

ADVAC®

Medium Voltage Mechanical Vacuum Circuit Breaker for IEEE Standards



The ADVAC Medium Voltage Mechanical Vacuum Circuit Breaker series is a complete line of IEEE-rated vacuum circuit breakers with a spring-charged mechanism and three position electric racking, offering customers the advantages of the latest technology with a modular design that is easily maintainable.

Help keep personnel safe

- Safety and protection of personnel and equipment with enclosed mechanism housing and embedded pole technology
- Roll-on-floor (ROF) caster design offers ease of use
- Three position remote motorized racking options available

Protect your assets

- Built-in truck interlocks for a compact and robust solution
- Maintenance-free embedded pole design helps protect vacuum interrupters from contamination, moisture, damage, and improving tracking resistance

Optimize investments

- Lowest power consumption accessories for reduced battery bank systems
- The integrated racking mechanism (truck) is designed to 180 ftlbs of torque for increased reliability and reduced maintenance costs
- Highest quality and short lead times through automated production process
- 75% lower power consumption accessories for reduced battery bank systems
- Global 24hour Service and support
- Breaker + cassette solutions available for a faster engineering design

Maximize your output

- 50% less maintenance time with modular accessory replacement
- Smart Coil accessories provide fast, low energy response with intelligent coil monitoring.
- ABB EL spring mechanism used on over 2 million breakers installed globally, modular design that is readily accessible and easily maintained to reduce downtime

Technical characteristic

Circuit breaker		ADVAC 05			ADVAC 08		
Rated and insulation voltage	[kV]	4.75			8		
Impulse withstand voltage	[kV]	60			95		
Rated frequency	[Hz]	60			60		
Execution		fixed/ADVANCE/Safegear/ADVANCE 63			fixed/ADVANCE/Safegear		
Rated normal current	[A] [40 °C]	1200	2000	3000	1200	2000	3000
		25	25	25			
		32	32	32			
		40	40	40			
		50	50	50			
Rated breaking capacity and rated short-time withstand current (3s)	[kA]	63 (2s)	63 (2s)	63 (2s)	40	40	40
		65	65	65			
		82	82	82			
		104	104	104			
		130	130	130			
Making capacity	[kA]	163.8	163.8	163.8	104	104	104
		130	130	130			
		104	104	104			
Operation sequence		0-0.3s-CO-3min-CO*			0-0.3s-CO-3min-CO*		
Interrupting time	[ms]	50-83*	50-83*	50-83*	50-83	50-83	50-83
Closing time	[ms]	35...60*	35...60*	35...60*	35...60	35...60	35...60
Overall dimensions (fixed version)	H [inches]	18.13 ... 27	18.13 ... 27	18.13 ... 27	18.13 ... 27	18.13 ... 27	18.13 ... 27
	W [inches]	27.56 ... 31	27.56 ... 31	27.56 ... 31	27.56 ... 31	27.56 ... 31	27.56 ... 31
	D [inches]	16.7 ... 30.3	16.7 ... 30.3	16.7 ... 30.3	16.7 ... 30.3	16.7 ... 30.3	16.7 ... 30.3
Weight	Fixed [kg]	302...459	302...459	302...459	364...430	364...430	364...430
	Withdrawable [kg]	220...681	220...681	220...681	364...430	364...430	364...430

Circuit breaker		ADVAC 15			ADVAC 38		
Rated and insulation voltage	[kV]	15			38		
Impulse withstand voltage	[kV]	95			150		
Rated frequency	[Hz]	60			50/60		
Execution		fixed/ADVANCE/Safegear/Safegear HD/ADVANCE 63			PowerCube PB8		
Rated normal current	[A] [40 °C]	1200	2000	3000	1200	2000	3000
		25	25	25			
		32	32	32			
		40	40	40			
		50	50	50			
Rated breaking capacity and rated short-time withstand current (3s)	[kA]	63	63	63	-	-	-
		65	65	65	-	-	-
		82	82	82	-	-	-
		65	65	65	65	65	65
		82	82	82	82	82	82
Making capacity	[kA]	104	104	104	104	104	104
		130	130	130	-	-	-
		163.8	163.8	163.8	-	-	-
Operation sequence		0-0.3s-CO-3min-CO*			0-0.3s-CO-3min-CO		
Interrupting time	[ms]	50-83*	50-83*	50-83*	50	50	50
Closing time	[ms]	35...60*	35...60*	35...60*	35...80	35...80	35...80
Overall dimensions (fixed version)	H [inches]	18.13 ... 27	18.13 ... 27	18.13 ... 27	37.77 ... 44.3	37.77 ... 44.3	37.77 ... 44.3
	W [inches]	27.56 ... 31	27.56 ... 31	27.56 ... 31	35.3	35.3	35.3
	D [inches]	16.7 ... 30.3	16.7 ... 30.3	16.7 ... 30.3	35.7	35.7	35.7
Weight	Fixed [kg]	302...459	302...459	302...459	302...459	302...459	302...459
	Withdrawable [kg]	220...681	220...681	220...681	302...681	302...681	302...681

* ADVAC 63kA has an operation sequence of CO-30min-CO

* ADVAC 63kA has a rated closing time of 50...80ms

* ADVAC 63kA has a rated interrupting time <=50ms