

ABB BALDOR RELIANCE III

Customer information packet

VEM3661T-5

3HP, 1755RPM, 3PH, 60HZ, 182TC, 0632M, TEFC, F1

Class - None

Division - Not Applicable

Specifications

Enclosure	TEFC
Frame	182TC
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	3.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	575.0 V @ 60 HZ
Agency Approvals	NEMA PREMIUM CURUSEEV NEMA PREMIUM (OLD LOGO)
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	3.300 A @ 575.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	89.5 %
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	3.3 a
Insulation Class	F

Part Detail

Revision	P
Type	AC
Mech. spec.	06H016
Base	
Status	PRD/A
Elec. spec.	06WGX319
Layout	06LYH016
Eff. date	06-09-2025
CD Diagram	CD00006
Poles	04
Leads	3#16
Proprietary	False
Created date	10-10-2011

Inverter Code	Inverter Ready
IP Rating	NONE
KVA Code	J
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	3 @ 16 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	0632M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	15.98 IN
Power Factor	77
Product Family	General Purpose
Pulley End Bearing Type	Ball
Pulley Face Code	C-Face
Pulley Shaft Indicator	Standard
Rodent Screen	None
Service Factor	1.15
Shaft Diameter	1.125 IN
Shaft Extension Location	Pulley End
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	1755 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

NP3441L									
CAT.NO.	VEM3661T-5								
SPEC.	06H016X319G1								
HP	3								
VOLTS	575								
AMP	3.3								
RPM	1755								
FRAME	182TC		HZ	60			PH	3	
SER.F.	1.15	CODE	J	DES	B	CL	F		
NEMA-NOM-EFF	89.5	PF	77						
RATING	40C AMB-CONT								
CC	010A								
DE	6206		ODE	6205					
ENCL	TEFC	SN							
VPWM INVERTER READY									
CT6-60H(10:1)VT3-60H(20:1									
	SFA 3.5								

Parts List

Part number	Description	Quantity
SA232424	SA 06H016X319G1	1.000 ea
RA219430	RA 06H016X319G1	1.000 ea
36FN3000C01SP	EXFN, PLASTIC, 5.25 OD, .912 ID	1.000 ea
HW3201A05	3/8-16 EYEBOLT	1.000 ea
06CB3000	BALDOR CONDUIT BOX CAST	1.000 ea
06GS1000	GASKET, CONDUIT BOX	1.000 ea
51XW2520A12	SCREW, HEX SER SLT HD, ZN, 1/4-20 X .75	2.000 ea
WD1000B17	T&B CX35TN OR L35P TERMINAL LUG	1.000 ea
11XW1032G06	10-32 X .38, TAPTITE II, HEX WSHR SLTD U	1.000 ea
36EP1101A21	FR ENDPLATE, MACH	1.000 ea
HW4500A01	1641B(ALEMITE)400 UNIV, GREASE FITT	1.000 ea
HW4500A17	317400 ALEMITE GREASE RELIEF	1.000 ea
HW5100A05	WVY WSHR F/205 & 304 BRGS	1.000 ea
36EP1300A13	PU ENDPLATE, MACH	1.000 ea
HW4500A01	1641B(ALEMITE)400 UNIV, GREASE FITT	1.000 ea
HW4500A17	317400 ALEMITE GREASE RELIEF	1.000 ea
10XN2520A28	1/4-20X 1 3/4 HEX HD	4.000 ea
HW1001A25	LOCKWASHER 1/4, ZINC PLT .493 OD, .255 I	4.000 ea
HA3101A34	THRUBOLT- 1/4-20 X 10.375	4.000 ea
36FH4009A31	IEC FH W/GREASER & SPL NOTCH, W/ PRIMER	1.000 ea
51XW1032A06	10-32 X .38, TAPTITE II, HEX WSHR SLTD S	3.000 ea
06CB3500	BALDOR CONDUIT BOX LID	1.000 ea
06GS1001	BALDOR CONDUIT BOX GASKET	1.000 ea
51XW2520A12	.25-20 X .75, TAPTITE II, HEX WSHR SLTD	2.000 ea
HW2501E16	KEY, 1/4 SQ X 1.750	1.000 ea
HA7000A02	KEY RETAINER RING, 1 1/8 DIA, 1 3/8 DIA	1.000 ea
LB1624	COMBINED WARNING LABEL, ISO/ANSI PICTOGR	1.000 ea
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	2.000 ea
MJ1000A02	GREASE, POLYREX EM EXXON	0.050 lb
51XB1214A16	12-14X1.00 HXWSSLD SERTYB	1.000 ea
MG1050Y01	CELEROL BALDOR GOLD *5 GALLON BUCKET*	0.028 ga

