

**BALDOR® • RELIANCE** 

**Product Information Packet**

**EJPM2543T**

**50HP, 1775RPM, 3PH, 60HZ, 326JP, 4256M, OPSB, F**

| Part Detail |    |             |              |             |        |               |            |
|-------------|----|-------------|--------------|-------------|--------|---------------|------------|
| Revision:   | -  | Status:     | PRD/A        | Change #:   |        | Proprietary:  | No         |
| Type:       | AC | Elec. Spec: | 42WG387      | CD Diagram: | CD0180 | Mfg Plant:    |            |
| Mech. Spec: |    | Layout:     | 42LY-000-047 | Poles:      | 04     | Created Date: | 02-02-2021 |
| Base:       |    | Eff. Date:  | 02-10-2021   | Leads:      | 9#8    |               |            |

| Specs                           |                         |                                |                       |
|---------------------------------|-------------------------|--------------------------------|-----------------------|
| Catalog Number:                 | EJPM2543T               | Inverter Code:                 | Inverter Ready        |
| Enclosure:                      | OPSB                    | IP Rating:                     | NONE                  |
| Frame:                          | 326JP                   | KVA Code:                      | G                     |
| Frame Material:                 | Steel                   | Lifting Lugs:                  | Standard Lifting Lugs |
| Output @ Frequency:             | 50.000 HP @ 60 HZ       | Locked Bearing Indicator:      | Locked Bearing        |
| Synchronous Speed @ Frequency:  | 1800 RPM @ 60 HZ        | Motor Lead Quantity/Wire Size: | 9 @ 8 AWG             |
| Voltage @ Frequency:            | 460.0 V @ 60 HZ         | Motor Lead Exit:               | Ko Box                |
|                                 | 230.0 V @ 60 HZ         | Motor Lead Termination:        | Flying Leads          |
| Agency Approvals:               | CSA                     | Motor Type:                    | 4256M                 |
|                                 | CSA EEV                 | Mounting Arrangement:          | F1                    |
|                                 | UR                      | Power Factor:                  | 87                    |
| Auxillary Box:                  | No Auxillary Box        | Product Family:                | General Purpose       |
| Auxillary Box Lead Termination: | None                    | Pulley End Bearing Type:       | Ball                  |
| Base Indicator:                 | Rigid                   | Pulley Face Code:              | C-Face                |
| Bearing Grease Type:            | Polyrex EM (-20F +300F) | Pulley Shaft Indicator:        | Tapped & Key          |
| Blower:                         | None                    | Rodent Screen:                 | Included              |
| Current @ Voltage:              | 57.000 A @ 460.0 V      | Shaft Extension Location:      | Pulley End            |
|                                 | 121.000 A @ 208.0 V     | Shaft Ground Indicator:        | No Shaft Grounding    |

|                                       |                           |                                    |                     |
|---------------------------------------|---------------------------|------------------------------------|---------------------|
|                                       | 114.000 A @ 230.0 V       | <b>Shaft Rotation:</b>             | Reversible          |
| <b>Design Code:</b>                   | A                         | <b>Shaft Slinger Indicator:</b>    | Shaft Slinger       |
| <b>Drip Cover:</b>                    | No Drip Cover             | <b>Speed Code:</b>                 | Single Speed        |
| <b>Duty Rating:</b>                   | CONT                      | <b>Motor Standards:</b>            | NEMA                |
| <b>Electrically Isolated Bearing:</b> | Not Electrically Isolated | <b>Starting Method:</b>            | Direct on line      |
| <b>Feedback Device:</b>               | NO FEEDBACK               | <b>Thermal Device - Bearing:</b>   | None                |
| <b>Front Face Code:</b>               | Standard                  | <b>Thermal Device - Winding:</b>   | None                |
| <b>Front Shaft Indicator:</b>         | None                      | <b>Vibration Sensor Indicator:</b> | No Vibration Sensor |
| <b>Heater Indicator:</b>              | No Heater                 | <b>Winding Thermal 1:</b>          | None                |
| <b>Insulation Class:</b>              | F                         | <b>Winding Thermal 2:</b>          | None                |

