

**Joslyn Clark** 



# VACUUM CONTACTOR & STARTER FAMILY

[WWW.JOSLYNCLARK.COM](http://WWW.JOSLYNCLARK.COM)

Produced by Northeast Power Systems, Inc.  
[www.nepsi.com](http://www.nepsi.com)

## USAVAC® MEDIUM VOLTAGE

The Joslyn Clark USAVAC medium voltage vacuum contactors are ideal for applications for 2300V to 7200V. Current ratings of 200, 400, and 600 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 and load termination to be on same side of contactor. Ideal for dropout starter designs. Can be easily converted.

The Joslyn Clark USAVAC medium voltage vacuum contactors and starters offer many unique features to create easy maintenance, dependability and versatility. NEMA type E2 starters are available in Type 1, 3R and 12 enclosures. The modular design allows for a simplified assembly and easy inspection, utilizing minimum parts.

The control module contains the coil and 2 N.O. and 2 N.C. auxiliary contacts. It is easily removed for inspection or replacement. A factory set half shell phase assembly and replacement control module are the only replacement parts.

The Joslyn Clark family of low and medium voltage vacuum contactors and starters are available in combination and non-combination enclosures. Controllers are available for across the line, reduced voltage, reversing, and non-reversing arrangements. Enclosures are available in Types 1, 3R, 4 and 12.



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# ENGINEERING DATA

## Vacuum Contactor & Starter Ratings

Standard - NEMA ICS 2-324, UL 347, CSA 22.2, IEC 470, BS 775

Description		200A	400A	600	1200
Catalog Number & 2.5KV	MVC77U032A25	MVC77U031A25	MVC77U036A25	SVC77U031225	
Rated Voltage	5.0KV	MVC77U032A50	MVC77U034A50	MVC77U036A50	SVC77U031250
	7.2KV	MVC77U032A72	MVC77U034A72	MVC77U036A72	SVC77U031272

Power Ratings					
Operational Rated Current		200A	400A	600A	800/1200A
Operational Rated Frequency HZ		50/60	50/60	50/60	50/60
E1 Interrupt Rating	2.5KV	20 MVA Equivalent to 4.62 KA			-----
MVA & KA Values	5.0KV	40 MVA Equivalent to 4.62 KA			-----
Contactor Only	7.2KV	60 MVA Equivalent to 4.81 KA			-----
E2 Fuse Coordination	Rating	400 MVA 45.7 KA RMS			-----
MVA & KA	5.0KV	38R max. fuse size			-----
Withstand KA	5.0KV	57.8 KA - Peak, 38R - Fuse			-----
Short Time Current	1 Sec. KA	6	7	9	12
	5 Sec. KA	4	5	6	9
	15 Sec. KA	2	2.6	3	6
Switching Frequency		300/Hr			
Elec. Life at Rated Current		.6 x 10 <sup>6</sup>	.40 x 10 <sup>6</sup>	.250 x 10 <sup>6</sup>	.250 x 10 <sup>6</sup>
Mechanical Life		.75 x 10 <sup>6</sup>			
Dielectric Strength		20KV 1 min.			
Impulse withstand B.I.L.		1.2 x 50 us 60KV			
Chopping Current Max.		.9A			
Control Ratings AC&DC					
Rated Control Voltage		120/240V 50/60Hz AC or 125/250V DC			
Allowable Fluctuation		+10-15%		+10-20%	
Closing Power VA/Duration		650VA/45MS		1300VA/45MS	
Holding Power		7VA AC .47A DC		14VA AC .924A DC	
Opening Time Ave.		90 MS at 60Hz			
Closing Time Ave.		40 MS at 60 Hz			
Pick up Voltage	Min.	102V or less			
Drop Out Voltage	Ave.	70% or less			
Recommended Control Trans.		(AC Only)	300VA	600VA	
Application Conditions					
Standard	Current	Continuous AC/DC 10A/5A			
Auxiliary	Voltage	600V Max. - 48V Min. NEMA A600 (AC) P600 (DC)			
Contact	AC	Make/Break 7200VA/720VA			
Ratings	DC	Make/Break 125/250V 138VA 300/600V 138VA			
Additional	Current	Continuous AC/DC 10A/2.5A			
Auxiliary Contact	Voltage	600V Max. - 48 Min. NEMA A600 (AC) Q300 (DC)			
Relay Ratings	AC	Make/Break 7200VA/720VA			
	DC	Make/Break 125/250V/69VA			
Weight		48 lbs.		96 lbs.	

