



Airports & Aviation

Commercial and Military



Nothing protects quite like Piller

www.piller.com



Solutions for airports and aviation

About Piller

Since its formation by Anton Piller in 1909, the company Piller has been synonymous with electrical machines of the highest quality and reliability. Today, Piller, from its headquarters in Germany and via its regional offices, representatives and distributors world-wide, continues that tradition into the 21st century.

Piller produces high performance power protection systems and converters. Combined with the highest levels of client support and engineering excellence available anywhere, Piller is internationally recognised as the most respected name in its field.

Piller is a wholly owned subsidiary of the multi-disciplined global UK engineering group, Langley Holdings plc. (www.langleyholdings.com)



Piller headquarters,
Osterode, Germany



The efficient day-to-day operation of a modern airport totally relies upon the continuous availability of quality power. Whether it is 400Hz or 28VDC power for aircraft, runway lighting, terminals or maintenance hangars, instrument landing systems and electronic display boards, a sudden loss of power could cause untold damage to the workings of an airport and worse still could even affect human life itself. Which is why many of the world's airlines, airports and military establishments place their trust in Piller power protection systems guaranteeing the highest reliability possible.

It may only be a matter of seconds between power going down and standby generators kicking in - but that short delay could have catastrophic results. As one of the world's leading UPS (Uninterruptible Power Supply) and frequency conversion suppliers, Piller understands the need to maintain power at all times, especially in times of utility outages or other crisis. With almost 100 years of experience, the Piller name is synonymous with the utmost quality and reliability when it comes to protecting your operations, ensuring that power is always available to your aircraft at civil or military installations.

Every organisation hopes they never have to call upon their UPS systems - but with Piller there is the ultimate peace of mind knowing that aircraft and airport critical electrical and electronic systems are supported by the most reliable power sources available.

Likewise, the 400Hz power delivered to the aircraft is equally critical to safety and on-time take-offs.

'with Piller there is the ultimate peace of mind knowing that aircraft and airport critical electrical and electronic systems are supported by the most reliable power sources available'

SOLUTIONS

Features

Piller UPS systems and ground support equipment are designed and built to the highest quality by the best people in the business. Piller.

- Microprocessor control with voltage regulation and current limiting.
- Compact low noise construction
- Low output distortion factor
- Load dependent, phase-to-phase automatic compensation of voltage losses due to long cables using the unique I-Boost[®] system.
- Short circuit and overload protection
- User friendly mimic diagram with liquid crystal display
- Event recorder for 1200 events + memory.
- Input output data showing currents, voltages and loads
- Ground power equipment standard with E&F, 42V safety relay.
- EMI/RFI filtering standard on all units.
- Low harmonic distortion to utility power <5%.
- Constant output voltage for non-linear loads.
- Interface for remote control and centralised monitoring option.
- Plug head temperature monitoring on all ground power units, available as an option.



Piller ground support for passenger boarding bridge



APOJET AJS static GPU



360KVA rotary converter for Boeing (shown with open covers)



