ABB BALDOR RELIANCE

# Customer information packet

610490001AH

.75HP, 3450//2850RPM, 3PH, 60//50HZ, 56C, 351
Class - None
Division - Not Applicable

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## Specifications

| | |
|---|---|
| **Enclosure** | TENV |
| **Frame** | 56C |
| **Frame Material** | Steel |
| **Frequency** | 50.00 Hz |
| | 60.00 Hz |
| **Haz Area Class and Group** | None |
| **Haz Area Division** | Not Applicable |
| **Motor Letter Type** | Three Phase |
| **Output @ Frequency** | .750 HP @ 50 HZ |
| | .750 HP @ 60 HZ |
| **Phase** | 3 |
| **Synchronous Speed @ Frequency** | 3000 RPM @ 50 HZ |
| **Voltage @ Frequency** | 460.0 V @ 60 HZ |
| | 240.0 V @ 50 HZ |
| | 230.0 V @ 60 HZ |
| | 480.0 V @ 50 HZ |
| **Agency Approvals** | CSA |
| | CE |
| | UR |
| | WEEE |
| **Ambient Temperature** | 40 °C |
| **Auxiliary Box** | NO AUXILLARY BOX |
| **Auxiliary Box Lead Termination** | None |
| **Base Indicator** | No Mounting |
| **Bearing Grease Type** | Polyrex EM (-20F +300F) |
| **Blower** | None |
| **Current @ Voltage** | 2.200 A @ 230.0 V |
| | 2.400 A @ 240.0 V |
| | 1.200 A @ 480.0 V |
| | 1.100 A @ 460.0 V |
| **Design Code** | B |
| **Drip Cover** | No Drip Cover |

## Part Detail

| | |
|---|---|
| **Revision** | Y |
| **Type** | AC |
| **Mech. spec.** | 35W577 |
| **Base** | |
| **Status** | PRD/A |
| **Elec. spec.** | 35WG1202 |
| **Layout** | 35LYW577 |
| **Eff. date** | 09-16-2026 |
| **CD Diagram** | CD0005 |
| **Poles** | 02 |
| **Leads** | 9#18 |
| **Proprietary** | False |
| **Created date** | 06-18-2007 |

| | |
|---|---|
| **Duty Rating** | CONT |
| **Efficiency @ 100% Load** | 80.0 % |
| **Electrically Isolated Bearing** | Not Electrically Isolated |
| **Feedback Device** | NO FEEDBACK |
| **Front Face Code** | Standard |
| **Front Shaft Indicator** | None |
| **Heater Indicator** | No Heater |
| **High Voltage Full Load Amps** | 1.1 a |
| **Insulation Class** | F |
| **Inverter Code** | Not Inverter |
| **KVA Code** | J |
| **Lifting Lugs** | No Lifting Lugs |
| **Locked Bearing Indicator** | Locked Bearing |
| **Motor Lead Exit** | Ko Box |
| **Motor Lead Quantity/Wire Size** | 9 @ 18 AWG |
| **Motor Lead Termination** | Flying Leads |
| **Motor Standards** | NEMA |
| **Motor Type** | 3516M |
| **Mounting Arrangement** | F1 |
| **Number of Poles** | 2 |
| **Overall Length** | 11.06 IN |
| **Power Factor** | 86 |
| **Product Family** | Chemical Processing (Not DC) |
| **Pulley End Bearing Type** | Ball |
| **Pulley Face Code** | C-Face |
| **Pulley Shaft Indicator** | Standard |
| **Rodent Screen** | None |
| **RoHS Status** | ROHS COMPLIANT |
| **Service Factor** | 1.15 |
| **Shaft Diameter** | 0.625 IN |
| **Shaft Extension Location** | Pulley End |
| **Shaft Ground Indicator** | No Shaft Grounding |
| **Shaft Rotation** | Reversible |
| **Shaft Slinger Indicator** | Shaft Slinger |

| | |
|---|---|
| **Speed** | 2850 rpm |
| | 3450 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**

