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ISO 9001 Certified
ISO 14001 Certified

G&W Electric
Engineered to order. Built to last.

Customer:	Border States
Date:	March 23, 2026
Validity:	60 Days
Quotation Number:	SQ-94266:A (MAP)
Customer Reference:	Lincolnton, NC

Item 1: G&W Electric Viper-ST Solid Dielectric Recloser, Catalog No. VIP378ER-12-1-ST

Quantity: 6

Standard Features:
- Three (3) epoxy insulated vacuum interrupter modules
- One (1) magnetic actuator operator per phase, providing single or three phase operation
- One (1) manual trip and lockout handle with mechanical block per phase, capable of physically blocking electronic and manual operation
- Contact position indicator
- Three (3) 1000/500:1 (factory set to 1000:1) current transformers, encapsulated within the solid dielectric insulation, exclusively for use with the recloser control
- Deadline Operation
- Lifting provisions

Additional Features:
- L-shaped vacuum interrupter modules
- Six (6) 800A deadbreak Apparatus Bushing per IEEE 386 interface 13
- Six (6) 15.5kV screw-on silicone insulators
- Six (6) clamp type for #2-500 MCM overhead conductor
- Six (6) LEA capacitively coupled voltage sensors, encapsulated within the solid dielectric insulation, exclusively for use with the recloser control
- 40-foot 32 pin control cable connectorized on both ends
- Aluminum 15-inch phase spacing center mount frame, with provisions for lightning arrester mounting
- Transformer mounting provisions included
- One (1) Oil potential transformer, suitable for phase to ground connection on a 12470V phase to phase system included and factory installed (for control power)
  - No primary potential transformer fusing included
- One (1) 40-foot, 3 pin PT cable (Hardwired)
- **Custom SEL - 0651R22CXGAXAE1123G5XX (651R#D69V)** control:

Category	Selection
Firmware	Standard
Control Cable Interface	G&W Viper-ST (32-Pin)
Enclosure	Single Door (Rear Mount), Painted 5052 Marine Grade Aluminum With 3-Point Latches
Conformal Coat	None

Secondary Input Voltage	(6) 8 Vac Max LEA Inputs
Secondary Input Current	1 A Phase, 0.2 A Neutral
Extra Inputs/Outputs	None
Communications Port	3 EIA-232, USB
Communications Interface	(2) 10/100BASE-T, EIA-485
Communications Protocol	Standard
Power Supply	120 Vac (Includes GFCI Outlet)
Battery Option	12 V, 40 Ahr
User Interface	Configurable Labels and Tri-Colored LEDs
Installed Accessories	Voltage Input Fuse Block (Secondary Voltages), Universal Fuse Block (Incoming Power), 100 W Heater, and SEL-2401 Satellite-Synchronized Clock (24010XXX0) on Accessory Shelf
Bundled Accessories	None

Note: The SEL-651R2 requires 120 Vac (Includes GFCI Outlet) for control power, to be provided via connection to a user supplied source

Included SEL-651R2 Relay Functionality:

- 50 (P, N, G, Q) – Overcurrent *(Phase, Neutral, Ground, Negative Sequence)*
- 51 (P,N,G,Q) – Time Overcurrent *(Phase, Neutral, Ground, Negative Sequence)*
- 79 – Autoreclosing
- 25 – Synchronization Check
- 27 – Undervoltage
- 32 – Directional Power
- 59 (P,G,Q) – Overvoltage *(Phase, Ground, Negative Sequence)*
- 67 (P,G,Q) – Directional Overcurrent *(Phase, Ground, Negative Sequence)*
- 81 (O,U,R) – Frequency (Over, Under, Rate of Change)

Ratings:

Maximum design voltage	15.5kV
Impulse level (BIL)	110kV
Continuous and load break current	800A
8 Hr. Overload at 20°C	960A
60Hz Withstand, kV rms Dry, 1 min	50kV
60Hz Withstand, kV rms Wet, 10 sec	45kV
Interrupting Rating RMS (kA)	12.5kA
Making Current, RMS, asym, KA	20kA
Peak, asym (kA)	32kA
Short Circuit Current, kA sym, 3 second	12.5kA
Mechanical Operations	10K

Operating Temperature Range: Temperature range, -40°C to +65°C (-40°F to 150°F)

Standards: Ratings per IEEE C37.60-2012 and IEC 62271-111

Price Each: $37,115.00 **Extended Total Price $222,690.00**

Technical Data Sheet

Item Number : 1
ABB Product ID : MB11140LZNL4KMZC

Quote No: 000-00005602
Modified User: McCauley, Terry

Type	R-MAG - Outdoor Dead Tank Vacuum Magnetic Circuit Breaker
Types Rating	MB1114 - 15.5 kV 1250 A 110 kV BIL 25 kA Operating duty: O-0.3s-CO-3min-CO
Switching Application	Standard Capacitor Switching C1 Class (IEEE Std C37.04-2018)
Voltage	15.5 kV
BIL	110 kV BIL
Interrupting Current	25 kA
Power Frequency	60 Hz
Auxiliary Switches	0 - (1) 20 deck snap action rotory switch. Normally this should provide 6 'a' and 6 'b' field adjustable contacts.
CTs 1-3-5	L - 1 Set 1200/5 C400 TR 2.00 (4.12') 1 set of 1200/5 C400 Bushing Current Transformers on bushings 1-3-5. Thermal Rating Factor @ 30°C: 2.00. Full Winding Metering Class: 0.3B1.8.
CTs 2-4-6	Z - Special BCT (2-4-6)
CTS_SPECIAL_2_4_6	Z-1 Set Metering 1200/5,MR, CL 0.2, 30VA, 60Hz,TR2.00-2.38-IEC
Enclosure Material	N - NextGeneration R-MAG Cabinet (15kV, 1200A). Review details of NextGeneration cabinet in this quote´s introduction section

Bill of Material(s) - All Items with Price

Item #	Qty	Description	Unit Price (USD)	Extended Price (USD)
1	4	**Circuit Breaker, Medium Voltage, ANSI Outdoor Vacuum, R-MAG, MB11140LZNL4KMZC** Types Rating: MB1114 - 15.5 kV 1250 A 110 kV BIL 25 kA Operating duty: O-0.3s-CO-3min-CO Voltage: 15.5 kV BIL: 110 kV BIL Interrupting Current: 25 kA	37,786.49	151,145.96
2	1	**Circuit Breaker, Medium Voltage, ANSI Outdoor Vacuum, Spare Part, 1B09551G01** **Spare Parts**	1,223.00	1,223.00
			Total Net Price (USD):	152,368.96