



ORMAZABAL

Focus on Medium Voltage

ekorSYS units: protection, telemanagement & communication

CGMCOSMOS-2LPT

CGM.3-2LPT

Compact cubicle with integrated remote control equipment

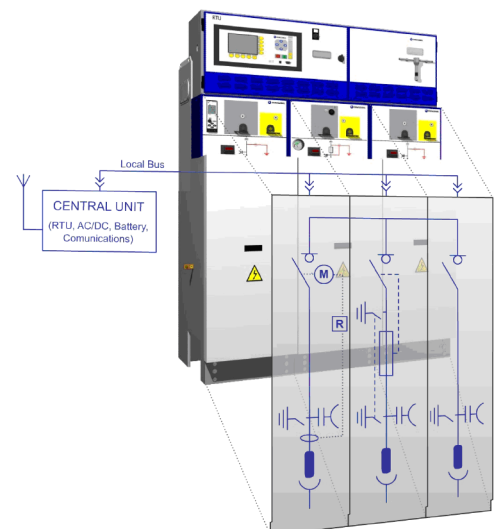


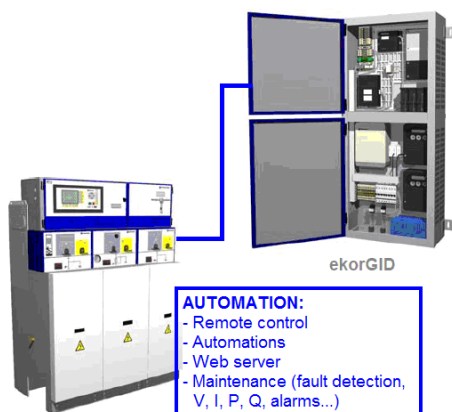
Compact integral unit with remote control, composed by two feeder functional units and one fuse protection function (CGMCOSMOS-2LPT up to 24 kV and CGM.3-2LPT up to 36 kV), together with ekorSYS units for automation and remote control functions:

- Assembly optimised for remote control of Transformer Substations.
- Extensible up to 5L-2P.
- RMU compact unit (Ring Main Unit) + RTU (Remote Terminal Unit):
 - Cubicles
 - Control box:
 - RTU
 - AC/DC converter and battery charger
 - Batteries
 - Relay + toroidal current transformers

APPLICATIONS

- Transformer and switching substation remote control:
 - Metering of V, I, P and Q
 - Detection, indication and communication of Faults
 - Remote switchgear command
- Telemanagement in association with ekorGID (Smart Grid):
 - Automation and remote control
 - Web Server
 - Maintenance (fault detection, meterings, alarms...)
- Automatic sectionaliser for line fault sections
- Earthing prevention interlock
- Automatic line transfer





- ➔ Most notable features:
- Directional earth fault
 - Factory-installed toroidal current transformers
 - Meters without VT
 - Factory-integrated RMU+RTU
 - Meterings and history logs accessible from the Internet (Web server)
 - Remotely configurable relays



Technical Characteristics			CGMCOSMOS		CGM.3*	
			L	P	L	P
Rated voltage	U_r	[kV]	12/24		36	
Rated current						
On bushbars	I_r	[A]	400/630			
Outgoing line	I_r	[A]	400/630	200	400/630	200
Short-time current (1 s / 3 s)	I_k	[kA]	16/20/25 (1 s) 16/20 (3 s)		16/20	
Rated frequency	f	[Hz]	50/60		50/60	
Dimensions			Low base	High base		
Width		[mm]	1190		1316	
Depth		[mm]	735		1010	
Height		[mm]	1460	1900	1905	
Weight		[kg]	370	290	570	
RTU Module						
General	AC	[Vac]	230 +/-15%			
	Insulation	[kV]	10			
	Consumption	[W]	100			
Output power supply voltage	DC	[Vdc]	48 and 12			
Digital Inputs			24			
	Polarised voltage	[Vdc]	30 to 80			
Digital outputs			12			
	Contacts	[Vac]	5° / 250 / resistive			
CPU	RAM	[MB]	16			
	Real time clock		hh:mm:ss:dd			
	Event log		1792			
	Graphic capacity		6 cubicles in display			
Communications	DB9 front port		RS232 - RJ45			
	Rear port		RS485 (5 kV) - RJ45			
	Protocols		MODBUS (RTU)			
			IEC-60870-5-101			
			IEC-60870-5-104			
		Web Server				
Integrated Control Module						
General	AC	[Vac]	24 to 100 +/-30%			
	Impedance	[Ω]	0,1			
	Switched power	[VA]	750 (resistive load)			
Accuracy	Time delay		5% (minimum 20 ms)			
Current inputs	Primary phase	[A]	5 to 1200			
	Earth	[A]	0.5 to 480			
	Thermal/dynamic	[kA]	20 / 50			
Output contact	Voltage	[Vac]	270			
	Current	[A]	5 (AC)			

➔ (*) Under development at the moment of publication of this catalogue

Applicable standards

IEC 60265	IEC 62271-1
IEC 62271-105	IEC 62271-200
IEC62271-102	IEC 60265-1
IEC 60255	