| NP2403 | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **CAT.NO.** | 610490001AH | | | | | | | | |
| **SPEC.** | 35W577-1202G1 | | | | | | | | |
| **HP** | .75/KW.55 | | | | | | | | |
| **VOLTS** | 230/460//240/480 | | | | | | | | |
| **AMP** | 2.2/1.1//2.4/1.2 | | | | | | | | |
| **RPM** | 3450//2850 1/MIN | | | | | | | | |
| **FRAME** | 56C | **HZ** | 60//50 | | **PH** | 3 | | | |
| **SER.F.** | 1.15 | **CODE** | J | **DES** | B | **CL** | F | | |
| **NEMA-NOM-EFF** | 80 | **PF** | 86 | | | | | | |
| **RATING** | 40C AMB-CONT | | | | | | | | |
| **CC** | | | | **USABLE AT 208V** | | N/A | | | |
| **DE** | 6205 | **ODE** | 6203 | | | | | | |
| **ENCL** | TENV | **SN** | | | | | | | |
| | IP55 IC410 18KG | | | | | | | | |

**AC Induction Motor Performance Data**
Record # 74369
Typical performance - not guaranteed values

| **Winding:** 35WG1202-R012 | **Type:** 3516M | **Enclosure:** TENV |
|---|---|---|

| **Nameplate Data** | | | | **460 V, 60 Hz: High Voltage Connection** | |
|---|---|---|---|---|---|
| **Rated Output (HP)** | | | .75 | **Full Load Torque** | 1.14 LB-FT |
| **Volts** | | | 230/460//240/480 | **Start Configuration** | direct on line |
| **Full Load Amps** | | | 2.2/1.1//2.4/1.2 | **Breakdown Torque** | 4.5 LB-FT |
| **R.P.M.** | | | 3450//2850 | **Pull-up Torque** | 2.6 LB-FT |
| **Hz** | 60//50 | **Phase** | 3 | **Locked-rotor Torque** | 3.5 LB-FT |
| **NEMA Design Code** | B | **KVA Code** | J | **Starting Current** | 8.1 A |
| **Service Factor (S.F.)** | | | 1.15 | **No-load Current** | 0.5 A |
| **NEMA Nom. Eff.** | 80 | **Power Factor** | 86 | **Line-line Res. @ 25ºC** | 27.1 Ω |
| **Rating - Duty** | | | 40C AMB-CONT | **Temp. Rise @ Rated Load** | 63°C |
| **S.F. Amps** | | | | **Temp. Rise @ S.F. Load** | 73°C |
| | | | | **Locked-rotor Power Factor** | 66.5 |
| | | | | **Rotor inertia** | 0.0443 LB-FT2 |

**Load Characteristics 460 V, 60 Hz, 0.75 HP**

| **% of Rated Load** | **25** | **50** | **75** | **100** | **125** | **150** | **S.F.** |
|---|---|---|---|---|---|---|---|
| **Power Factor** | 50 | 65 | 77 | 81 | 85 | 88 | 83 |
| **Efficiency** | 60.3 | 73.2 | 76.9 | 79.2 | 79.3 | 78.6 | 79.3 |
| **Speed** | 3561 | 3535 | 3510 | 3474 | 3450 | 3409 | 3460 |
| **Line amperes** | 0.6 | 0.75 | 0.9 | 1.1 | 1.3 | 1.5 | 1.22 |