LC0006	CONNECTION LABEL	1.000 ea
NP3441L	ALUM SUPER-E VPWM INVERTER READY UL EEV	1.000 ea
36PA1001	PKG GRP, PRINT PK1017A07	1.000 ea
PK3082	STYROFOAM CRADLE	1.000 ea
MN416A01	TAG-INSTAL-MAINT no wire (2500 bx)11/25	1.000 ea
PE-0000001	ZRTG PE ASSEMBLY	1.000 ea
FE-0000001	ZRTG FE ASSEMBLY	1.000 ea

AC Induction Motor Performance Data

Record # 75292

Typical performance - not guaranteed values

Winding: 06WGX319-R001			Type: 0632M		Enclosure: TEFC	
Nameplate Data			460 V, 60 Hz: Single Voltage Motor			
Rated Output (HP)		3	Full Load Torque		9.17 LB-FT	
Volts		575	Start Configuration		direct on line	
Full Load Amps		3.3	Breakdown Torque		20.9 LB-FT	
R.P.M.		1755	Pull-up Torque		11.4 LB-FT	
Hz	60	Phase	Locked-rotor Torque		12.71 LB-FT	
NEMA Design Code	B	KVA Code	Starting Current		18.81 A	
Service Factor (S.F.)		1.15	No-load Current		1.29 A	
NEMA Nom. Eff.	89.5	Power Factor	Line-line Res. @ 25°C		6.2 Ω	
Rating - Duty		40C AMB-CONT	Temp. Rise @ Rated Load		41°C	
S.F. Amps			Temp. Rise @ S.F. Load		54°C	
			Locked-rotor Power Factor		41.1	
			Rotor inertia		0.298 LB-FT2	

Load Characteristics 460 V, 60 Hz, 3 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	54	74	81	84	85	84	85
Efficiency	86.9	89.6	89.6	88.1	86.2	83.1	87
Speed	1785	1769	1753	1734	1711	1684	1720
Line amperes	1.57	2.17	2.94	3.81	4.83	6.1	4.42

