ELATEC
POWER DISTRIBUTION

Air-insulated medium voltage switchgear

Reliable, type-tested & eco-friendly

We are ELATEC

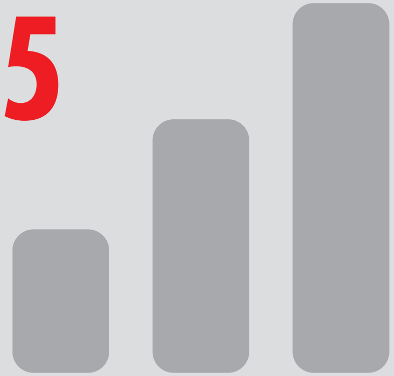
1995

Founded in Konz

180

Employee in three locations

25



Million euros yearly performance

SINCE 1995
GROWTH
INNOVATION
AND QUALITY

Worldwide represented in the field of power distribution

ELATEC
POWER DISTRIBUTION

Company profile

We are a mid-sized provider of solutions for energy-distribution and -supply. In addition to the development and manufacture of medium-voltage switchgear as well as its installation and commissioning, we also undertake comprehensive projects.

At the **company headquaters in Konz,** switchgear for a wide range of applications in the fields of power generation and power distribution is developed and manufactured. Moreover, our portfolio includes a number of special products as well as retrofit solutions for nearly every application in power distribution.

Our specialists at the **Ilmenau site** are engaged in the provision of highly qualified engineering services in the field of electrical power quality and the subsequent plant construction. This is where the development and integration of standardised and customer-specific electrotechnical / power electronic systems is conducted in worldwide turn-key plant construction projects for industry and public energy suppliers.

SECONDARY DISTRIBUTION

Air-insulated **switchgear for secondary distribution** in accordance with IEC 62271-200 for various applications in power supply companies, industry and infrastructure facilities

- Up to 12 kV
- Up to 1250 A
- Up to 25 kA
- Internal arc classification up to IAC A FLR 25 kA 1 s
- Loss of service continuity category: up to LSC 2B
- Partition class: PI / PM
- Single busbar & RMU‘s
- Switch-disconnector panels
- Circuit-breaker panels in withdrawable design
- Highly compact construction
- The alternative to SF6 insulated switchgear
- Easily accessible
- Modular & expandable
- Maximum personal safety

PRIMARY DISTRIBUTION

Air-insulated **switchgear for primary distribution** in accordance with IEC 62271-200 for various applications in industry and power supply companies

- Up to 40,5 kV
- Up to 4000 A
- Up to 50 kA
- Internal arc classification up to IAC A FLR 50 kA 1 s
- Loss of service continuity category: up to LSC 2B
- Partition class: PI / PM
- Design variants:
  - Single busbar
  - Double busbar
  - Duplex busbar
- Fixed installation & withdrawable design
- For wall and free-standing installation
- Various panel typicals
- Modular & expandable
- Individual special solutions
- Maximum personal safety

POWER GENERATION

Air-insulated **switchgear for high current and generator applications** in accordance with IEC 62271-200 for use in various power plants and as a retrofit solution for power plant conversions

- Up to 17,5 kV
- Up to 7000 A
- Up to 72 kA
- Internal arc classification up to IAC A FLR 63 kA 0.5 s / 72 kA 0.1 s
- Loss of service continuity category: LSC 2B
- Partition class: PM
- Design variants:
  - Single busbar
  - Duplex busbar
- withdrawable unit & truck type design
- Generator circuit breaker in accordance with the IEEE C37.013 standard
- Highest availability
- Maximum personal safety
- Modular & expandable
- Individual special solutions

MOBILITY SOLUTIONS

Air-insulated **switchgear for traction power supply and marine applications** in accordance with IEC 62271-200

Marine installations

- Up to 12 kV
- Up to 1250 A
- Up to 31,5 kA
- Distribution systems, ring cable systems, shore connection systems, switchover panels
- For cruise ships, container ships and mega yachts

