

## Vacuum Contactor & Starter Ratings 200V-3600V

## Technical Specifications

A

Standards NEMA ICS 2-1988, UL 508 (1.5KV), CSA 22.2 (1.5KV), IEC 158-1, BS 547-1				
	160A	320A	600A	1000A
Catalog No. 3 Pole	1.5KV VC77U03415	VC77U03515	VC77U03615	SVC77U031015
	3.6KV VC77U03436	VC77U03536	VC77U03636	SVC77U031036
<b>Power Ratings</b>				
Rated Insulating and Operational Voltage	1500/3600 <sup>1</sup>			
Rated Operational Current	160	320	600	1000
Rated Frequency	50/400Hz			
Making Current	1600	3200	6000	6000
Breaking Current	1600	3200	6000	6000
Dielectric Strength/BIL.	6KV-1 min. / 45KV. 1.2 X 50 Micro/Sec.			
Interrupting Current	4400	5000	6000	6000
Withstand Current	30KA-3Hz			
Short Time Current - 1 Sec.	5000	7000	9000	11000
	2 Sec.	3000	5000	7000
Mechanical Life	2 x 10 <sup>6</sup>			
Electrical Life at Rated Current - AC3 Duty	1 x 10 <sup>6</sup>			
Switching Frequency	600/hr every 6 seconds			
Chop Current	Mean	.55A		
	Max.	.9A		
<b>Control Ratings</b>				
Description	160/320A	600A	1000A	
Rated Control Voltage	120/240V 50/400Hz			
Allowable Fluctuation	+10% of rated -25% voltage			
Closing Power VA/Duration	950VA/17MS	1900VA/17MS	2850VA/17MS	
Holding Power	9VA	18VA	27VA	
Opening Time Ave.	90 MS at 60Hz			
Closing Time Ave.	17 MS at 60Hz			
Pick up Voltage	90V			
Drop Out Voltage	70% or less			
Recommended Control Transformer	When Required 250VA	When Required 500VA	When Required 750VA	
<b>Application Conditions</b>				
Installation	All Planes contactor only			
Altitude without Derating	Up to 6600 ft. (2000m)			
Ambient	Storage	-65°F (-54°C) +160°F (71°C)		
	Operating	-40°F (-40°C) +135°F (57°C)		
Vibration/Shock	40Hz - 2G/30G			
Weight 160/320A	12lbs. (5.45kg.)	24lbs. (11kg.)	36lbs. (16.36kg.)	
Dimensions	8 <sup>7</sup> / <sub>8</sub> " x 7 <sup>7</sup> / <sub>16</sub> " x 7 <sup>7</sup> / <sub>8</sub> " 225 x 189 x 200mm	17 <sup>7</sup> / <sub>8</sub> " x 7 <sup>7</sup> / <sub>16</sub> " x 7 <sup>7</sup> / <sub>8</sub> " 450x189x200mm	26 <sup>5</sup> / <sub>8</sub> " x 7 <sup>7</sup> / <sub>16</sub> " x 7 <sup>7</sup> / <sub>8</sub> " 676x189x200mm	



Open Type  
USA VAC Starter Size 5

### Accessories & Options:

- Mechanical Interlocked contactors available, pages A22/23.
- Vacuum starters in combination and non-combination forms are available in NEMA 1, 3, and 12 enclosures on, pages A24, 26 & 27
- Terminal Lug Kits, page A36.
- Suppressor Kits, page A36.

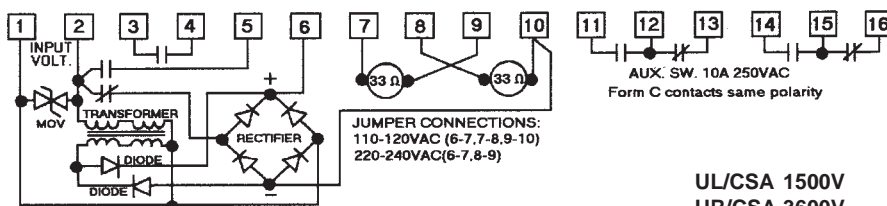
For KW Rating Multiply HP Ratings by .746  
(example: 100HP x .746 = 75KW)

### Power Application Ratings

Volts	Motor HP			
	160A	320A	600A	1000A <sup>2</sup>
230	60	125	200	-----
460	125	250	500	-----
1000	300	600	1200	-----
1500	420	850	1600	-----
2300	600	1250	2400	-----
3300	960	1920	3700	-----
Volts	Transformer Load KVA			
	160A	320A	600A	1000A
230	66	133	250	415
460	127	255	500	746
1000	277	554	1000	1730
1500	415	850	1500	2600
2300	665	1330	2500	4150
3300	910	1820	3400	5700
Volts	Capacitor Load KVAR			
	160A	320A	600A	1000A
230	50	100	180	310
460	95	190	360	595
1000	205	415	750	1300
1500	310	620	1125	1450
2300	500	1000	1875	3110
3300	700	1365	2550	4275

### Note:

- 3600V model has a B.I.L. rating of 45KV and an interrupt rating of 4000A.
- Motor applications ratings are limited to 1000A continuous with maximum LRC of 6000 ampere.



Control Diagram

UL/CSA 1500V  
UR/CSA 3600V