ABB BALDOR RELIANCE

# Customer information packet

## VEM3613T

5HP, 3480RPM, 3PH, 60HZ, 184TC, 3628M, TEFC, F1
Class - None
Division - Not Applicable

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## Specifications

| | |
|---|---|
| **Enclosure** | TEFC |
| **Frame** | 184TC |
| **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** | 5.000 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** | CURUSEEV |
| | NEMA PREMIUM |
| **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** | 11.500 A @ 230.0 V |
| | 13.000 A @ 208.0 V |
| | 5.730 A @ 460.0 V |
| **Design Code** | A |
| **Drip Cover** | No Drip Cover |
| **Duty Rating** | CONT |
| **Efficiency @ 100% Load** | 88.5 % |
| **Electrically Isolated Bearing** | Not Electrically Isolated |
| **Feedback Device** | NO FEEDBACK |
| **Front Shaft Indicator** | None |
| **Heater Indicator** | No Heater |
| **High Voltage Full Load Amps** | 5.7 a |

## Part Detail

| | |
|---|---|
| **Revision** | A |
| **Type** | AC |
| **Mech. spec.** | 36A003 |
| **Base** | |
| **Status** | PRD/A |
| **Elec. spec.** | 36WGZ651 |
| **Layout** | 36LYA003 |
| **Eff. date** | 01-08-2026 |
| **CD Diagram** | CD0005 |
| **Poles** | 02 |
| **Leads** | 9#16 |
| **Proprietary** | False |
| **Created date** | 11-07-2025 |

| | |
|---|---|
| **Insulation Class** | F |
| **Inverter Code** | Inverter Ready |
| **KVA Code** | L |
| **Lifting Lugs** | No Lifting Lugs |
| **Locked Bearing Indicator** | Locked Bearing |
| **Motor Lead Quantity/Wire Size** | 9 @ 16 AWG |
| **Motor Lead Termination** | Flying Leads |
| **Motor Standards** | NEMA |
| **Motor Type** | 3628M |
| **Mounting Arrangement** | F1 |
| **Number of Poles** | 2 |
| **Overall Length** | 16.54 IN |
| **Power Factor** | 92 |
| **Product Family** | General Purpose |
| **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** | 1.125 IN |
| **Shaft Ground Indicator** | No Shaft Grounding |
| **Shaft Rotation** | Reversible |
| **Shaft Slinger Indicator** | No Slinger |
| **Speed** | 3480 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**

| NP3441LUA | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **CAT.NO.** | VEM3613T | | | | | | | | |
| **SPEC** | 36A003Z651 | | | | | | | | |
| **HP** | 5 | | | | | | | | |
| **VOLTS** | 230/460 | | | | | | | | |
| **AMPS** | 11.5/5.73 | | | | | | | | |
| **RPM** | 3480 | | | | | | | | |
| **FRAME** | 184TC | **HZ** | 60 | | **PH** | 3 | | | |
| **SF** | 1.15 | **CODE** | L | **DES** | A | **CLASS** | F | | |
| **NEMA NOM. EFF** | 88.5 | **PF** | 92 | | | | | | |
| **RATING** | 40C AMB-CONT | | | | | | | | |
| **CC** | 010A | | | | | | | | |
| **ENCL** | TEFC | **SER** | | | | | | | |
| **DE** | 6206 | **ODE** | 6205 | | | | | | |
| **VPWM INVERTER READY** | SFA 13.2/6.61 | | | | | | | | |
| **CT6-60H(10:1)VT3-60H(20:1** | | | | | | | | | |
| | 50HZ 5HP 190/380V 14.2/7.1A | | | | | | | | SF1.0 |

