ABB BALDOR RELIANCE

# Customer information packet

## CFSWDM3559T-E

3HP, 3470RPM, 3PH, 60HZ, 145TC, 3546M, TEFC, F1
Class - None
Division - Not Applicable

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## Specifications

| | |
|---|---|
| **Enclosure** | TEFC |
| **Frame** | 145TC |
| **Frame Material** | Stainless Steel |
| **Frequency** | 60.00 Hz |
| **Haz Area Class and Group** | None |
| **Haz Area Division** | Not Applicable |
| **Motor Letter Type** | Three Phase |
| **Output @ Frequency** | 3.000 HP @ 60 HZ |
| **Phase** | 3 |
| **Synchronous Speed @ Frequency** | 3600 RPM @ 60 HZ |
| **Voltage @ Frequency** | 230.0 V @ 60 HZ |
| | 460.0 V @ 60 HZ |
| **Agency Approvals** | UR |
| | CSA |
| **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** | 3.700 A @ 460.0 V |
| | 7.400 A @ 230.0 V |
| | 7.700 A @ 208.0 V |
| **Design Code** | A |
| **Drip Cover** | No Drip Cover |
| **Duty Rating** | CONT |
| **Efficiency @ 100% Load** | 86.5 % |
| **Electrically Isolated Bearing** | Not Electrically Isolated |
| **Feedback Device** | NO FEEDBACK |
| **Front Face Code** | Standard |
| **Front Shaft Indicator** | None |
| **Heater Indicator** | No Heater |

## Part Detail

| | |
|---|---|
| **Revision** | L |
| **Type** | AC |
| **Mech. spec.** | 35E4743 |
| **Base** | |
| **Status** | PRD/A |
| **Elec. spec.** | 35WGR930 |
| **Layout** | 35LYE4743 |
| **Eff. date** | 08-14-2023 |
| **CD Diagram** | CD0005 |
| **Poles** | 02 |
| **Leads** | 9#18,0#,0#,0# Y |
| **Proprietary** | False |
| **Created date** | 07-28-2017 |

| | |
|---|---|
| **High Voltage Full Load Amps** | 3.7 a |
| **Insulation Class** | H |
| **Inverter Code** | Inverter Ready |
| **KVA Code** | P |
| **Lifting Lugs** | No Lifting Lugs |
| **Locked Bearing Indicator** | Locked Bearing |
| **Motor Finish** | UNPAINTED |
| **Motor Lead Exit** | Ko Box |
| **Motor Lead Quantity/Wire Size** | @ 0 AWG<br>9 @ 18 AWG |
| **Motor Lead Termination** | Flying Leads |
| **Motor Standards** | NEMA |
| **Motor Type** | 3546M |
| **Mounting Arrangement** | F1 |
| **Number of Poles** | 2 |
| **Overall Length** | 16.28 IN |
| **Power Factor** | 91 |
| **Product Family** | WD All SS Encapsulated |
| **Pulley End Bearing Type** | Sealed Bearing |
| **Pulley Face Code** | C-Face |
| **Pulley Shaft Indicator** | Standard |
| **Rodent Screen** | None |
| **RoHS Status** | ROHS COMPLIANT |
| **Service Factor** | 1.15 |
| **Shaft Diameter** | 0.875 IN |
| **Shaft Extension Location** | Pulley End |
| **Shaft Ground Indicator** | No Shaft Grounding |
| **Shaft Rotation** | Reversible |
| **Shaft Slinger Indicator** | No Slinger |
| **Speed** | 3470 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**

