



WARSAW, POLAND

Polsat Recording Studio



Studio Silence at an Industrial Scale

Daikin delivered a complete HVAC solution for Telewizja Polsat's newly built recording facility in Warsaw, an 18-meter-tall, 2.400 m² production space supported by more than 3.000 m² of backstage and technical areas. Built for high-performance broadcasting, film shoots, and live events, the system moves an incredible 210.000 m³/h of fresh air while meeting strict acoustic and reliability requirements.

Installed systems:

- Daikin Air handling unit - Professional series with integrated silencers
- Air-cooled scroll chillers for AHU cooling coil
- VRV IV heat recovery systems for common areas and backstage zones
- SkyAir Alpha-series systems

Location

Country: Poland

City: Warsaw





On the rooftop above Polsat's Lubinowa 4A, Daikin's VRV outdoor unit, air handling units and ductwork quietly power the complex's high-performance HVAC system.

Daikin moves 210.000 m³/h of air through Poland's top broadcast studio, Support the production with highest comfort

Polsat's Lubinowa 4A complex is one of the most advanced broadcast facilities in Poland, built to handle everything from live television and concerts to film shoots and corporate events.

At the heart of the building is a 2.400 m² main hall with 18-meter ceilings and a movable acoustic wall that can split the space into two—each section with its own access point through a 900 m² foyer.

Designing an HVAC solution for a space like this meant working around competing priorities. The system needed to be powerful enough to keep the entire facility comfortable, quiet enough to stay out of the audio mix, and flexible enough to maintain optimal indoor air quality across a wide range of production scenarios.



Daikin works behind the scenes to deliver clean air and consistent comfort across the studio and other functional spaces.

Project requirements

- Air conditioning
- Controls
- Heating
- Ventilation

Year of Installation

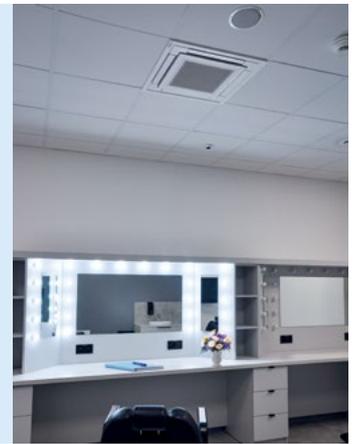
2023

Total Capacity

1.75 MW

Solution and system components

- Air-cooled scroll chiller, high-efficiency low-sound (EWAT700B-XLB2000, 1.4 MW)
- VRV IV Heat Recovery system
- ERQ condensing unit
- SkyAir Alpha series systems
- Split and multi-split systems
- Air handling unit - Professional series
- Fully flat cassette indoor units
- Daikin commissioning and maintenance service



Performance That Stays Behind the Scenes



Engineered for airflow and silence

To meet the space's unique demands, Daikin engineered a full-scale HVAC system built for control, consistency, and quiet performance. The solution centers around 11 Professional series air handling units (AHUs), which supply a combined 210,000 m³/h of fresh air.

The two largest units each deliver 82,000 m³/h with 600 Pa of external static pressure to ensure peak performance, even during full-capacity productions.

Each AHU is equipped with 1,500 mm length silencers (sound attenuators) on the intake and exhaust sides, maintaining sound pressure levels as low as 64 dB(A) at a distance of one meter from AHU. The result is reliable airflow that doesn't interfere with recordings, even in the most sound-sensitive setups.



Reliable comfort in every space

Air-cooled scroll chillers installed at ground level support the AHUs, reducing the structural load and simplifying maintenance. The low-noise version helps meet strict acoustic requirements, while its high efficiency ensures consistent comfort under all operating conditions, providing optimal control throughout the entire facility.

For dressing rooms, common areas, and other support spaces, seven heat recovery VRV IV systems provide efficient, year-round comfort. With features like free heating, zone-specific control, and 24/7 remote monitoring, the system delivers comfort even in harsh winter conditions down to -20 °C.





SkyAir systems offer precise temperature control for smaller zones, helping maintain a balanced environment across the entire studio.

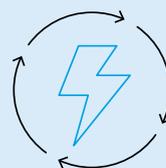
From initial concept through installation and beyond, Daikin partnered closely with Polsat to ensure their system would perform exactly as intended.

Today, the system offers the flexibility to match any production schedule so crews and guests can focus on what matters most: the performance.

Why Daikin?

For Polsat, the choice was clear. Daikin offered:

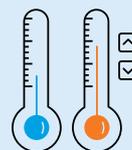
- **Ultra-quiet operation** to protect audio quality in sound-sensitive environments
- **Proven reliability** backed by comprehensive service and long-term performance
- **High energy efficiency** to reduce costs and support sustainability goals
- **Precise control** over temperature and humidity throughout the facility
- **A partnership approach** from initial planning through ongoing maintenance



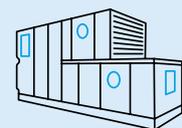
Energy-efficient technologies



Low noise level



Precise climate control



210.000 m³/h of fresh air