

SIEMENS

www.usa.siemens.com/mvswitchgear

Medium-voltage, air-insulated switchgear

Type GM38, 38 kV up to 40 kA drawout metal-clad



- One-high construction
- Up to 50 full-fault interruptions
- Universal spare circuit breaker
- Closed door racking
- Interlocks permit insertion of higher rated vacuum circuit breaker into lower rated cell but not vice versa
- Front accessible circuit breaker operating mechanism for ease of maintenance
- Floor rollout circuit breaker in lower cell without a dolly
- Visible secondary disconnect
- Pair with Siemens protective relays to match any typical application
- Horizontal drawout type 38-3AH3 vacuum circuit breaker with type 3AH3 operating mechanism
- Uses the latest developments in vacuum interrupter technology
- Highly reliable vacuum interrupters - MTTF over 57,000 years
- Common type 3AH3 operator platform for all ratings
- Over 60,000 type 3AH3 operators produced since 1998
- 10,000 operations to overhaul
- Three-cycle interrupting time (optional)
- Meets or exceeds the latest ANSI, IEEE and NEMA standards
- UL Listing for 40 kA rating.

Answers for infrastructure.

Type 38-3AH3 circuit breaker ratings								
Measured parameter			Units	Circuit breaker type				
				38-3AH3-1500 ¹	38-3AH3-31 ²	38-3AH3-40 ²		
General	Nominal voltage class		kV	38.0	38.0	38.0		
	Nominal three-phase MVA class		MVA	1,500	----	----		
Rated values	Rated voltage	Maximum design voltage (V)		kV rms	38.0	38.0	38.0	
		Voltage range factor (k)		----	1.65	1.0	1.0	
	Insulation levels	Withstand voltage levels	Power frequency		kV rms	80	80	80
			Lightning impulse (BIL)		kV peak	150	150	150
	Rated current	Continuous		A rms	1,200, 2,000, 3,000FC ³	1,200, 2,000, 3,000FC ³	1,200, 2,000, 3,000FC ³	
		Short-circuit (at rated maximum design voltage) (I)		kA rms sym	21	31.5	40	
		Interrupting time		Cycles/ms	5/83 ⁸	5/83 ⁸	5/83 ⁸	
		Permissible tripping delay (Y)		Sec	2	2	2	
Related required capabilities	Current	Rated maximum design voltage (V) divided by K = (V/K)		kA rms	23.0	38.0	38.0	
		Maximum symmetrical (sym) interrupting (K x I)		kA rms sym	35	31.5	40	
		Short-time current (K x I) (3 s)		kA rms sym	35	31.5	40	
	Closing and latching (momentary)	Asymmetrical		kA rms	56 ⁴	50 ⁶	62 ⁶	
		Peak		kA peak	95 ⁵	85 ⁷	104 ⁷	
Dimensions in inches (mm) ⁹								
Type	Height (H)	Width (W)	Depth (D)	Drawout aisle (DA) ^{11,12}				
Indoor GM38 ¹⁰	110.0 (2,794)	48.0 (1,219)	130.0 (3,302)	96.0 (2,438) recommended				
Shelter-Clad single-aisle SGM38	132.5 (3,366)	48.0 (1,219)	234.5 (5,956)	96.0 (2,438) included				
Shelter-Clad common-aisle SGM38	132.5 (3,366)	48.0 (1,219)	363.8 (9,239)	96.0 (2,438) included				
Aisleless non-walk-in OGM38	48.0 (1,219)	48.0 (1,219)	139.4 (3,539)	96.0 (2,438) recommended				

Footnotes:

- ¹ Historic constant MVA class (ANSI C37.06-1987)
- ² New constant kA class (ANSI/IEEE C37.06-2009)
- ³ Fan cooled
- ⁴ 1.6 x K x I
- ⁵ 2.7 x K x I
- ⁶ 1.55 x I
- ⁷ 2.6 x I
- ⁸ Three-cycle (50 ms) interrupting optional
- ⁹ Add for roof and enclosure overhang:
Rear (cable side):
 - Non-walk-in: 3.9" (98 mm)
 - Shelter-Clad 3.9" (98 mm)
 Front (drawout side):
 - Non-walk-in 6.9" (175 mm)
 - Shelter-Clad 1.5 (38 mm).
- ¹⁰ Add 6" (152 mm) to each end of lineup for aisle extension 12" (304 mm) total.
- ¹¹ If indoor switchgear is installed on a raised housekeeping pad, the pad must not extend further than 3" (75 mm) from the front of the switchgear to avoid interference with the use of the portable lift truck.
- ¹² 96.0" (2,438 mm) aisle space recommended and allows room for interchange of circuit breakers. Minimum aisle space required for handling circuit breakers with lift truck is 80" (2,030 mm).

The information provided in this document contains merely general descriptions or characteristics of performance which in case of actual use do not always apply as described or which may change as a result of further development of the products. An obligation to provide the respective characteristics shall only exist if expressly agreed in the terms of contract.

All product designations may be trademarks or product names of Siemens AG or supplier companies whose use by third parties for their own purposes could violate the rights of the owners.

Siemens Industry, Inc.
7000 Siemens Road
Wendell, NC 27591

Subject to change without prior notice.
Order No.: E50001-F710-A143-V1-4A00
All rights reserved.
© 2012 Siemens Industry, Inc.

For more information, contact: +1 (800) 347-6659

www.usa.siemens.com/mvswitchgear