| NP4427AAA01 | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **CAT #** | CFSWDM3559T-E | | | **WT** | 61 | **LBS** | | | | | | |
| **SPEC** | 35E4743R930G2 | | | **ENCL** | TEFC | | | | | | | |
| **SER #** | | | | **CC** | 010A | **IP** | 69 | | | | | |
| **HP** | 3 | | | **MAG CUR** | 2.6/1.3 | | | | | | | |
| **VOLTS** | 230/460 | | | | | **NEMA NOM. EFF** | 86.5 | | | | | |
| **AMPS** | 7.4/3.7 | | | | | **PF** | 91 | | | | | |
| **RATING** | 40C AMB-CONT | | | | | | | | | | | |
| **RPM** | 3470 | | | | **MAX RPM** | 5400 | | | | | | |
| **FRAME** | 145TC | **HZ** | 60 | **CODE** | P | **CLASS** | H | | | | | |
| **SER.F.** | 1.15 | **SF AMP** | | | | **PH** | 3 | **DES** | A | | | |
| **DE** | 6205 | | | **ODE** | 6205 | | | | | | | |
| **LUBRICATION** | POLYREX EM | | | | | | | | | | | |
| **ID LOGO** | | **INVERTER TYPE** | | **VPWM** | | **CHP** | 60 | **TO** | 90 | | 1.5:1 | |
| **ID LOGO** | **WK2** | 0.127 | **CT** | 15 | **TO** | 60 | | 4:1 | | | | |
| **ID LOGO** | **SL HZ** | 2.2 | **VT** | 3 | **TO** | 60 | | 20:1 | | | | |
| | | | | | | | | | | | | |
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| | | | | | | | | | | | | |
| | | | | | | **QR** | | | | | | |
| **YR** | | | | | | | | | | | | |

**Parts List**

| Part number | Description | Quantity |
|---|---|---|
| SA350712 | SA 35E4743R930G2 | 1.000 ea |
| RA339376 | RA 35E4743R930G2 | 1.000 ea |
| 34FN3002A01SP | EXTERNAL FAN, PLASTIC, .637/.639 HUB W/ | 1.000 ea |
| 35CB1017A02 | 5/36 MID SECT - 3 PC. CONDUIT BOX 3/4 N | 1.000 ea |
| HA3424S48 | STUD - M6X1.0 THDS X 3.00" | 1.000 ea |
| 11XW1032G08 | 10-32 X .50, TAPTITE II, HEX WSHR SLTD U | 1.000 ea |
| HW3001B02 | BRASS CUP WASHER W/GROUND SYMBOL TAB, | 1.000 ea |
| 35EP1940A05 | FRONT TEFC 205 BRG (STAINLESS) | 1.000 ea |
| RM1070A25 | O-RING, VITON/FKM .070CS X 6.190ID | 1.000 ea |
| HW4600G01 | .984X1.499X.25 VITON SLICK SERIES LIP | 1.000 ea |
| HW4600E99 | 25 X 42 X 6 AFX SEAL, GRAPHITE INFUSED V | 1.000 ea |
| HW4500S33 | 1/8 NPT STAINLESS #304 SS PLUG | 4.000 ea |
| HW4500S33 | 1/8 NPT STAINLESS #304 SS PLUG | 4.000 ea |
| HW5100A05 | WVY WSHR F/205 & 304 BRGS | 1.000 ea |
| 35EP1935A02 | PULLEY 56C/143-5TC ENCL 205 BRG | 1.000 ea |
| RM1070A25 | O-RING, VITON/FKM .070CS X 6.190ID | 1.000 ea |
| HW4600G01 | .984X1.499X.25 VITON SLICK SERIES LIP | 1.000 ea |
| HW4600E99 | 25 X 42 X 6 AFX SEAL, GRAPHITE INFUSED V | 1.000 ea |
| RM1070A26 | O-RING,4.5MM I.D.X1.5MM C.S. (VITON) | 4.000 ea |
| 35FH4005A39 | IEC FH NO GREASER DEBURR/CLEAN - SS | 1.000 ea |
| 10XN1032FS06 | HEX HD CAP SCREW 10-32 X 3/8 SS FOOD SAF | 3.000 ea |
| RM1070A81 | O-RING, -043 VITON/FKM .070CS X 3.489ID | 1.000 ea |
| 35CB1513A01 | 35-36-37 MACH. LID - 3 PC. CONDUIT BOX | 1.000 ea |
| RM1070A81 | O-RING, -043 VITON/FKM .070CS X 3.489ID | 1.000 ea |
| HW2502D13 | SS KEY, 3/16 SQ X 1.375 | 1.000 ea |
| HA7000A01 | KEY RETAINER 7/8" DIA SHAFT | 1.000 ea |
| MJ5001A27 | 32220KN GRAY SEALER *MIN BUY 4 QTS=1GAL | 0.005 qt |
| MJ5004A93 | FOOD GRADE (H1 RATED) ANTISEIZE THRD COM | 0.005 ea |
| HA1025A21 | WSHR,FELT .125" THK | 1.000 ea |
| HA5027A09 | DRAIN KIT,(2)HA4002A03 BAGGED W/LABEL | 1.000 ea |
| MJ1000A02 | GREASE, POLYREX EM EXXON | 0.050 lb |

