

SIMOVAC-AR™ medium-voltage controller

Arc-resistant, up to 720 A, and 2.4 kV, 4.16 kV and 6.9 kV

Description

A leader in the design of medium-voltage controllers, Siemens offers its advanced arc-resistant medium-voltage controller with enhanced safety for your personnel. Siemens combined its knowledge as a leading manufacturer of motors worldwide and as a world-class supplier of medium-voltage controller innovation and technologies to deliver flexibility and reliability.

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 5th edition/CSA C22.2 No. 253-09¹
- 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
- Tin- or silver-plated bus available
- Front accessible
- Main bus and ground bus are supported and 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 to verify that the power cell is isolated from line-side source – no need to open panel door

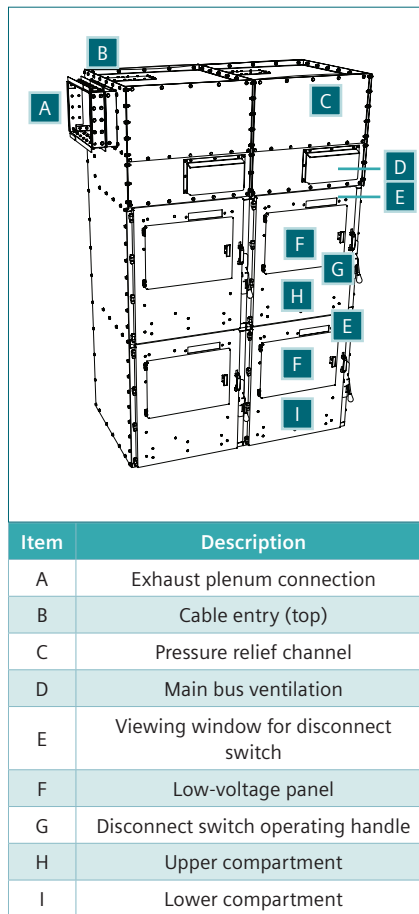
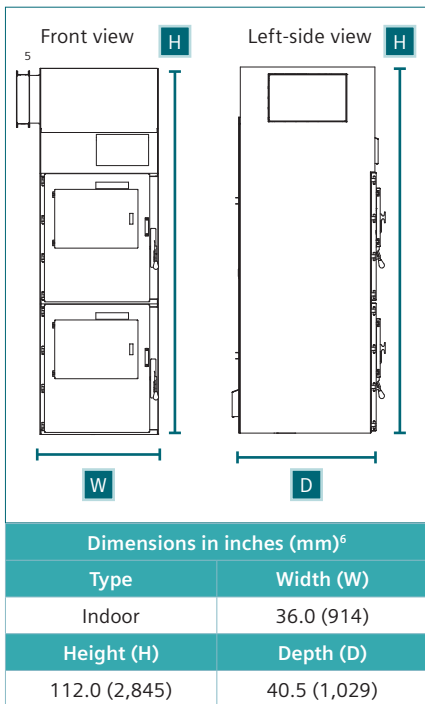
- Isolation switch mechanically interlocked with the access door to prevent user access to primary compartment when isolation switch is closed
- Low-voltage compartment is isolated from the medium-voltage compartment
- All components are front accessible, facilitating routine inspection or parts replacement
- Current-limiting fuses, contactor assembly and isolating switch assembly are easily removed from the enclosure
- The main bus compartment is top, side and front accessible for easy installation and extension.



Footnote:

¹ UL/cUL listing not available on 720 A SSRVS controllers.

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



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.
5. 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.
6. Two-section minimum for arc-resistant design.
7. Fuse shown will not permit transformer forced-cooled rating of 133 percent of self-cooled rating.

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