Piller equipment at AWACS bases worldwide

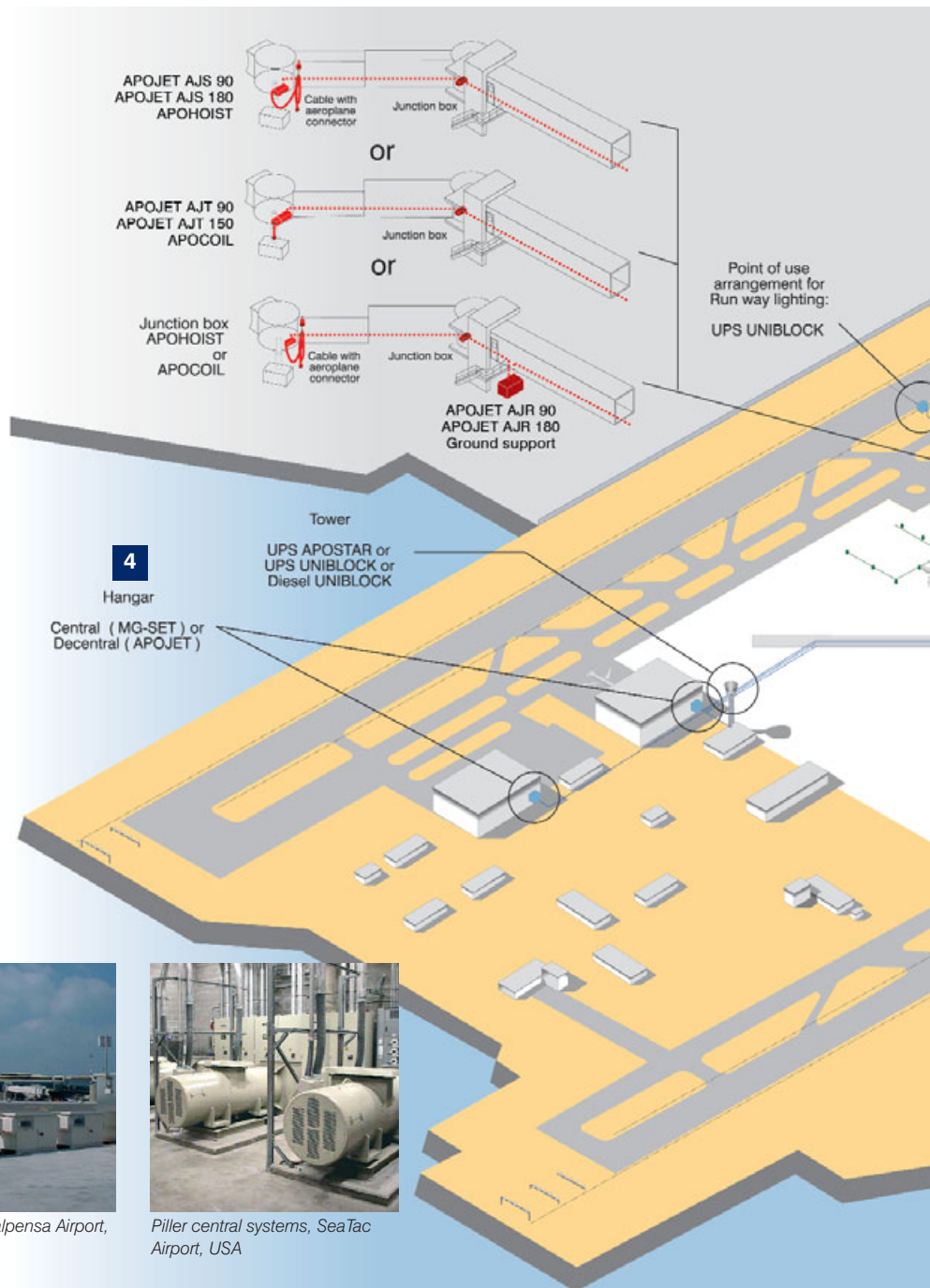
PILLER

The Piller solution

Piller provides its customers with a complete line of Rotary and Static (Solid State) Frequency Converters and UPS systems as well as Distribution Panels, Gate-Boxes and accessory equipment such as cable hoists and retrievers.

Many varieties and configurations of special problem solving systems are also available, to ensure clients get the best technical solution and equipment for their particular application. Piller is dedicated to client satisfaction by providing total support during the design stage, installation and especially after commissioning. Piller has a team of many trained technicians strategically located around the world to support its many products.

The diagram illustrates typical applications using Piller equipment to protect critical airport systems and provide quality power to aircraft at the boarding gates and maintenance hangers. Our solutions the world over include:-



