ABB BALDOR RELIANCE

# Customer information packet

## CFSWDM22976T-E

7.5HP, 1180RPM, 3PH, 60HZ, 254TC, 3954M, TEFC
Class - None
Division - Not Applicable

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11/5/2026 11:28:59 AM

## Specifications

| | |
|---|---|
| **Enclosure** | TEFC |
| **Frame** | 254TC |
| **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** | 7.500 HP @ 60 HZ |
| **Phase** | 3 |
| **Synchronous Speed @ Frequency** | 1200 RPM @ 60 HZ |
| **Voltage @ Frequency** | 230.0 V @ 60 HZ |
| | 460.0 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** | 22.500 A @ 208.0 V |
| | 21.400 A @ 230.0 V |
| | 10.700 A @ 460.0 V |
| **Design Code** | A |
| **Drip Cover** | No Drip Cover |
| **Duty Rating** | CONT |
| **Efficiency @ 100% Load** | 91.0 % |
| **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** | X |
| **Type** | AC |
| **Mech. spec.** | 39E646 |
| **Base** | |
| **Status** | PRD/A |
| **Elec. spec.** | 39WGX429 |
| **Layout** | 39LYE646 |
| **Eff. date** | 02-10-2025 |
| **CD Diagram** | CD0005 |
| **Poles** | 06 |
| **Leads** | 9#12 |
| **Proprietary** | False |
| **Created date** | 08-08-2017 |

| | |
|---|---|
| **High Voltage Full Load Amps** | 10.7 a |
| **Insulation Class** | H |
| **Inverter Code** | Inverter Ready |
| **KVA Code** | J |
| **Lifting Lugs** | Standard Lifting Lugs |
| **Locked Bearing Indicator** | Locked Bearing |
| **Motor Lead Exit** | Ko Box |
| **Motor Lead Quantity/Wire Size** | 9 @ 12 AWG |
| **Motor Lead Termination** | Flying Leads |
| **Motor Standards** | NEMA |
| **Motor Type** | 3954M |
| **Mounting Arrangement** | F1 |
| **Number of Poles** | 6 |
| **Overall Length** | 24.18 IN |
| **Power Factor** | 71 |
| **Product Family** | WD All SS Encapsulated |
| **Pulley End Bearing Type** | Sealed Bearing |
| **Pulley Face Code** | C-Face |
| **Pulley Shaft Indicator** | Standard |
| **Rodent Screen** | None |
| **Service Factor** | 1.15 |
| **Shaft Diameter** | 1.625 IN |
| **Shaft Extension Location** | Pulley End |
| **Shaft Ground Indicator** | No Shaft Grounding |
| **Shaft Rotation** | Reversible |
| **Shaft Slinger Indicator** | No Slinger |
| **Speed** | 1180 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 #** | CFSWDM22976T-E | | | | **WT** | 255 | **LBS** | | | | | | |
| **SPEC** | 39E646X429G1 | | | | **ENCL** | TEFC | | | | | | | |
| **SER #** | | | | | **CC** | 010A | **IP** | 69 | | | | | |
| **HP** | 7.5 | | | **MAG CUR** | 11/5.5 | | | | | | | | |
| **VOLTS** | 230/460 | | | | | | **NEMA NOM. EFF** | 91 | | | | | |
| **AMPS** | 21.4/10.7 | | | | | | **PF** | 71 | | | | | |
| **RATING** | 40C AMB-CONT | | | | | | | | | | | | |
| **RPM** | 1180 | | | | **MAX RPM** | 1800 | | | | | | | |
| **FRAME** | 254TC | **HZ** | 60 | | **CODE** | J | **CLASS** | H | | | | | |
| **SER.F.** | 1.15 | **SF AMP** | | | | | **PH** | 3 | **DES** | A | | | |
| **DE** | 6309 | | | **ODE** | 6309 | | | | | | | | |
| **LUBRICATION** | POLYREX EM | | | | | | | | | | | | |
| **ID LOGO** | **INVERTER TYPE** | | | **VPWM** | | **CHP** | 60 | **TO** | 90 | 1.5:1 | | | |
| **ID LOGO** | **WK2** | 4.34 | **CT** | 30 | **TO** | 60 | 2:1 | | | | | | |
| **ID LOGO** | **SL HZ** | 1 | **VT** | 6 | **TO** | 60 | 10:1 | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | **QR** | | | | | | |
| **YR** | | | | | | | | | | | | | |