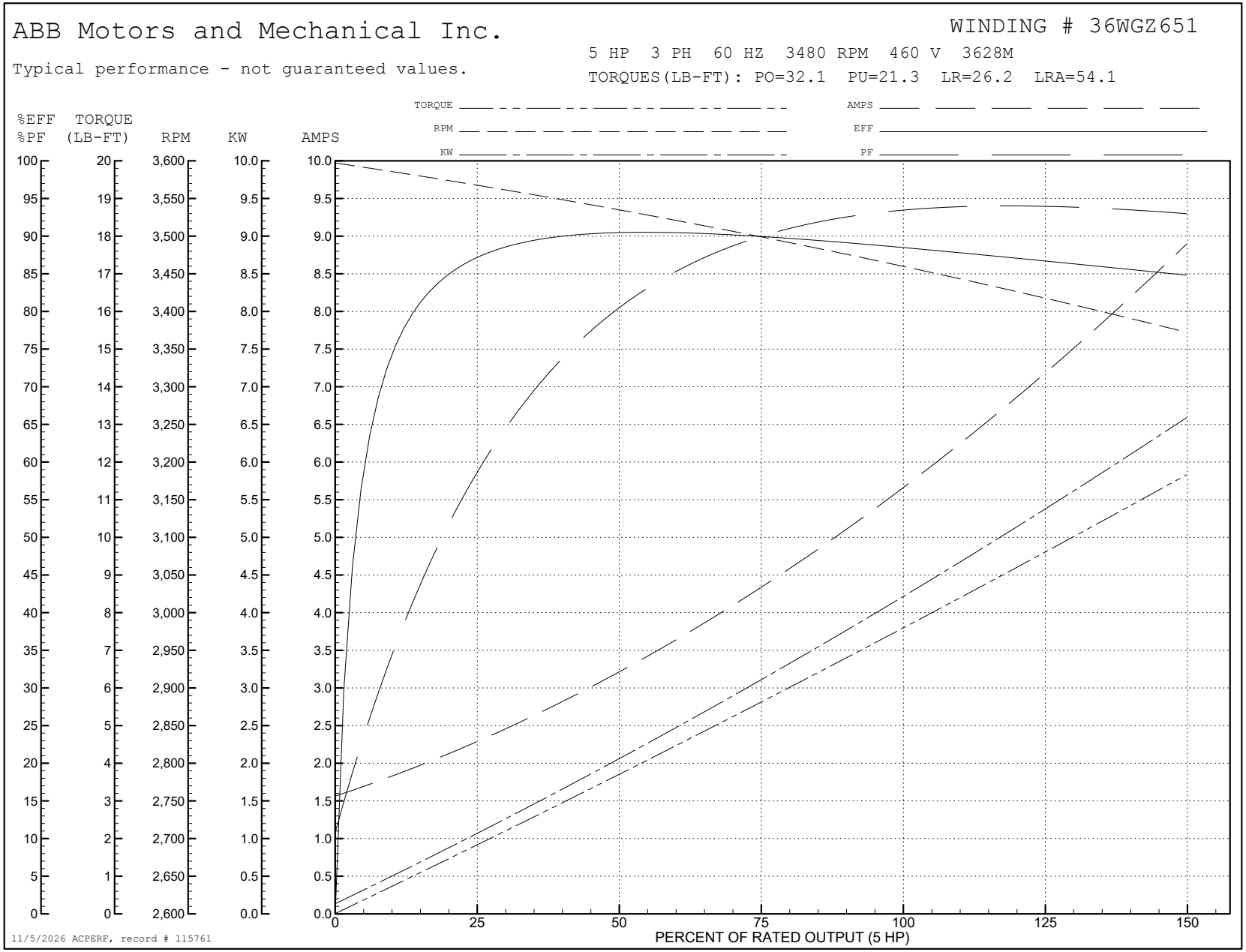
**AC Induction Motor Performance Data**
Record # 115761
Typical performance - not guaranteed values

