

HVL/cc Switchgear

Big Performance in a Small Package

Leave it to Square D to develop the latest in switchgear technology. Introducing the new HVL/cc Medium Voltage Metal Enclosed switchgear. Dramatically smaller. Virtually maintenance free. And it provides unparalleled protection during operation. It's just what you've been looking for.

Smaller Footprint

Square D's new HVL/cc switchgear is less than one-half the size of traditional medium voltage switchgear. It's a breeze to transport, easily fits through standard doorways, and gives you more usable floorspace. Smaller footprint. Big, big value.



Virtually Maintenance Free

The superior design of the HVL/cc load interrupter switch offers a rotary-type double break interrupting switch that's filled with SF6 gas, and encased in an epoxy enclosure. The switch is sealed for life. That means it's absolutely maintenance free. The main switch contacts can be inspected through two viewing ports conveniently located on the front panel. And because the switch is sealed, HVL/cc switchgear is perfect for applications where external arcing is concerned.

Revolutionary Protection

Square D's new HVL/cc switchgear is UL/cUL listed. Each compartment is isolated for increased protection in the field. The unique system of fuse grounding switches and auto-transfer schemes, for both electrical and mechanical interlocks, incorporates the latest, most innovative technology. What else would you expect from Square D?



SQUARE D
ENCLOSURE TECHNOLOGIES

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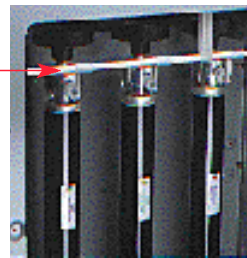
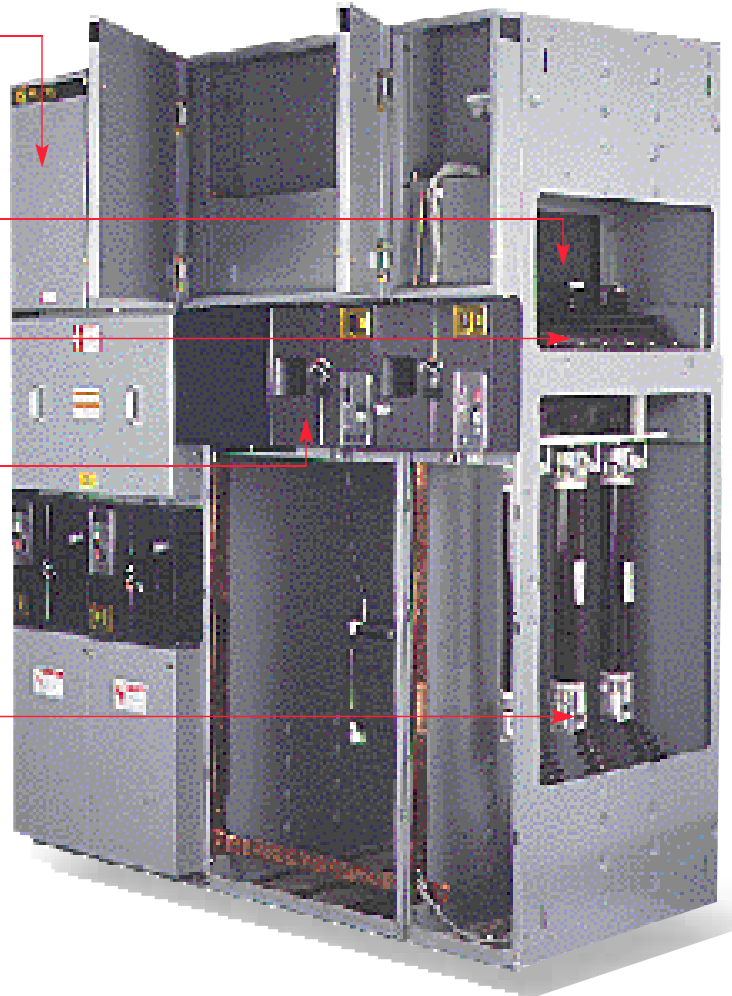
The optional low voltage/control compartment has a separate metal-enclosed area used to accommodate PowerLogic® metering.

The bus compartment is isolated by the switch enclosure and sheet metal.

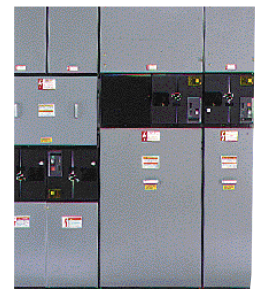
The load interrupter switch compartment is sealed for life and maintenance free.

The mechanism controls operate the load interrupter and grounding switches.

The fuse/cable compartment has a mechanically interlocked front cover that is removable only after the switch is opened and grounded.



Optional FUSELOGIC™ system provides direct acting blown fuse single phase protection.



73.75"

4-Bay 15kV metal enclosed HVL/cc switchgear is smaller than traditional switchgear of this type.