**AC Induction Motor Performance Data**
Record # 54940
Typical performance - not guaranteed values

| **Winding:** 39WGX429-R006 | **Type:** 3954M | **Enclosure:** TEFC |
|---|---|---|

| **Nameplate Data** | | | | **460 V, 60 Hz: High Voltage Connection** | |
|---|---|---|---|---|---|
| **Rated Output (HP)** | | | 7.5 | **Full Load Torque** | 33.3 LB-FT |
| **Volts** | | | 230/460 | **Start Configuration** | direct on line |
| **Full Load Amps** | | | 21.4/10.7 | **Breakdown Torque** | 99.5 LB-FT |
| **R.P.M.** | | | 1180 | **Pull-up Torque** | 39.7 LB-FT |
| **Hz** | 60 | **Phase** | 3 | **Locked-rotor Torque** | 58.4 LB-FT |
| **NEMA Design Code** | A | **KVA Code** | J | **Starting Current** | 70.1 A |
| **Service Factor (S.F.)** | | | 1.15 | **No-load Current** | 5.52 A |
| **NEMA Nom. Eff.** | 91 | **Power Factor** | 71 | **Line-line Res. @ 25ºC** | 0.895 Ω |
| **Rating - Duty** | | | 40C AMB-CONT | **Temp. Rise @ Rated Load** | 51°C |
| **S.F. Amps** | | | | **Temp. Rise @ S.F. Load** | 61°C |
| | | | | **Locked-rotor Power Factor** | 25.8 |
| | | | | **Rotor inertia** | 4.34 LB-FT2 |

**Load Characteristics 460 V, 60 Hz, 7.5 HP**

| **% of Rated Load** | **25** | **50** | **75** | **100** | **125** | **150** | **S.F.** |
|---|---|---|---|---|---|---|---|
| **Power Factor** | 33 | 53 | 65 | 71 | 74 | 75 | 73 |
| **Efficiency** | 84.9 | 90.6 | 91.8 | 91.5 | 91.4 | 90.5 | 91.6 |
| **Speed** | 1196 | 1192 | 1188 | 1183 | 1178 | 1173 | 1180 |
| **Line amperes** | 6.25 | 7.28 | 8.82 | 10.72 | 12.91 | 15.5 | 12.03 |

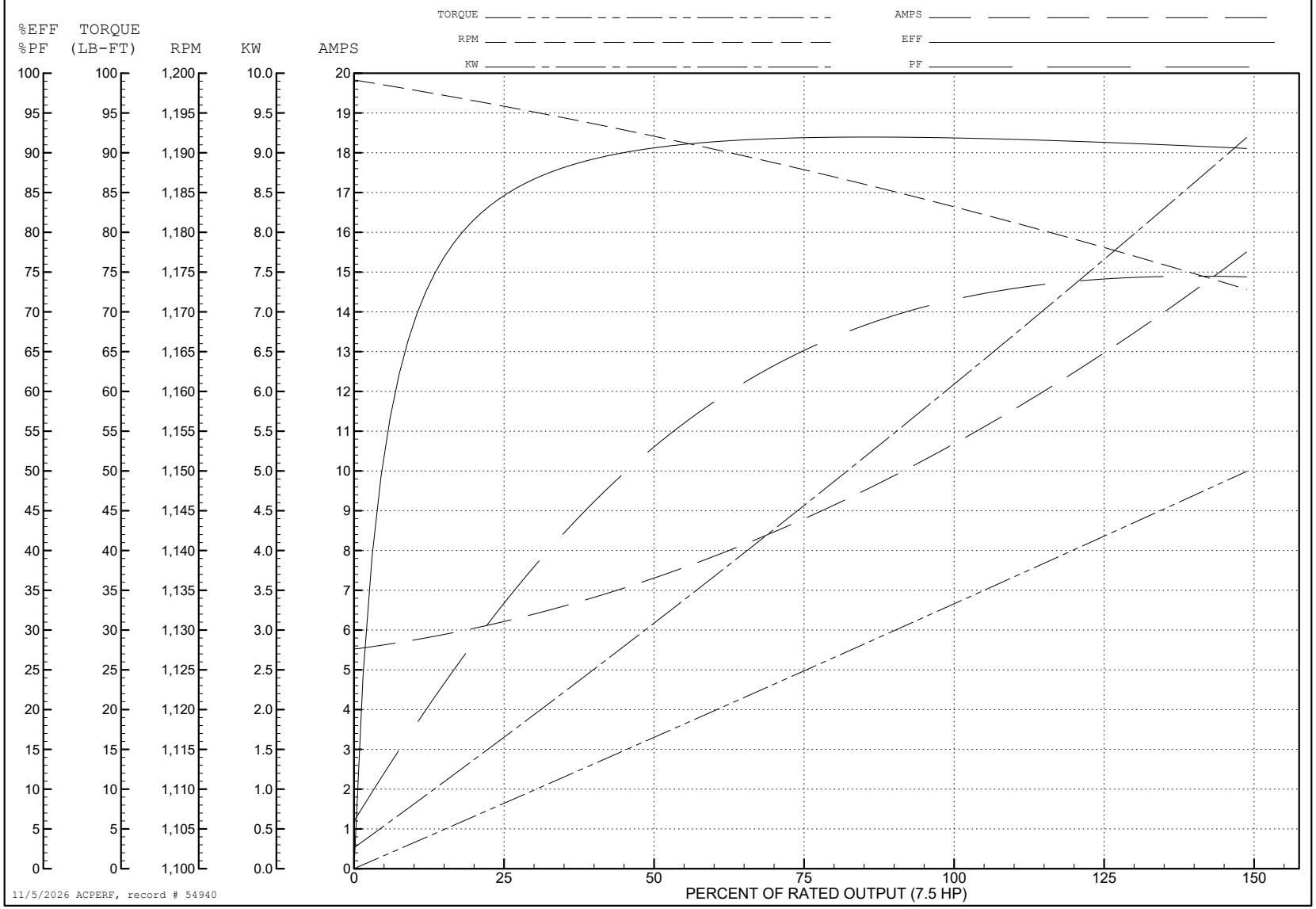
ABB Motors and Mechanical Inc.