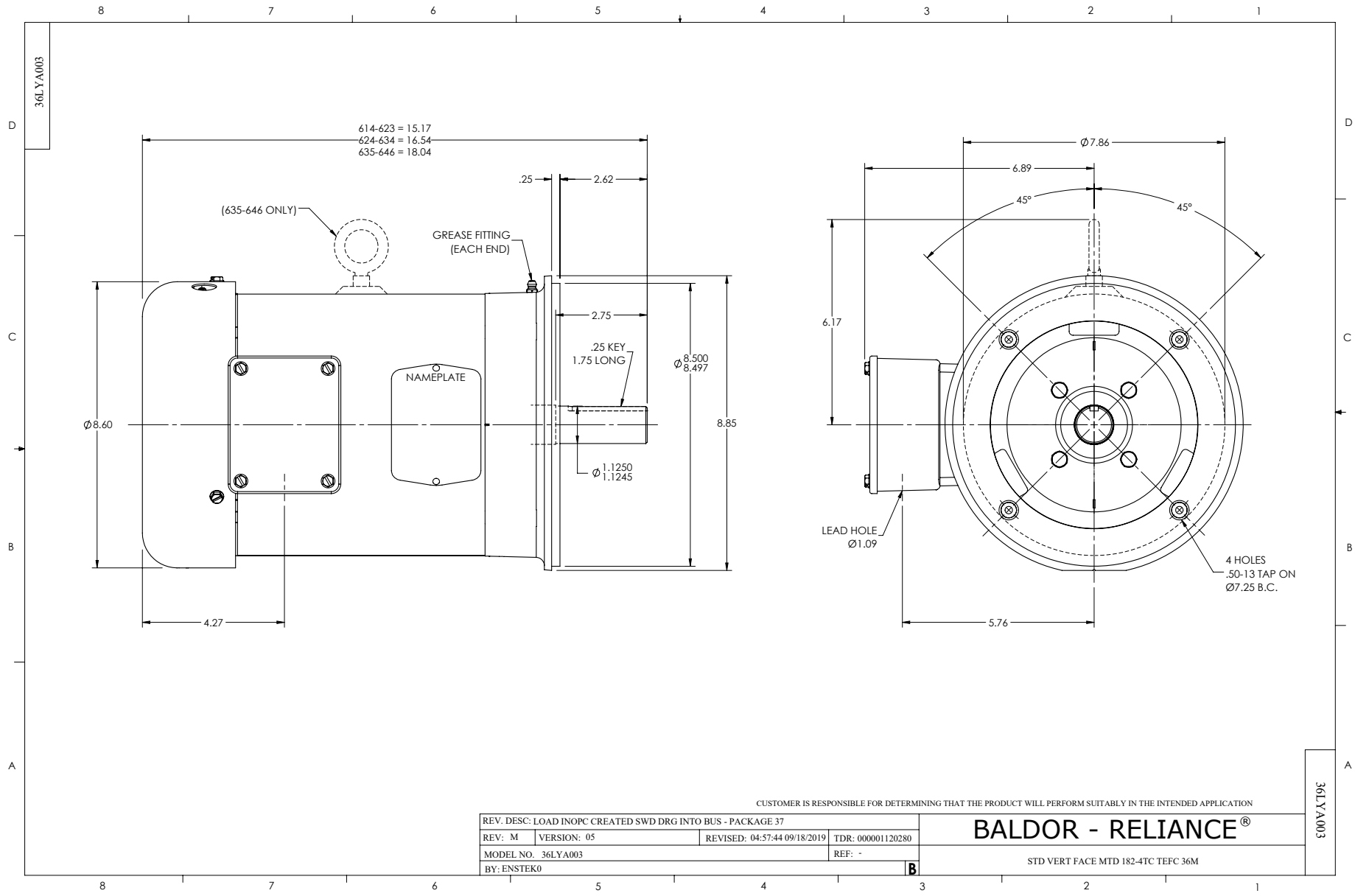
| **Winding:** 36WGZ651-R001 | **Type:** 3628M | **Enclosure:** TEFC |
|---|---|---|

| **Nameplate Data** | | | | **460 V, 60 Hz: High Voltage Connection** | |
|---|---|---|---|---|---|
| **Rated Output (HP)** | | | 5 | **Full Load Torque** | 7.602 LB-FT |
| **Volts** | | | 230/460 | **Start Configuration** | direct on line |
| **Full Load Amps** | | | 11.5/5.73 | **Breakdown Torque** | 32.1 LB-FT |
| **R.P.M.** | | | 3480 | **Pull-up Torque** | 21.3 LB-FT |
| **Hz** | 60 | **Phase** | 3 | **Locked-rotor Torque** | 26.2 LB-FT |
| **NEMA Design Code** | A | **KVA Code** | L | **Starting Current** | 54.1 A |
| **Service Factor (S.F.)** | | | 1.15 | **No-load Current** | 1.66 A |
| **NEMA Nom. Eff.** | 88.5 | **Power Factor** | 92 | **Line-line Res. @ 25ºC** | 2.821 Ω |
| **Rating - Duty** | | | 40C AMB-CONT | **Temp. Rise @ Rated Load** | 74°C |
| **S.F. Amps** | | | 13.2/6.61 | **Temp. Rise @ S.F. Load** | 95°C |
| | | | | **Locked-rotor Power Factor** | 48.1 |