Ground power equipment, Frankfurt Airport, Germany



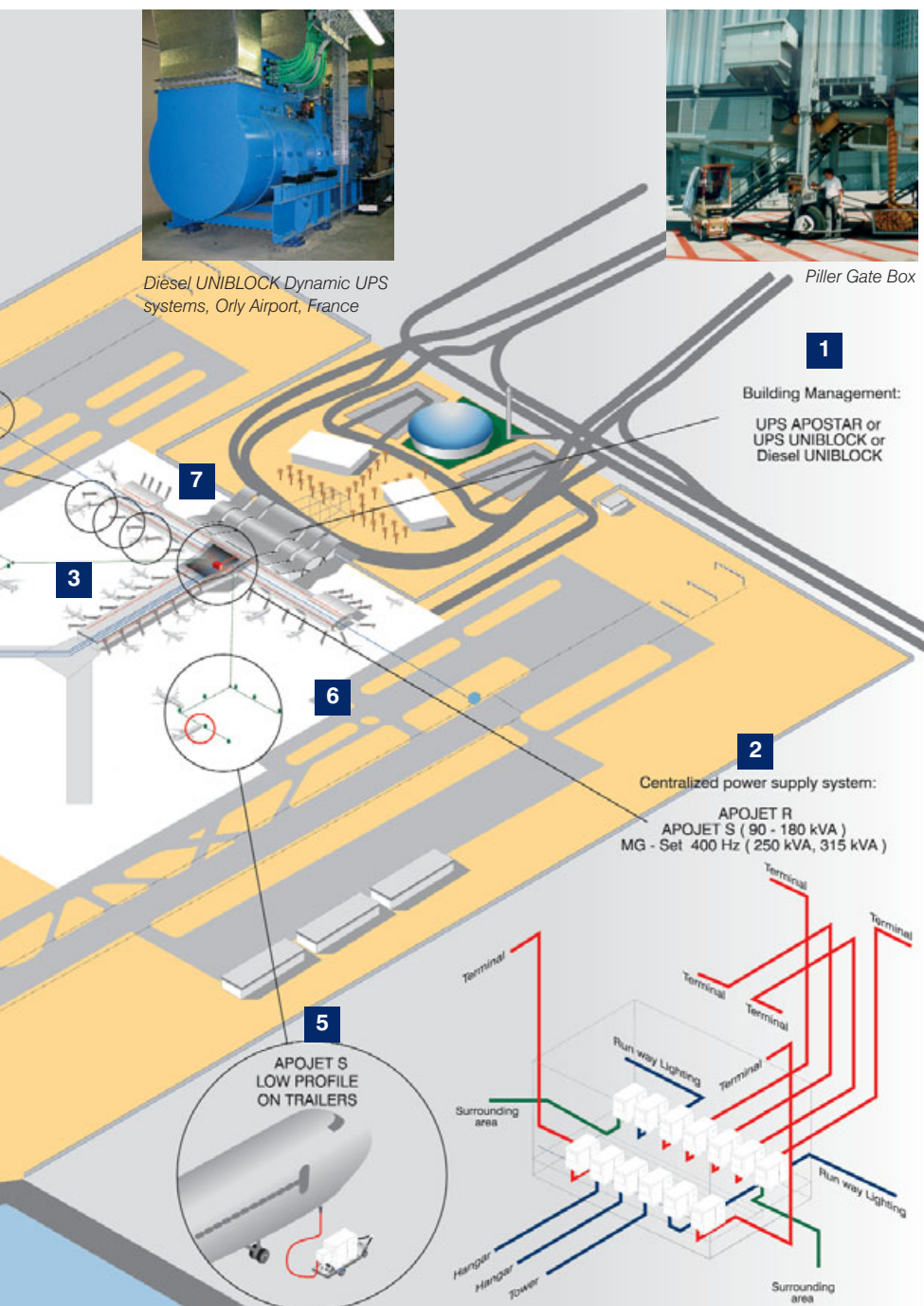
4 Apojet units, Malpensa Airport, Italy



Piller central systems, SeaTac Airport, USA



Critical to safety and on-time takeoff





The products

Model/Type	kVA ratings	
	Solid state 400Hz units	
APOJET AJS	Compact	40, 60, 90 120, 150, 180, 200 kVA
	Flat Pack	120, 150, 180, 200 kVA
	All units can be paralleled load share, and used in centralised systems	
AJS + 28VDC Combi	Compact Cabinet	60 / 90 kVA 400Hz & 600A/2000A peak 28VDC
28VDC	Small Compact	400A / 1600A peak, 600A / 2000A peak
	Rotary 400Hz units	
APOJET AJR	Compact (50Hz/40Hz)	20, 40, 60, 90, 120, 150kVA
	Compact (60Hz/40Hz)	75, 90, 125, 150, 200kVA
	MG Sets for centralised systems	250, 315, 380kVA
	All units can be paralleled load share, and used in centralised systems	
	Automatic Voltage Regulators 400Hz	
APOJET AJT	Gate-Box	90 -150kVA with or w/o Step-down transformer incl. LVR
	Auxiliary Equipment	
APOCOIL	Bridge or Ground	Max. 28m single jacketed cable storage
APOHOIST	Bridge	Dual sling single or banded cable storage
400Hz Distribution Panel	Panels	Multi outputs, kVA ratings on request
	Rotary UPS	
UNIBLOCK	Rotary UPS	from 400kVA - 50MVA
	Diesel Rotary UPS	
	Hybrid Rotary UPS	
Other units and equipment available on request		

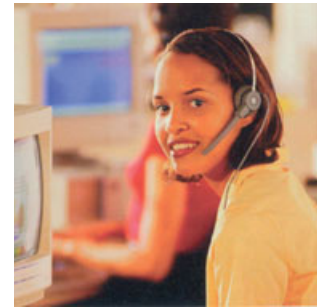


Unrivalled after sales service

Across the globe the Piller network is committed to delivering world-class service resources and Piller clients can always be confident that a highly qualified team of service and support technicians are there to uphold the very best standards of customer care.

Services range from installation and commissioning to predictive analysis, emergency calls, spare parts, planned maintenance and training. A direct link to Piller engineers and technicians through Piller's advanced digital control technology is available on every unit (rotary and static) offering 24/7 Remote Monitoring and Support with total diagnostics and 1,200 event memory.

