

SIMOVAC-AR™ ARC-RESISTANT

Medium-voltage controller

2.4 kV, 4.16 kV, and 6.9 kV, up to 720 A usa.siemens.com/simovac

Features and benefits:

- Tested for arc-resistance to IEEE C37.20.7-2007, up to 63 kA, 0.5 s, accessibility type 2B
- UL 347 6th Edition/CSA C22.2 No. 253-09
- 400 A bolt-in or plug-in (optional) or 720 A bolt-in vacuum contactor
- 400 A or 720 A non-load-break isolation switch
- 2.4 kV, 4.16 kV and 6.9 kV (up to 7.65 kV) system voltage ratings
- 1,200 A, 2,000 A, 3,000 A or 4,000 A main bus with standard epoxy insulation on bus bars, and with optional boots for insulating joints
- Main bus and ground bus braced up to 63 kA two-second short-time capability
- Top-mounted pressure relief channel shipped installed for reduced site installation time
- Isolation switch with visible indication through viewing window verifies power cell is isolated from line-side source no need to open panel door
- Low-voltage compartment is isolated from the medium-voltage compartment
- Isolation switch mechanically interlocked with the access door to prevent user access to primary compartment when isolation switch is closed
- All components are front accessible, facilitating routine inspection or parts replacement
- Current-limiting fuses, contactor assembly and isolating switch assembly are easily removed from the enclosure
- Tin- or silver-plated bus



- Main bus compartment top, side and front accessible for easy installation and extension
- Optional Sm@rtGear™ functionality provides predictive diagnostics, continuous monitoring, and control from a remote location.
- Trained and certified local personnel in U.S. available for start-up, commissioning, and maintenance.

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Technical ratings

Characteristics		Unit	Voltage class	5				
System design voltage		kV	2.4	2.4	4.16	4.16	6.9 ⁸	6.9 ⁸
Enclosed continuous current		A	400	720	400	720	400	720
Interrupting capacity fused class E2		kA	63	63	63	63	63	63
Motor horsepower (HP) rating three-phase	Synchronous motors	0.8 PF	1,500	3,000	2,500	5,500	4,000	8,000
		1.0 PF	1,750	3,500	3,000	6,000	5,000	10,000
	Induction motors	HP	1,500 ⁸	3,000	2,500 ⁹	5,500	4,000	8,000
Maximum motor fuse rating			24R ²	57X ³	24R ²	57X ³	18R ⁴	57X ³
Transformer loads	Three-phase	kVA	1,500	2,500	2,500	5,000	2,000-3,500	4,000-6,000
	Fuse rating		450E ⁷	900E	450E ⁷	900E	200E ⁷ -18R	450E ⁷ -57X ³



Туре	Height (H)	Width (W)	Depth (D)
Indoor	112.0 (2,845)	36.0 (914)	40.5 (1,029)
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Dimensions in inches (mm)





Item	Description				
A	Exhaust plenum connection				
В	Cable entry (top)				
С	Pressure relief channel				
D	Main bus ventilation				
E	Viewing window for disconnect switch				
F	Low-voltage panel				
G	Disconnect switch operating handle				
Н	Upper compartment				

Lower compartment

T

Footnotes:

- 1. Maximum design voltage 7.65 kV.
- 2. With 24R fuse, interrupting capacity is 50 kA.
- 3. With 48X or 57X fuse, interrupting capacity is 50 kA.
- 4. Maximum fuse 18R.
- Exhaust plenum can be connected to front, rear or either side of lineup. Exhaust plenum required to exhaust arc by-products outside of building. If connected to Siemens type GM-SG-AR arc-resistant switchgear, exhaust plenum can be coordinated with the type GM-SG-AR plenum so that a single plenum may be used.
- Two-section minimum for arc-resistant design.
- Fuse shown will not permit transformer forced-cooled rating of 133 pecent of self-cooled rating.
- 8. For horsepower greater than 1,500, please consult factory.
- 9. For horsepower greater than 2,500, please consult factory.

Legal Manufacturer

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