ABB BALDOR RELIANCE

# Customer information packet

## ECTM4100T

15 AIR OVERHP, 1175RPM, 3PH, 60HZ, 284T, 1046
Class - None
Division - Not Applicable

Copyright © All product information within this document is subject to ABB Motors and Mechanical Inc. copyright © protection, unless otherwise noted.
11/21/2026 2:29:08 PM

## Specifications

| | |
|---|---|
| **Enclosure** | TEAO |
| **Frame** | 284T |
| **Frame Material** | Iron |
| **Frequency** | 60.00 Hz |
| **Haz Area Class and Group** | None |
| **Haz Area Division** | Not Applicable |
| **Motor Letter Type** | Three Phase |
| **Output @ Frequency** | 15.000 HP @ 60 HZ |
| **Phase** | 3 |
| **Synchronous Speed @ Frequency** | 1200 RPM @ 60 HZ |
| **Voltage @ Frequency** | 460.0 V @ 60 HZ |
| | 230.0 V @ 60 HZ |
| **Agency Approvals** | CSA |
| | CSA EEV |
| | 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** | 42.000 A @ 208.0 V |
| | 42.000 A @ 230.0 V |
| | 21.000 A @ 460.0 V |
| **Design Code** | A |
| **Drip Cover** | No Drip Cover |
| **Duty Rating** | CONT |
| **Efficiency @ 100% Load** | 91.7 % |
| **Electrically Isolated Bearing** | Not Electrically Isolated |
| **Feedback Device** | NO FEEDBACK |
| **Front Face Code** | Standard |
| **Front Shaft Indicator** | None |

## Part Detail

| | |
|---|---|
| **Revision** | S |
| **Type** | AC |
| **Mech. spec.** | 10K189 |
| **Base** | |
| **Status** | PRD/A |
| **Elec. spec.** | 10WGY561 |
| **Layout** | 10LYK189 |
| **Eff. date** | 10-08-2025 |
| **CD Diagram** | CD0180 |
| **Poles** | 06 |
| **Leads** | 9#10 |
| **Proprietary** | False |
| **Created date** | 04-22-2016 |

| | |
|---|---|
| **Heater Indicator** | No Heater |
| **High Voltage Full Load Amps** | 21.0 a |
| **Insulation Class** | F |
| **Inverter Code** | Not Inverter |
| **KVA Code** | H |
| **Lifting Lugs** | Vertical Lifting Lugs |
| **Locked Bearing Indicator** | Locked Bearing |
| **Motor Lead Exit** | Ko Box |
| **Motor Lead Quantity/Wire Size** | 9 @ 10 AWG |
| **Motor Lead Termination** | Flying Leads |
| **Motor Standards** | NEMA |
| **Motor Type** | 1046M |
| **Mounting Arrangement** | F1 |
| **Number of Poles** | 6 |
| **Overall Length** | 25.63 IN |
| **Power Factor** | 73 |
| **Product Family** | Super-E Chemical Processing |
| **Pulley End Bearing Type** | Sealed Bearing |
| **Pulley Face Code** | Standard |
| **Pulley Shaft Indicator** | Standard |
| **Rodent Screen** | None |
| **RoHS Status** | ROHS COMPLIANT |
| **Service Factor** | 1.15 |
| **Shaft Diameter** | 1.875 IN |
| **Shaft Extension Location** | Pulley End |
| **Shaft Ground Indicator** | No Shaft Grounding |
| **Shaft Rotation** | Reversible |
| **Shaft Slinger Indicator** | Shaft Slinger |
| **Speed** | 1175 rpm |
| **Speed Code** | Single Speed |
| **Starting Method** | Direct on line |
| **Thermal Device - Bearing** | NONE (OLD) |
| **Thermal Device - Winding** | None |
| **Vibration Sensor Indicator** | No Vibration Sensor |

| | |
|---|---|
| **Winding Thermal 1** | None |
| **Winding Thermal 2** | None |

**Nameplate**

| NP2178 | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **CAT.NO.** | ECTM4100T | | | | | | | | |
| **SPEC.** | 10K189Y561G1 | | | | | | | | |
| **HP** | 15 AIR OVER | | | | | | | | |
| **VOLTS** | 230/460 | | | | | | | | |
| **AMP** | 42/21 | | | | | | | | |
| **RPM** | 1175 | | | | | | | | |
| **FRAME** | 284T | **HZ** | 60 | | | **PH** | 3 | | |
| **SER.F.** | 1.15 | **CODE** | H | **DES** | A | **CL** | F | | |
| **NEMA-NOM-EFF** | 91.7 | **PF** | 73 | | | | | | |
| **RATING** | 40C AMB-CONT | | | | | | | | |
| **CC** | | | | | | | | | |
| **DE** | 6311 | **ODE** | 6309 | | | | | | |
| **ENCL** | TEAO | **SN** | | | | | | | |
| | 1900 FPM @ 360CFM | | | | | | | | |

