



**GT Series Low Voltage Switchgear
for Power Distribution & Motor Control
with Maximum Safety & Reliability**

GT Series, the Distribution Solution



For safety and reliable operation

GT Series Switchboard are fully tested to the latest IEC Standards for operational safety and performance.

Combine with industry leading brands of components support to achieve fully functional switchboard with built-in intelligence for energy efficiency.

Simple for installation, operation and maintenance.

Fixed-Type Switchgear

- fixed type modules are able to distribute currents up to 5000 A
- compartments are partitioned with individual doors for direct access through door mounted handles
- fixed type modules are designed for mounting of breakers, contactors and components on internal mounting plates
- fixed type MCC feeder column are equipped with up to 13 modules of 160mm height



Temperature rise verification IEC61439-1 10.10



Internal Arc Fault IEC 61641

GT Series Withdrawable Motor Control Centre



Tested to IEC 61439-1/2 and IEC 61641 by independent ASTA and DEKRA certified laboratories, operational safety is ensured in every GT Series Switchboard.

Fully Withdrawable Type Switchgear

- withdrawable units have 3 safe interlocked position:
 - disconnected (SEP)
 - test
 - connected (CON),
to improve operator safety when connecting, testing and disconnecting
- fully isolated from core parts when drawers are removed from switchboard
- built-in intelligence for efficiency and predictive maintenance
- fully and easy inter-changeable functional units
- fully withdrawable units for continuous process
- fixed functional units for economical applications

GT Series Switchgear Overview

Fully Withdrawable MCC Features



Drawable Units:
Ease of drawing out functional units, lifting handles on both side of drawout unit for easy handling.



Drawable Units:
Ease of drawing out and racking in of functional unit with guiding handles at the front.

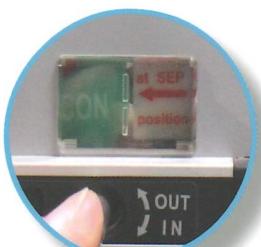


Drawout Unit Indicator changes colour shows unit in different position.

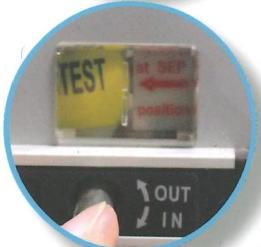


Drawable Units:
Drawout unit are fully connected or disconnected to MCC by means of racking tools turning guided shaft in units for precise engagement, test position or disengagement.

Drawout Unit Indicator
Turns "GREEN-CON"
shows unit is connected
to MCC.



Drawout Unit Indicator
Turns "YELLOW-TEST"
shows unit is in "Test"
position..



Drawout Unit Indicator Turns
"RED-SEP" shows unit is
disconnected from MCC.

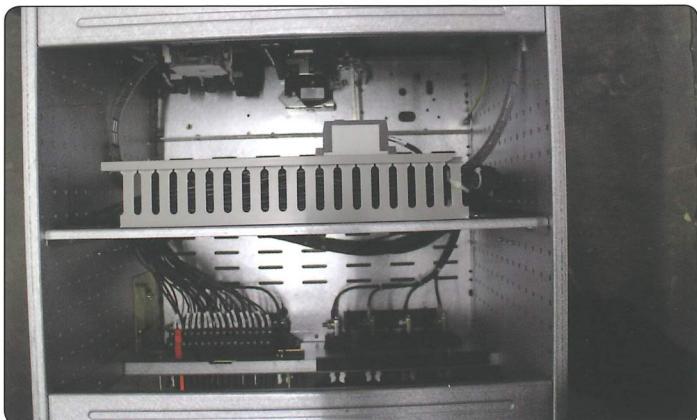


GT Series Switchgear Overview

Fully Withdrawable MCC Features



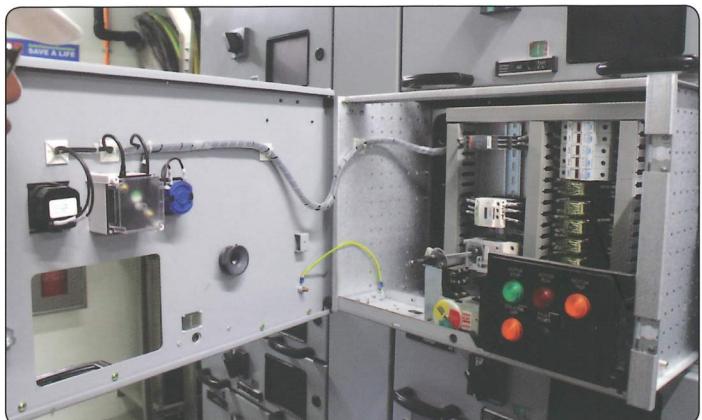
Fully Withdrawable Motor Control Centre with drawout units of various sizes of feeders and DOL Starters.



