# Customer information packet

ECS100A8H2DC4

2HP, 1800RPM, 3PH, 60HZ, 143TC, 3524B, TEFC, F1
Class - None
Division - Not Applicable

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11/5/2026 10:10:20 AM

## Specifications

| | |
|---|---|
| **Enclosure** | TEFC |
| **Frame** | 143TC |
| **Frame Material** | Steel |
| **Frequency** | 60.00 Hz |
| **Haz Area Class and Group** | None |
| **Haz Area Division** | Not Applicable |
| **Motor Letter Type** | Brushless Wound Field PM Rotor |
| **Output @ Frequency** | 2.000 HP @ 60 HZ |
| **Phase** | 3 |
| **Synchronous Speed @ Frequency** | 1800 RPM @ 60 HZ |
| **Voltage @ Frequency** | 230.0 V @ 60 HZ |
| **Agency Approvals** | BLUETOOTH<br>CULUS<br>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 |
| **Constant Torque Speed Range** | 6 |
| **Current @ Voltage** | 4.800 A @ 230.0 V |
| **Design Code** | - |
| **Drip Cover** | No Drip Cover |
| **Duty Rating** | CONT |
| **Efficiency @ 100% Load** | 91.3 % |
| **Electrically Isolated Bearing** | Not Electrically Isolated |
| **Feedback Device** | NO FEEDBACK |
| **Heater Indicator** | No Heater |
| **High Voltage Full Load Amps** | 4.8 a |
| **Insulation Class** | F |
| **Inverter Code** | 03 |

## Part Detail

| | |
|---|---|
| **Revision** | C |
| **Type** | AC |
| **Mech. spec.** | 35E5253 |
| **Base** | |
| **Status** | PRD/A |
| **Elec. spec.** | 35WGG964 |
| **Layout** | 35LYE5253 |
| **Eff. date** | 10-31-2024 |
| **CD Diagram** | CD0006B03 |
| **Poles** | 04 |
| **Leads** | 3#16 13" LONG LEADS Y |
| **Proprietary** | False |
| **Created date** | 05-10-2024 |

| | |
|---|---|
| **KVA Code** | - |
| **Lifting Lugs** | No Lifting Lugs |
| **Locked Bearing Indicator** | Locked Bearing |
| **Motor Lead Quantity/Wire Size** | 3 @ 16 AWG |
| **Motor Lead Termination** | Flying Leads |
| **Motor Standards** | NEMA |
| **Motor Type** | 3524B |
| **Mounting Arrangement** | F1 |
| **Number of Poles** | 4 |
| **Overall Length** | 17.72 IN |
| **Power Factor** | 93 |
| **Product Family** | General Purpose |
| **Pulley Face Code** | C-Face |
| **Rodent Screen** | None |
| **Service Factor** | 1.00 |
| **Shaft Diameter** | 0.875 IN |
| **Shaft Ground Indicator** | Shaft Grounding |
| **Shaft Rotation** | Reversible |
| **Speed** | 1800 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**

| NP3968A01A01 | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **CAT.NO.** | ECS100A8H2DC4 | | | | | | | | |
| **SPEC.** | 35E5253G964G1 | | | | | | | | |
| **FRAME** | 143TC | | | **ENCL.** | TEFC | | **IP** | 54 | |
| **HP** | 2 | | 40 | **C AMB** | | CONT | | | |
| **NOM. EFF.** | 91.3 | **PF** | 93 | | **SF** | 1 | | | |
| **VOLTS** | 230 | | | **FLA** | 4.8 | | | | |
| **RPM** | 1800 | | | **RPM-MAX** | | 4000 | | | |
| **HZ** | 60 | | **PH.** | 3 | **CLASS** | F | | | |
| **BEMF (V)** | 148 | | | | **RS (OHMS)** | 2.94 | | | |
| **LD (MH)** | 22.1 | | | | **LQ (MH)** | 97.1 | | | |
| **VPWM** | **CHP** | 60 | **TO** | 133 | | | | | |
| **CT** | 6 | **TO** | 60 | **VT** | 6 | **TO** | 60 | | |
| **MATCHED INV** | ECI8A7P0 | | | | | | | | |
| **DE** | 6205 | | | **ODE** | 6203 | | | | |
| **SERIAL #** | | | | | | | | | |