| | | |
|---|---|---|
| 19XB0818S12 | 8-18X3/4 HXWS TYB HIGH-LOW | 1.000 ea |
| WD5603A01 | KIT, CLOSED-END LEAD SPLICE (18-14GA) | 1.000 ea |
| HA3100FS61 | THRUBOLT, 10-32 X 11.750 SS FOOD SAFE | 4.000 ea |
| 36PA1001 | PKG GRP, PRINT PK1017A07 | 1.000 ea |
| MN416A01 | TAG-INSTAL-MAINT no wire (2500 bx)11/25 | 1.000 ea |
| FE-0000016 | ZTRG FE ASSEMBLY | 1.000 ea |
| PE-0000010 | ZRTG PE ASSEMBLY | 1.000 ea |

**AC Induction Motor Performance Data**
Record # 57380
Typical performance - not guaranteed values

| **Winding:** 35WGR930-R012 | **Type:** 3546M | **Enclosure:** TEFC |
|---|---|---|

| **Nameplate Data** | | | | **460 V, 60 Hz: High Voltage Connection** | |
|---|---|---|---|---|---|
| **Rated Output (HP)** | | | 3 | **Full Load Torque** | 4.5 LB-FT |
| **Volts** | | | 230/460 | **Start Configuration** | direct on line |
| **Full Load Amps** | | | 7.4/3.7 | **Breakdown Torque** | 17.2 LB-FT |
| **R.P.M.** | | | 3470 | **Pull-up Torque** | 10.5 LB-FT |
| **Hz** | 60 | **Phase** | 3 | **Locked-rotor Torque** | 17 LB-FT |
| **NEMA Design Code** | A | **KVA Code** | P | **Starting Current** | 48.3 A |
| **Service Factor (S.F.)** | | | 1.15 | **No-load Current** | 1.25 A |
| **NEMA Nom. Eff.** | 86.5 | **Power Factor** | 91 | **Line-line Res. @ 25ºC** | 3.47 Ω |
| **Rating - Duty** | | | 40C AMB-CONT | **Temp. Rise @ Rated Load** | 63°C |
| **S.F. Amps** | | | | **Temp. Rise @ S.F. Load** | 74°C |
| | | | | **Locked-rotor Power Factor** | 42.3 |
| | | | | **Rotor inertia** | 0.127 LB-FT2 |

**Load Characteristics 460 V, 60 Hz, 3 HP**

| **% of Rated Load** | **25** | **50** | **75** | **100** | **125** | **150** | **S.F.** |
|---|---|---|---|---|---|---|---|
| **Power Factor** | 59 | 79 | 87 | 90 | 91 | 90 | 91 |
| **Efficiency** | 80.1 | 86.4 | 87.3 | 86.9 | 85.7 | 83.9 | 86.2 |
| **Speed** | 3567 | 3541 | 3510 | 3479 | 3443 | 3403 | 3457 |
| **Line amperes** | 1.53 | 2.07 | 2.78 | 3.55 | 4.42 | 5.4 | 4.07 |