| Nameplate NP2138LUA |                            |    |    |                |            |       |         |           |      |        |      |
|---------------------|----------------------------|----|----|----------------|------------|-------|---------|-----------|------|--------|------|
| CAT.NO.             | EJPM2543T                  |    |    | P/N            |            |       |         | ENCLOSURE | OPSB |        |      |
| SPEC.               | 42-0000-0109               |    | CC | 010A           |            | FRAME | 326JP   |           | S/N  |        |      |
| HP                  | 50                         |    |    | CLASS          | F          |       | HZ      | 60        |      |        |      |
| RPM                 | 1775                       |    |    | PH             | 3          |       | DES     | A         |      |        |      |
| VOLT                | 230/460                    |    |    | KVA-CODE       | G          |       | ODE BRG | 6311      |      | DE BRG | 6312 |
| AMP                 | 114/57                     |    |    | USABLE AT 208V | 121        |       |         |           |      |        |      |
| RATING              | 40C AMB-CONT               |    |    | GREASE         | POLYREX EM |       |         |           |      |        |      |
| NEMA-NOM-EFF        | 94.5                       | PF | 87 | SER.F.         | 1.15       |       |         |           |      |        |      |
| HTR-VOLTS           | 50HZ 50HP 190/380V 136/68A |    |    |                |            |       | SF1.0   |           |      |        |      |
|                     | HTR-AMPS                   |    |    |                |            |       |         |           |      |        |      |

| Parts List  |                                           |          |
|-------------|-------------------------------------------|----------|
| Part Number | Description                               | Quantity |
| SA390258    | SA 42-0000-0109                           | 1.000 EA |
| RA380699    | RA 42-0000-0109                           | 1.000 EA |
| LB1115N     | LABEL,LIFTING DEVICE (ON ROLLS)           | 1.000 EA |
| LB1119N     | WARNING LABEL                             | 1.000 EA |
| LC0181      | CONNECTION LABEL                          | 1.000 EA |
| NP2138LUA   | ALUM SUPER-E UL CSA-EEV PREM CC (300SER)  | 1.000 EA |
| 85XU0407S04 | 4X1/4 U DRIVE PIN STAINLESS               | 4.000 EA |
| MN416A01    | TAG-INSTAL-MAINT no wire (2100/bx) 4/22   | 1.000 EA |
| HA6360      | LIFTING LUG FOR 42 FRAME MOTORS.          | 2.000 EA |
| MJ1000A02   | GREASE, MOBIL POLYREX EM - 124047         | 0.030 LB |
| HA3151A03   | THRUBOLT STUD 1/2-13 X 20.5               | 4.000 EA |
| HW1001A50   | LOCKWASHER 1/2, ZINC PLT.,.879 OD, .509 I | 8.000 EA |
| XY5013A12   | NUT,1/2-13,HEX,STEEL,ZINCPLATED           | 8.000 EA |
| 42EP3200A01 | FR ENDPLATE, MACH                         | 1.000 EA |
| HW5100A13   | W4627-047 WVY WSHER                       | 1.000 EA |
| HA4051A00   | PLASTIC CAP FOR GREASE FITTING            | 1.000 EA |
| HW4500A03   | GREASE FITTING, .125 NPT 1610(ALEMITE) 8  | 1.000 EA |
| HW4500A17   | 317400 ALEMITE GREASE RELIEF              | 1.000 EA |
| 51XW1032A06 | 10-32 X .38, TAPTITE II, HEX WSHR SLTD S  | 4.000 EA |
| 42EP1300A44 | PU ENDPLATE, MACH                         | 1.000 EA |
| HW4600B41   | V-RING SLINGER 2.125 X 2.880 X 0.280      | 1.000 EA |
| 10XN3118K40 | 5/16-18 X 2.50" HEX HD, GRADE 5           | 4.000 EA |
| HW1001A31   | LOCKWASHER 5/16, ZINC PLT.591 OD, .319 I  | 4.000 EA |
| HA4051A00   | PLASTIC CAP FOR GREASE FITTING            | 1.000 EA |