Traction power supply systems

- Up to 24 kV / 16,7 Hz
- Up to 2500 A
- Up to 40 kA
- withdrawable unit & truck type design
- Internal arc classification up to IAC A FLR 40 kA 1 s
- Loss of service continuity category: LSC 2B
- Partition class: PM

SPECIAL PRODUCTS

Air-insulated **special switchgear and special solutions**

Furnace switchgear systems

- Up to 40,5 kV
- Up to 250 MVA
- Up to 31,5 kA
- Fixed installation & withdrawable design

Switchgear container

- Designed according to customer requirements

Mobile substations

- HV - Transformer - MV

Cable junction boxes

- For secure connection between oil and plastic cables

Retrofit of existing installations

- Primary components
- Secondary components (protection and control technology)

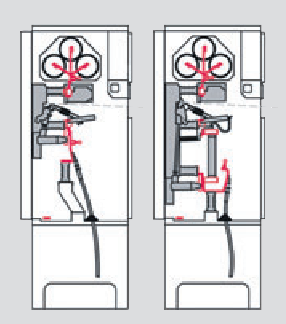
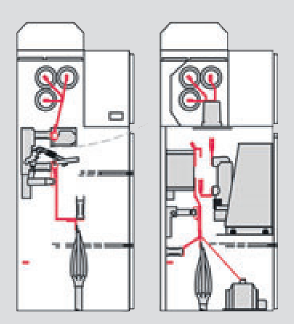
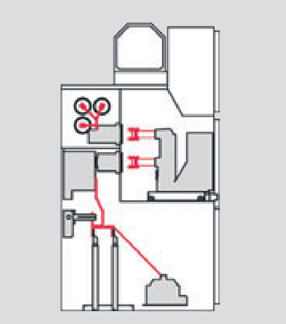
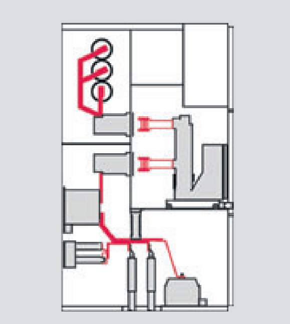
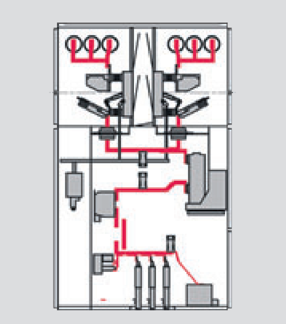
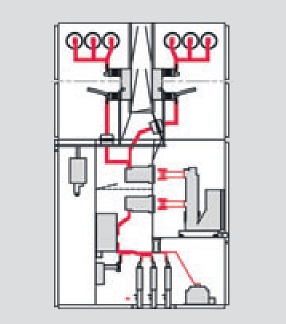
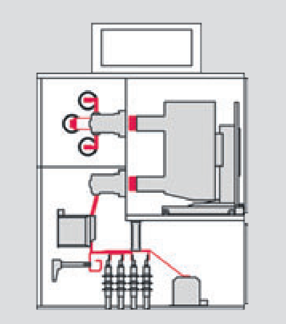
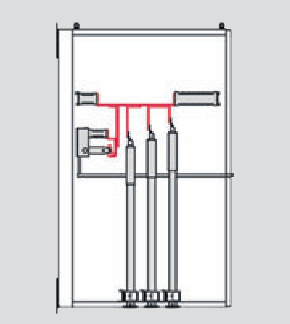
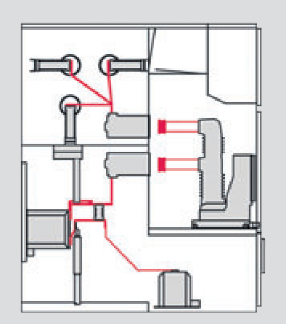
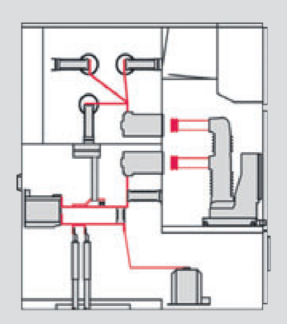
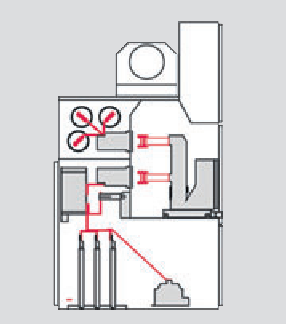
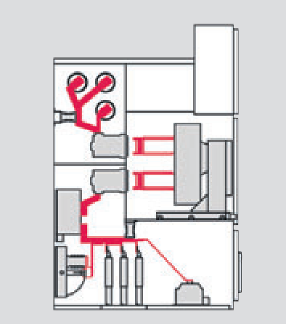
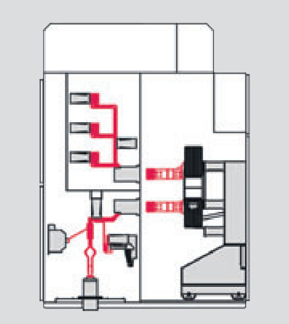
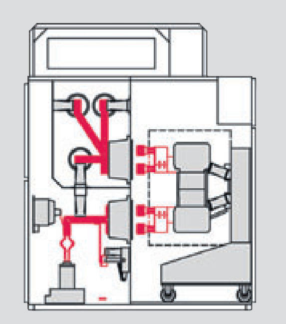
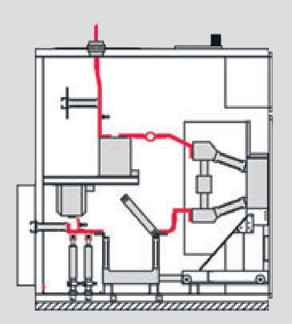
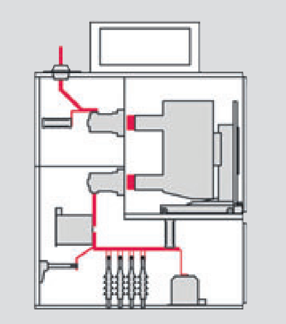
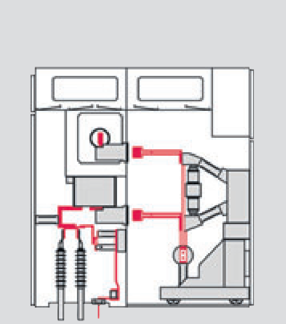
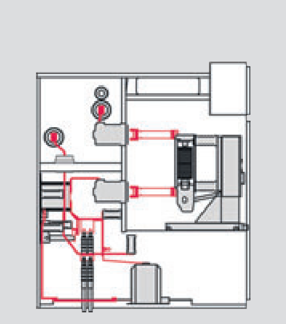
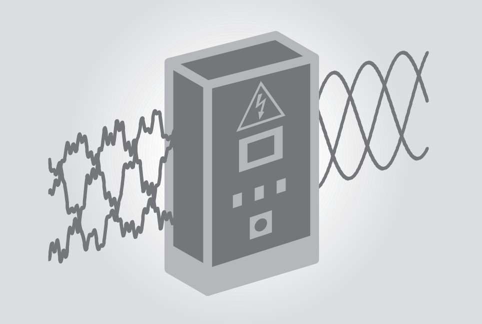
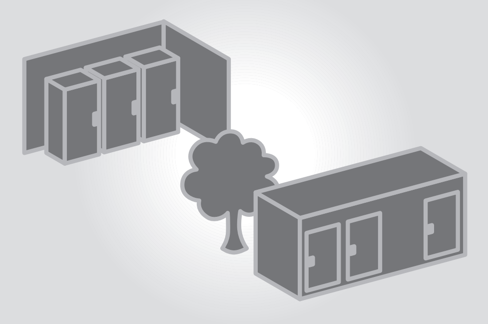
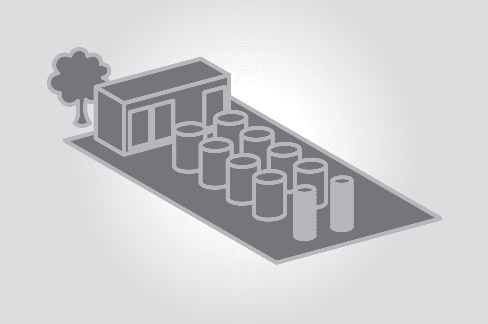
POWER QUALITY