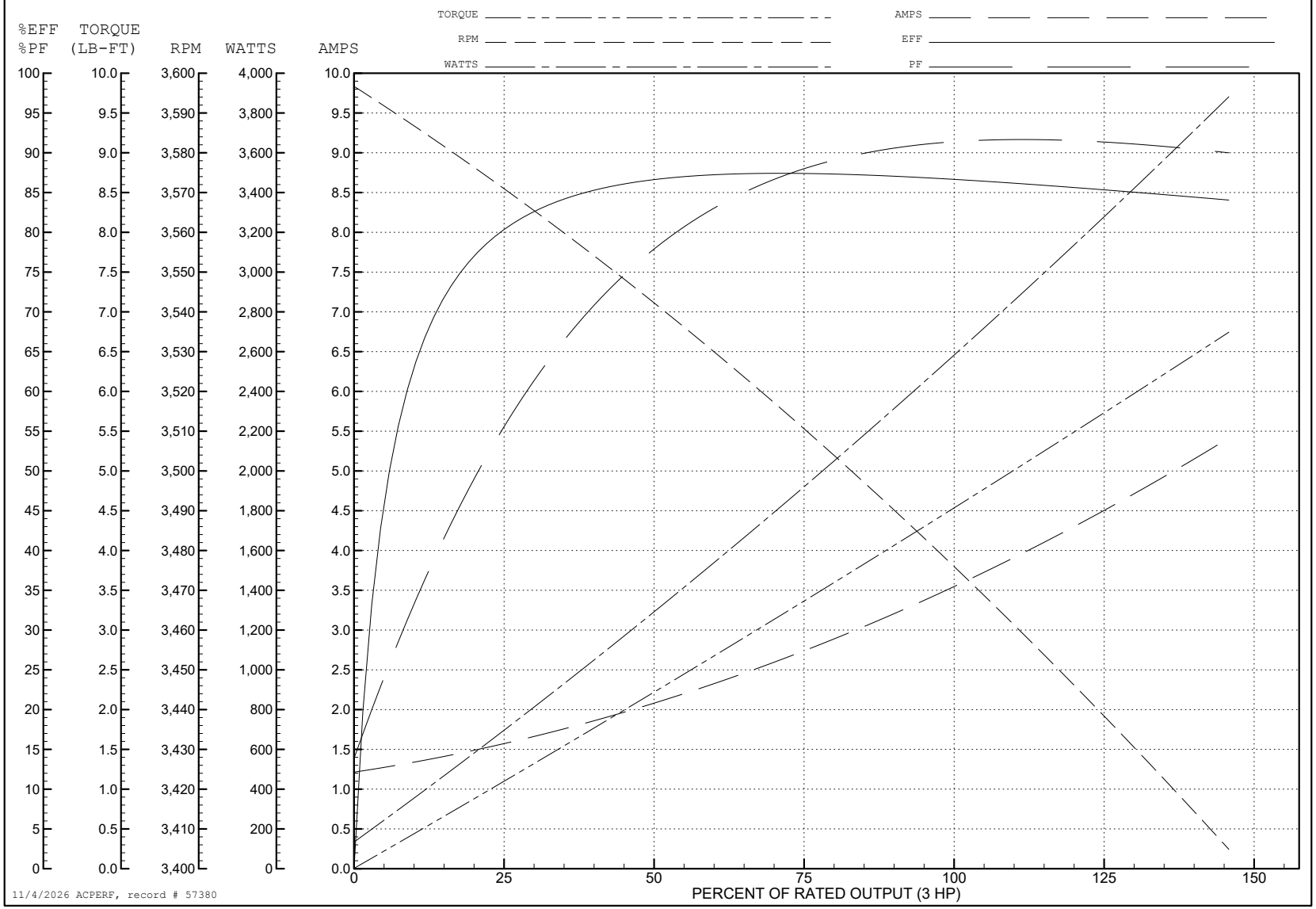
ABB Motors and Mechanical Inc.

