MV air insulated switchgear



PIX

Whether you generate, distribute or use electrical power, in today's economic climate, you need a cost-effective solution which is reliable, safe and easy to use.

In order to meet the demands of your specific application, from the simplest to the most complex project, we have developed PIX.

This versatile and cost-effective range of medium voltage switchgear comes with the ratings, features and customized configurations to exactly meet your needs.

#### THE KEY LINK FOR ALL YOUR DISTRIBUTION NEEDS

The PIX range of withdrawable switchgear provides versatile configurations up to 24 kV. It can be supplied in many different versions fitted with circuit breakers or contactors using either  $SF_6$  or vacuum switching technology.

PIX combines well proven design features with innovative components derived from the collective experience gained by our factories worldwide over more than 80 years.

As a result, PIX's designs meet the requirements of both relevant IEC and ANSI international standards and other national specifications.



#### **Customer benefits**

- Versatile and reliable design
- Choice of SF<sub>6</sub> and vacuum switching technologies
- High performance
  & high ratings
- Safe, user-friendly operation
- Compact design
- Internal arc fault containment tested
- Reduced installation and maintenance costs





# PIX

### MV air insulated switchgear



2

#### EFFECTIVE PLANT AND NETWORK MANAGEMENT

Designed for easy installation and operation, PIX ensures a secure investment for the future by incorporating the latest developments in control, monitoring and automation.

PIX cubicles can incorporate all the user-friendly digital control and protection relays necessary for flexible system configuration based on customer requirements. Standard solutions are available, using fully integrated digital control, protection and monitoring units which can be individually configured.

Using this latest digital technology, PIX can be easily integrated into any overall control and monitoring system. It provides detailed plant operating information to a central control unit, significantly improving the control and management of the complete plant or distribution network.

In addition, modifications to the control configuration during manufacturing, commissioning or future plant upgrades can be quickly and easily achieved without the need for any specialized equipment or programming knowledge.



#### INNOVATIVE OPERATING MECHANISM



PIX is available with either conventional or magnetic actuator operating mechanisms.

The AMD magnetic actuator is the latest innovation in this field, offering all the functions of a conventional motor wound spring operating mechanism, with a significantly reduced number of parts. It can also perform many more operations before needing any maintenance.





#### **SAFETY & EASE OF OPERATION**

For maximum safety all operations are performed from the front with the door closed.

Operation is simple and logical, with clear status indication of all functions.

Comprehensive electrical interlocking in combination with robust mechanical interlocks ensures the maximum safety of both plant and personnel.

#### EASY ACCESS TO ALL COMPONENTS

PIX has been designed for front access to minimize space requirements.

The functional design of the front panels affords easy access to the separate compartments within the cubicles. In addition internal partitions can be quickly and easily removed to facilitate access for installation, inspection and testing.

#### **IMPROVED PERSONAL SAFETY**

PIX is a robust metal-clad switchgear, divided into four compartments segregated by earthed metal panels. It incorporates independent pressure relief flaps on each of the cable, circuit breaker and busbar compartments.

The design of PIX ensures effective internal arc containment in the unlikely event of a major fault occurring within the cubicle. The gases are expelled at the top of the cubicle, as far from the operator as possible, for improved safety.

For special installations, additional arc energy absorbing devices are available.





"Designed to minimize space requirement".



## ... for high performance



#### Low voltage compartment

- 2 Circuit breaker
- **3** Busbars
- 4
- 5 Earthing switch
- 6 Current transformers Cable connections 8 Voltage transformers
- Width From 650 to 1000

From 2130 to 2330\* From 1405 to 1605 Dimensions depend on cubicle type (contactor / vacuum or SF<sub>6</sub> circuit

\*up to 3100 with optional equipment for internal arc containment or gas evacuation.

#### VACUUM OR SF<sub>6</sub> SWITCHING, **IT'S UP TO YOU**

The PIX range can be fitted with circuit breakers or fused contactors, mounted on a withdrawable carriage with disconnecting contacts:

- >> HVX vacuum circuit breakers, fitted with a conventional spring operating mechanism or the innovative AMD magnetic actuator and our latest range of interrupters
- >> FPX SF<sub>6</sub> circuit breakers combining two breaking techniques for more reliability: thermal expansion and auto-pneumatic puffing
- >> GFX fused SF<sub>6</sub> contactor
- >> CVX fused vacuum contactor

RATINGS	PIX					
>> Rated voltage		kV	12	17,5	24	
>> Rated power frequency withstand voltage		kV	28	38	50	
>> Rated lightning impulse withstand voltage		kV peak	75	95	125	
>> Rated short time withstand current - 3s.		Up to kA	40*/50	40*/50	31,5	
>> Rated peak withstand current		Up to kA	100/125	100/125	80	
>> Internal arc withstand		Up to kA	40/50	40/50	31,5	
>> Rated frequency		Hz	50/60			
>> Rated current	- busbar	Up to A	3150/	′5000**	2500	
	- CB feeder	Up to A	3150/5000**		2500	
	- Contactor feeder	Up to A	400	-	-	
>> Degree of protection			IP 3X or IP 4X			
>> Standards IEC (ANSI version available)						
*Farthing switch 1 sec. or 31.5 kA 3 sec **With forced ventilation						



FPX SF6 circuit breaker



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