ABB BALDOR RELIANCE

# Customer information packet

## M1504T

1-.5HP, 1715-870RPM, 3PH, 60HZ, 143T, 3524M, T
Class - None
Division - Not Applicable

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## Specifications

| | |
|---|---|
| **Enclosure** | TEFC |
| **Frame** | 143T |
| **Frame Material** | Steel |
| **Frequency** | 60.00 Hz |
| **Haz Area Class and Group** | None |
| **Haz Area Division** | Not Applicable |
| **Motor Letter Type** | Three Phase |
| **Output @ Frequency** | .500 HP @ 60 HZ |
| | 1.000 HP @ 60 HZ |
| **Phase** | 3 |
| **Synchronous Speed @ Frequency** | 900 RPM @ 60 HZ |
| **Voltage @ Frequency** | 230.0 V @ 60 HZ |
| | 208.0 V @ 60 HZ |
| **Agency Approvals** | CSA |
| | UR |
| **Ambient Temperature** | 40 °C |
| **Auxiliary Box** | NO AUXILLARY BOX |
| **Auxiliary Box Lead Termination** | None |
| **Base Indicator** | Rigid |
| **Bearing Grease Type** | Polyrex EM (-20F +300F) |
| **Blower** | None |
| **Current @ Voltage** | 3.540 A @ 230.0 V |
| | 2.740 A @ 208.0 V |
| **Design Code** | B |
| **Drip Cover** | No Drip Cover |
| **Duty Rating** | CONT |
| **Electrically Isolated Bearing** | Not Electrically Isolated |
| **Feedback Device** | NO FEEDBACK |
| **Front Shaft Indicator** | None |
| **Heater Indicator** | No Heater |
| **High Voltage Full Load Amps** | 2.7 a |
| **Insulation Class** | F |

## Part Detail

| | |
|---|---|
| **Revision** | E |
| **Type** | AC |
| **Mech. spec.** | 35AA001 |
| **Base** | |
| **Status** | PRD/A |
| **Elec. spec.** | 35WGG366 |
| **Layout** | 35LYAA001 |
| **Eff. date** | 10-28-2025 |
| **CD Diagram** | CD0011 |
| **Poles** | 04/08 |
| **Leads** | 6#18 |
| **Proprietary** | False |
| **Created date** | 02-23-2023 |

| | |
|---|---|
| **Inverter Code** | Not Inverter |
| **KVA Code** | H |
| **Lifting Lugs** | No Lifting Lugs |
| **Locked Bearing Indicator** | No Locked Bearing |
| **Motor Lead Quantity/Wire Size** | 6 @ 18 AWG |
| **Motor Lead Termination** | Flying Leads |
| **Motor Standards** | NEMA |
| **Motor Type** | 3524M |
| **Mounting Arrangement** | F1 |
| **Number of Poles** | 4 |
| | 8 |
| **Overall Length** | 13.31 IN |
| **Product Family** | General Purpose |
| **Pulley End Bearing Type** | Ball |
| **Pulley Face Code** | Standard |
| **Pulley Shaft Indicator** | Standard |
| **Rodent Screen** | None |
| **Service Factor** | 1.15 |
| **Shaft Diameter** | 0.875 IN |
| **Shaft Ground Indicator** | No Shaft Grounding |
| **Shaft Rotation** | Reversible |
| **Shaft Slinger Indicator** | No Slinger |
| **Speed** | 1715 rpm |
| | 870 rpm |
| **Speed Code** | 2S-1W-CT |
| **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**

| NP1256L | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **CAT.NO.** | M1504T | | | | | | | | | | |
| **SPEC.** | 35AA001G366G1 | | | | | | | | | | |
| **HP** | 1/.5 | | | | | | | | | | |
| **VOLTS** | 208-230 | | | | | | | | | | |
| **AMP** | 2.7-3.5 | | | | | | | | | | |
| **RPM** | 1715-870 | | | | | | | | | | |
| **FRAME** | 143T | | **HZ** | 60 | | | **PH** | 3 | | | |
| **SER.F.** | 1.15 | **CODE** | H | **DES** | B | **CLASS** | | F | | | |
| **NEMA-NOM-EFF** | | **PF** | | | | | | | | | |
| **RATING** | 40C AMB-CONT | | | | | | | | | | |
| **CC** | | | | | | | | | | | |
| **DE** | 6205 | | **ODE** | 6203 | | | | | | | |
| **ENCL** | TEFC | **SN** | | | | | | | | | |
| | SFA 3.43-3.09 | | | | | | | | | | |

