



GRIDCON<sup>®</sup>

POCOM<sup>®</sup> – POCOS<sup>®</sup> – POCOL<sup>®</sup>

# MEDIUM VOLTAGE COMPENSATION SYSTEMS IN CABINET DESIGN

POWER QUALITY

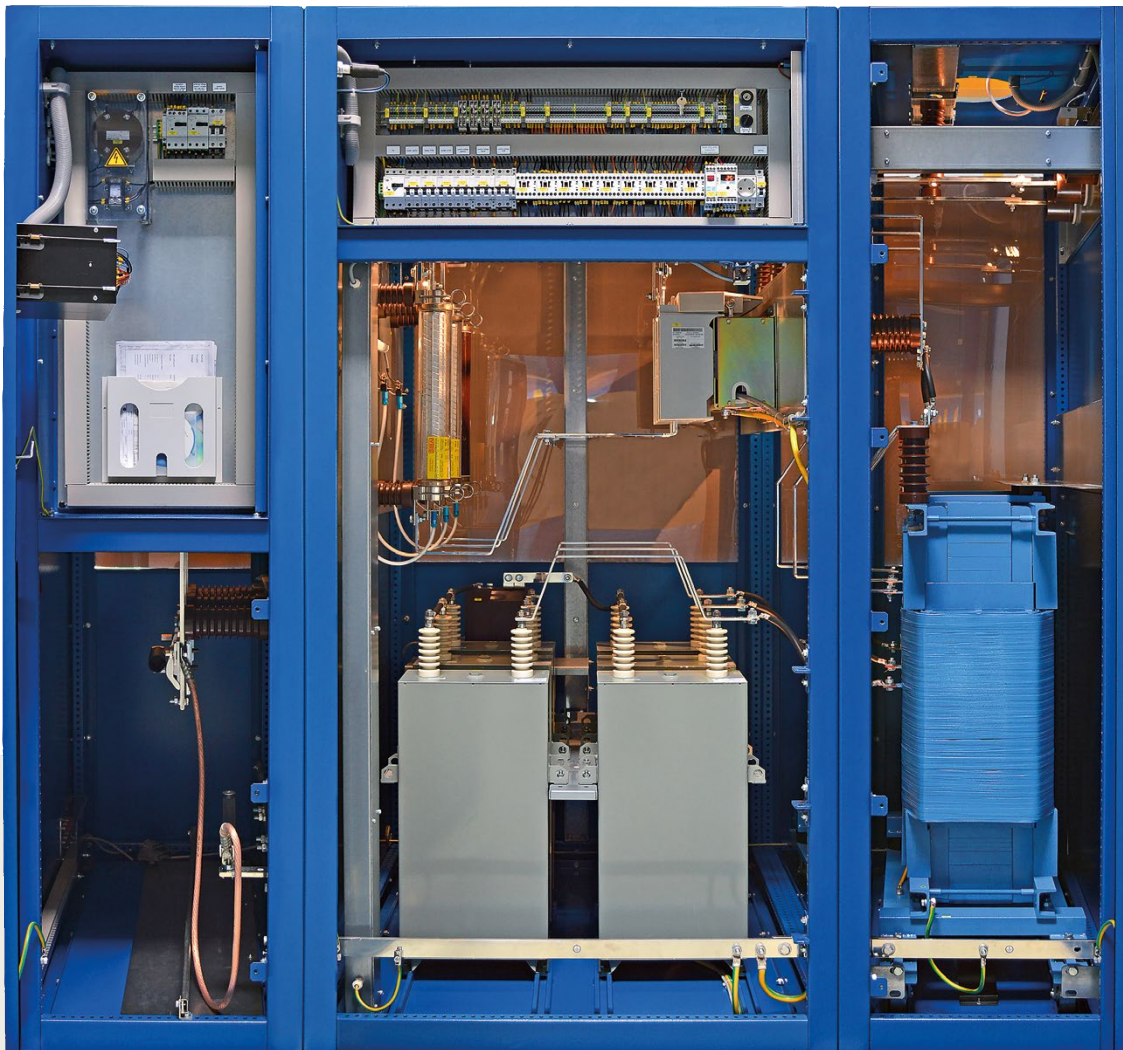


# GRIDCON® POCOM®, POCOS®, POCOL®

## Compensation systems in a cabinet design

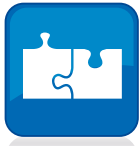
GRIDCON® POCOM®, POCOS® and POCOL® compensation systems provide maximum functionality in tight spaces. Our fully comprehensive package includes system dimensioning, production, delivery, assembly and commissioning – all from the same provider. In our systems, we manage to combine standardization with flexibility. Our experts would be happy to provide advice on individual adaptation to your needs.