## Technical Specifications

CSA 5KV. 400A

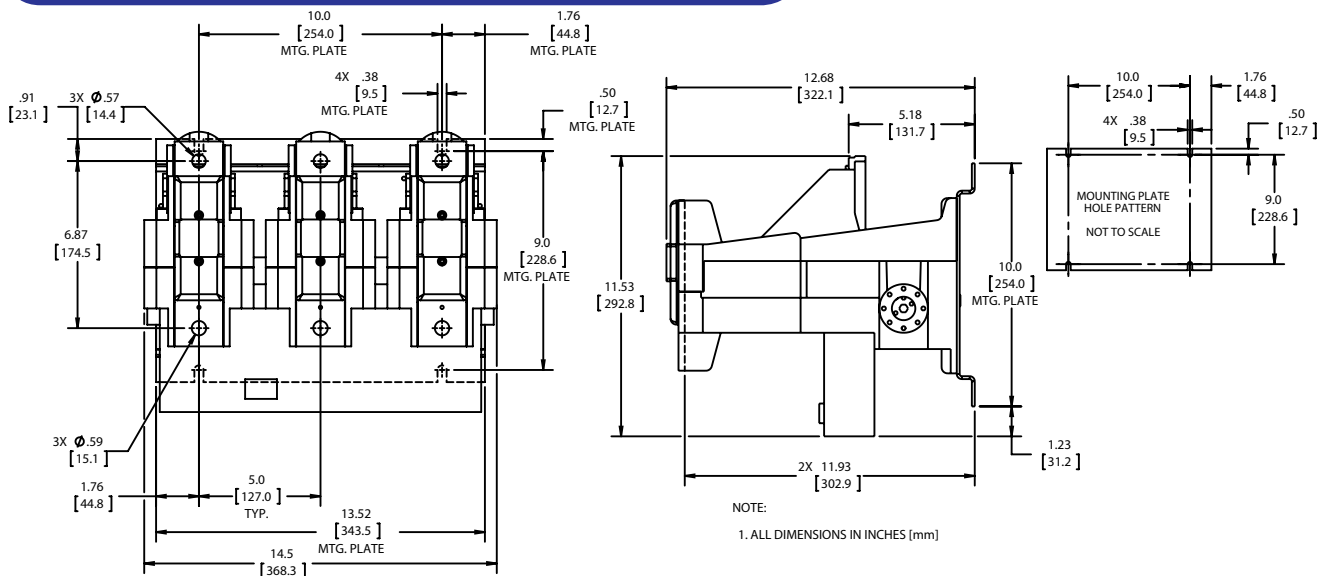
UL Recognized 5KV 500A 7.2KV 400A

## Power Application Ratings

Voltage KV		2.5	3.3	4.16	6.6
Motor Type	Current	Motor HP			
.8 P.F. Ind. or Syn Motor	200A	900	1250	1500	2500
1.0 P.F. Syn Motor	200A	1000	1500	1750	2750
.8 P.F. Ind. or Syn Motor	400A	1750	2250	3500	5000
1.0 P.F. Syn Motor	400A	2000	2500	3500	5250
.8 P.F. Ind. or Syn Motor	600A	2250	3250	4500	6750
1.0 P.F. Syn Motor	600A	2250	3500	4750	7000
.8 P.F. Ind. or Syn Motor	800A	2750	4000	5500	8000
Transformer Load KVA					
Three Phase Transformer	200A	750	1000	1500	2000
	400A	1500	2000	3000	4000
	600A	2500	3000	4250	6000
	800A	2750	3750	5250	7500
	1200A	4100	5000	7000	10000
Capacitor Load KVAR					
Three Phase Capacitor	200A	550	750	1050	1500
	400A	1125	1500	2250	3000
	600A	1650	2250	3375	4500
	800A	2200	2900	4500	5000
	1200A	2750	3750	5625	7500

### Accessories & Options:

- 2, 4, & 5 Pole contactors, consult factory.
- Mechanically interlocked contactors available.
- Medium voltage starters available in non-drawout designs in NEMA 12 & 3 enclosures, consult factory.
- Terminal Lug Kits available.



800.390.6405

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