| NP3978A01 | | | | | | |
|---|---|---|---|---|---|---|
| **PART NO.** | ECI8A7P0 | | | | | |
| **U1** | 240 | **PH** | 1 | **HZ** | 60 | |
| **I1** | 12.5 | **W/EXT. CHOKE** | | | 10.2 | |
| **SERIAL #** | | | | | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Volts | 230 | Max RPM | 4000 | Conn Diag. | CD0006B03 | Leads | 3 |
| Amps | 4.8 | Max Amps | | Cs Diagram | CS1127 | BEMF | 95 |
| HP | 2 | VFD# | OPC-2-120070-1 | | | LD | 15.2 |
| RPM | 1800 | S.F. | 1.00 | | | LQ | 63.5 |
| Phase/Hz | 3/60 | Rating | 40C AMB-CONT | | | Rs | 9.5595 Meas. L-L |

## 60034-2-3 Motor Performance at Standardized Operating Points

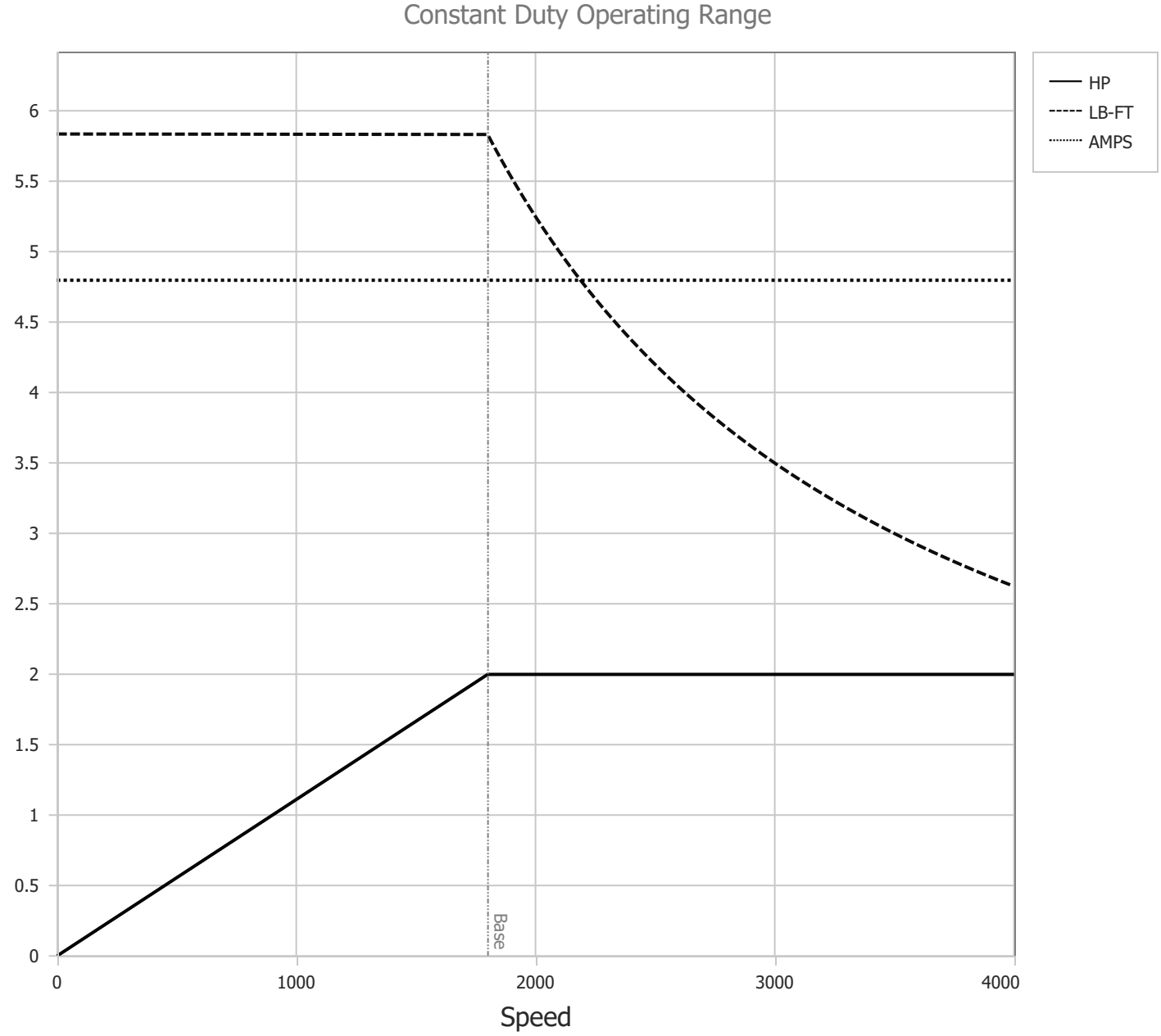
| | RPM | % Speed | LB-FT | % Torque | HP | Efficiency | Loss (% FL) | Watts Loss (W) |
|---|---|---|---|---|---|---|---|---|
| P1 | 1619 | 90% | 5.8 | 100% | 1.8 | 84.2 | 16.73% | 252 |
| P2 | 906 | 50% | 4.2 | 100% | 0.7 | 62.7 | 21.27% | 321 |
| P3 | 440 | 25% | 2.8 | 100% | 0.2 | 36.4 | 20.56% | 310 |
| P4 | 1627 | 90% | 2.9 | 50% | 0.9 | 83.8 | 8.66% | 131 |
| P5 | 902 | 50% | 2.9 | 50% | 0.5 | 69.3 | 10.98% | 166 |
| P6 | 901 | 50% | 1.5 | 25% | 0.3 | 76.0 | 3.93% | 59 |
| P7 | 455 | 25% | 1.5 | 25% | 0.1 | 61.2 | 3.96% | 60 |