Plant engineering

- Compensation / filter systems
- RC circuits
- Customised special solutions

Services

- Grid planning and improvement: Short circuit and load flow calculations, network optimization, protection concepts
- Grid and process simulations: Simulation of electrical conditions (switching operations, voltage distortion, etc.)
- Metrological network investigations: Determination of load flow, interference emitters and susceptible devices
- Fault analysis: Identification of causes and the development of technical solutions
- Dimensioning of equipment / electrical elements
- Consulting: technical advice, feasibility studies, basic engineering design, construction and commissioning
- Protection tests / parameterisation tests

Application		Secondary distribution		Secondary - primary / marine		Primary distribution	Primary distribution							Generator- / high current-switchgears			Furnace switchgears		Traction power systems		Power quality		
Product sector																							
Sectional view of typical panel																							
Product		M19	M20	M9	M13	M6	M6-DSS	M6-DSS E	M11-D	M14-I / -O	M16.1-W	M16.1-F	M18	M6-G	M12	M17	M4	M11-F	M7	M15	ELA©omp		
Switchgear design	Single bus bar	•	•	•	•	•			•	•	•	•	•	•	•	•	•	•	•	•	ELA©LVact	ELA©MVpass	ELA©MVsvc
	Double bus bar						•	•													Active LV compensation	Passive MV compensation	Active MV compensation (SVC)
	Duplex				•	•			•		•		•	•									
Circuit breaker / Switching device		Disconnector	Withdrawable	Fix installed	Withdrawable	Withdrawable	Fix installed	Withdrawable	Withdrawable	-	Withdrawable	Withdrawable	Withdrawable	Withdrawable	Withdrawable	Withdrawable	Fix installed	Withdrawable	Withdrawable	Withdrawable	High electric power quality for reliable technology processes		
Rated voltage [kV]	12	•	•	•	•	•	•	•		•			•	•	•	•							
	17,5			•	•	•	•	•		•			•	•	•	•			17,25 kV		0,4 kV	Up to 50 kV	Up to 50 kV
	24			•		•	•	•		•			•	•			•	•		•	Compensation -of the reactive power -of the voltage distortion -of load-caused voltage dips -of voltage asymmetries	Reactive power compensation Harmonics compensation - single or multiple frequency - single or multi-stage - unchoked / choked	Static filter circuit systems TCR systems
	36								•	•	•	•					•	•					
	40,5								•								•	•					
Rated frequency [Hz]		50	50	50 / 60	50 / 60	50	50	50 / 60	50	50	50 / 60	50 / 60	50 / 60	50	50	50	50	50	16,7	16,7			
Rated current of bus bar [A] max.		630	630	1250	2000	4500	3700	3150	3150	2500	2500	2500	3150	5200	7000	5400	3150	2500	2000	2500			
Rated current of feeder [A] max.		630	630	1250	1250	4000	3700	2500	2500	2500	2500	2500	3150	5200	7000	5400	3150	2500	2000	2500			
Rated short time current [kA] max.		25	25	31,5	31,5	50	31,5	40	31,5	40	31,5	31,5	40	63 / 72	63	72	31,5	31,5	40	31,5			
