



MV Switchgear for
Distribution Network Solutions

CGM.3

Fully gas insulated modular
and compact (RMU) system

Up to 40.5 kV
Up to 38 kV

IEC Standards
ANSI / IEEE Standards

Reliable innovation. Personal solutions.

PREFACE

The earlier version of **CGM.3** was CGM-CGC, the first modular and extensible fully gas insulated secondary distribution cubicle in the world market. After the worldwide success of its antecedent, **CGM.3** was launched in 2008. During the recent years **CGM.3** has been extended to higher electrical ratings, e.g. up to 40.5 kV and up to 25 kA.

CGM-CGC and **CGM.3** systems have already been integrated into several smart grid and RES applications. Currently more than 165,000 functional units of these systems have been in service in more than 35 countries.

SAFETY

- » Internal arc tested (21-25 kA 1s)
- » All live components are inside a hermetically sealed gas tank
- » Mechanical / electrical interlocks to prevent unsafe operations
- » Switch position, voltage presence and acoustic alarm indicators

RELIABILITY

- » Fully insulated & sealed for life
- » Immersion tested for 24 hours
- » 100% routine tested at factory

EFFICIENCY

- » Modular design extensible to both sides thanks to ORMALINK
- » Mechanism motorization without interrupting the supply
- » Easy frontal access to install and to test MV cables and fuses
- » Small size and light weight

SUSTAINABILITY

- » Continuous reduction in use of greenhouse gases
- » End-of-life management and re-cycling
- » Use of highly recyclable material
- » Self-powered protection relays

CONTINUOUS INNOVATION

- » New modules for 25 kA
- » Modules operating in -30 °C
- » New metering cubicles
- » Evolution in driving mechanisms
- » Integrated in cubicle own protection and automation units
- » Smart grid ready system
- » Voltage and current sensors
- » Preventive cable fault diagnosis
- » Partial discharge (PD) detection for network diagnosis

STANDARDS

IEC

IEC 62271-1
IEC 62271-200
IEC 62271-100
IEC 62271-102
IEC 62271-105
IEC 62271-103
IEC 60529
IEC 62271-206



ANSI / IEEE

IEEE Std C37.74
IEEE Std C37.20.3
IEEE Std 1247
IEEE Std C37.123
IEEE Std C37.20.4
IEEE Std C37.04
IEEE Std C37.06
IEEE Std C37.09
IEEE Std C37.20.7



Others: GB,...

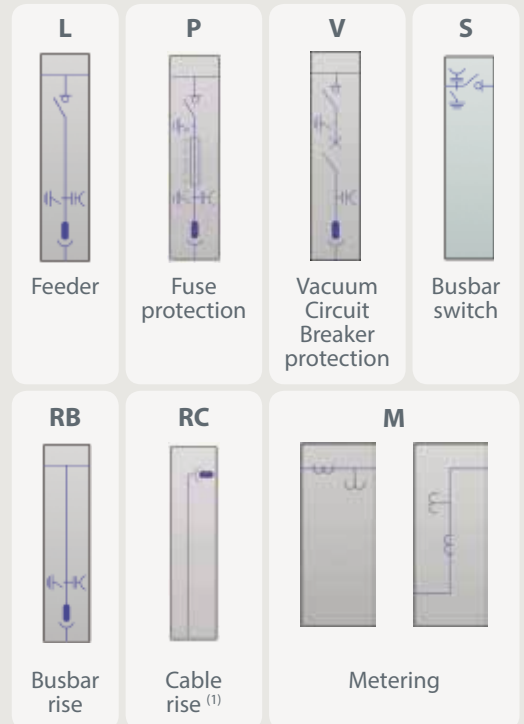
DESIGN



- 1 Gas Tank
- 1a Busbar connection
- 1b Switching devices
- 2 Driving Mechanism
- 3 Base
- 3a Cable Compartment
- 3b Gas relief duct
- 4 Control Box

FAMILY

MODULAR FUNCTIONAL UNITS



(1) Available: Double cable version

COMPACT FUNCTIONAL UNIT

2LP (RMU)



Fuse protection and feeder

RES CONFIGURATIONS

RLP



Fuse protection, rise and feeder

RLV



CB protection, rise and feeder

Available other RES configurations

TECHNICAL DATA

General

Rated values 36-38-38.5-40,5 kV
400-630 A
16-20-25 kA 1-3 s
50 / 60 Hz

Metal enclosed, single busbar
Indoor use up to 2000* m altitude

Ambient T°: Standard -5°C to +40°C*
Extended -30°C to +55°C*

Loss of service continuity: LSC 2B

Partition class: PM

(*) Other conditions under consultation

IEC Standards

Rated voltages: up to 40.5 kV

Internal arc class

IAC AFL(R*) 25 kA 1s (up to 36 kV)
IAC AFL(R*) 21 kA 1s (up to 40.5 kV)

(*) R with rear chimney

Functions

L, P, V, S, RC, RB, , M, 2LP, RLP, RLV

ANSI / IEEE Standards

Rated voltage: up to 38 kV

Internal arc qualified: 25 kA 1s

Functions: L, P, V, S, RB, RC



CGM.3

