VCP-WXC
Vacuum circuit breakers

Xtra capabilities and enhanced features

The VCP-WXC, Eaton's medium voltage ANSI breaker platform's newest addition, features Xtra capability to meet today's circuit protection needs.

Features

- 15 kV, 63 kA, 1200–3000A drawout vacuum circuit breaker
- 62% DC Component that exceeds IEEE® requirements and is used in applications with high impedance/ resistance ratios (X/R)
- 175 kA peak close and latch and momentary rating exceeds IEEE preferred rating of 164 kA
- Demonstrated Out-of-Phase switching rating of 31.5 kA rms for industry applications such as power plants
- Additional vacuum interrupter very fast TRV testing up to 10 kV per microsecond
- Enhanced vacuum interrupter low frequency testing as low as 4 Hz for use with adjustable frequency drives
- Available as drawout with the option of six wheel roll-on-the-floor configuration
- Control circuit and wiring enhancements
  - Dedicated dry contact for spring-charged indication; this extra contact can be wired out to the panel for visual indication that the breaker is charged
  - Enhanced wiring with a newly detailed wiring schematic
  - Superior environmental capability, anti-radiation wire for special applications such as power plant use
  - Control wiring terminated with ring terminals for reliable connections

Application

The VCP-WXC is ideal for large power plant and industrial applications where the highest interrupting and momentary ratings are required for distribution circuits. The VCP-WXC complements the VCP-WG generator circuit breakers for applications when very high inductance provides challenges to system switching and interruption.

EATON
Powering Business Worldwide

VCP-WXC ratings (symmetrical current basis)

Voltage		Insulation Level Withstand Test			
Maximum Voltage	Voltage Range Factor	Power Frequency (1 Min.)	Lightning Impulse 1.2 x 50 µs	Continuous Current at 60 Hz	Style Number ❶
15 kV rms	1	42 kV rms	95 kV peak	1200A rms	**4A35390G10**
15 kV rms	1	42 kV rms	95 kV peak	2000A rms	**4A35391G10**
15 kV rms	1	42 kV rms	95 kV peak	3000A rms	**4A35392G10**

❶ This breaker is available with 125 Vdc secondary control voltage. This includes as standard a motor, closing coil, shunt trip #1 and shunt trip #2.

Short-Circuit Current							
Symmetrical Interrupting at V (Isc)	% DC Component (Idc)	Asymmetrical Interrupting (It)	Closing and Latching Capability	Short-Time Current for 3 Sec ❶	Interrupting Time ❷	Maximum Permissible Tripping Delay	Transient Recovery Voltage (RRRV) ❸
63 kA rms	62%	83 kA rms	175 kA peak	63 kA rms	50 ms	2 sec	1.1 kV/µs

❶ Except as noted.

❷ Three cycles.

❸ Contact Eaton for higher RRRV or for more information.

Capacitor Switching Ratings				
General Purpose Isolated Shunt Capacitor Bank Current	Definite Purpose Back-to-Back Capacitor Switching			Mechanical Endurance No-Load Operations
	Capacitor Bank Current	Inrush Current	Inrush Frequency	
250A rms	200 and 1600A rms ❶	7.7 kA peak	465 kHz	10,000

❶ C37.04a–2003 class C2 at 15 kV.

For additional information on the VCP-WXC, contact:

Jim Smith
Product Integration Manager
jamesesmith@eaton.com
412-893-2863

Jim Benke
Product Line Support Engineering Manager
Jimjbenke@eaton.com
412-893-2895

Kevin Hestad
Power Breakers Sales Manager
kevinrhestad@eaton.com
412-893-2575

Jhula Barua
Power Breakers Product Manager
jhulabarua@eaton.com
412-893-2891

For application assistance on the VCP-WXC, contact:

Larry Connor
Applications Engineer
lawrencetconnor@eaton.com
412-893-3648

Eaton
1000 Eaton Boulevard
Cleveland, OH 44122 USA
Eaton.com

Printed in USA
Publication No. PA131001EN / Z13564
April 2013

Powering Business Worldwide