WINDING # 35WGR930

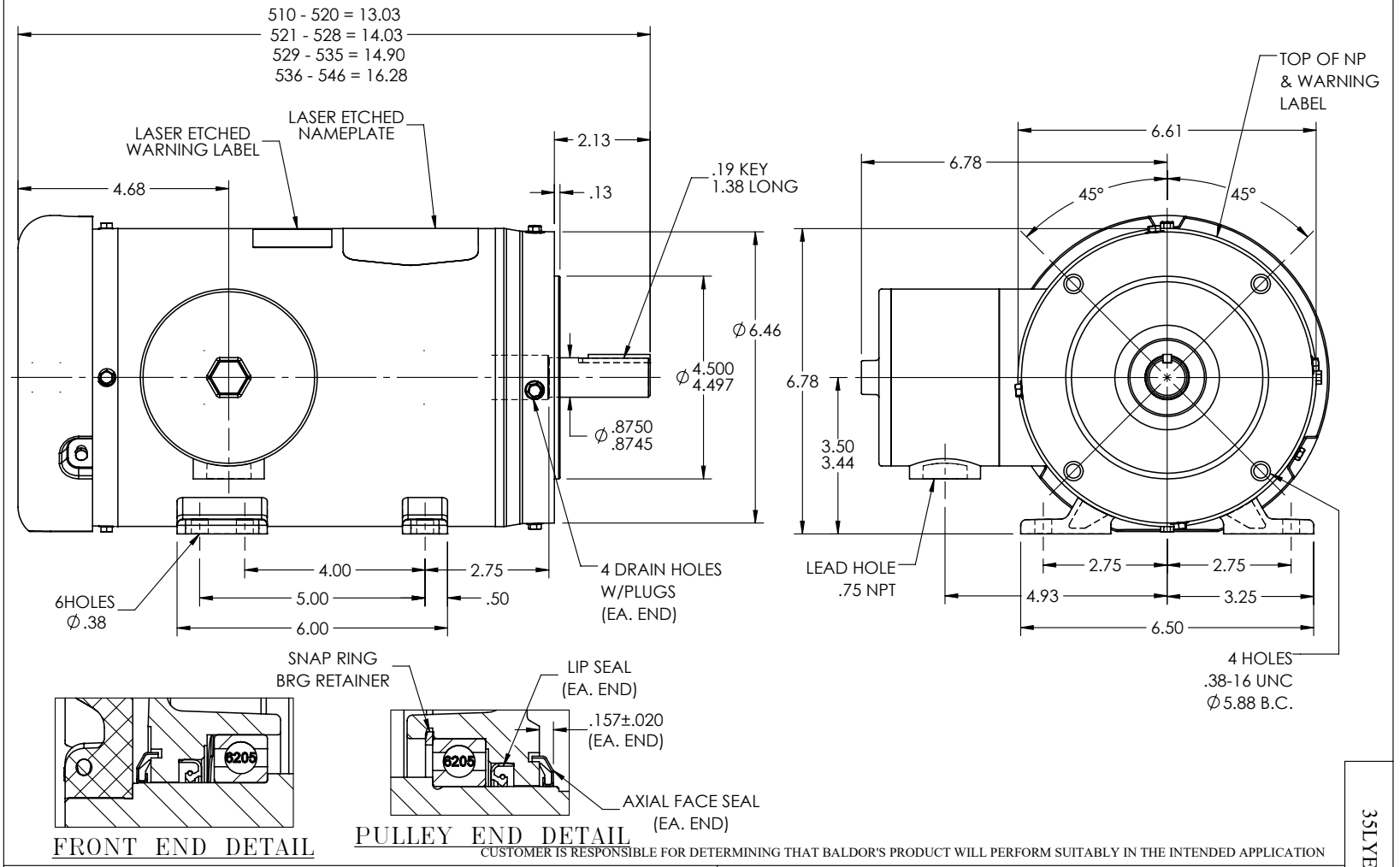
3 HP 3 PH 60 HZ 3470 RPM 460 V 3546M

Typical performance - not guaranteed values.