| Parts List (continued) |                                          |          |
|------------------------|------------------------------------------|----------|
| Part Number            | Description                              | Quantity |
| HW4500A03              | GREASE FITTING, .125 NPT 1610(ALEMITE) 8 | 1.000 EA |
| HW4500A17              | 317400 ALEMITE GREASE RELIEF             | 1.000 EA |
| 51XW1032A06            | 10-32 X .38, TAPTITE II, HEX WSHR SLTD S | 4.000 EA |
| 10CB3001A31            | KOBX, MACH W/2.50 LD HL, .38-16 GND      | 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 |
| WD1000B19              | TERMINAL BURNDY L250HP                   | 1.000 EA |
| 10XN3816K08            | 3/8-16 X .50 HEX HD CAP SCREW GRADE 5    | 1.000 EA |
| HW1001A38              | LOCKWASHER 3/8, ZINC PLT .688 OD, .382 I | 1.000 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 |
| 10CB3500SP             | CONDUIT BOX LID, CAST                    | 1.000 EA |
| 51XW2520A12            | .25-20 X .75, TAPTITE II, HEX WSHR SLTD  | 4.000 EA |
| HA1165A01              | RODENT SCREEN FOR 42 PU. C-FACE EP (INSI | 1.000 EA |
| 42AD2001A01            | BAFFLE PLATE 42 OPEN, SLOTTED BAND MTRS  | 1.000 EA |
| 42AD2001A01            | BAFFLE PLATE 42 OPEN, SLOTTED BAND MTRS  | 1.000 EA |
| HA1108A01              | RODENT SCREEN                            | 1.000 EA |
| MG1000Y03              | MUNSELL 2.53Y 6.70/ 4.60, GLOSS 20,      | 0.125 GA |
| 40PA1010               | PACKAGING GROUP, PRINT PK1151A06         | 1.000 EA |
| HW2501E18              | KEY, 1/4 SQ X 2.000                      | 1.000 EA |

**AC Induction Motor Performance Data**

Record # 53755

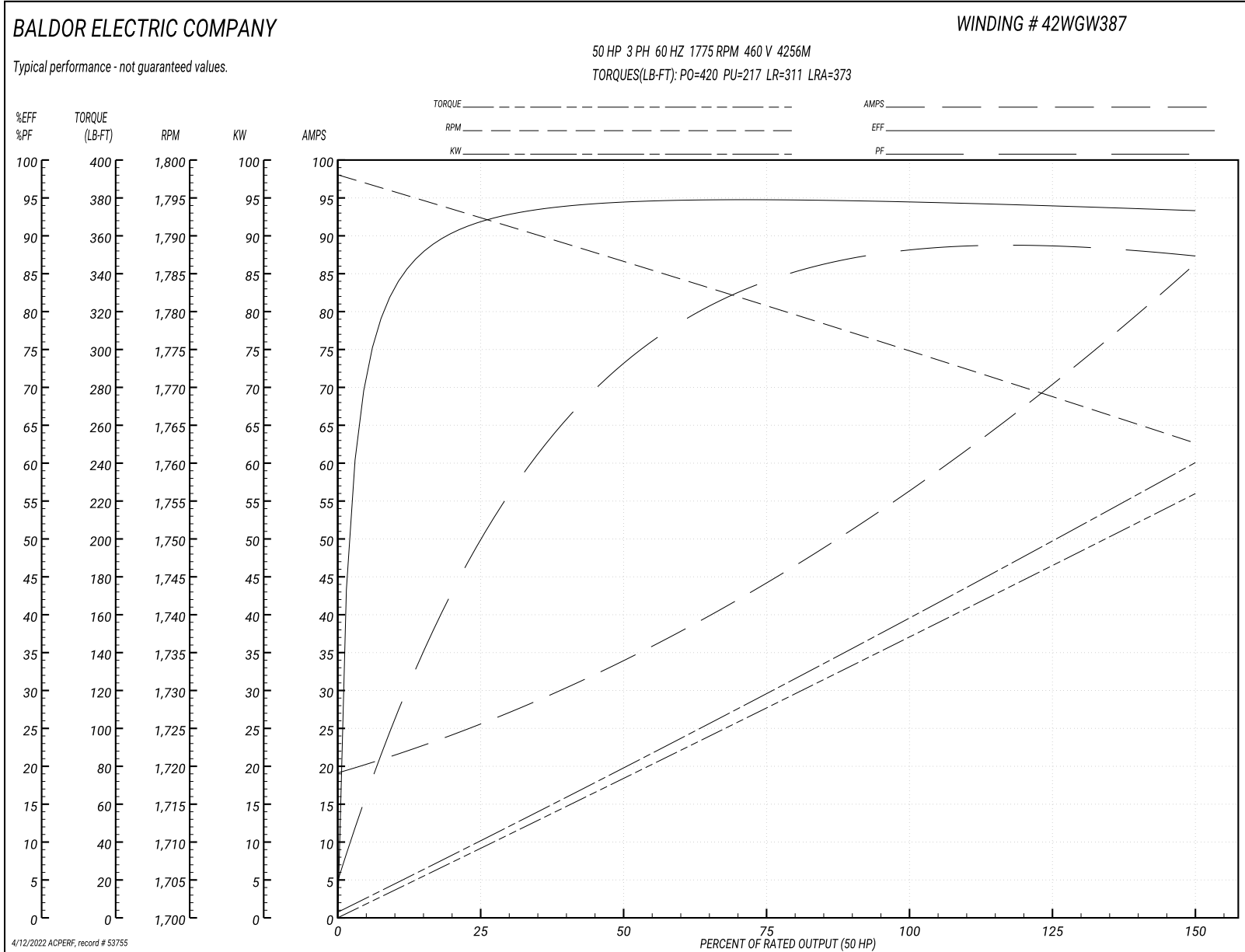
Typical performance - not guaranteed values