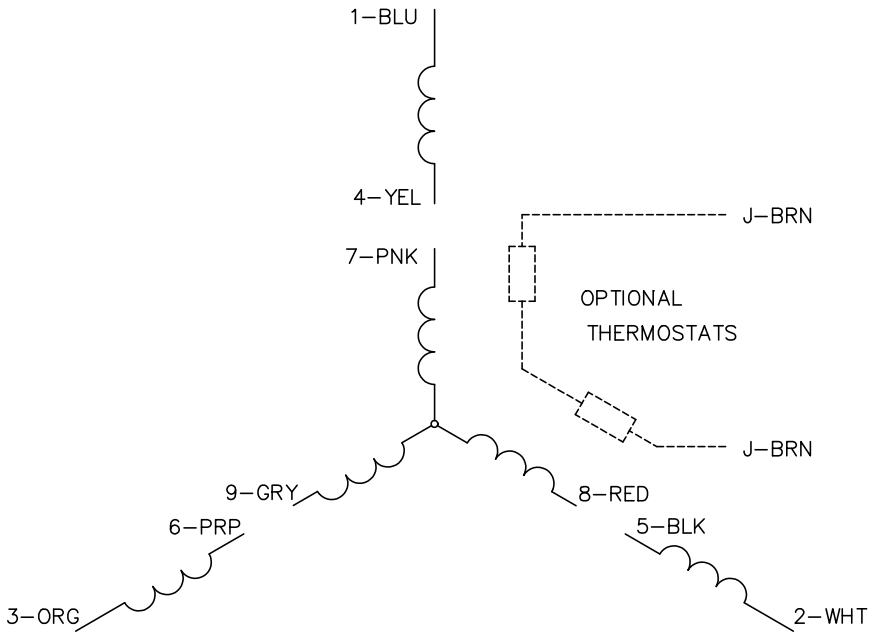
**Load Characteristics 460 V, 60 Hz, 5 HP**

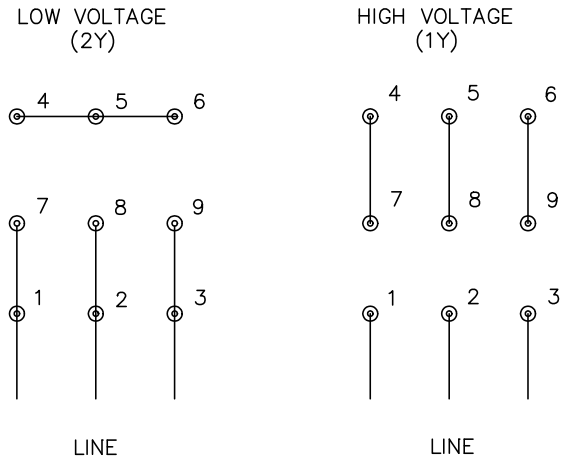
| **% of Rated Load** | **25** | **50** | **75** | **100** | **125** | **150** | **S.F.** |
|---|---|---|---|---|---|---|---|
| **Power Factor** | 63 | 82 | 89 | 92 | 93 | 94 | 93 |
| **Efficiency** | 86.4 | 90 | 89.9 | 88.6 | 86.8 | 84.7 | 87.5 |
| **Speed** | 3566.6 | 3534.1 | 3499.1 | 3460.2 | 3417.5 | 3371.4 | 3435 |
| **Line amperes** | 2.16 | 3.16 | 4.37 | 5.75 | 7.25 | 8.84 | 6.65 |


ABB Motors and Mechanical Inc.
WINDING # 36WGZ651
5 HP 3 PH 60 HZ 3480 RPM 460 V 3628M
Typical performance - not guaranteed values.
TORQUES(LB-FT): PO=32.1 PU=21.3 LR=26.2 LRA=54.1
TORQUE
RPM
KW
AMPS
EFF
PF
%EFF %PF
TORQUE (LB-FT)
RPM
KW
AMPS
PERCENT OF RATED OUTPUT (5 HP)
11/5/2026 ACPERF, record # 115761


36LYA003
614-623 = 15.17
624-634 = 16.54
635-646 = 18.04
.25
2.62
(635-646 ONLY)
GREASE FITTING
(EACH END)
2.75
.25 KEY
1.75 LONG
Ø8.500
8.497
NAMEPLATE
Ø8.60
8.85
Ø1.1250
1.1245
4.27
Ø7.86
6.89
45°
45°
6.17
LEAD HOLE
Ø1.09
4 HOLES
.50-13 TAP ON
Ø7.25 B.C.
5.76
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 37
REV: M
VERSION: 05
REVISED: 04:57:44 09/18/2019
TDR: 000001120280
MODEL NO. 36LYA003
REF: -
BY: ENSTEK0
B
BALDOR - RELIANCE®
STD VERT FACE MTD 182-4TC TEFC 36M
36LYA003

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 |