TORQUES(LB-FT): PO=17.2 PU=10.5 LR=17 LRA=48.3



35LYE4743



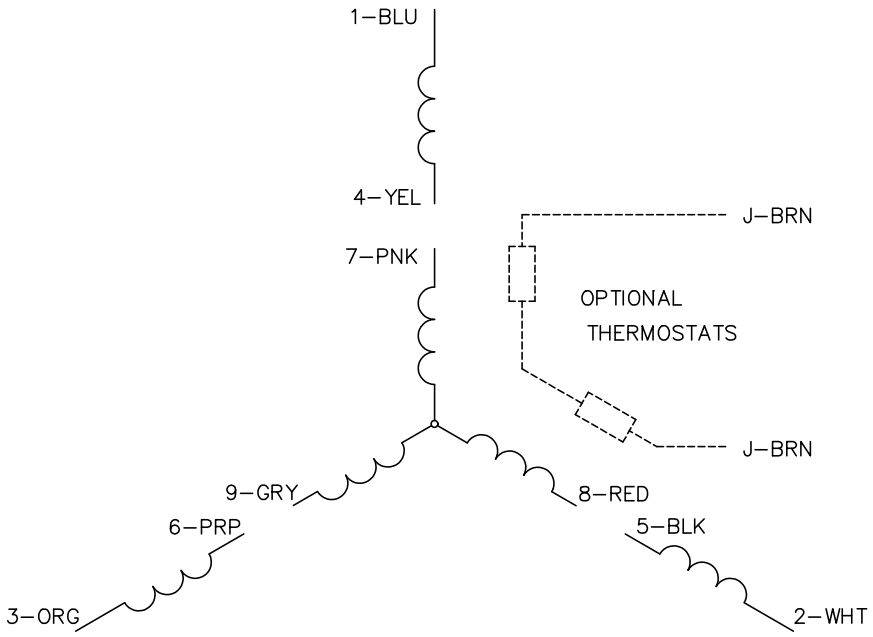

CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT BALDOR'S PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION

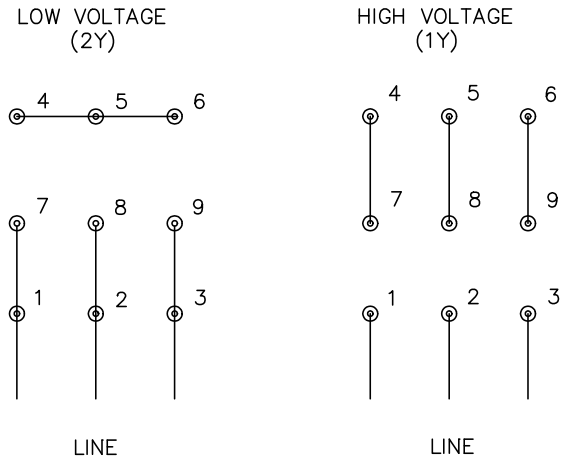
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|---|---|---|---|
| REV. DESC: ADD DIM TO AXIAL SEAL LOCATION | | | |
| REV: E | VERSION: 05 | REVISED: 01:08:57 07/23/2026 | TDR: 000001276312 |
| 35LYE4743 | MODEL NO. 35LYE4743 | | REF: - |
| | BY: USALMAZ | | STD HORZ 143-5TC TEFC 35M WD11/12 |

BALDOR

35LYE4743

CD0005




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.

CD0005

| | | | |
|---|---|---|---|
| REV. DESC: REVISE TO SHOW OPTIONAL COLORS | | | BALDOR ELECTRIC Co. |
| REV. LTR: E | BY: JLP | REVISED: 01/19/99 10:15 | TDR: 0171435 |
| CD0005 | | FILE: AAA00005140 | MDL: – |
| | | MTL: – | 3PH, DV, 9 LEADS |