**AC Induction Motor Performance Data**
Record # 66702
Typical performance - not guaranteed values

| **Winding:** 10WGY561-R023 | **Type:** 1046M | **Enclosure:** TEAO |
|---|---|---|

| **Nameplate Data** | | | | **460 V, 60 Hz: High Voltage Connection** | |
|---|---|---|---|---|---|
| **Rated Output (HP)** | | | 15 AIR OVER | **Full Load Torque** | 66.68 LB-FT |
| **Volts** | | | 230/460 | **Start Configuration** | direct on line |
| **Full Load Amps** | | | 42/21 | **Breakdown Torque** | 213 LB-FT |
| **R.P.M.** | | | 1175 | **Pull-up Torque** | 93.1 LB-FT |
| **Hz** | 60 | **Phase** | 3 | **Locked-rotor Torque** | 114 LB-FT |
| **NEMA Design Code** | A | **KVA Code** | H | **Starting Current** | 144 A |
| **Service Factor (S.F.)** | | | 1.15 | **No-load Current** | 12.4 A |
| **NEMA Nom. Eff.** | 91.7 | **Power Factor** | 73 | **Line-line Res. @ 25ºC** | 0.502 Ω |
| **Rating - Duty** | | | 40C AMB-CONT | **Temp. Rise @ Rated Load** | 43°C |
| **S.F. Amps** | | | | **Temp. Rise @ S.F. Load** | 51°C |
| | | | | **Locked-rotor Power Factor** | 32.9 |
| | | | | **Rotor inertia** | 5.63 lb-ft² |

**Load Characteristics 460 V, 60 Hz, 15 HP**

| **% of Rated Load** | **25** | **50** | **75** | **100** | **125** | **150** | **S.F.** |
|---|---|---|---|---|---|---|---|
| **Power Factor** | 32 | 52 | 65 | 72 | 76 | 78 | 75 |
| **Efficiency** | 83 | 89.4 | 91.3 | 91.7 | 91.4 | 90.8 | 91.7 |
| **Speed** | 1196 | 1193 | 1189 | 1185 | 1181 | 1177 | 1181 |
| **Line amperes** | 13.2 | 15.1 | 17.9 | 21.3 | 25.3 | 29.6 | 23.4 |

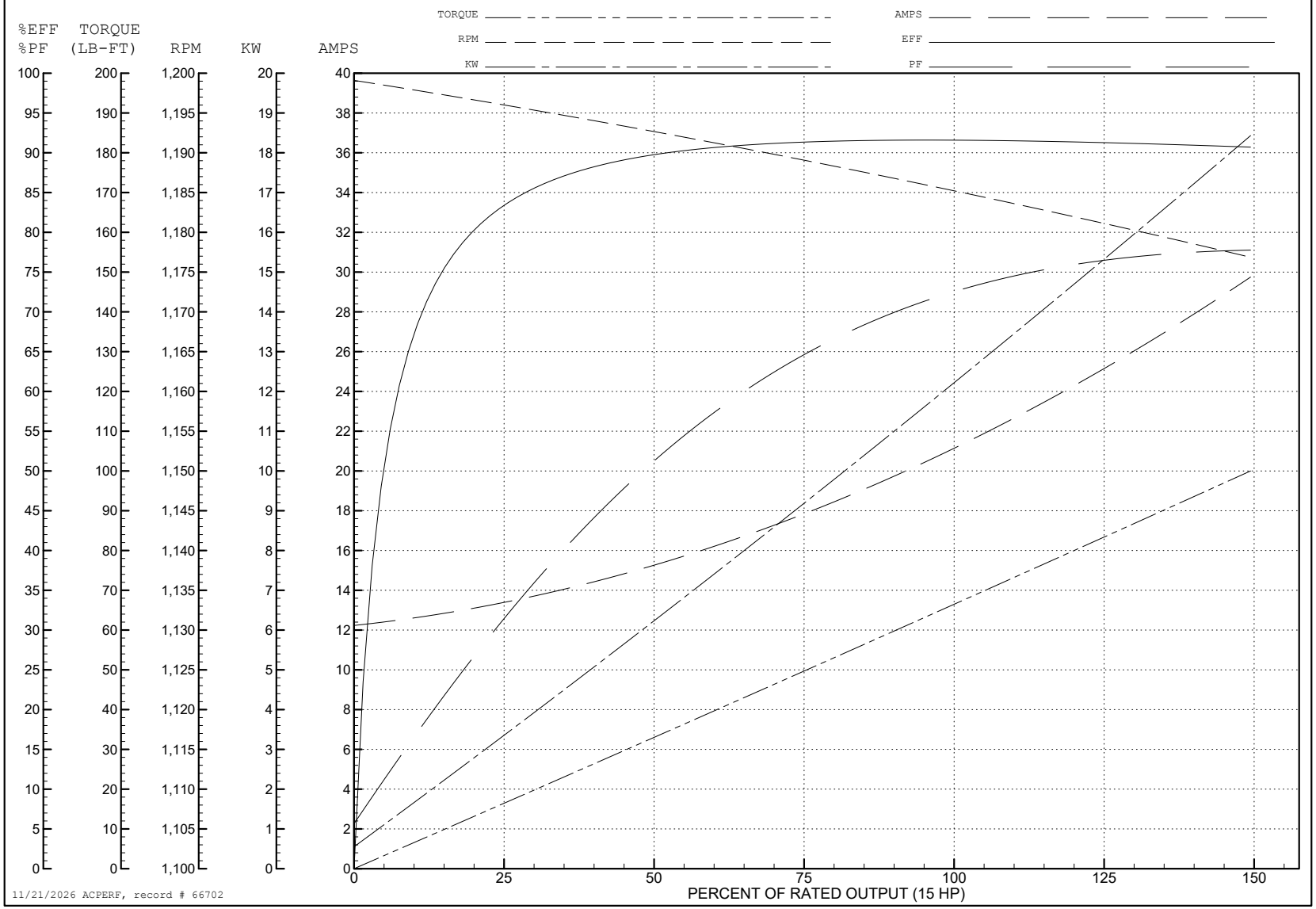
ABB Motors and Mechanical Inc.