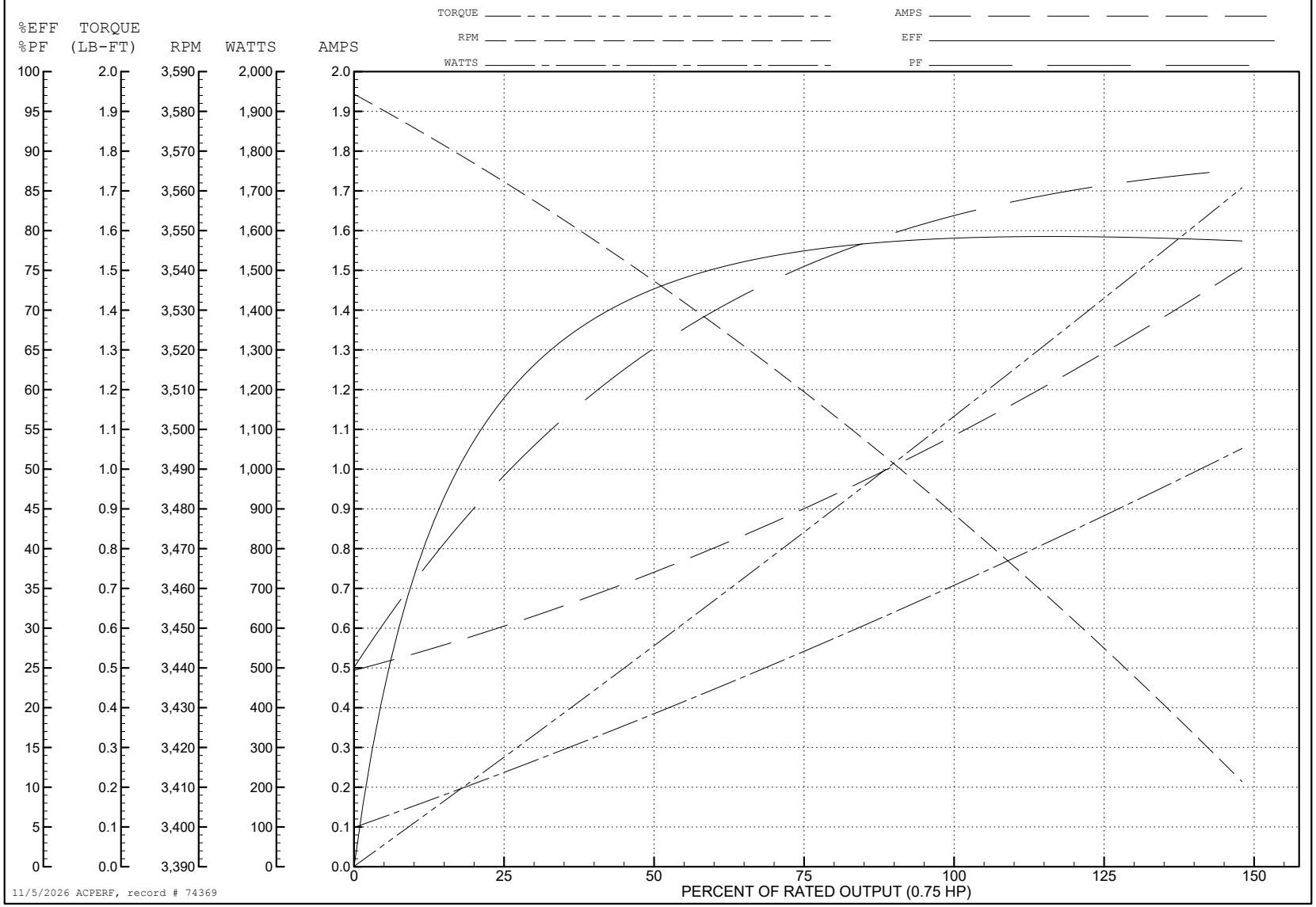
ABB Motors and Mechanical Inc.

WINDING # 35WG1202

0.75 HP 3 PH 60 HZ 3474 RPM 460 V 3516M

Typical performance - not guaranteed values.

TORQUES(LB-FT): PO=4.5 PU=2.6 LR=3.5 LRA=8.1



**AC Induction Motor Performance Data**
Record # 74370
Typical performance - not guaranteed values

| **Winding:** 35WG1202-R012 | **Type:** 3516M | **Enclosure:** TENV |
|---|---|---|

| **Nameplate Data** | | | |
|---|---|---|---|
| **Rated Output (HP)** | | | .75 |
| **Volts** | | | 230/460//240/480 |
| **Full Load Amps** | | | 2.2/1.1//2.4/1.2 |
| **R.P.M.** | | | 3450//2850 |
| **Hz** | 60//50 | **Phase** | 3 |
| **NEMA Design Code** | B | **KVA Code** | J |
| **Service Factor (S.F.)** | | | 1.15 |
| **NEMA Nom. Eff.** | 80 | **Power Factor** | 86 |
| **Rating - Duty** | | | 40C AMB-CONT |
| **S.F. Amps** | | | |

| **480 V, 50 Hz: High Voltage Connection** | |
|---|---|
| **Full Load Torque** | 1.36 LB-FT |
| **Start Configuration** | direct on line |
| **Breakdown Torque** | 6.57 LB-FT |
| **Pull-up Torque** | 4.17 LB-FT |
| **Locked-rotor Torque** | 5.61 LB-FT |
| **Starting Current** | 9.44 A |
| **No-load Current** | 0.696 A |
| **Line-line Res. @ 25ºC** | 27.1 Ω |
| **Temp. Rise @ Rated Load** | 79°C |
| **Temp. Rise @ S.F. Load** | 88°C |
| **Locked-rotor Power Factor** | 73.8 |
| **Rotor inertia** | 0.0443 LB-FT2 |