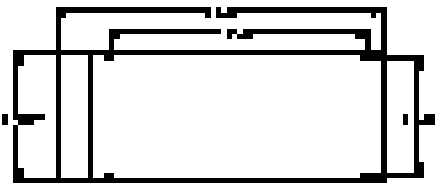
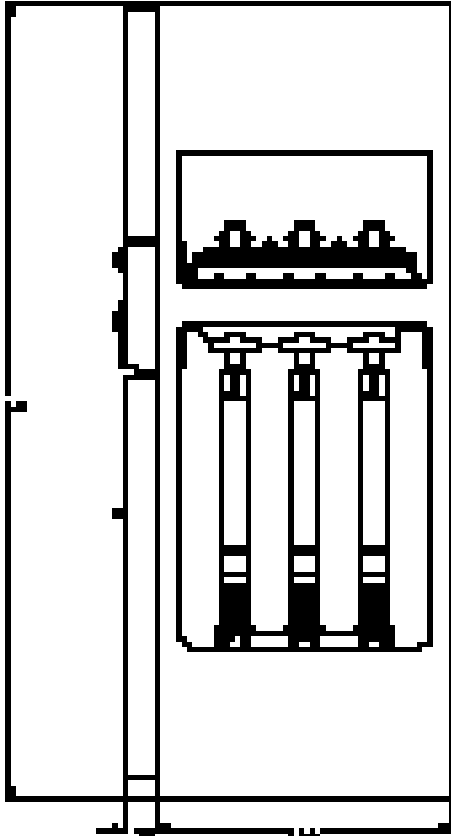


Simplified bus design and reduced connections in compact duplex configurations. Dramatically reduce maintenance requirements.

Features/Options	Benefits
Sealed for life interrupter	No contact maintenance and no external arcing
Grounding switches	Sequence of operation requires grounding switch to be closed prior to entering cable/fuse compartment
Simplified bus bar design	Reduces downtime required to perform scheduled maintenance
Infrared viewing windows	Permits verification of connections without de-energizing equipment
Load/line side live line indicators	Provides incoming and outgoing voltage presence indication
Designed for front access only	Allows installation of equipment against a wall to eliminate wasted space
Top and bottom cable entry for all applications	Provides flexibility and versatility to meet today's and tomorrow's applications
FUSELOGIC™ system	System utilizing the blown fuse indicator to prevent downstream single phasing. Prevents reclosing of the switch if fuse is blown or missing
ANSI 27/47 and 46 relays	Provides utility loss of phase protection
ANSI 51 relay	Provides transformer overload protection for better coordination
Advanced metering with PowerLogic® Circuit Monitors and Power Meters	Permits system power monitoring and recording of on line events
Basic impulse level rating up to 110 kV BIL	For high altitude applications or where dielectric concerns exist
Surge arresters	Distribution and intermediate class can be installed in 14.75" cubicle width
Automatic transfer schemes with mechanical and electrical interlocks	Mechanical interlocks prevent paralleling of the incoming lines
Motor operated mechanisms with opening and closing coils	Transfer times of 10 cycles or less accomplished in two 14.75" bays. Loss of source detection is power from live line indication circuits
Utility/customer hot/cold sequence metering bays	Compact or conventional metering bays with and without grounding switches provide advanced protection
Substation primary switches	Duplex configurations can be provided in a compact 29.5" wide assembly
Transitions to conventional HVL and VISI/VAC® Circuit interrupters	Transitions do not increase the footprint of the equipment
Transitions to ISO-Flex MV Motor Control	Simple bus transition without increasing footprint
NEMA 1 and NEMA 3R	Choice of both indoor or outdoor configurations in a compact footprint
Load discharge switch	Discharges residue or capacitive voltage prior to entering cable/fuse compartment

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Specification Dimensions



* Voltage transformer bay 20"
Control transformer bay 20.5"

4.1.2 Ratings


Nominal Voltage (kV)	4.16	13.8
Max. Design Voltage (kV)	4.76	17.5
BIL (kV)	60	95 (110*)
Frequency (Hz)	50/60	50/60
Continuous Amps	600	600
Interrupting Amps	600	600
Fault Close (kA Asymmetrical)	40	40
Momentary Current (kA Asymmetrical 10 cycles)	40	40
Duty-Cycle Fault-Close (Number of Operations)	4	4
Grounding Switch Fault Close (kA Asymmetrical)	40	40
Short Time Rating (kA Asymmetrical 2 seconds)	25	25
Dielectric Withstand (kV 1 Minute)	19	36
Electrical Endurance (Close-Open)	100	100
Mechanical Endurance (Close-Open)	1000	1000

*Optional BIL for high altitude applications.

Voltage	Fuse Rating	Number of Fuses	Bay Width
5.5kV	10 to 400	1	14.75"
	450	2	20"
	540	2	20"
	600	2	20"
15.5kV	10 to 200	1	14.75"
	225	2	20"
	270	2	20"
	315	2	20"
	360	2	20"

To learn more about all the great features and benefits of Square D's HVL/cc switchgear, contact your local Square D sales office.

Visit the Square D web site at www.squared.com

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