| <b>Winding: 42WGW387-R001</b> |                 | <b>Type: 4256M</b>         |                                                  | <b>Enclosure: OPSB</b>       |           |
|-------------------------------|-----------------|----------------------------|--------------------------------------------------|------------------------------|-----------|
| <b>Nameplate Data</b>         |                 |                            | <b>460 V, 60 Hz:<br/>High Voltage Connection</b> |                              |           |
| <b>Rated Output (HP)</b>      | 50              | <b>Full Load Torque</b>    | 149 LB-FT                                        |                              |           |
| <b>Volts</b>                  | 230/460         | <b>Start Configuration</b> | direct on line                                   |                              |           |
| <b>Full Load Amps</b>         | 114/57          | <b>Breakdown Torque</b>    | 420 LB-FT                                        |                              |           |
| <b>R.P.M.</b>                 | 1775            | <b>Pull-up Torque</b>      | 217 LB-FT                                        |                              |           |
| <b>Hz</b>                     | 60 <b>Phase</b> | 3                          | <b>Locked-rotor Torque</b>                       | 311 LB-FT                    |           |
| <b>NEMA Design Code</b>       | A               | <b>KVA Code</b>            | G                                                | <b>Starting Current</b>      | 373 A     |
| <b>Service Factor (S.F.)</b>  | 1.15            |                            | <b>No-load Current</b>                           | 20.2 A                       |           |
| <b>NEMA Nom. Eff.</b>         | 94.5            | <b>Power Factor</b>        | 87                                               | <b>Line-line Res. @ 25°C</b> | 0.12266 Ω |
| <b>Rating - Duty</b>          | 40C AMB-CONT    |                            | <b>Temp. Rise @ Rated Load</b>                   | 39°C                         |           |
| <b>S.F. Amps</b>              |                 |                            | <b>Temp. Rise @ S.F. Load</b>                    | 47°C                         |           |

