

MEDIUM VOLTAGE VACUUM CONTACTOR

MVC Series

The Joslyn Clark USAVAC medium voltage vacuum contactors are ideal for applications for 2300V to 7200V. Current ratings of 200-1200 ampere, and motor ratings up to 7000 HP at 6600V are available.

- 7200V, 600 Ampere, 3 phase vacuum contactor with In-Line Power Terminals
- 400 Ampere, 3 phase vacuum contactor with alternative line terminal position enabling line andload termination to be on same side of contactor. Ideal for dropout starter designs. Can be easily converted.

The MVC Series Medium Voltage Vacuum Contactors offer many unique features to create easy maintenance, dependability and versatility. The modular design allows for a simplified assembly and easy inspection, utilizing minimum parts.

The control module contains the coil and auxiliary contacts, which can easily be removed for inspection or replacement.





Features

- Front Accessible
- Panel mount or table mount
- Field selectable power terminals
- Full phase insulated, B.I.L. 60kV

- · Rugged design
- · Compact, Lightweight
- Low Maintenance
- Self-adjusting power contacts



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Specifications

Catalog Numbers 1,2					
2,500V	MVC77U032A25-**	MVC77U034A25-**	MVC77U036A25-**		
5,000V	MVC77U032A50-**	MVC77U034A50-**	MVC77U036A50-**		
7,200V	MVC77U032A72-**	MVC77U034A72-**	MVC77U036A72-**		

Power Ratings Enclosed				
Rated Operational Current	200A	400A	600A	
Rated Frequency	50/60Hz			
E1 Interrupt Rating	2,500V - 20 MVA equivalent to 4.62KA			
MVA & KA Values	5,000V - 40 MVA equivalent to 4.62KA			
Contactor Only	7,200V - 60 MVA equivalent to 4.81KA			
E2 Fuse Coordination (5000V)	400 MVA 45.7 KA RMS (38R max. fuse size)			
Peak Withstand Current (5000V)	57.8 KA - Peak (38R m	ax. fuse size); 50 KA (24	R max. fuse size)	
Short Time Current (1s)	6,000V	7,000V	9,000V	
Short Time Current (5s)	4,000V	5,000V	6,000V	
Short Time Current (15s)	2,000V	2,600V	3,000V	
Switching Frequency	300 cycles per hour			
Elec. Life at Rated Current*	600,000 cycles	400,000 cycles	250,000 cycles	
Mechanical Life - No Load*	750,000 cycles			
Dielectric Strength / B.I.L.	20,000V (1 min. per Interrupter) 60,000V (60ms per Interrupter)			
Chop Current Max	0.9A			
Operating Range at Rated Voltage	+10% -15%			
Typical Closing Power VA/Duration	@120V 1kVA / 55ms			
Typical Holding Power	@120V 13VA / 0.47VDC			
Typical Opening Time	@120V≈125ms / @240V≈195ms			
Typical Closing Time	@120V≈55ms / @240V≈50ms			
Average Pick-Up at Rated Voltage	≤85%			
Average Drop-out at Rated Voltage	≤70%			
Recommended Control Transformer	300VA 600VA			

Application Ratings	
Mounting Installation	All Planes (Contactor only)
Altitude	6600 ft. (2000 Meters)
Operating Temperature Range	32°F (0°C) +134°F (57°C)
Vibration / Shock	40Hz - 2G. / 30G.
Weight	41 lbs. (18.6 kg)
Auxiliary Contacts	3 N.O. & 3 N.C. (standard), 1 N.O. SSR

Coil Voltages

Suffix	Coil Voltage
-1	110/120VAC 50/60Hz & 125VDC
-2	220/240VAC 50/60Hz & 250VDC

Motor HP/KW AC3

Voltage	Power Factor	200A	400A	600A
2,500V	0.8	800	1,625	2,500
2,500V	1.0	1,000	2,000	3,000
3,300V	0.8	1,050	2,125	3,175
3,300V	1.0	1,350	2,750	4,000
4,160V	0.8	1,350	2,750	4,000
4,160V	1.0	1,625	3,350	5,000
6,600V	0.8	2,125	4,250	6,000
6,600V	1.0	2,750	5,500	8,000

Transformer Load KVA

Voltage	200A	400A	600A
2,500V	750	1,500	2,500
3,300V	1,000	2,000	3,000
4,160V	1,500	3,000	4,250
6,600V	2,000	4,000	6,000

Capacitor Load KVAR

200A	400A	600A
550	1,125	1,650
750	1,500	2,250
1,050	2,250	3,375
1,500	3,000	4,500
	550 750 1,050	550 1,125 750 1,500 1,050 2,250

NOTES:

- ¹ Consult factory for 2, 4, 5 Pole Contactors, and Mechanically Interlocked Contactors.
- $^{\rm 2}$ Consult factory for certifications and approvals. $^{\rm 3}$ Excludes DC Voltages.