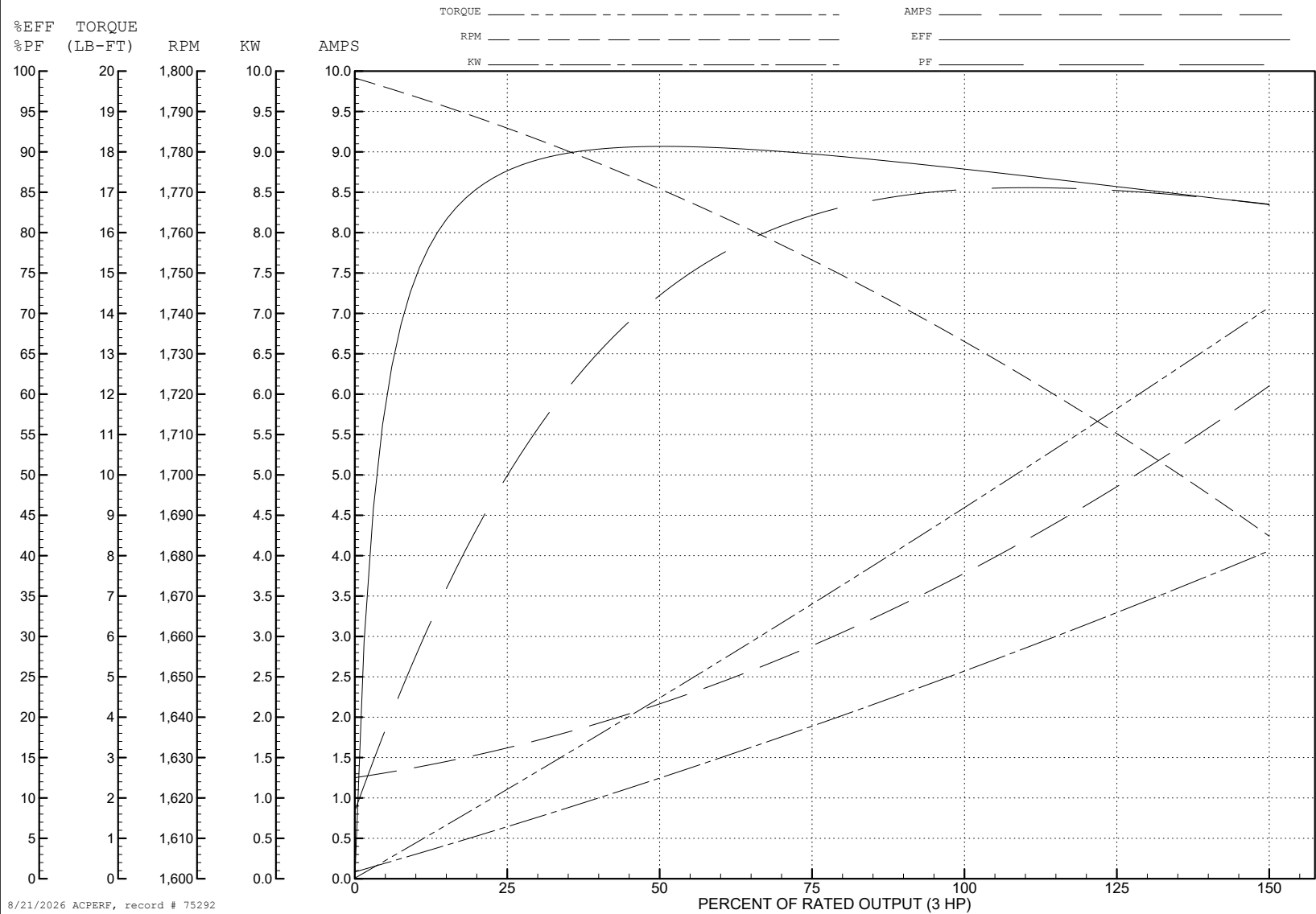
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WINDING # 06WGX319

Typical performance - not guaranteed values.

3 HP 3 PH 60 HZ 1755 RPM 460 V 0632M

TORQUES (LB-FT): PO=20.9 PU=11.4 LR=12.71 LRA=18.81



AC Induction Motor Performance Data

Record # 84796

Typical performance - not guaranteed values

Winding: 06WGX319-R001			Type: 0632M		Enclosure: TEFC		
Nameplate Data			575 V, 60 Hz: Single Voltage Motor				
Rated Output (KW)		2.2	Full Load Torque		12.21 N-M		
Volts		575	Start Configuration		direct on line		
Full Load Amps		3.3	Breakdown Torque		28.35 N-M		
R.P.M.		1755	Pull-up Torque		15.46 N-M		
Hz	60	Phase	3	Locked-rotor Torque		17.23 N-M	
NEMA Design Code		B	KVA Code	J	Starting Current		18.81 A
Service Factor (S.F.)		1.15	No-load Current		1.29 A		
NEMA Nom. Eff.		89.5	Power Factor	77	Line-line Res. @ 25°C		6.2 Ω
Rating - Duty		40C	AMB-CONT		Temp. Rise @ Rated Load		40°C
S.F. Amps					Temp. Rise @ S.F. Load		48°C
					Locked-rotor Power Factor		41.5
					Rotor inertia		0.0126 kg-m²