- Maintenance
- Battery maintenance
- Technical support
- Operator training
- 24 hour call-out
- Temporary UPS systems
- Comprehensive spares
- Remote monitoring
- Worldwide service organisation



References

Airports

Airport Authority of India
 Airport Authority of Thailand
 Casablanca Airport, Morocco
 Chek Lap Kok Airport Hong Kong
 Charles de Gaulle & Orly Airports, France
 Damascus Airport, Syria,
 Dubai Airport, UAE
 All Major Airports, Germany
 Heathrow & Manchester Airports, UK
 Johannesburg Int'l Airport, RSA
 Kuala Lumpur Int'l Airport, Malaysia
 Madrid Airport, Spain
 Milan Airport, Italy
 Prague Airport, Czech Republic
 Schiphol Airport, Netherlands
 Seattle Airport, USA
 Stockholm Airport, Sweden
 Warsaw Airport, Poland

Aviation (Commercial)

Airbus
 British Airways
 Boeing
 Cathy Pacific Airways
 Continental Airlines
 Dassault
 Delta Airlines
 Eurocopter
 Hapag Lloyd
 Indian Airlines Ltd
 Lockheed Martin Corp.
 Lufthansa
 Qantas Airlines
 SAS Airlines
 United Airlines
 Xiamen Airlines

Aviation (Military)

AWACS USA & NATO
 Dassault
 Eurocopter
 French Air Force
 French Navy
 MoD Cyprus, Germany, Singapore, Turkey, UK
 Royal Air Force UK
 US Navy
 US Marine Corps
 US Air Force
 US Army - Patriot Missile Training School

*'Piller upholds the very best standards
 of customer care'*

PILLER

ROTARY UPS SYSTEMS
HYBRID ROTARY UPS SYSTEMS
ROTARY DIESEL UPS SYSTEMS
STATIC UPS SYSTEMS
STATIC TRANSFER SWITCHES
KINETIC ENERGY STORAGE
AIRCRAFT GROUND POWER SYSTEMS
FREQUENCY CONVERTERS
NAVAL POWER SUPPLIES
SYSTEM INTEGRATION



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The information contained within this brochure is deemed to be correct at the time of going to press. Due to a policy of continued improvement, we reserve the right to change any specification without prior notice.
ERRORS & OMISSIONS EXCEPTED

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PILLER
Power Systems