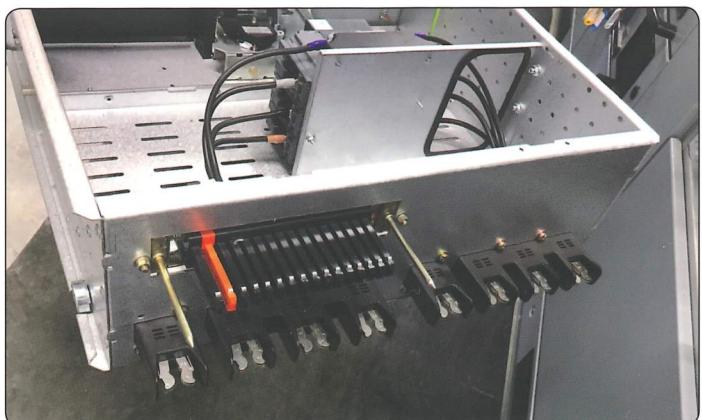
Drawout unit with mounting plate for mounting components in the front. Power and control plugs are mounted at the rear for connection to MCC.



MCC are fully insulated when functional unit are being removed for operational change or maintenance purposes.



Drawout unit with door opened, components base mounted, indication meters, indication lights and control button on door.



Drawout unit with incoming/outgoing power and control plugs mounted at the rear for connection onto MCC.

