

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



MEDIUM VOLTAGE VACUUM CONTACTOR

MVC Series



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 equivilent to 4.62KA | | |
| MVA & KA Values | | 40 MVA equivilent to | | |
| Contactor Only | 7,200V | - 60 MVA equivilent to | 4.62KA | |
| E2 Fuse Coordination (5000V) | 400 MVA 4 | 400 MVA 45.7 KA RMS (38R max. fuse size) | | |
| Peak Withstand Current (5000V) | 57.8 KA - Peak (38R ı | max. fuse size); 50 KA | (24R 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% | | | |
| Closing Power VA/Duration | 650VA / 45ms | | | |
| Holding Power | 7VAC / 0.47VDC | | | |
| Average Opening Time | 90ms | | | |
| Average Closing Time | 40ms | | | |
| Average Pick-Up at Rated Voltage | ≤85% | | | |
| Average Drop-out at Rated Voltage | | | | |
| Recommended Control Transformer | 300 | OVA | 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 | 56 lbs. (25.4 kg) | | |
| Auxiliary Contacts 2 N.O. & 2 N.C. (standard); 4 N.O. & 4 N.C. (options | | | |

Coil Voltages

| Suffix | Coil Voltage |
|--------|--------------------|
| -76 | 110/120VAC 50/60Hz |
| -26 | 220/240VAC 50/60Hz |
| -125 | 125VDC |
| -150 | 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 | 800 | 1,600 | 2,400 |
| 3,300V | 1,000 | 2,100 | 3,200 |
| 4,160V | 1,350 | 2,700 | 4,100 |
| 6,600V | 2,100 | 4,300 | 6,500 |

Transformer Load KVA

| | Voltage | 200A | 400A | 600A |
|---|---------|-------|-------|-------|
| | 2,500V | 550 | 1,100 | 1,650 |
| | 3,300V | 750 | 1,500 | 2,250 |
| ١ | 4,160V | 1,000 | 2,000 | 3,000 |
| | 6,600V | 1,500 | 3,000 | 4,500 |

NOTES:

- ¹ Consult factory for 2, 4, 5 Pole Contactors, and Mechanically Interlocked Contactors.
- ² Consult factory for certifications and approvals.³ Excludes DC Voltages.

^{**} Coil Voltage 10.0 - [254.0] MTG. PLATE 1.76 - [44.8] MTG. PLATE 4X .38 [9.5] MTG. PLATE 12.68 [322.1] .50 [12.7] MTG. PLATE - [12.7] [131.7] MOUNTING PLATE HOLE PATTERN [228.6] NOT TO SCALE 6.87 [174.5] [228.6] MTG. PLATE [254.0] MTG. PLATE 11.53 [292.8] 6 3X **Ø**.59 1.76 [44.8] [302.9] 127.0 - [343.5] MTG. PLATE 1. ALL DIMENSIONS IN INCHES [mm] 14.5