



SIEMENS

Ingenuity for life

Medium-voltage, reduced-voltage, autotransformer controllers

SIMOVAC-RVAT™ non-arc-resistant and SIMOVAC-RVAT-AR™ arc-resistant

Description

A leader in the design of medium-voltage controllers, Siemens offers reduced-voltage, autotransformer non-reversing controller in addition to its solid-state, reduced-voltage (SSRV) controller. This traditional electro-mechanical starting approach is rated for NEMA medium-duty applications. Motor data must be provided when ordering to ensure that the autotransformers are sized properly.

Features and benefits:

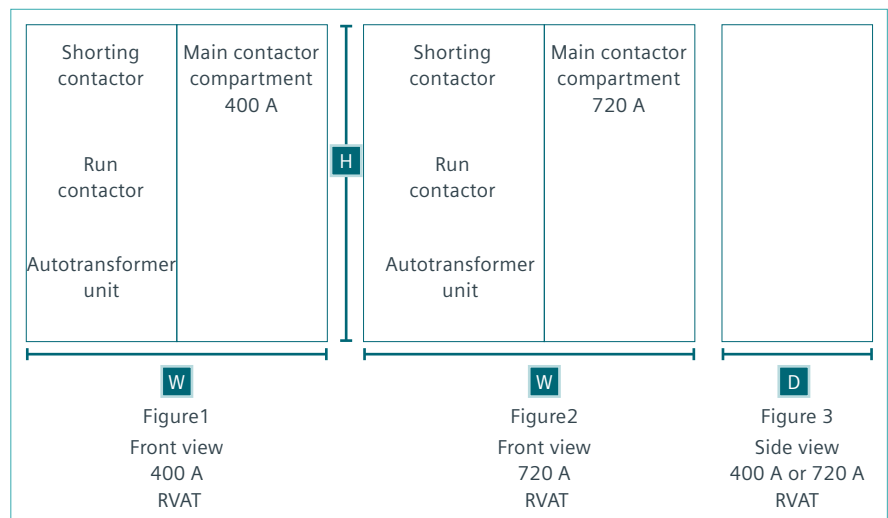
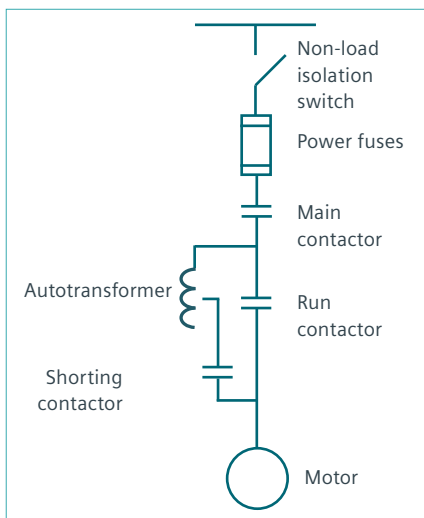
- 2.4 kV and 4.16 kV system voltage ratings
- Fixed-mounted 400 A or 720 A vacuum contactor (optional 400 A plug-in for main contactor)
- Non-load-break isolating switch
- Available non-arc-resistant and arc-resistant versions
- Arc-resistant design tested for internal arcing to IEEE C37.20.7, up to 63 kA, 0.5 s, accessibility type 2B
- UL (or C-UL) available
- Isolating switch with visible indication through viewing window to verify that the power cell is isolated from line side – no need to open panel door
- Isolating switch mechanically interlocked with the access doors to prevent user access to primary compartment when isolation switch is closed
- Low-voltage compartment isolated from the medium-voltage compartment
- All components front accessible, facilitating routine inspection or parts replacement
- Current-limiting fuses, contactor assembly and isolating switch assembly are easily removed from the enclosure
- Delivers more torque per incoming ampere than the solid state reduced voltage (SSRV) motor controller
- Low-voltage test mode – no special tools required
- Current limit.



Technical ratings				
System design voltage kV	Enclosed continuous current rating A	Interrupting capacity kA	Motor horsepower rating (three-phase) ⁸	Maximum motor fuse rating
		Fuses class E2 kA	Induction type motor	
2.4	400	63	100-1,250	24R
2.4	720	63	1,750-3,000	57X
4.16	400	63	100-2,500	24R
4.16	720	63	3,000-5,500	57X

Autotransformer controller starting characteristics				
Autotransformer tap settings	% motor voltage	% motor current	% line current	% torque
50% tap	50	50	28	25
65% tap	65	65	45	42
80% tap	80	80	67	64

Dimensions in inches (mm)						
Type	Width (W) ³	Height (H) ^{1, 7, 9}	Depth ^{2, 6}	Configuration	Weight in lbs (kg) non-arc-resistant ⁴	Weight in lbs (kg) arc-resistant
400	72 (1,829)	80 (2,038) ⁵	30 (762)	1,3	4,465 (2,025)	5,145 (2,334)
720	84 (2,134)	95 (2,413)	30 (762)	2,3	6,283 (2,850)	6,963 (3,158)



Footnotes:

- Add 17.0" (432 mm) for height of SIMOVAC-RVAT-AR arc-resistant controller (total 112.0" (2,845 mm)).
- Add 10.5" (267 mm) for depth of SIMOVAC-RVAT-AR arc-resistant controller (total 40.5" (1,029 mm)).
- Add 6.0" (152 mm) for width per section for outdoor (non-arc-resistant).
- Add 850 lbs (386 kg) for weight per section for outdoor (non-arc-resistant).
- Height increases to 107.3" (2,725 mm) for outdoor (non-arc-resistant).
- Depth increases to 37.4" (950 mm) for outdoor (non-arc-resistant).
- Add 13.0" (330 mm) the height for horizontal bus bar compartment.
- Consult factory for other ratings.
- For non-arc-resistant with 4,000 A main bus, add 7.25" (184 mm) to the overall height and 75 lbs (35 kg) to the total weight per section.

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