Compensation systems from Power Quality Management® only use components and assemblies from renowned manufacturers, fitted by our specialist staff. So outstanding production quality is guaranteed. Before delivery, every system also passes through extensive testing. Furthermore mounting and and commissioning are very quick processes because your GRIDCON® POCOM®, POCOS® or POCOL® system is supplied ready to connect. Thanks to the product description provided, commissioning is simple and operating mistakes are virtually impossible.



GRIDCON® POCOS® S  
Automatic control system,  
10 kV, 1-step, tuned 189 Hz  
(doors open)

# COMPACT CABINET SYSTEMS



## Modular and flexible design

- Modular cabinet design offers functionality in tight spaces
- System dimensioning, production, delivery, assembly and commissioning are all provided by the same manufacturer
- In our systems, we manage to combine standardization and flexibility



## Quick and reliable

- Controls and function tests are carried out in the factory before delivery
- Ready-to-connect delivery minimizes the time needed for assembly and commissioning



## Maximum operational reliability

- System and staff safety starts with system design
- Integration of passive and active systems to avoid internal errors
- GRIDCON® POCOS® with fault arc qualifications up to leakage currents of 50 kA, meeting the highest standards
- Intelligent inlet and outlet air systems for system ventilation without compromising staff safety

## Compensation Systems – an investment with long-term benefits

- Savings in energy costs
- Reduction of losses in transmission and distribution networks
- Lower investment costs for power stations, transformers and cables etc.
- Improvement of voltage quality
- Stabilization of public and industrial power supply networks
- Reduction of CO<sub>2</sub> emissions

# GRIDCON® POCOM®

The economical solution for entering medium-voltage compensation.



| GRIDCON® POCOM®-Cabinet System |  |
|--------------------------------|--|
| Models                         | GRIDCON® POCOM® M, S   |
| Operating voltage              | 4.16 kV / 6.6 kV / 11 kV   |
| Mains frequency                | 50 Hz, 60 Hz   |
| Power per step                 | up to 1.5 Mvar (GRIDCON® POCOM® M)<br>up to 1.0 Mvar (GRIDCON® POCOM® S) |
| Designs                        | non-tuned system<br>tuned system, filter circuit                         |
| Degree of protection           | IP23, IP40, IP43   |

GRIDCON® POCOM® M  
Individual motor compensation,  
6 KV, tuned 189 Hz

- Compensation capacities for small to medium power
- Preferred solution for individual motor compensation
- As an automatic control unit with up to 3 compensation steps
- Light-weight cabinet system with flexible height
- Cabinet doors screwed on both sides
- Variable cable feeding thanks to flexible floor
- Integrated control unit in a separate low-voltage connection area
- Systems for individual motor compensation also available as assembly sets

# GRIDCON® POCOS®

The universal and flexible solution for the most challenging requirements.



| GRIDCON® POCOS®-Cabinet System |  |
|--------------------------------|--|
| Models                         | GRIDCON® POCOS® M, S, F, C                       |
| Operating voltage              | 4.16 kV / 6 kV / 10 kV<br>13.8 kV / 17.5 kV      |
| Mains frequency                | 50 Hz, 60 Hz                                     |
| Power per step                 | up to 1.8 Mvar                                   |
| Designs                        | non-tuned system<br>tuned system, filter circuit |
| Degree of protection           | IP23, IP40, IP43, IP52                           |

GRIDCON® POCOS® S  
Automatic control system with pressure relief channel  
in accordance with IEC-62271-200, 6 kV,  
2-steps, tuned 189 Hz

- Medium power compensation capacities
- Particularly as automatic control units with up to 8 compensation steps for group compensation
- Used for individual motor or fixed step compensation as well as customized system solutions
- Sturdy cabinet design with door-locking system or screw-fastened doors
- Various assembly combinations, e.g. in-line or back-to-back installation
- Modules for special applications such as filter circuit step with high-pass resistors or modules for limiting inrush current
- Dividing walls between the individual compensation steps
- Each compensation module has its own separately accessible low-voltage area
- A multitude of equipment combinations
- Fault arc protection up to leakage currents of 50 kA due to IAC (Internal Arc Classification) according to IEC 62271-200

# GRIDCON® POCOL®

High capacity with a small footprint.

| GRIDCON® POCOL®-Cabinet System |  |
|--------------------------------|--|
| Models                         | GRIDCON® POCOL® M, S, C                          |
| Operating voltage              | 4.16 kV / 6 kV<br>10 kV / 13.8 kV / 20 kV        |
| Mains frequency                | 50 Hz, 60 Hz                                     |
| Power per step                 | up to 4.0 Mvar                                   |
| Designs                        | non-tuned system<br>tuned system, filter circuit |
| Degree of protection           | IP20, IP40                                       |