**Load Characteristics 480 V, 50 Hz, 0.75 HP**

| **% of Rated Load** | **25** | **50** | **75** | **100** | **125** | **150** | **S.F.** |
|---|---|---|---|---|---|---|---|
| **Power Factor** | 38 | 54 | 67 | 74 | 80 | 84 | 78 |
| **Efficiency** | 58.3 | 72.1 | 76 | 78.8 | 79.2 | 79.3 | 79 |
| **Speed** | 2972 | 2952 | 2934 | 2906 | 2890 | 2860 | 2896 |
| **Line amperes** | 0.772 | 0.889 | 1 | 1.16 | 1.33 | 1.5 | 1.26 |

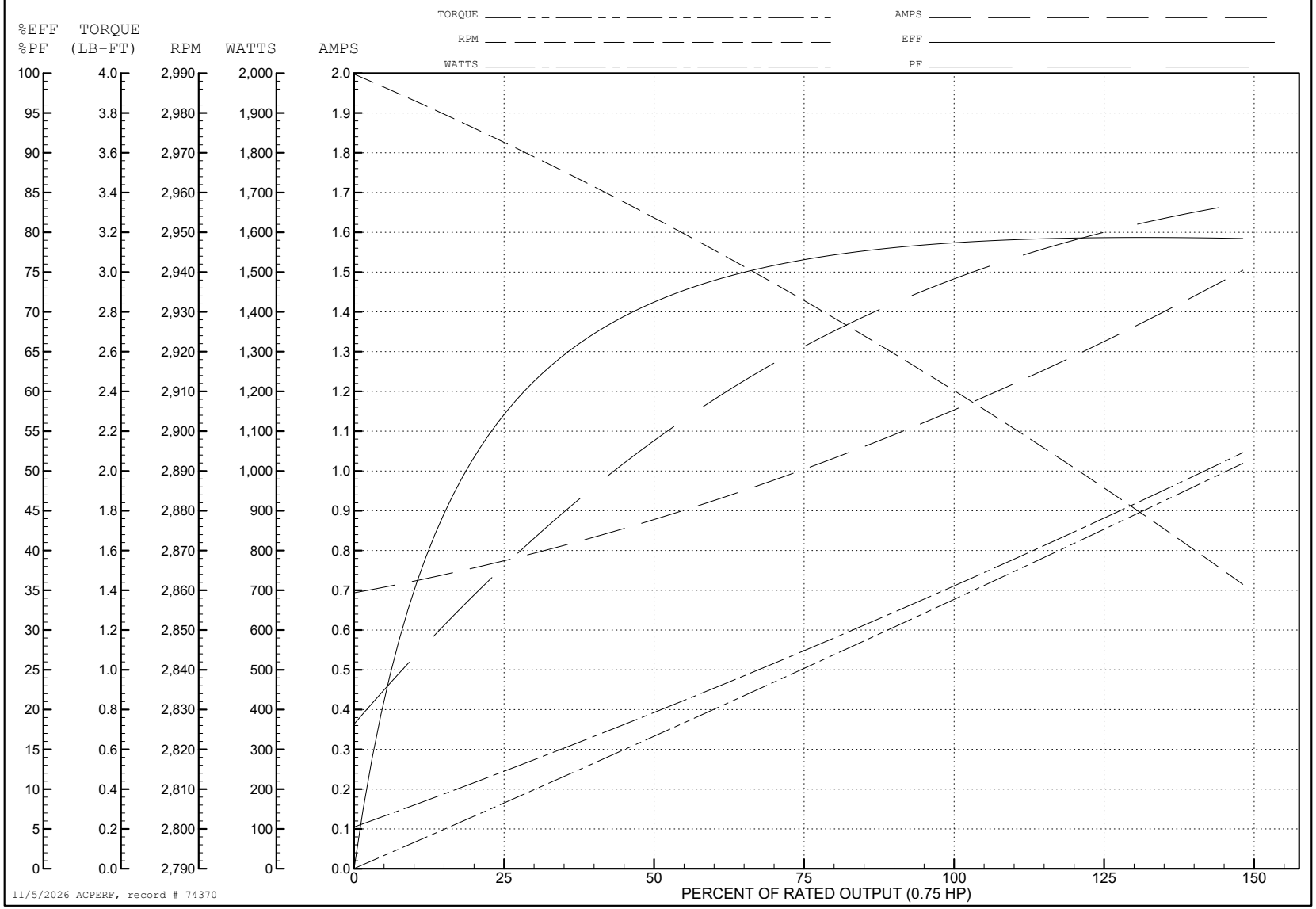
ABB Motors and Mechanical Inc.