GT Series Switchgear Overview

Technical Data

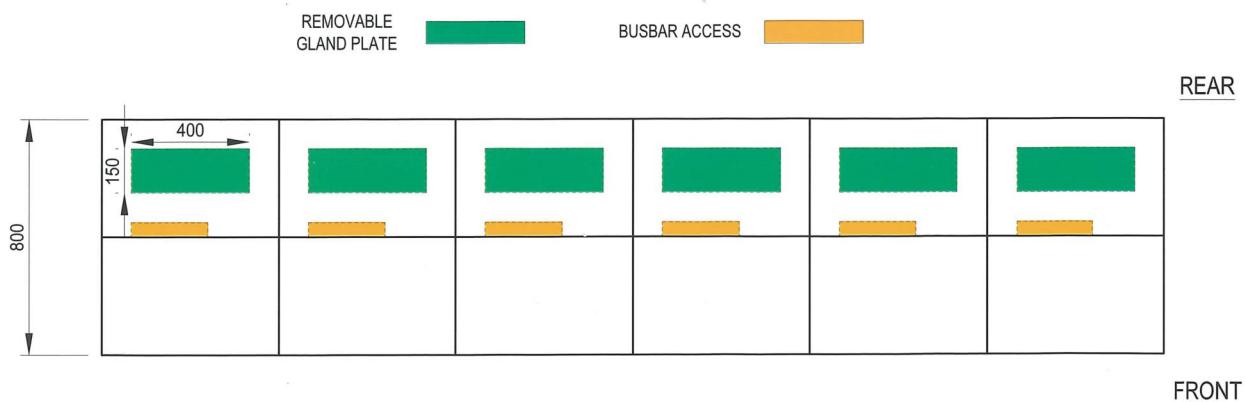
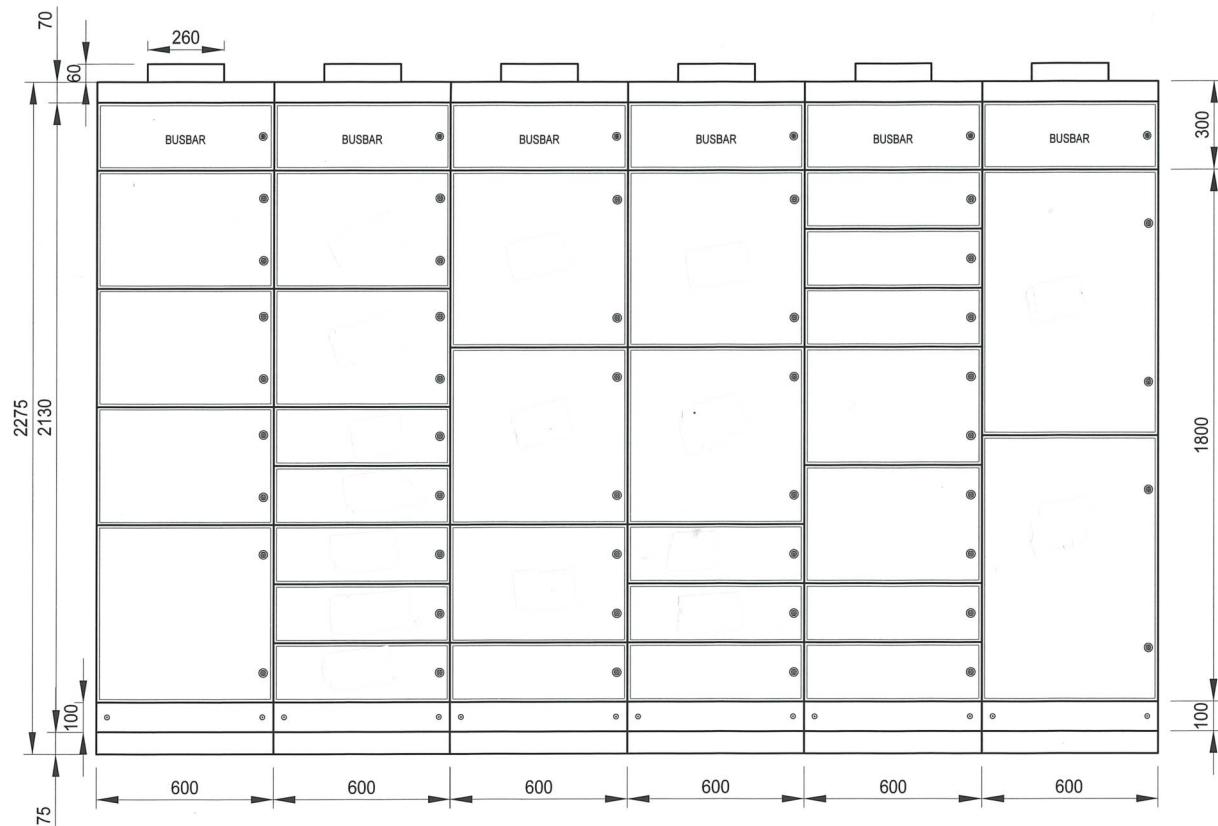
Standards		Low Voltage Switchgear and Controlgear Assemblies – Verification by testing*	IEC 61439-1/2 IEC 61641
Test certificates	ASTA, DEKRA		
Electrical data	Rated voltages	Rated insulation voltage U_i	up to 1000V
		Rated operating voltage U_e	up to 690V
		Rated impulse withstand voltage U_{imp}	6 / 8 / 12 kV
		Overtoltage category	II / III / IV
		Degree of pollution	3
		Rated frequency	up to 60Hz
	Rated current	Rated current I_n	up to 5000A
		Rated peak withstand current I_{pk}	up to 187kA
		Rated short-time withstand current I_{cw}	up to 85kA 3secs, 100kA 1secs
	Arc Fault Containment	Rated operational voltage	up to 415V
		Prospective short-circuit current	up to 85kA
		Duration	Ipc arc, Ip arc up to 300ms
		Criteria (IEC 61641)	1 to 7
Mechanical Characteristics	Forms of separation		up to Form 4b
	Dimensions	Recommended height	2275 mm, 2235 mm, 2075 mm
		Recommended width	600, 800, 1000, 1200, 1400 mm
		Recommended depth	800, 1000, 1200, 1400 mm
	Degrees of Protection	According to IEC 60529	External from IP30 to IP55 Internal IP2X
	Protection against mechanical damage	According to IEC 62262	IK08
	Steel components	Frame, incl. internal subdivisions	2.0 / 2.5 mm
		Cladding, internal	1.5 / 2.0 mm
		Cladding, external	1.5 mm
	Surface protection/Paint	Frame, incl. internal subdivisions	Zinc or Alu-zinc coated (powder coated)
		Cladding, internal	Zinc or Alu-zinc coated (powder coated)
		Cladding, external	Zinc or Alu-zinc coated and Powder coated RAL 7035 (light grey) 8041 or specified
	Plastic components	Halogen-free, self-extinguishing, flame retardant, CFC-free	IEC 60707
	Communications	Protocols: Ethernet TCP/IP Profibus-DP, Modbus	
	Special qualification	Test certificates	See test certificates and reports
	Paint	Enclosure	Special colours on request

GT Series Switchgear Overview

Layout Configurations

- The GT Series range of low voltage switchgear and control gear assemblies have been extensively type tested by ASTA/DEKRA to comply with the requirements of IEC 61439 1/2, IEC 61641.
 - This is your assurance of operator safety in the unlikely event of an internal arcing fault occurring during operation.
 - The standard GT Series product incorporates modules that are vented on top to allow ionised gases to expand during arcing. The vent is also used to create a chimney to funnel ionised gases through a hinged cover on the roof of the switchgear and control gear assembly.
 - A wide variety of internal arcing fault type tests has been conducted on air circuit breaker as well as MCCB protected circuits and motor starters. these type tests have been conducted by DEKRA, and prove the integrity of the GT Series enclosure system under the most extreme fault conditions.

