

38kV Metal-Clad Medium Voltage Switchgear



IEM's medium voltage product line is available in the 38kV class in indoor, outdoor non-walk-in, and outdoor enclosures.

The 38kV mechanically complete switchgear rated for 40kA is also available with CSA certification when required and applicable, and tested per ASCE7-10 requirements to meet and exceed IBC & CBC codes.

38kV Metal-Clad Medium Voltage Switchgear

ANSI/IEEE C37.20.2
Metal-Clad Switchgear

ANSI/IEEE C37.04
Rating Structure for High Voltage
Circuit Breakers

ANSI/IEEE C37.54
Indoor HV Breakers in Metal
Enclosure Conformance Test

ANSI/IEEE C37.55
Medium Voltage Metal-Clad
Assemblies

ANSI/IEEE C37.09
Test Procedure for AC HV Breakers
on Sym Current basis

CSA Certified

Features & Benefits

- Voltage: 38kV
- Ampacity: 1200A
- Basic Insulation Level (BIL): 150kV (Breaker 170kV BIL)
- Breaker interrupter ratings: Up to 40kAIC
- Type 1: 42" W x 123" D x 95" H
- Type 3R: 42" W x 132" D x 107" H
- Advanced vacuum circuit breaker
- Metal-clad compartmentalized construction
- Main-tie-main automatic transfer scheme
- Rear access for load and incoming connections
- Indoor or outdoor applications
- Breaker & PT can be constructed into one section (feeder only)

Vacuum Circuit Breaker

- Full Roll on the floor – No accessories required (Lift truck, ramp, etc.)
- Manual and electrical (motor) spring charging
- Front Operation and front access to operating mechanism
- AC or DC auxiliary voltage
- Under voltage release and second shunt trip optional
- Capacitor trip device –Internal or external when AC required
- Standard fast interruption: 3 Cycles
- SIS – 600V secondary wiring
- 4NO + 4NC auxiliary contacts
- Operation counter and charge/discharge spring indicator
- Front access to position indicator
- Safe and reliable flexible secondary disconnect signals



Breaker Ratings

VIDER VVA	Circuit Breaker Type	
38	Rated Maximum Voltage (kV)	
34.5	Nominal Voltage Class (kV)	
60	Frequency (Hz)	
1.0	Rated Voltage Range Factor (K)	
80	Power Frequency 1 min (kvrms)	Insulation / Withstand Class
170	Lighting Impulse 1.2X50 μS (kV)	
1200A, 2000A	Rated Current (A)	Current
40	Rated Breaking Current (kA)	
104	Rated Making Current (kAp)	
40	Rated Short Circuit Time Withtnad ~3 sec (kA)	
65.2	Rated Crest Voltage (kVCrest)	Rated Transient Recovery Voltage (TRV)
109	Rated Time to Crest (T2 μS)	
0.6	Rated Rise of Recovery Volt	
2	Rated Permissible Tripping Delay (YSec)	
0.05	Opening Time (Sec)	Operation Time
3	Breaking Time (Cycles)	
O-C-O	Rated Operating Sequence	
4 A/B	Auxiliary Contacts	



Industrial Electric Mfg.

iemfg.com

