



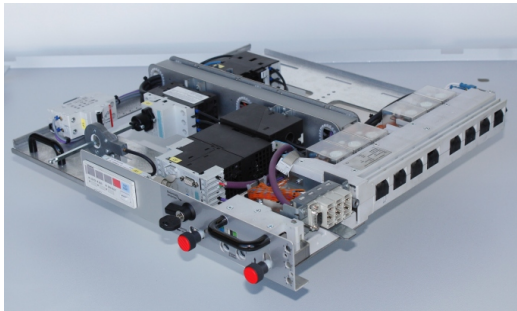
## MODUL K SYSTEM

### Motor-Control-Center (MCC)

Verification of Design (Type tested)  
according to IEC 61439 & IEC 61641

The low voltage distribution MODUL K SYSTEM in either modular fixed mounted, semi-withdrawable, withdrawable or Motor-Control-Center (MCC) design is used to provide safe energy distribution in power plants, heavy industries, chemical plants and in building facilities. The system can also be used for power factor correction.





- Design verified, type tested, arc fault tested and seismic tested low voltage system up to 6300 A
- Factory assembled switchgear system in modular construction
- All types extendable by standardized dimensions
- Sturdy, high end design for industrial use with minimized types of system parts, for maximum liability, stainless chrome steel frame as standard
- Flexibility for special custom-made solutions
- Verification of design and type test
  - IEC 61439-2
  - DIN EN 61439-1/2 (VDE 0660 part 600 1/2)
  - DIN EN 60439-1 (VDE 0660 part 500)
- Internal arc fault withstand test acc. IEC/TR 61641 resp. DIN EN 60439-1, suppl. 2
- Seismic withstand test ( earth quake test)
  - IEC 60068-2-6/-3-3 /- 2-59
  - TA34-PB-295/12-01
- Internal separation up to Form 4b
  - Circuit breaker cubicle in modular construction
  - Outgoing cubicle for fixed mounted components (e.g. FC)
  - MCC cubicles for fully withdrawable feeder modules
- Additional safety features as option
  - Fast arc fault distinguisher *Arc-K-System* (within 1,2ms)
  - Smoke detectors, Surge arresters
  - Main busbar insulation
- Mechanical interlocked drawer operation with closed door, patented fully encapsulated contact mechanism

## Technical data

Rated insulation voltage $U_i$	1000V
Rated operation voltage $U_e$	Up to 690V AC
Nominal frequency	50Hz/60Hz
Rated current horizontal main busbars $I_e$	1250A up to 3200A ( busbar top), up to 6300A ( busbar rear)
Rated current vertical distribution busbar $I_e$	Min. 1000A
Rated short-time withstand current $I_{cw}$ main busbars	60kA up to 120kA 1 sec
Rated short-time withstand current $I_{cw}$ distr. busbars	80kA 1 sec
Rated peak current $I_{pk}$ main busbars	Up to 265kA 0,1 sec
Rated peak current $I_{pk}$ distribution busbars	176kA 0,1 sec
Arc fault withstand capacity	65kA/0,3s/725V
Arc fault free distribution busbars	Fully GRP phase encapsulated
Withdrawable modules ( feeders, motor starters)	Up to 630A, patented safe contact mechanism
ACB circuit breaker fixed mounted / withdrawable	Up to 6300A
Degree of protection	IP 3X/IP 4X IEC 529/DIN 40050
Internal separation	Form 2B up to Form 4b IEC
Ambient temperature	Min. -5° C, Max. 40° C, 35° C 24 hours time averaged
Degree of pollution	3
Overvoltage category	III
Dimensions	Height: 2000 or 2250 mm Depth: 600, 800 mm (single fr.) 1200, 1600 ( double fr.) Width: 450, 600, 800, 1000, 1200 mm
Construction	Frame: Steel ( Zinc or stainless) Internal sheets: Galvalumed ( alu zinc coated) Walls, doors: Epoxy powder coated