Medium Voltage VR-Series+ Circuit Breakers

Powerful Enhancement of a Proven Technology

All VR-Series+ circuit breakers are designed, manufactured and tested at Eaton's Power Breaker Center (PBC) to the same strict standards as the original VR-Series vacuum replacement circuit breakers. VR-Series+ circuit breakers take performance and reliability to new levels by incorporating a utility hardened mechanism and advance lubrication.

Synthetic Molybdenum Disulfide Lubrication System

A modern lubrication system creates a protective layer between wearing surfaces. The lubrication system and utility hardened mechanism extends scheduled maintenance to 10 years or 10,000 operations, whichever comes first.

Designed and Tested to Exceed Current IEEE Standards in an ISO Certified Facility

VR-Series+ circuit breakers meet K>1 and K=1 rating structures as defined by IEEE C37.06-2000 and have a full three-second short-time rating. This exceeds current IEEE Standards. VR-Series+ circuit breakers extend the useful life of existing switchgear and comply with the testing, interfaces, and compatibility of C37.59 Standards. IEEE/ANSI certificates and certified factory production test reports are available for each design. VR-Series+ finished product is assembled in an ISO 9001:2015 certified facility assuring the finest quality.

Reduce Maintenance Costs

Most power circuit breakers require maintenance and lubrication every two years. Proper maintenance can require 6-8 man-hours per circuit breaker. VR-Series+ circuit breakers have scheduled maintenance intervals of up to 10 years and require less than one-hour. The current transfer and contact systems are all maintenance free. Spare parts inventory is also considerably reduced because VR-Series+ circuit breakers have 50% fewer parts than air magnetic breakers. This saves $2,000 - $4,500 per circuit breaker over a 10 year period.

Solve Parts Availability Issues

VR-Series+ control components are compatible with Eaton's original VR-Series and VCP-W circuit breakers and are in stock at Eaton's PBC. This can save $3,000 - $6,500 per design in future spare parts investments.

Increased Interrupting Capability

Power demands may have increased your available short current beyond the capabilities of your existing switchgear. VR-Series+ circuit breakers along with the appropriate bus bracing upgrades can increase your switchgear's interrupting capabilities in the same space as your original air-magnetic circuit breakers. This provides a possible savings of $5,000 - $12,000 per breaker versus the costs of replacing the switchgear.

SURE CLOSE MOC Technology

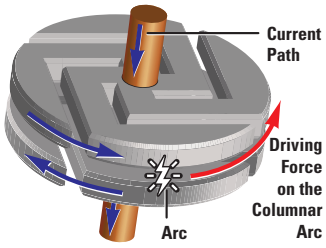
Eaton's *SURE CLOSE* technology for vacuum replacement circuit breakers with de-coupled stored energy is guaranteed not to stall the circuit breaker during closing and prevents damage to the existing cell MOC components. MOC switch replacements cost an average of $2,500- $6,000 each.

Powering Business Worldwide

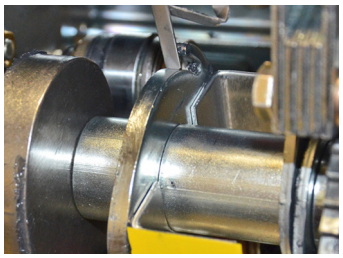
DHP-VR+ Availability and Interchangeability

