Eff. | 94.1 Power Factor | 81 | Line-line Res. @ 25°C | 0.224 Ω | |
| Rating - Duty | 40C AMB-CONT | | Temp. Rise @ Rated Load | 41°C | |
| S.F. Amps | | | Temp. Rise @ S.F. Load | 50°C | |
| | | | Locked-rotor Power Factor | 32 | |
| | | | Rotor inertia | 5.09 LB-FT ² | |

Load Characteristics 575 V, 60 Hz, 40 HP

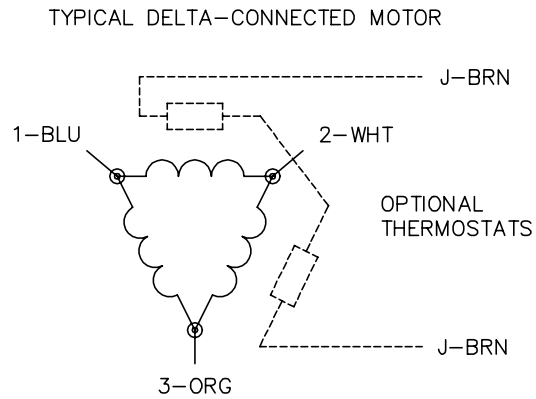
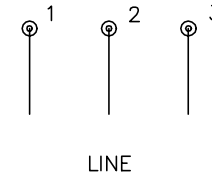
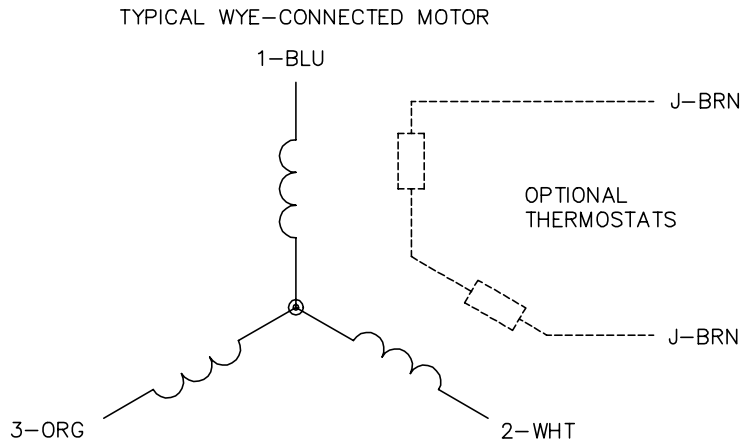
| % of Rated Load | 25 | 50 | 75 | 100 | 125 | 150 | S.F. |
|------------------------|-----------|-----------|-----------|------------|------------|------------|-------------|
| Power Factor | 41 | 63 | 75 | 81 | 84 | 84 | 83 |
| Efficiency | 90.1 | 93.2 | 94 | 93.8 | 93.3 | 92.9 | 93.5 |
| Speed | 1793 | 1785 | 1778 | 1771 | 1763 | 1754 | 1766 |
| Line amperes | 20.3 | 25.5 | 32.1 | 39.6 | 48 | 57.4 | 44.6 |

Performance Graph at 575V, 60Hz, 40.0HP Typical performance - Not guaranteed values





CD0006



NOTES:

1. THREE LEAD MOTOR MAY BE EITHER WYE CONNECTED OR DELTA CONNECTED.
2. INTERCHANGE ANY TWO LINE LEADS TO REVERSE ROTATION.
3. OPTIONAL THERMOSTATS ARE PROVIDED WHEN SPECIFIED.
4. ACTUAL NUMBER OF INTERNAL PARALLEL CIRCUITS MAY VARY.
5. LEAD COLORS ARE OPTIONAL. LEADS MUST BE NUMBERED AS SHOWN.

CD0006

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|-----------------------------------|------------------------------|-------------------|
| REV. DESC: ADD CLASS CONN00000007 | | |
| REV. LTR: E | VERSION: 01 | TDR: 000001099922 |
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| MTL: - | © □ | |

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3PH, SV, 3 LEADS, WYE OR DELTA CONNECTED

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