Load Characteristics 575 V, 60 Hz, 2.2 KW

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	43	59	65	67	68	67	68
Efficiency	86.7	89.8	89.5	88.1	86.3	83.1	87
Speed	1785	1769	1753	1735	1713	1685	1722
Line amperes	1.56	2.16	2.91	3.76	4.75	6	4.35

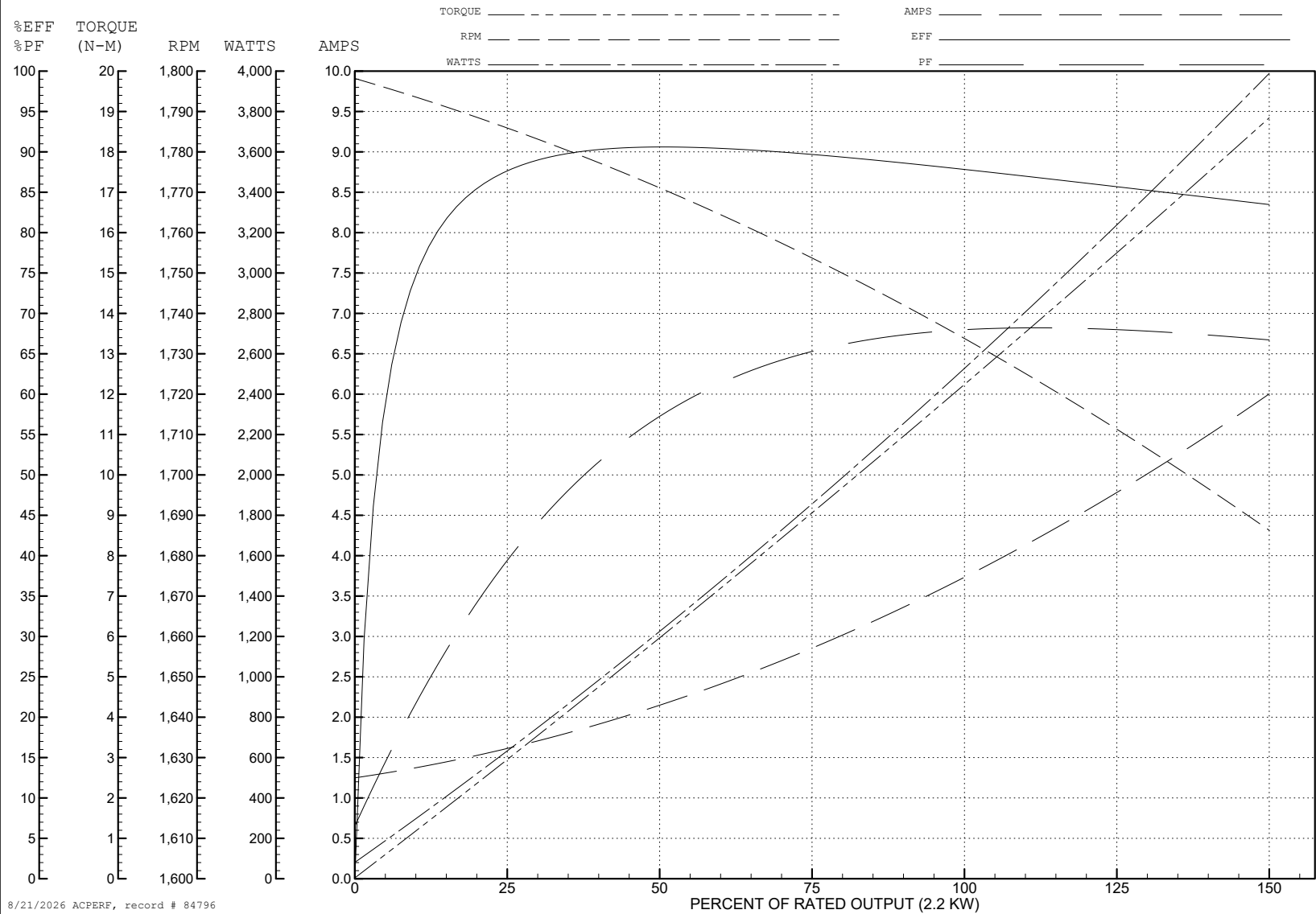
ABB Motors and Mechanical Inc.