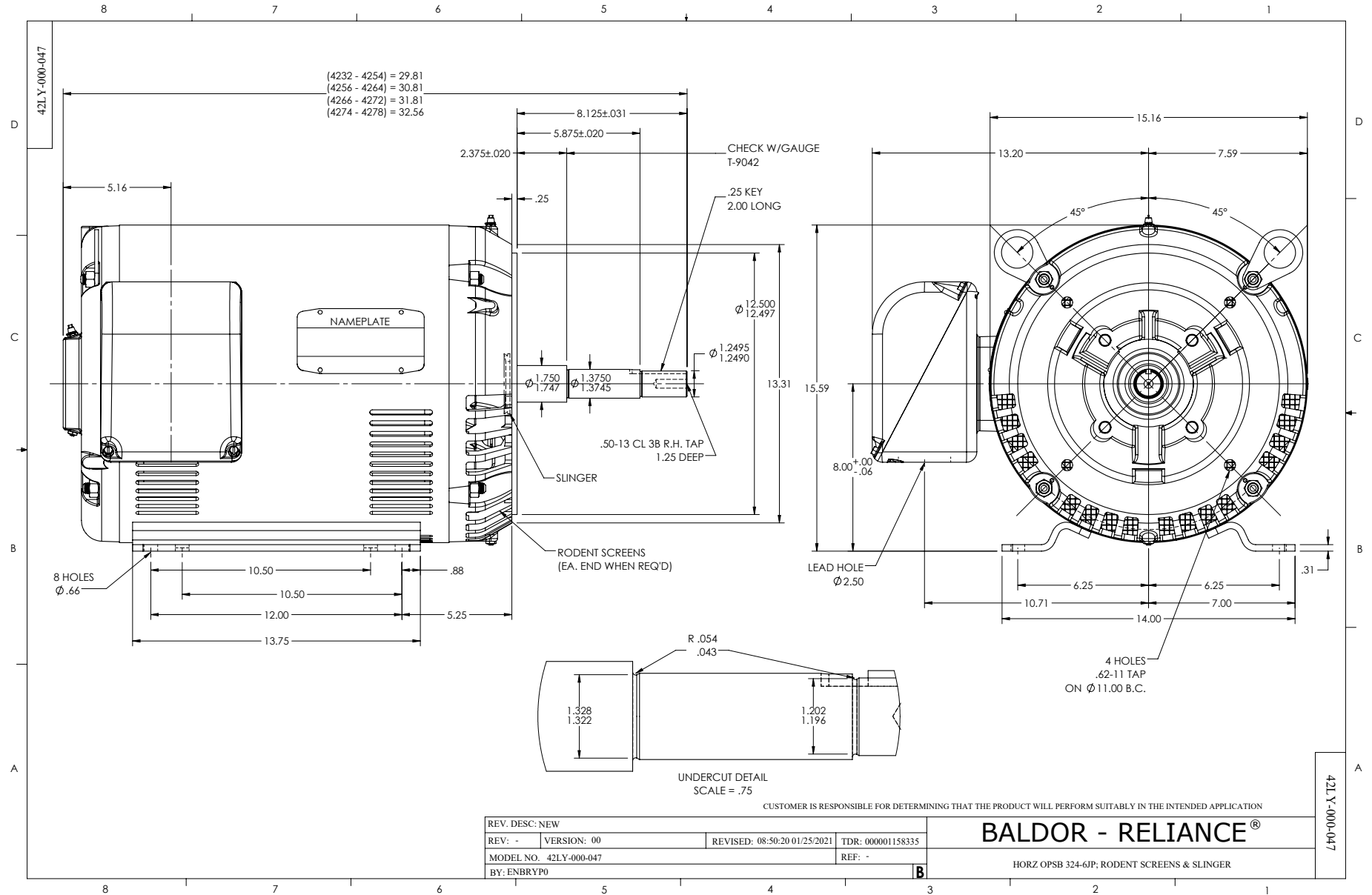
**Load Characteristics 460 V, 60 Hz, 50 HP**

| <b>% of Rated Load</b> | <b>25</b> | <b>50</b> | <b>75</b> | <b>100</b> | <b>125</b> | <b>150</b> | <b>S.F.</b> |
|------------------------|-----------|-----------|-----------|------------|------------|------------|-------------|
| <b>Power Factor</b>    | 54        | 75        | 83        | 87         | 88         | 88         | 88          |
| <b>Efficiency</b>      | 92        | 94.5      | 94.9      | 94.7       | 94.2       | 93.4       | 94.4        |
| <b>Speed</b>           | 1791      | 1786.1    | 1781.1    | 1775.2     | 1769.2     | 1762.1     | 1772        |
| <b>Line amperes</b>    | 24.4      | 33.4      | 44.7      | 57.4       | 71         | 85.6       | 65.6        |

Performance Graph at 460V, 60Hz, 50.0HP Typical performance - Not guaranteed values







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

|                                   |                              |                   |
|-----------------------------------|------------------------------|-------------------|
| 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

Marketing maintained PDF of MN416:

<http://www.baldor.com/support/Literature/Load.ashx/MN416?ManNumber=MN416>