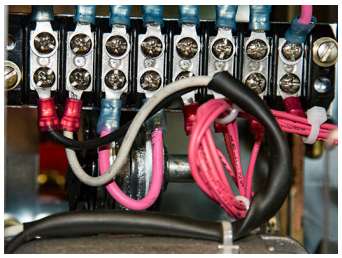
Existing DHP Circuit Breaker Type	DHP-VR+ Circuit Breaker Type ①	Nominal Voltage Class kV	Nominal 3-Phase MVA Class MVA	Existing Circuit Breaker Rated Continuous Current at 60 Hz Amps	Rated Voltage Factor K	Rated Withstand ANSI Test Voltage Low Freq. kV RMS	Rated Withstand ANSI Test Voltage Impulse kV Peak	Rated Short-Circuit I kA RMS	Maximum Sym. Interrupting Capability KI kA RMS	Closing and Latching / Momentary Capabilities kA RMS / Peak
50DHP75	50DHP-VR+75	4.16	75	1200	1.36	19	60	8.8	12	19 / 32
50DHP75	50DHP-VR+75U ③	4.16	75	1200	1.24	19	60	29	36	58 / 97
50DHEP250	50DHEP-VR+250	4.16	250	1200 / 2000	1.24	19	60	29	36	58 / 97
50DHP250	50DHP-VR+250	4.16	250	1200 / 2000	1.24	19	60	29	36	58 / 97
H50DHP250	50DHP-VR+250H	4.16	250	1200 / 2000	1.24	19	60	29	36	78 / 132
50DHP250	50DHP-VR+41 ②③	4.16	N/A	1200 / 2000	1.00	19	60	41	41	78 / 132
75DHP/DVP500	75DHP/DVP-VR+500	7.5	500	1200 / 2000	1.25	36	95	33	41	66 / 111
150DHP/DVP500	150DHP/DVP-VR+500	13.8	500	1200 / 2000	1.30	36	95	18	23	37 / 62
150DHP/DVP500	150DHP/DVP-VR+500U ③	13.8	750	1200 / 2000	1.30	36	95	28	36	58 / 97
H150DHP500	150DHP-VR+500H	13.8	500	1200 / 2000	1.30	36	95	18	23	58 / 97
150DHP/DVP/750/750C	150DHP/DVP-VR+750/750C	13.8	750	1200 / 2000	1.30	36	95	28	36	58 / 97
H150DHP750/750C	150DHP-VR+750H/750CH	13.8	750	1200 / 2000	1.30	36	95	28	36	77 / 130
150DHP500/750	150DHP-VR+41 ②③	13.8	N/A	1200 / 2000	1.00	36	95	41	41	77 / 130

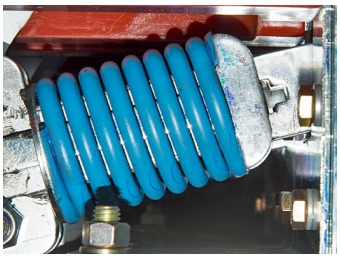
① All circuit breakers have a 3 second short-time and 3-cycle interrupting ratings.
② Non-standard rating.
③ Requires bus bracing study and additional switchgear bracing.

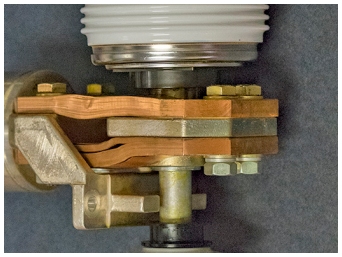


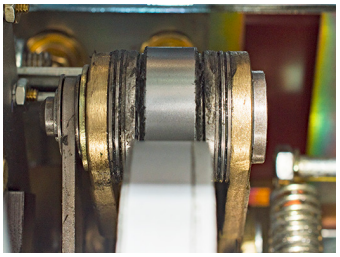
Reliable TMF Vacuum Technology

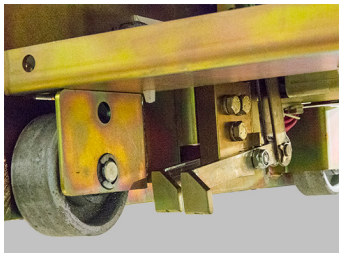

Enhanced Motor Cut-off Cam

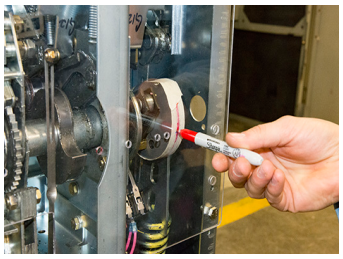

Insulated Ring-Togue Terminals


T-Cutout Wear and Wipe Indicator

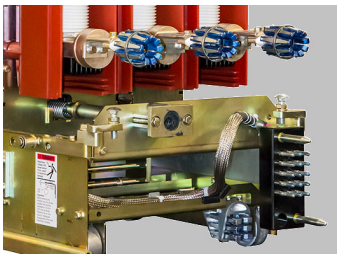

Non-Sliding Conical Current Transfer with Zero Holm Effect

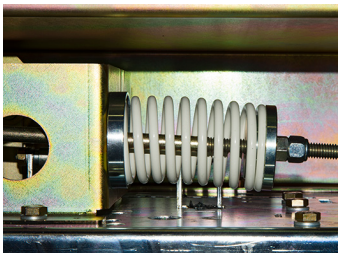

63 kA Closing System


Welded Floor Trippers


CloSure™ Mechanism Health-Check


Solid Spring Disk


Original DHP Component Design


Sure Close MOC Operator


Remote Rotary Racking System

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