## 61800-9-2 PDS Performance at Reference Operating Points

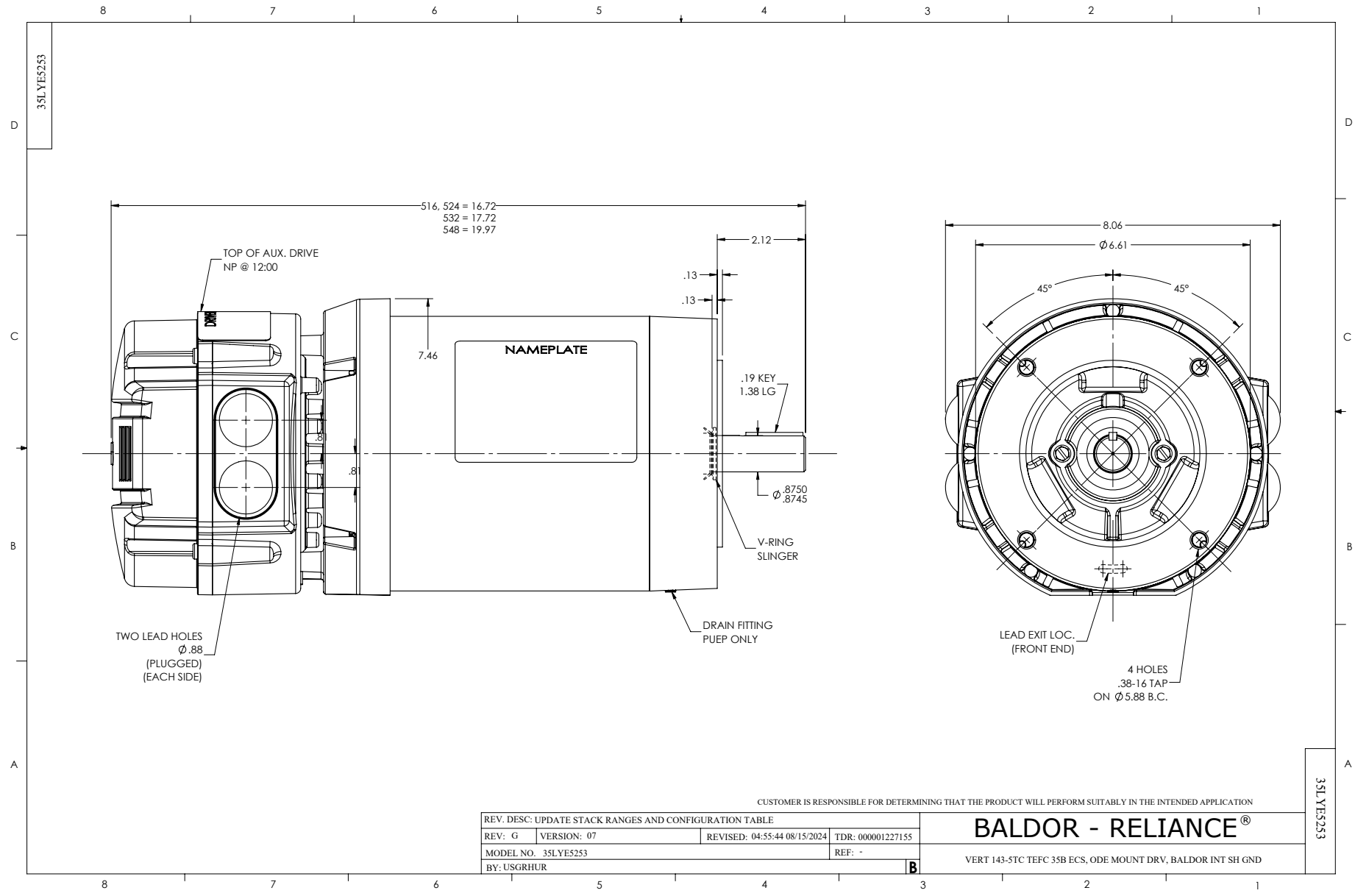
| | RPM | % Speed | LB-FT | % Torque | HP | System Efficiency | Loss (% FL) | Watts Loss (W) |
|---|---|---|---|---|---|---|---|---|
| P1 | 1784 | 100% | 5.8 | 100% | 2.0 | 81.2 | 22.62% | 341 |
| P2 | 906 | 50% | 4.2 | 100% | 0.7 | 58.0 | 25.91% | 391 |
| P3 | 298 | 17% | 2.2 | 100% | 0.1 | 26.7 | 16.78% | 253 |
| P4 | 1790 | 100% | 2.9 | 50% | 1.0 | 79.0 | 13.05% | 197 |
| P5 | 902 | 50% | 2.9 | 50% | 0.5 | 63.9 | 14.02% | 212 |
| P6 | 299 | 17% | 2.2 | 50% | 0.1 | 26.7 | 16.62% | 251 |
| P7 | 901 | 50% | 1.5 | 25% | 0.3 | 68.7 | 5.66% | 85 |
| P8 | 311 | 17% | 1.5 | 25% | 0.1 | 40.6 | 6.26% | 94 |