**Parts List**

| Part number | Description | Quantity |
|---|---|---|
| SA414947 | SA 35AA001G366G1 | 1.000 ea |
| RA406716 | RA 35AA001G366G1 | 1.000 ea |
| NS2512A01 | INSULATOR, CONDUIT BOX X | 1.000 ea |
| 35CB3009 | 35 CB W/1.09 DIA. LEAD HOLE @ 6: | 1.000 ea |
| 36GS1000SP | GASKET-CONDUIT BOX, .06 THICK #SV-330 LE | 1.000 ea |
| 51XB1016A07 | 10-16 X 7/16 HXWSSLD SERTYB | 2.000 ea |
| 11XW1032G06 | 10-32 X .38, TAPTITE II, HEX WSHR SLTD U | 1.000 ea |
| 35EP3122A00 | MASTER ODE,203 BRG,.683SH,#26 DRN,GRSR,F | 1.000 ea |
| HW4500A01 | 1641B(ALEMITE)400 UNIV, GREASE FITT | 1.000 ea |
| HW5100A03 | WAVY WASHER (W1543-017) | 1.000 ea |
| 35EP3123F00 | MASTER DE,205 BRG,.998SH,#26 DRN,GRSR | 1.000 ea |
| HW4500A01 | 1641B(ALEMITE)400 UNIV, GREASE FITT | 1.000 ea |
| XY1032A02 | 10-32 HEX NUT DIRECTIONAL SERRATION | 4.000 ea |
| 51XB1214A16 | 12-14X1.00 HXWSSLD SERTYB | 1.000 ea |
| 35FH4005A84SP | IEC FH W/GRSR, NO DIMPLES PRIMED | 1.000 ea |
| 51XW1032A06 | 10-32 X .38, TAPTITE II, HEX WSHR SLTD S | 3.000 ea |
| 35CB4521GX | CONDUIT BOX LID KIT **ORDER INDIV PARTS | 1.000 ea |
| 51XW0832A07 | 8-32 X .44, TAPTITE II, HEX WSHR SLTD SE | 4.000 ea |
| HW2501D13 | KEY, 3/16 SQ X 1.375 | 1.000 ea |
| HA7000A01 | KEY RETAINER 7/8" DIA SHAFT | 1.000 ea |
| 85XU0407S04 | 4X1/4 U DRIVE PIN STAINLESS | 2.000 ea |
| MJ1000A02 | GREASE, POLYREX EM EXXON | 0.050 lb |
| 35FN3002A05SP | EXFN, PLASTIC, 6.376 OD, .638 ID | 1.000 ea |
| MG1050G01 | CELEROL MEDIUM CHARCOAL METALLIC GRAY | 0.017 ga |
| HA3100A18 | THRUBOLT 10-32 X 9.250 | 4.000 ea |
| LB1624 | COMBINED WARNING LABEL, ISO/ANSI PICTOGR | 1.000 ea |
| LC0032 | CONNECTION LABEL | 1.000 ea |
| NP1256L | ALUM UL CC INDUSTRIAL MOTOR A60 | 1.000 ea |
| 36PA1000 | PKG GRP, PRINT PK1016A08 | 1.000 ea |
| MN416A01 | TAG-INSTAL-MAINT no wire (2500 bx)11/25 | 1.000 ea |
| FE-0000001 | ZRTG FE ASSEMBLY | 1.000 ea |

| | | |
|---|---|---|
| PE-0000001 | ZRTG PE ASSEMBLY | 1.000 ea |

**Accessories**

| Part number | Description | Multiplier |
|---|---|---|
| 35-8762 | C FACE KIT | A8 |
| 35EP1506A01SP | D-FLANGE KIT | A8 |