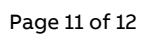
WINDING # 06WGX319

Typical performance - not guaranteed values.

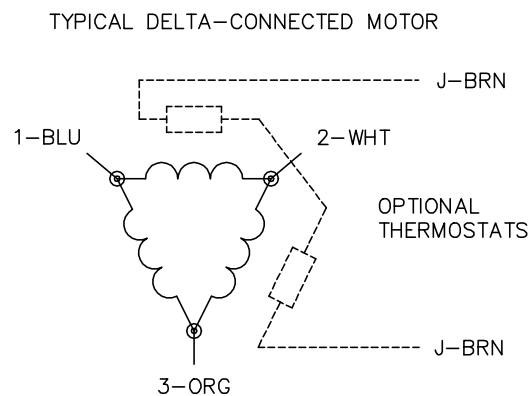
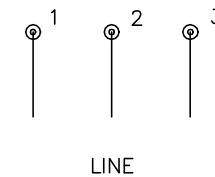
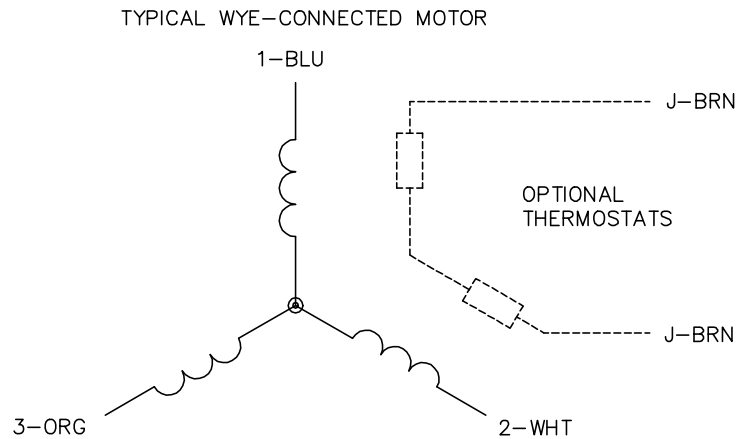
2.2 KW 3 PH 60 HZ 1755 RPM 575 V 0632M

TORQUES (N-M) : PO=28.35 PU=15.46 LR=17.23 LRA=18.81





CD0006


NOTES:

1. THREE LEAD MOTOR MAY BE EITHER WYE CONNECTED OR DELTA CONNECTED.
2. INTERCHANGE ANY TWO LINE LEADS TO REVERSE ROTATION.
3. OPTIONAL THERMOSTATS ARE PROVIDED WHEN SPECIFIED.
4. ACTUAL NUMBER OF INTERNAL PARALLEL CIRCUITS MAY VARY.
5. LEAD COLORS ARE OPTIONAL. LEADS MUST BE NUMBERED AS SHOWN.

CD0006

REV. DESC: ADD CLASS CONN00000007

REV. LTR: E

VERSION: 01

TDR: 000001099922

FILE: \AAA\00005\141

REVISED: 10:24:49 02/19/2019

BY: ENBRIRO

MTL: -


BALDOR - RELIANCE®

3PH, SV, 3 LEADS, WYE OR DELTA CONNECTED

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