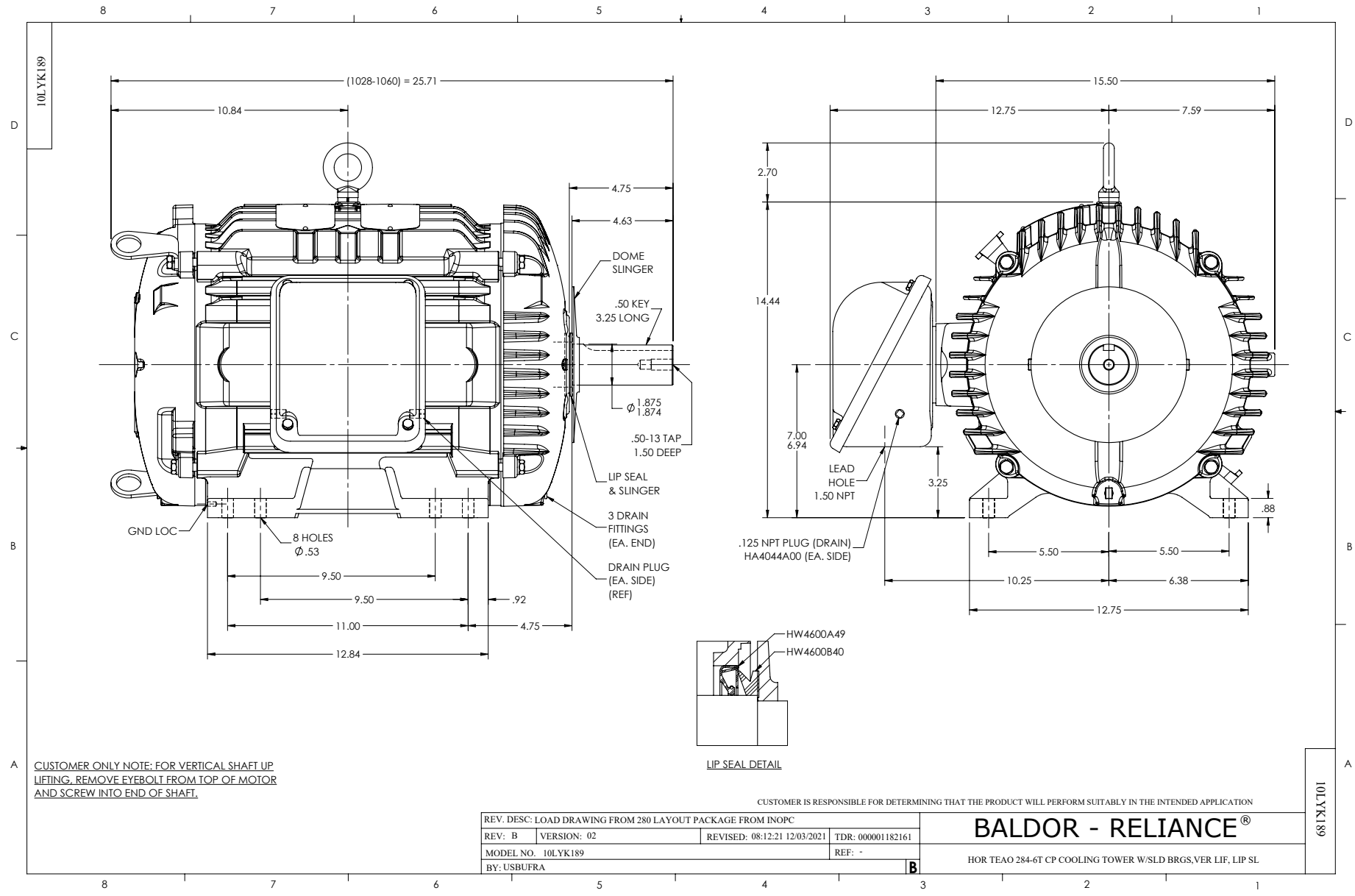
WINDING # 10WGY561

15 HP 3 PH 60 HZ 1175 RPM 460 V 1046M

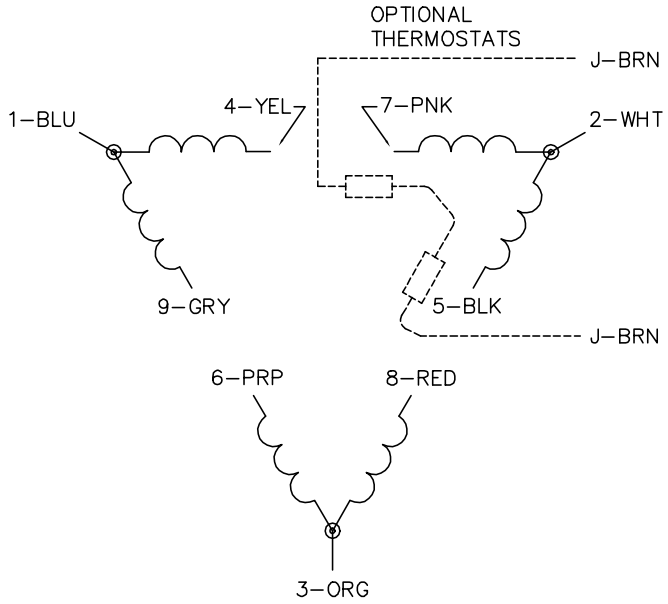
Typical performance - not guaranteed values.

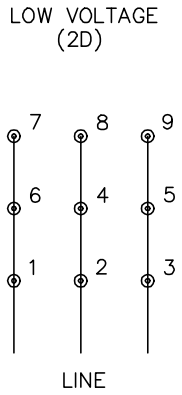
TORQUES(LB-FT): PO=213 PU=93.1 LR=114 LRA=144

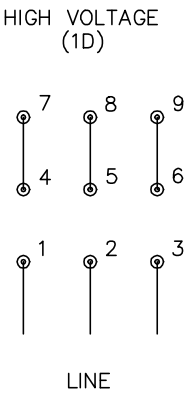



10LYK189
(1028-1060) = 25.71
10.84
4.75
4.63
DOME SLINGER
.50 KEY
3.25 LONG
Ø 1.875
1.874
.50-13 TAP
1.50 DEEP
LIP SEAL
& SLINGER
3 DRAIN
FITTINGS
(EA. END)
DRAIN PLUG
(EA. SIDE)
(REF)
GND LOC
8 HOLES
Ø.53
9.50
9.50
.92
11.00
4.75
12.84
15.50
12.75
7.59
2.70
14.44
7.00
6.94
LEAD
HOLE
1.50 NPT
3.25
.88
.125 NPT PLUG (DRAIN)
HA4044A00 (EA. SIDE)
5.50
5.50
10.25
6.38
12.75
HW4600A49
HW4600B40
LIP SEAL DETAIL
CUSTOMER ONLY NOTE: FOR VERTICAL SHAFT UP LIFTING, REMOVE EYEBOLT FROM TOP OF MOTOR AND SCREW INTO END OF SHAFT.
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT THE PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION
REV. DESC: LOAD DRAWING FROM 280 LAYOUT PACKAGE FROM INOPC
REV: B
VERSION: 02
REVISED: 08:12:21 12/03/2021
TDR: 000001182161
MODEL NO. 10LYK189
REF: -
BY: USBUFRA
B
BALDOR - RELIANCE®
HOR TEAO 284-6T CP COOLING TOWER W/SLD BRGS,VER LIF, LIP SL
10LYK189

CD0180




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.

CD0180

| | | |
|---|---|---|
| REV. DESC: ADD CLASS CONN00000007 | | |
| REV. LTR: D | VERSION: 01 | TDR: 000001099922 |
| FILE: \AAA\00005\148 | REVISED: 10:25:29 02/19/2019 | BY: ENBRIR0 |
| MTL: – | | |

BALDOR - RELIANCE®

3PH, DV, 9 LEADS, DELTA CONNECTION

SH 1 of 1