

DATA SHEETS - GMCB

24kV/80kA - 12,000 amp

1.	Voltage Rating	
1.1	Normal System Voltage	24kV
1.2	Rated Maximum Voltage	25.8kV
1.3	Voltage Range Factor	1.0
2.	Interrupting Current Rating	
2.1	Symmetrical Short Circuit Capability	80KA
2.2	Three second short-time current carrying capability	125KA
2.3	Close and Latching Capability	240KA
2.4	Percent interrupting capability after 0-1 min-CO-3 min-CO duty cycle	100%
3.	Continuous Current Rating	12,000A
4.	Operating Time (60 Hz basis)	
4.1	Permissible Tripping Delay	0.25 sec.
4.2	Interrupting Time	5 cycles
4.3	Opening Time	3.8 cycles
4.4	Closing time	7 cycles
4.5	Minimum allowable reclosing time	1 Min
4.6	Reclosing range	1-3 Min
5.	Temperature Range	
5.1	Maximum Ambient	40°C
5.2	Minimum Ambient	-30°C
5.3	Contact temperature rise (max.)	65°C

6.	Insulation Level	
6.1	Power Frequency Withstand Voltage(kV)	
	To Ground And Across The Contacts	50kV
	Across Isolator Contacts	60kV
6.2	Impulse Withstand Voltage	
	To Ground And Across The Contacts	125kV
	Across Isolator Contacts	145kV
7.	Dielectric Strength at Atmospheric Pressure	1.2 times
8.	Breaks per Phase	1
9.	Operating Mechanism	
	12.1 Type	Pneumatic/Spring
	12.2 Individual or common mechanism	Common
10.	Air System	
10.1	Operating range of air pressure	178-213 psig
10.2	Low air pressure alarm	181 psig
10.3	Low air pressure lockout	178 psig
10.4	Overpressure relief valve open at	235 psig
10.5	Compressor	
	13.5.1 Manufacturer	EMGLO
	13.5.2 Horsepower	1.5
10.6	Number of close-open operations stored in air receiver	2
10.7	Pump up from atmospheric to operating pressure	.7 hrs.
10.8	Pump up from lockout to operating pressure	12 min.
10.9	Compressor motor	
	13.9.1 Manufacturer	Dayton
	13.9.2 Voltage	230/115AC single phase
	13.9.3 Speed	1725 rpm
	13.9.4 Class of insulation	B
10.10	Air storage volume	
	Primary:30kg/cm2G(436 psiG)	35 liters
	Secondary: 15kg/cm2G (213 psiG)	200 liters

- 11. SF6 System
 - 11.1 Normal operating pressure at 20°C 75 psig
 - 11.2 Minimum operating pressure with full rating 64 psig
 - 11.3 Temperature compensated gas density alarm 69 psig
 - 11.4 Temperature compensated gas density lockout 64 psig
 - 11.5 Overpressure relief valve 105 psig
 - 11.6 Weight of SF6 gas 120 lbs.

- 12. Trip Coil
 - 12.1 Voltage 125V DC
 - 12.2 Allowable Voltage Range 70-140V DC
 - 12.3 Current 10.4A
 - 12.4 Number of trip coils 2

- 13. Close Coil
 - 13.1 Voltage 125V DC
 - 13.2 Voltage Range 90-140V DC
 - 13.3 Current 3.3A
 - 13.4 Number of close coils 1

- 14. Control Cabinet Heaters
 - 14.1 Number & Wattage of heaters (4) - 160 Watt
 - 14.2 Location 1-mechanism
2-compressor motor
1-control cabinet
 - 14.3 Voltage 120/240V AC

15.	Breaker Dimensions	
15.1	Height of breaker	8'-6"
15.2	Total length	10' 6"
15.3	Width	12' 8"
15.4	Weight	16,500 lbs.
15.5	Impact loading for foundation design	None
15.6	Phase spacing	4'-5.15"
16.	CT Standard Ratings	
16.1	Max. number available per phase	2
16.2	Number proposed per bushing	per spec
16.2	Relaying or metering accuracy	per spec
16.3	Accuracy (relaying)	C400
16.4	Ratio	per spec
16.5	Thermal Rating Factor	1.5
17.	Maintenance Requirements	
17.1	Arcing contact material	Copper-Tungsten
17.2	Number of short circuits before internal maintenance check	10
17.3	Number of rated continuous current interruptions before internal maintenance check recommended	2000
18.	Applicable Standards	
18.1	ANSI	C37
18.2	IEC	56