Metal-Clad Medium Voltage Switchgear (5-15kV)

Vacuum Circuit Breakers

IEM's Metal-Clad Medium Voltage Switchgear vacuum circuit breaker product line is available in the 5kV and 15kV classes in outdoor non-walk-in, outdoor walk-in and indoor enclosures.

Selection of specific protective relays, metering devices and circuit breakers for specific applications is optional. This customizable feature makes IEM an ideal choice for unique projects and for matching or upgrading existing installations.

Metal-Clad Medium Voltage Switchgear (5-15kV)

Full Customization and Design Flexibility

Component and Metering Selection Options

Fully Rated Bus Based on Density Ratings

Standard Mechanical Circuit Breakers

Seismic Tested to Worst Case Response Spectrum

Indoor and Outdoor Applications

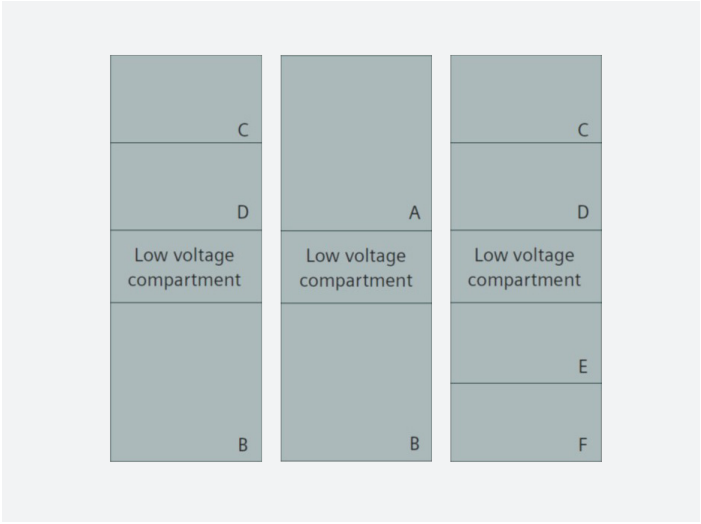
Meets ANSI, CSA, IEEE, and NEMA Standards

Features & Benefits

- 5 and 15kV Non Arc Resistant
- 2-Hi (breaker over breaker)
- Breaker roll-on-floor
- 1200, 2000 and 3000A (4000FC available – upon request)
- Up to 50kA (63kA available upon request)
- Finished product with UL and cUL label
- Max CPT is 15kVA in draw out – for larger CPT, a fuse truck is required and a fix mounted CPT in the rear compartment
- Conventional window type CT's
- Breaker and PT's secondary signals through slide contact system
- Flexible MOC's and TOC's (up to 24)
- Accessories include manual and electrical G&TD, electrical racking systems, lifting devices, standard tools (charging and racking)

Possible Combinations

- A and B can be Vacuum Circuit Breakers
  - 1200/1200A
  - 2000/2000A
  - 1200/2000A
- 3000A Rules
  - If VCB in A, then E to be blank
  - If VCB in B, then A to be blank
- PT's in C, D, E and F
- CPT's preferred in D (15kVA Max)
- FT's preferred in F
- Draw out bus connected preferred in D and E
- 4000A requires a 3000A VCB in "B" with FC system in the compartment "A"
- LV devices can be mounted in the front doors of breakers



IEM Medium Voltage Component Selection Ratings Based on kA Rating

5kV

Nominal Voltage kV rms	Nominal 3-phase class (kA) Voltage Factor k=1.0	Continuous Current A rms	Power Withstand Frequency kV rms	BIL Crest Impulse Voltage (kV)	Momentary Close & Latch Asym (1.55x1) kA rms	Momentary Close & Latch Peak (2.6x1) kA peak	Rated Interrupting Time (cycle/ms) 3 Cycles	Maximum Symmetrical Interrupting Capability	Short Time Current 3 Sec Carrying Capability(kA)
4.76	40	1200, 2000, 3000	19	60	62	104	5 / 83	40	40
4.76	50	1200, 2000, 3000, 4000 FC	19	60	78	130	5 / 83	50	50
4.76	63	1200, 2000, 3000, 4000 FC	19	60	98	164	5 / 83	63	63

15kV

Nominal Voltage kV rms	Nominal 3-phase class (kA) Voltage Factor k=1.0	Continuous Current A rms	Power Withstand Frequency kV rms	BIL Crest Impulse Voltage (kV)	Momentary Close & Latch Asym (1.55x1) kA rms	Momentary Close & Latch Peak (2.6x1) kA peak	Rated Interrupting Time (cycle/ms) 3 Cycles	Maximum Symmetrical Interrupting Capability	Short Time Current 3 Sec Carrying Capability(kA)
15	25	1200, 2000, 3000	36	95	39	65	5 / 83	25	25
15	40	1200, 2000, 3000	36	95	62	104	5 / 83	40	40
15	50	1200, 2000, 3000 4000FC	36	95	78	130	5 / 83	50	50
15	63	1200, 2000, 3000, 4000 FC	36	95	98	164	5 / 83	63	63

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