**AC Induction Motor Performance Data**
Record # 87900
Typical performance - not guaranteed values

| **Winding:** 35WGG366-R001 | **Type:** 3524M | **Enclosure:** TEFC |
|---|---|---|

| **Nameplate Data** | | | | **230 V, 60 Hz: Low Speed Connection** | |
|---|---|---|---|---|---|
| **Rated Output (HP)** | | | 1/.5 | **Full Load Torque** | 3.01 LB-FT |
| **Volts** | | | 208-230 | **Start Configuration** | direct on line |
| **Full Load Amps** | | | 2.74/3.54 | **Breakdown Torque** | 12.8 LB-FT |
| **R.P.M.** | | | 1715/870 | **Pull-up Torque** | 8.21 LB-FT |
| **Hz** | 60 | **Phase** | 3 | **Locked-rotor Torque** | 9.46 LB-FT |
| **NEMA Design Code** | B | **KVA Code** | H | **Starting Current** | 12.8 A |
| **Service Factor (S.F.)** | | | 1.15 | **No-load Current** | 3.51 A |
| **NEMA Nom. Eff.** | 0 | **Power Factor** | 0 | **Line-line Res. @ 25ºC** | 10.2 Ω |
| **Rating - Duty** | | | 40C AMB-CONT | **Temp. Rise @ Rated Load** | |
| | | | | **Locked-rotor Power Factor** | 80.4 |
| | | | | **Rotor inertia** | 0.173 lb-ft² |

**Load Characteristics 230 V, 60 Hz, 0.5 HP**

| **% of Rated Load** | **25** | **50** | **75** | **100** | **125** | **150** | **S.F.** |
|---|---|---|---|---|---|---|---|
| **Power Factor** | 23 | 30 | 37 | 44 | 50 | 56 | 48 |
| **Efficiency** | 29 | 44.5 | 53.7 | 59.4 | 62.9 | 64.9 | 61.5 |
| **Speed** | 893.2 | 887.2 | 880.9 | 874.1 | 866.9 | 858.9 | 870 |
| **Line amperes** | 3.5 | 3.51 | 3.55 | 3.61 | 3.72 | 3.86 | 3.68 |

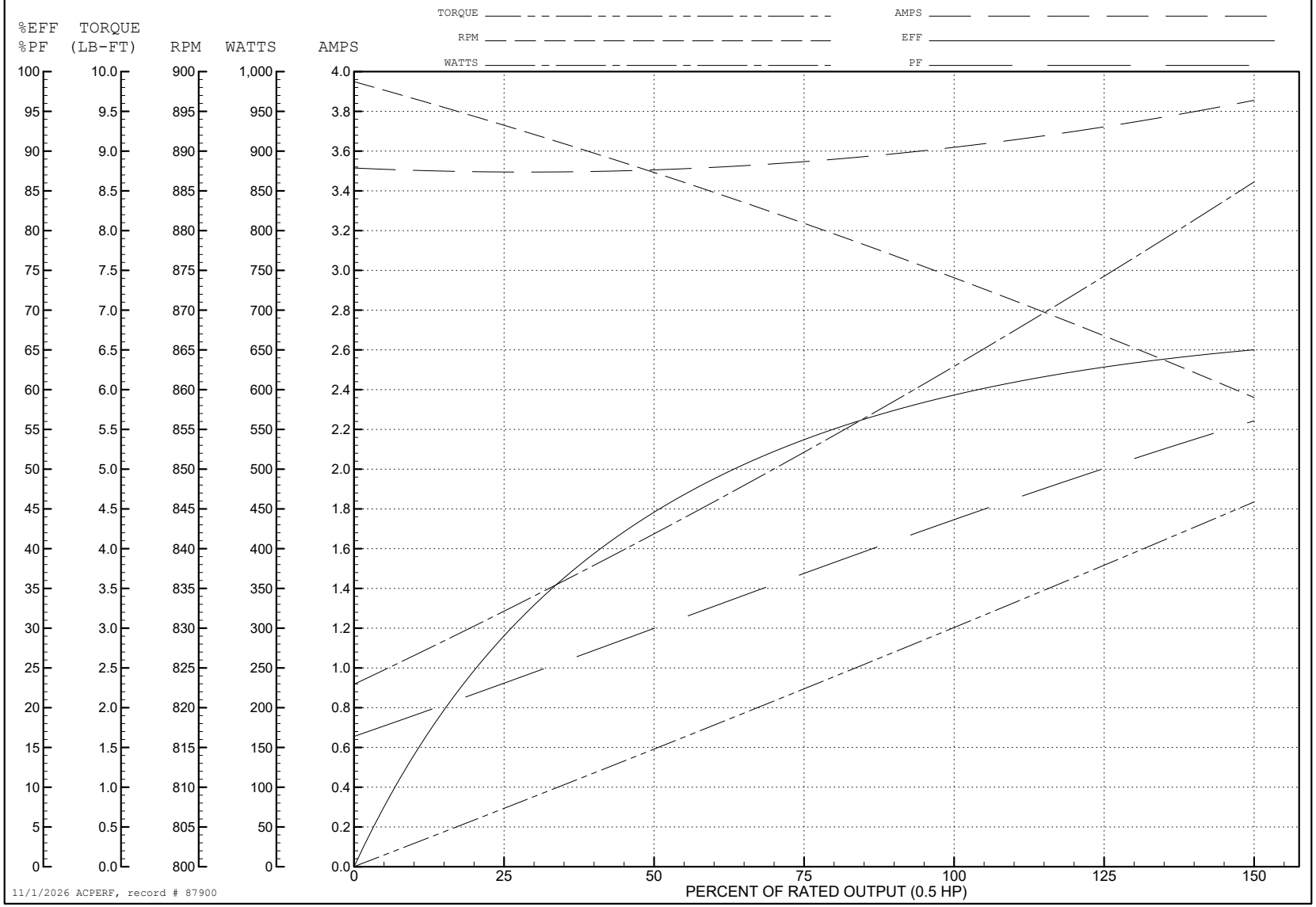
ABB Motors and Mechanical Inc.