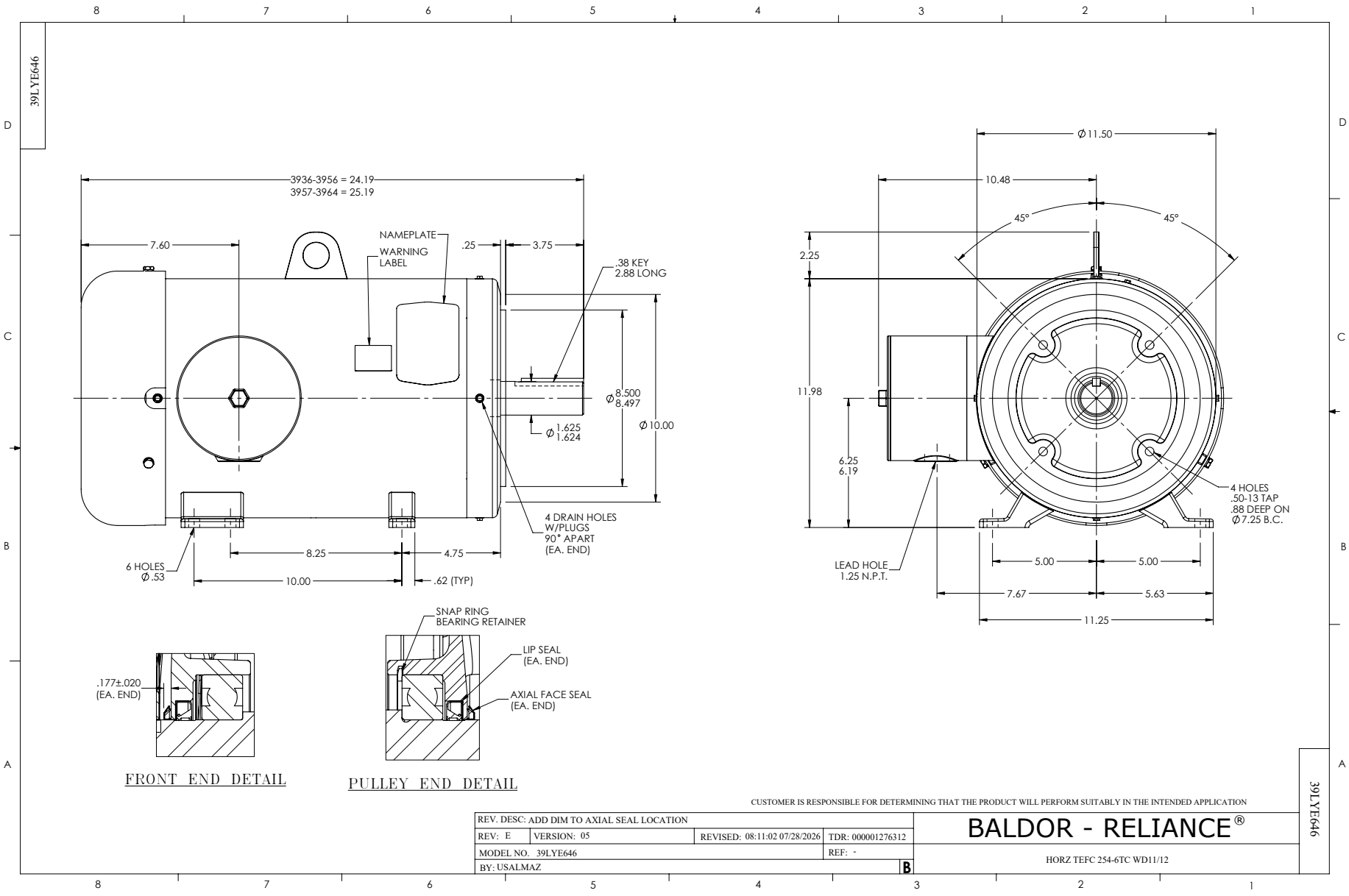
WINDING # 39WGX429

7.5 HP 3 PH 60 HZ 1180 RPM 460 V 3954M

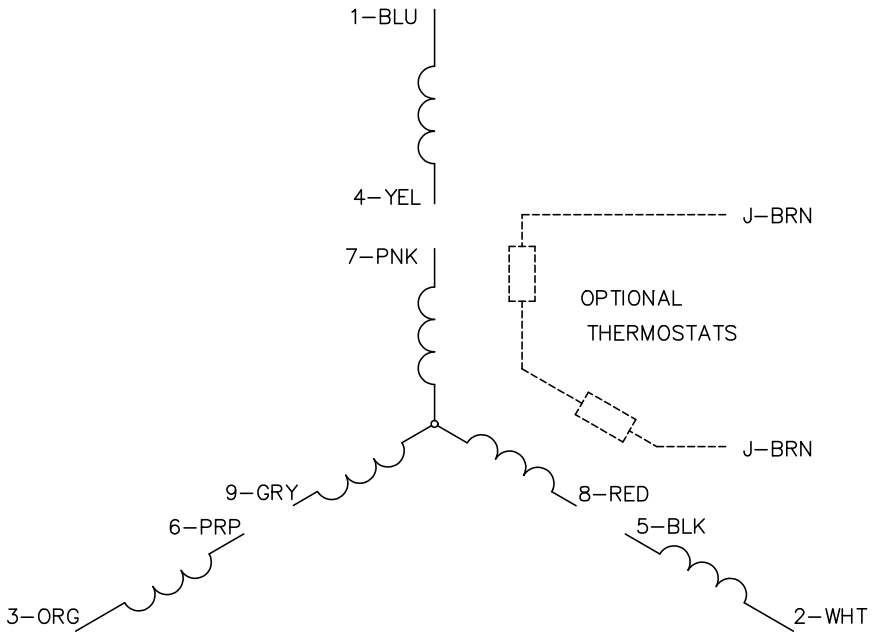
Typical performance - not guaranteed values.

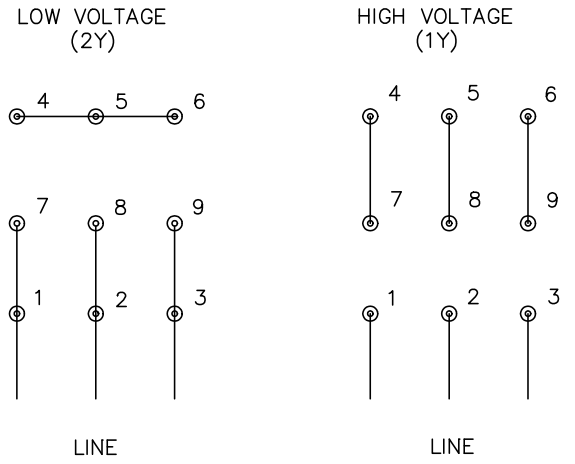
TORQUES(LB-FT): PO=99.5 PU=39.7 LR=58.4 LRA=70.1




39LYE646
3936-3956 = 24.19
3957-3964 = 25.19
7.60
NAMEPLATE
WARNING LABEL
.25
3.75
.38 KEY
2.88 LONG
Ø 8.500
8.497
Ø 1.625
1.624
Ø 10.00
4 DRAIN HOLES
W/PLUGS
90° APART
(EA. END)
6 HOLES
Ø .53
8.25
4.75
10.00
.62 (TYP)
Ø 11.50
10.48
45°
45°
2.25
11.98
6.25
6.19
4 HOLES
.50-13 TAP
.88 DEEP ON
Ø 7.25 B.C.
LEAD HOLE
1.25 N.P.T.
5.00
5.00
7.67
5.63
11.25
SNAP RING
BEARING RETAINER
LIP SEAL
(EA. END)
AXIAL FACE SEAL
(EA. END)
.177±.020
(EA. END)
FRONT END DETAIL
PULLEY END DETAIL
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT THE PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION
REV. DESC: ADD DIM TO AXIAL SEAL LOCATION
REV: E
VERSION: 05
REVISED: 08:11:02 07/28/2026
TDR: 000001276312
MODEL NO. 39LYE646
REF: -
BY: USALMAZ
B
BALDOR - RELIANCE®
HORZ TEFC 254-6TC WD11/12
39LYE646

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

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