



Fluokit M+

MV Modular Switchboard

To ensure the maximum availability of your distribution network, we propose the last evolution of our medium voltage air insulated equipments in accordance with the latest international standards.

With more than 600,000 modular cubicles in service throughout the world, AREVA T&D has unrivalled experience in this field. The Fluokit M+ has been designed and built on these time tested, field proven techniques to ensure the optimum availability for your installations.



THE BEST SOLUTION FOR YOUR MV INSTALLATION

The Fluokit M+ range of distribution cubicles provides all functions needed to design MV modular distribution switchboards for indoor applications, with a classification LSC 2A up to 24 kV. Fluokit M+ is designed for use in distribution networks for the public power distribution sector as well as for urban and infrastructure projects, buildings, industrial sites and windfarms.

The modular design of Fluokit M+ with its wide range of disconnectable functions or withdrawable for the circuit breaker, allows the optimum switchboard configuration for every electrical scheme.

Fluokit M+ combines the reliability and long life of switching in SF₆ or vacuum with isolation in air. Fluokit M+ is designed to meet the requirements of IEC 62271-200 as well as many national specifications thus increasing people and equipment safety.

It is manufactured in our factories which have been certified as conforming with the requirements of ISO 9001 and ISO 14001 standards.



Customer benefits

- Compact and modular switchboard easy to upgrade
- Improved personnel safety
- Easy operation
- Reduced footprint
- Wide range of functions
- Proven reliability
- Low maintenance





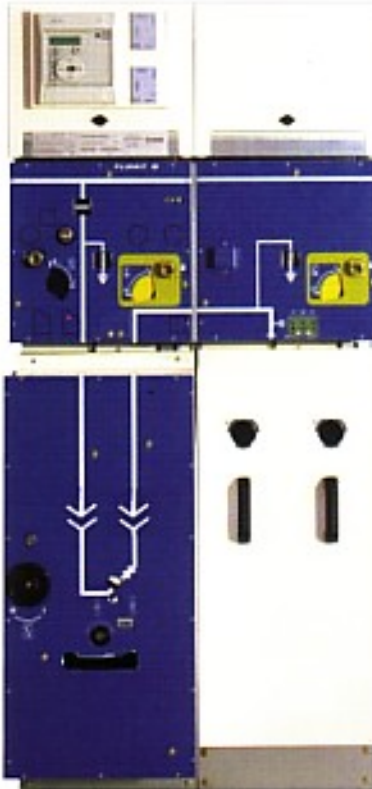
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BUILT FOR ENHANCED PERSONNEL SAFETY

Construction specifications used for the design of Fluokit M+ ensure that installations provide the highest level of personnel protection available:

- > Internal arc containment in accordance with IEC standards
- > Operator protection against internal faults through a hot gas duct at the back of the cubicle
- > All-metal construction for permanent earthing continuity.



SIMPLE AND SAFE OPERATION

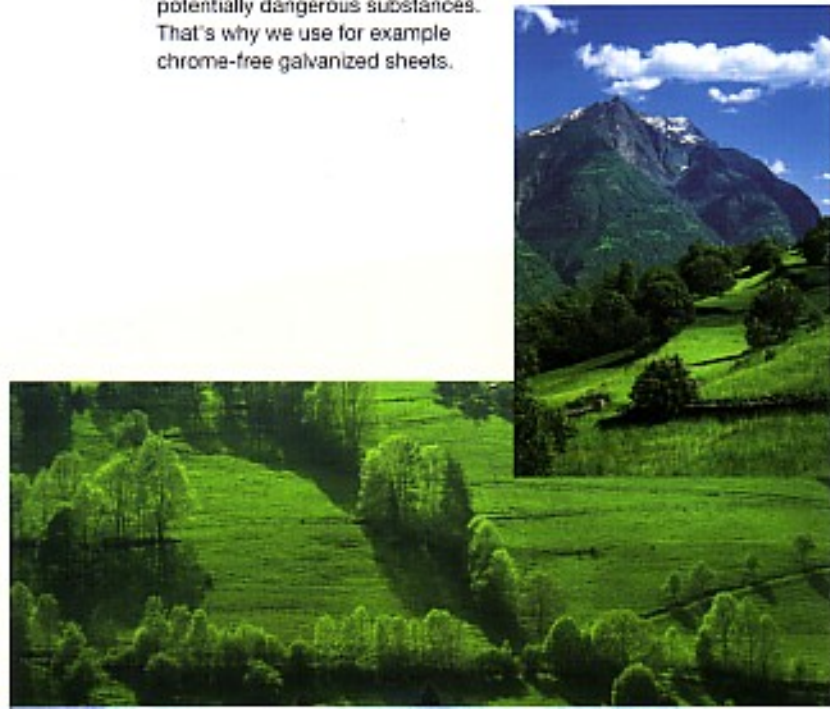
All operations and access to the various compartments are made from the front of the cubicles. Fluokit M+ cubicles include the following features in order to increase operating safety:

- > An interface panel allowing clear separate operation of each of the switching, isolating and earthing functions
- > Push button to directly trip the switch-disconnector
- > In-line mimic diagram giving reliable indication of the status of each function using robust mechanical linkages
- > Clear indicators showing the status of the trip operating mechanism and the fuses
- > Earthing switch with fault making capacity
- > Position of the earthing switch directly visible through inspection windows in the front of the cubicle
- > Access to cable compartment through easily removable cover
- > Withdrawable circuit breaker version
- > A comprehensive range of mechanical interlocking, key locking and padlocking facilities.



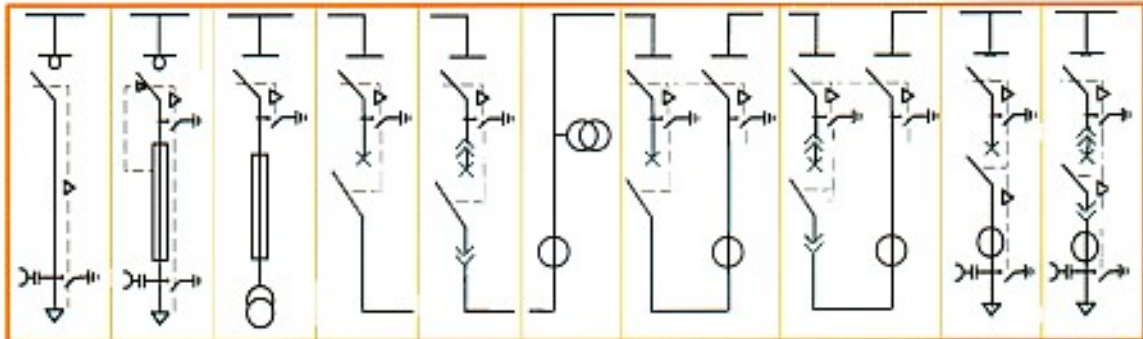
ENVIRONMENTALLY FRIENDLY

At AREVA T&D, we care about the environment. Therefore Fluokit M+ has been designed to use specially selected materials which can be easily recycled at the end of life and limit the content of potentially dangerous substances. That's why we use for example chrome-free galvanized sheets.



A WIDE CHOICE OF FUNCTIONS

Fluokit M+ meets your specific requirements while offering a space saving configuration thanks to its modular concept and its very small footprint. The basic cubicles are equipped with SF₆ switching technology, and for the circuit breaker function a vacuum switching technology is available.



Function	IS	PF/PFA	TM	PGc	PGc	LR	PGB	PGB	PGC	PGC
Width (mm)	375/500	375/500	375/500	375	500	375/500	750/875	750/1125/ 1250	750/875/ 1125	875/ 1250