WINDING # 35WG1202

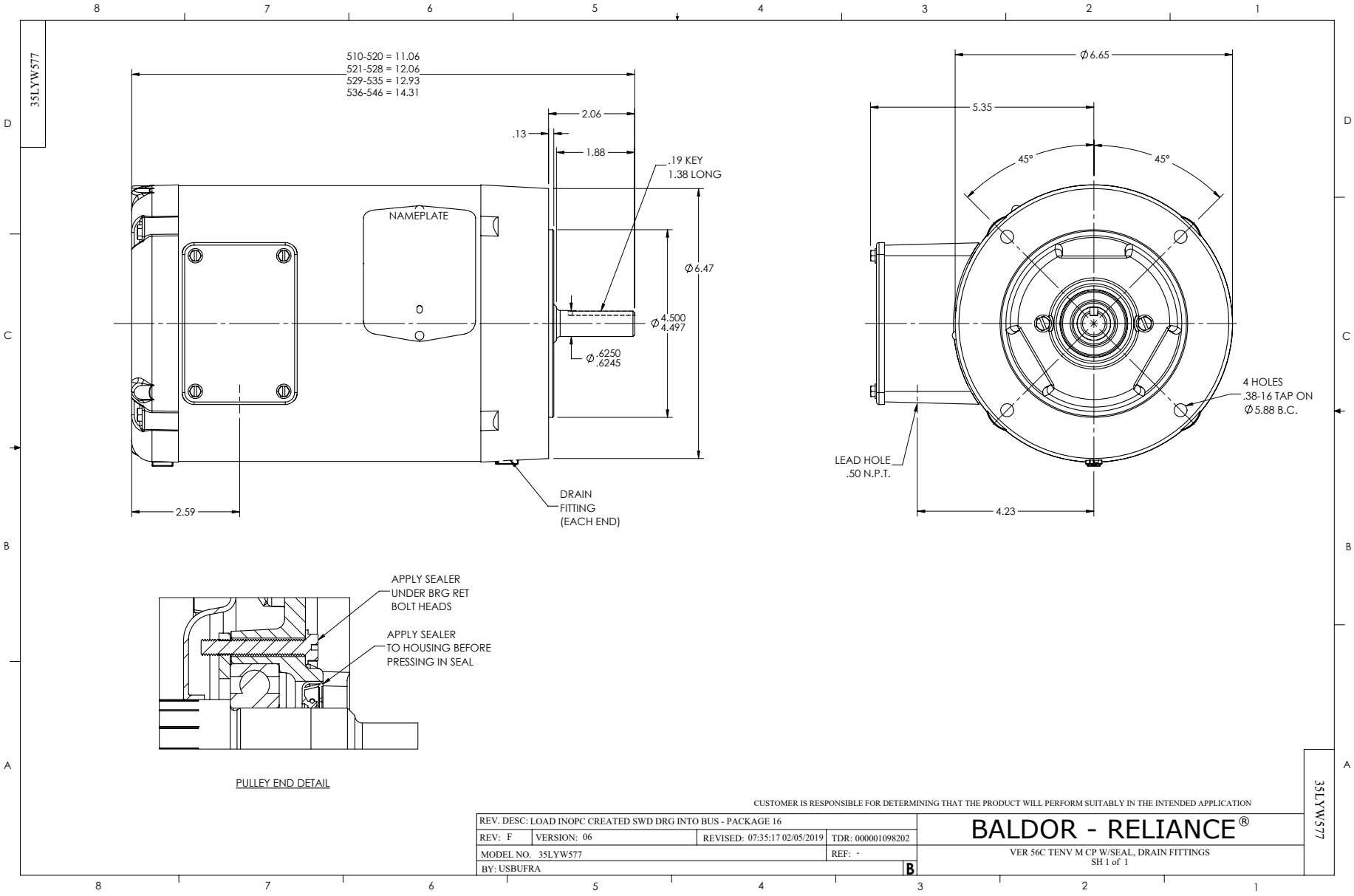
0.75 HP 3 PH 50 HZ 2906 RPM 480 V 3516M

TORQUES(LB-FT): PO=6.57 PU=4.17 LR=5.61 LRA=9.44

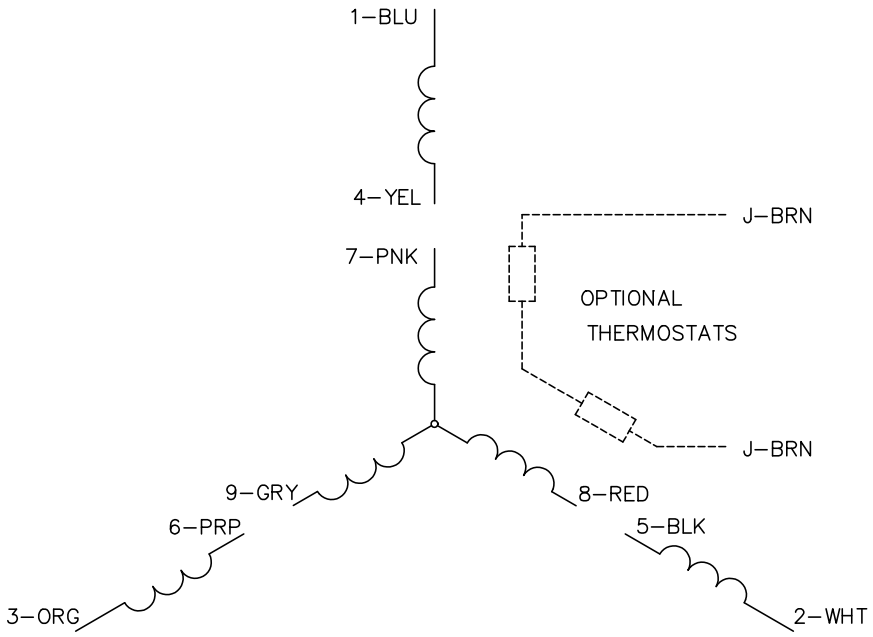
Typical performance - not guaranteed values.

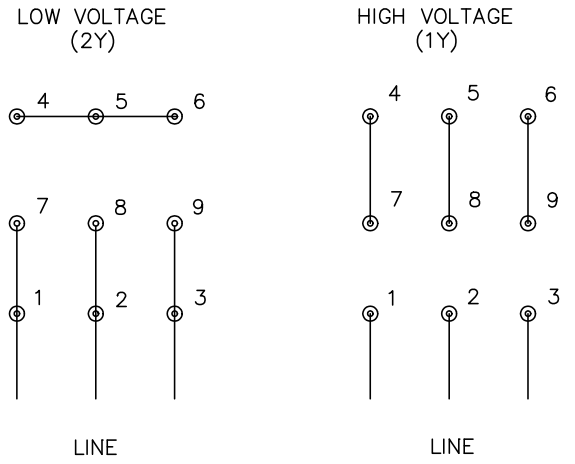



11/5/2026 ACPERF, record # 74370


35LYW577
510-520 = 11.06
521-528 = 12.06
529-535 = 12.93
536-546 = 14.31
2.06
.13
1.88
.19 KEY
1.38 LONG
NAMEPLATE
Ø6.47
Ø4.500
4.497
Ø.6250
.6245
2.59
DRAIN
FITTING
(EACH END)
Ø6.65
5.35
45°
45°
4 HOLES
.38-16 TAP ON
Ø5.88 B.C.
LEAD HOLE
.50 N.P.T.
4.23
APPLY SEALER
UNDER BRG RET
BOLT HEADS
APPLY SEALER
TO HOUSING BEFORE
PRESSING IN SEAL
PULLEY END DETAIL
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT THE PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION
REV. DESC: LOAD INOPC CREATED SWD DRG INTO BUS - PACKAGE 16
REV: F
VERSION: 06
REVISED: 07:35:17 02/05/2019
TDR: 000001098202
MODEL NO. 35LYW577
REF: -
BY: USBUFRA
B
BALDOR - RELIANCE®
VER 56C TENV M CP W/SEAL, DRAIN FITTINGS
SH 1 of 1
35LYW577

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 |