*Points not taken in certified order.*

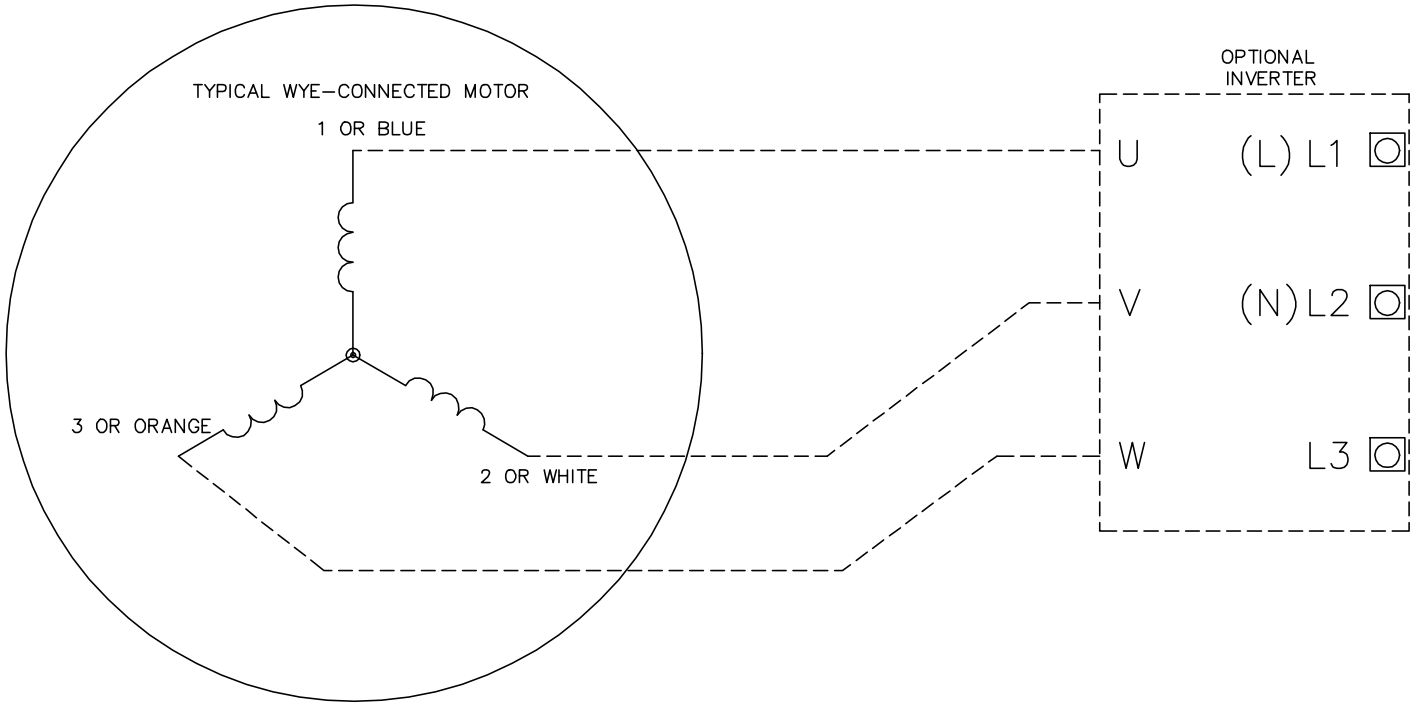
| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Volts | 230 | Max RPM | 4000 | Conn Diag. | CD0006B03 | Leads | 3 |
| Amps | 4.8 | Max Amps | | Cs Diagram | CS1127 | BEMF | 95 |
| HP | 2 | VFD # | OPC-2-120070-1 | | | LD | 15.2 |
| RPM | 1800 | S.F. | 1.00 | | | LQ | 63.5 |
| Phase/Hz | 3/60 | Rating | 40C AMB-CONT | | | Rs | 9.5595 Meas L-L |




| | | | |
|---|---|---|---|
| BALDOR • RELIANCE | DR By: R & D<br>CK By: USTOSAN<br>APP By: USJAROB1<br>Date: 01/29/2025 | **AC MOTOR PERFORMANCE CURVES** | **35WGA0050**<br>35-0000-1619<br>*Test - 111860* |


35LYE5253
516, 524 = 16.72
532 = 17.72
548 = 19.97
2.12
TOP OF AUX. DRIVE
NP @ 12:00
.13
.13
7.46
NAMEPLATE
.19 KEY
1.38 LG
.81
Ø .8750
.8745
V-RING
SLINGER
DRAIN FITTING
PUEP ONLY
TWO LEAD HOLES
Ø.88
(PLUGGED)
(EACH SIDE)
8.06