GRIDCON® POCOL® C  
6 kV, 3 filter circuits  
with high-pass resistors  
(filter 5. / 7. / 11. harmonics)

- ▮ Compensation capacities for medium to high power
- ▮ Primarily for fixed-step compensation or filter circuit system
- ▮ As an automatic control unit with up to 4 compensation steps
- ▮ Sturdy cabinet design for fixed installation of components
- ▮ Modules easy to transport thanks to the special floor component
- ▮ Open design within the compensation system
- ▮ Cabinet doors screwed on both sides
- ▮ Central low voltage compartment or integrated low voltage connection area

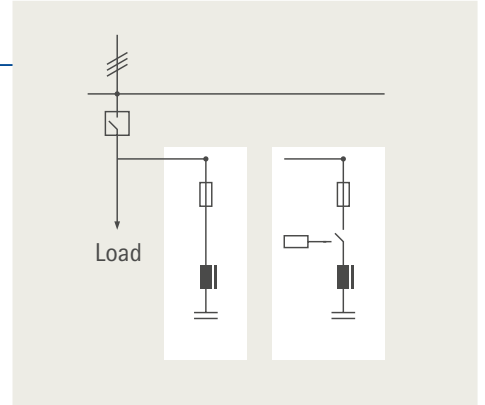
Different conditions demand different cabinet systems.

# GRIDCON<sup>®</sup> POCOM<sup>®</sup>, POCOS<sup>®</sup>, POCOL<sup>®</sup>

Different cabinet systems lead to different type models even if the applications are the same:

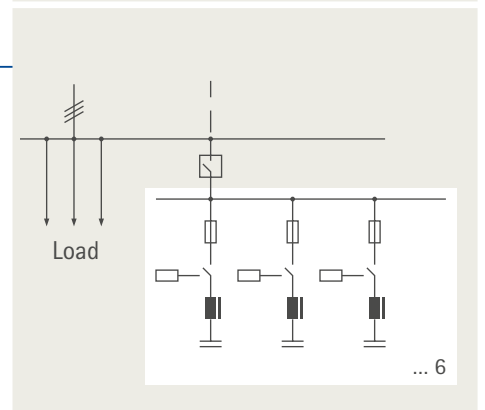
## Type M

The system consists of one individual compensation step, all main system components are integrated in cabinet modules, e.g. GRIDCON<sup>®</sup> POCOM<sup>®</sup> M, system for individual motor compensation.



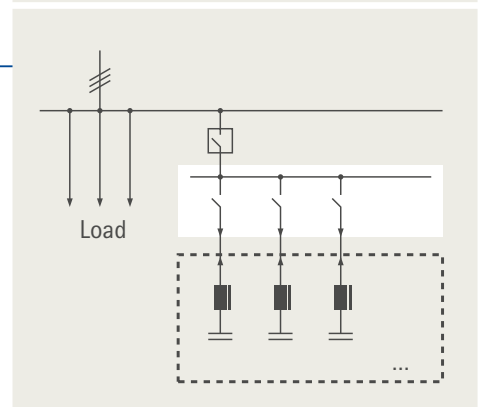
## Type S

The system consists of several compensation steps for the same or different power levels, all main system components are integrated in cabinet modules, e.g. GRIDCON<sup>®</sup> POCOS<sup>®</sup> S, system for automatic reactive-power compensation.



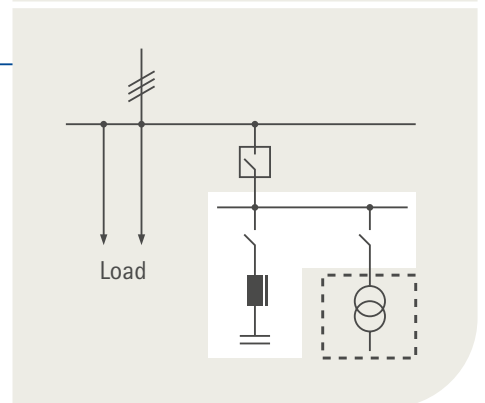
## Type F

The system consists of cabinet modules in which the switching devices, devices for measurement, protection, control and regulation are integrated. Capacitor banks and reactors are installed outside of the cabinet modules, e.g. GRIDCON<sup>®</sup> POCOS<sup>®</sup> F, multi-step tuned compensation system up to 20 kV.



## Type C

This system was tailor-made for a customer. The customized solution can have additional functionalities, e.g. GRIDCON<sup>®</sup> POCOS<sup>®</sup> C, single step compensation system with transformer junction.



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THE POWER BEHIND POWER.