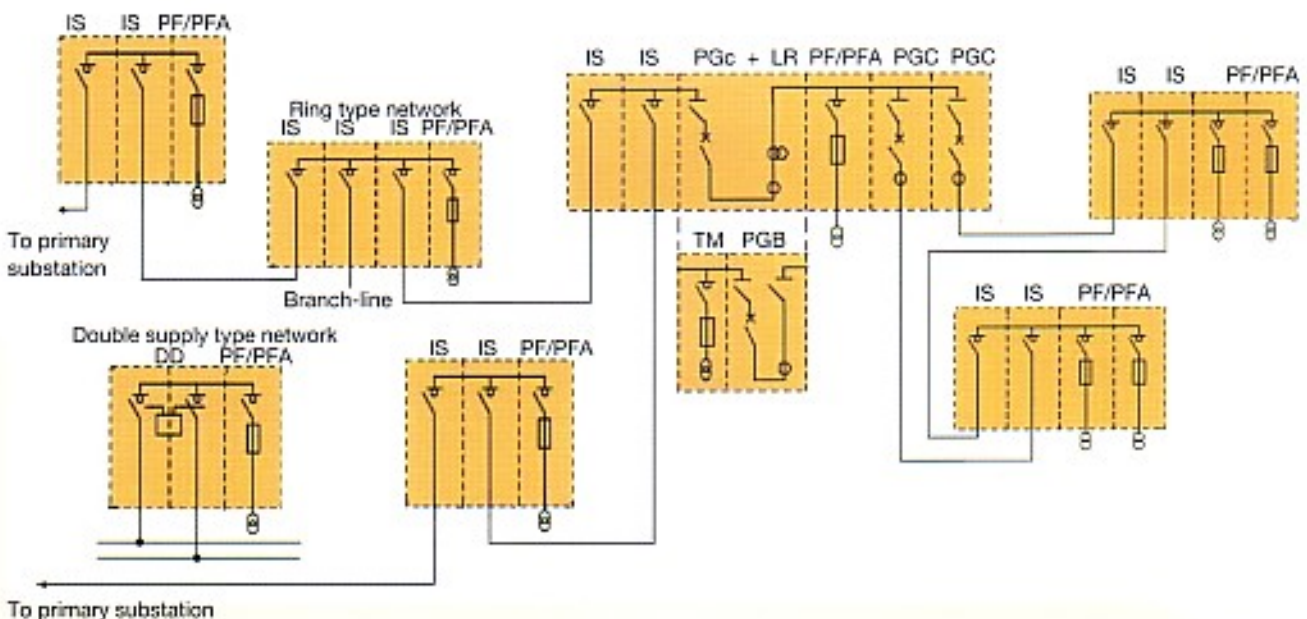
Designation: IS: Incoming or feeder with switch-disconnector
 PF/PFA: Feeder with switch-disconnector fuses combination or not
 TM: Measure busbar voltage
 PGc: Busbar coupling (with disconnectable or withdrawable circuit breaker)
 LR: Bus riser
 PGB: Bus section general protection (with disconnectable or withdrawable circuit breaker)
 PGC: Cable general protection (with disconnectable or withdrawable circuit breaker)

EXAMPLES OF APPLICATIONS

Public distribution and LV metering consumers substations

MV metering consumers substation

Internal network



HIGHLY EFFICIENT ISOLATING AND SWITCHING DEVICES

SF6 CIRCUIT BREAKER

Disconnectable or withdrawable SF₆ circuit breaker, equipped with hand or motorized operating mechanism.



VACUUM CIRCUIT BREAKER

Vacuum circuit breaker is available in fixed or disconnectable version, equipped with the last generation of vacuum bottles and a hand or motorized operating mechanism.



SWITCH-DISCONNECTOR

Switch-disconnector is sealed for life and equipped with either hand or motorized operating mechanism which can be replaced with the switch in any position.



FUSES

A complete range of medium voltage fuses is also offered with the cubicles Fluckit M+ in combination with the switch-disconnectors.



Separate compartments
 1 - Low voltage cabinet
 2 - Busbar compartment
 3 - Switchgear compartment
 4 - Cable compartment
 5 - Operating mechanism

A full range of prefabricated cubicles with small footprint

TECHNICAL CHARACTERISTICS

Rated voltage	kV	12	17	24
Rated withstand voltage lighting impulse				
. To earth and between poles	kVp	75	95	125
. Isolating distance	kVp	85	110	145
Rated withstand voltage at 50 Hz 1 mm				
. To earth and between poles	kV rms	28	38	50
. Isolating distance	kV rms	32	45	60
Short time current				
. Rms value (1s)	kA rms	≤25	≤25	≤20
. Rms value (3s)	kA rms	≤16	≤16	≤16
. Peak value	kAp	≤63	≤63	≤50
Cubicle rated current	A	≤1250	≤1250	≤1250
Busbar rated current	A	≤1250	≤1250	≤1250
IAC classification acc. to IEC 62271-200. (1s)	kA	≤20	≤20	≤20
		≤AFLR	≤AFLR	≤AFLR
Earthing switch making capacity	kAc	≤63	≤63	≤50
Main enclosure degree of protection		IP3X	IP3X	IP3X

FUNCTIONS	Width	Height	Depth on floor
With switch-disconnector	375 / 500	1610 / 1950	850
With circuit breaker	750 / 875 / 1125	1610 / 1950	850

For more information please see the technical characteristics brochure.
 For the vacuum circuit breaker consult us.