Rated short circuit duration [s]		1	3	1	3	3	3	1	3	1	3	3	3	3 / 1	1	3	1	1	1	3	250kvar / power module, max. 60 kHz clock speed, water cooling, 400 V connection Indoor installation Expandable, intelligent	0.5 - 200 Mvar Indoor and outdoor installation cabinet / container construction	Up to several 100 Mvar Outdoor installation
Rated peak withstand current [kA] max.		63	63	80	80	125	80	100	80	100	80	80	100	173 / 193	173	197	80	80	100	80			
Dimensions width [mm]		540	600	650 / 800 / 1000	600	650 / 800 / 1000	650 / 800 / 1000	650 / 800 / 1000	1500	630 / 800 / 1000	1000	1000	650 / 800 / 1000	800 / 1000	1500	1200	2200	1500 / 2220	800 / 1000	800			
Dimensions height [mm]		1930	2110	2000	2100 - 2540	2250 - 2600	3000	3000	2910	1400 / 2000	2500	2500	2380 - 2800	2400 - 2550	3000	2900	2500	3080	2250	2350			
Dimensions depth [mm]		780 / 860	870	950 / 1200	1150	1300	1600 / 1750 / 2112	1750 / 2112	2200	700 / 1200	2100	2300	1385	1600	2200	2300	2300	2200	2000	2000			
Internal arc class max.		IAC AFL 25kA 1s	IAC AFLR 25kA 1s	IAC AFLR 31,5kA 1s	IAC AFLR 31,5kA 1s	IAC AFLR 50kA 1s	IAC AFLR 31,5kA 1s	IAC AFLR 40kA 1s	IAC AFLR 31,5kA 1s	IAC AFLR 40 1s	IAC AFLR 31,5kA 1s	IAC AFLR 31,5kA 1s	IAC AFLR 31,5kA 1s	IAC AFLR 63kA 0,5 / 72kA 0,1s	IAC AFLR 63kA 0,5s	IAC AFLR 63kA 0,3s	-	IAC AFLR 31,5kA 1s	IAC AFLR 40kA 0,5s	IAC AFLR 31,5kA 1s			
Loss of service continuity category		LSC 2A	LSC 2A	LSC 2A	LSC 2A / 2B	LSC 2B	LSC 2A	LSC 2B	LSC 2B	LSC 1	LSC 2B	LSC 2B	LSC 2B	LSC 2B	LSC 2B	LSC 2B	LSC 1	LSC 2B	LSC 2B	LSC 2B	Optimal and future-proof solutions / Design according to customer requirements Planning, delivery, installation and commissioning		
Partition class		PI	PI / PM	PI	PI / PM	PM / PI	PM / PI	PM / PI	PM	-	PM	PM	PM	PM	PM	PM	-	PM	PM	PM			
IEC standard		IEC 62271-200	IEC 62271-200	IEC 62271-200	IEC 62271-200	IEC 62271-200	IEC 62271-200	IEC 62271-200	IEC 62271-200	IEC 62271-200	IEC 62271-200	IEC 62271-200	IEC 62271-200	IEC 62271-200	IEC 62271-200	IEC 62271-200	IEC 60298	IEC 62271-200	IEC 62271-200	IEC 62271-200			

ELATEC - innovative medium voltage switchgear

- Solutions for all MV applications on land and at sea
- Highest operational reliability and personal safety
- Environmentally friendly systems through air-insulated technology
- Innovation leader for medium-voltage switchgear
- Comprehensive expertise in the field of power quality
- Development, engineering, manufacturing and support from Germany
- Manufacturer with 25 years of experience
- Quality made in Germany

ELATEC
POWER DISTRIBUTION

MADE IN GERMANY

SINCE 1995
GROWTH
INNOVATION
AND QUALITY

ELATEC is located in western part of Germany, close to Luxembourg

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