Back Cable Termination

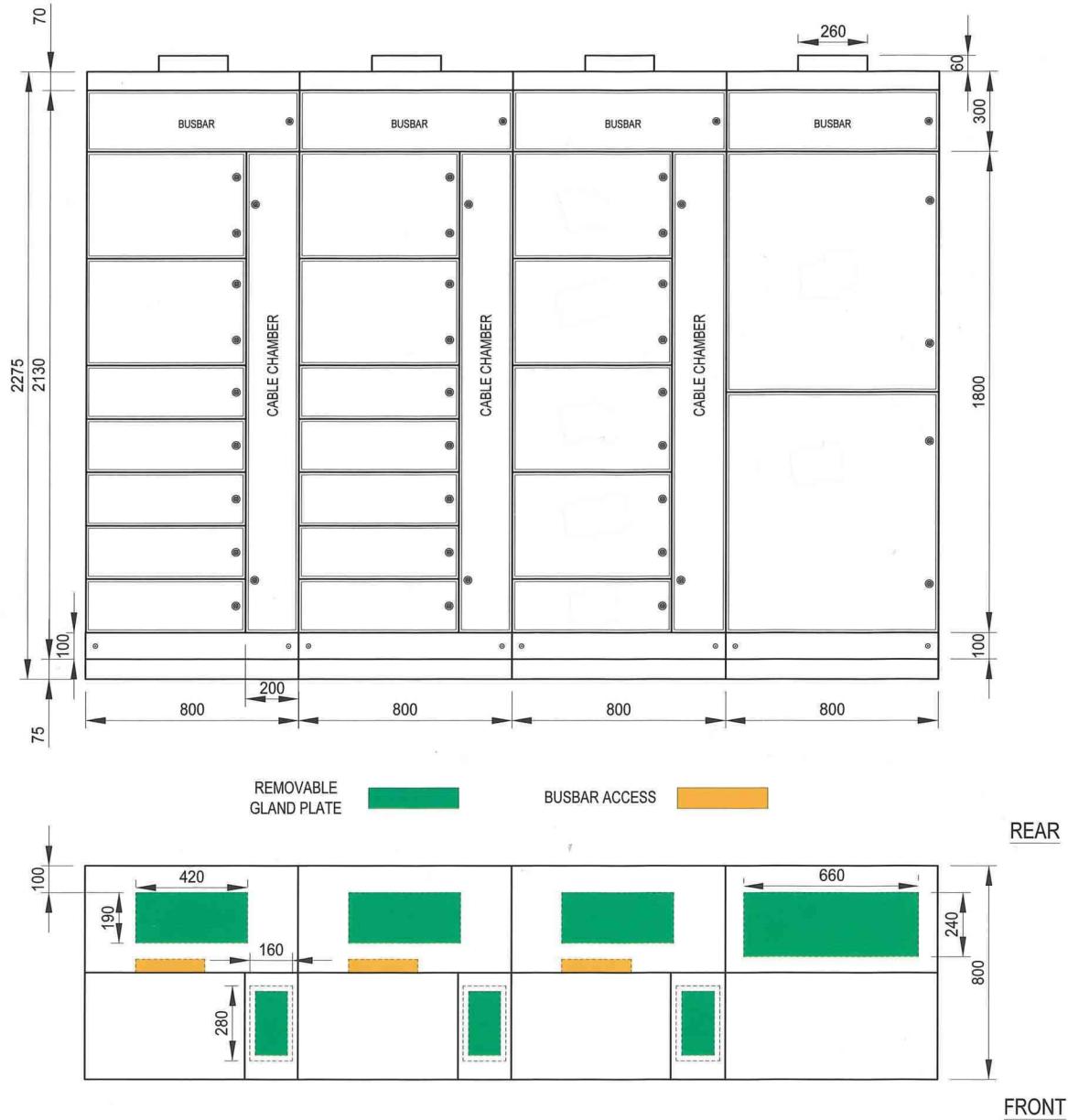


GT Series Switchgear Overview

Layout Configurations



Side Cable Termination



Module height (ht)	Size	Breaker Rating (max)
1/2 module	200	2x MCCB 100A (3P)
1 module	200	MCCB 250A (4P)
2 module	400	MCCB 400A (4P)
3 module	600	MCCB 630A (4P)

Module height (ht)	Size	Starter Rating (max)
1 module	200	37kW
2 module	400	55kW
3 module	600	160kW

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