Ø6.61
45°
45°
LEAD EXIT LOC.
(FRONT END)
4 HOLES
.38-16 TAP
ON Ø5.88 B.C.
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT THE PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION
REV. DESC: UPDATE STACK RANGES AND CONFIGURATION TABLE
REV: G
VERSION: 07
REVISED: 04:55:44 08/15/2024
TDR: 000001227155
MODEL NO. 35LYE5253
REF: -
BY: USGRHUR
B
BALDOR - RELIANCE®
VERT 143-5TC TEFC 35B ECS, ODE MOUNT DRV, BALDOR INT SH GND
35LYE5253

CD0006B03




NOTES:

1. INTERCHANGE ANY TWO LINE LEADS TO REVERSE ROTATION.
2. ACTUAL NUMBER OF INTERNAL PARALLEL CIRCUITS MAY VARY.

CD0006B03

| | | |
|---|---|---|
| REV. DESC: CHANGE LEAD COLORS TO BLUE WHITE ORANGE | | |
| REV. LTR: A | VERSION: 01 | TDR: 000001158598 |
| FILE: \AAA\00252\917 | REVISED: 11:01:03 01/19/2021 | BY: ENMARSO |
| MTL: – | | |

BALDOR - RELIANCE®

3PH, SV, 3 LEADS, WYE CONNECTED, ECS

SH 1 of 1