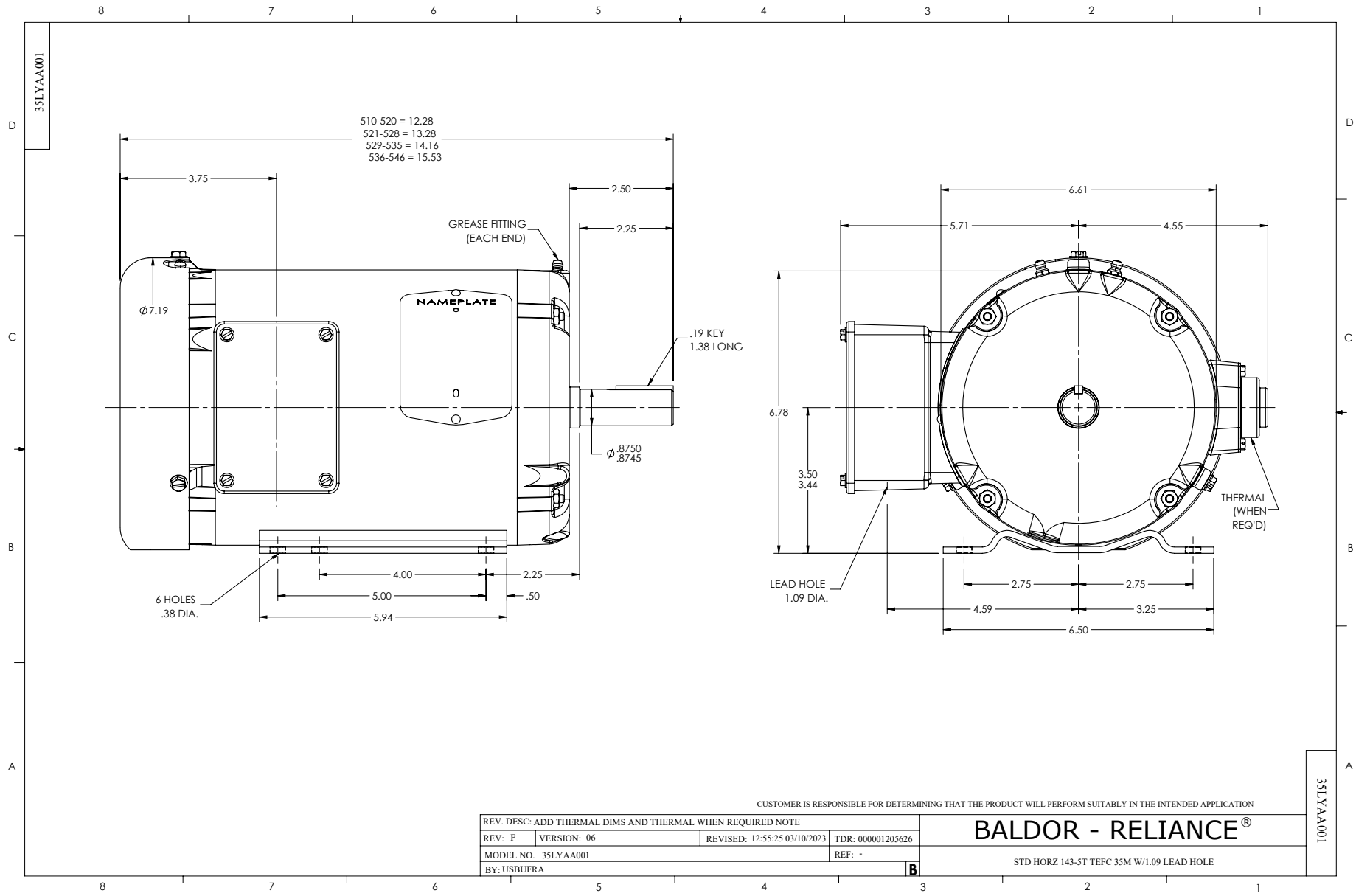
WINDING # 35WGG366

0.5 HP 3 PH 60 HZ 874.1 RPM 230 V 3524M

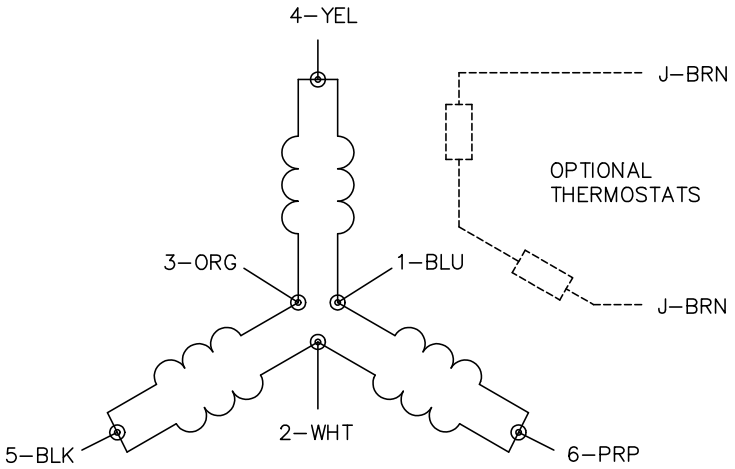
Typical performance - not guaranteed values.

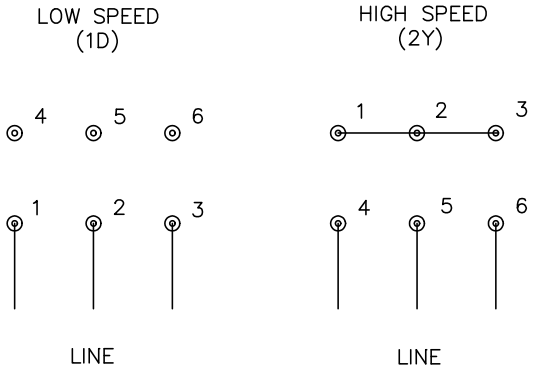
TORQUES(LB-FT): PO=12.8 PU=8.21 LR=9.46 LRA=12.8




35LYAA001
510-520 = 12.28
521-528 = 13.28
529-535 = 14.16
536-546 = 15.53
3.75
2.50
2.25
GREASE FITTING
(EACH END)
NAMEPLATE
Ø7.19
.19 KEY
1.38 LONG
Ø .8750
.8745
4.00
2.25
5.00
.50
5.94
6 HOLES
.38 DIA.
6.61
5.71
4.55
6.78
3.50
3.44
THERMAL
(WHEN
REQ'D)
LEAD HOLE
1.09 DIA.
2.75
2.75
4.59
3.25
6.50
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT THE PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION
REV. DESC: ADD THERMAL DIMS AND THERMAL WHEN REQUIRED NOTE
REV: F
VERSION: 06
REVISED: 12:55:25 03/10/2023
TDR: 000001205626
MODEL NO. 35LYAA001
REF: -
BY: USBUFRA
B
BALDOR - RELIANCE®
STD HORZ 143-5T TEFC 35M W/1.09 LEAD HOLE
35LYAA001

CD0011




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.

CD0011

| | | | |
|---|---|---|---|
| REV. DESC: REVISE TO SHOW OPTIONAL COLORS | | | BALDOR ELECTRIC Co. |
| REV. LTR: F | BY: JLP | REVISED: 01/21/99 5:04 | TDR: 0171435 |
| CD0011 | | FILE: DWG\142.wg | MDL: – |
| | | MTL: – | 3PH, SV, 6 LEADS, 2–SPEED 1–WINDING CONSTANT TORQUE |