



CLOSE  
CONTROL  
SYSTEMS

# PRODUCT OVERVIEW



EXCELLENCE AND INNOVATION IN  
PRECISION AIR CONDITIONING



CLOSE  
CONTROL  
SYSTEMS

PRODUCT OVERVIEW

 **G.I. INDUSTRIAL**  
HOLDING

**45** YEARS  
OF EXPERIENCE IN  
**AIR** CONDITIONING,  
INDUSTRIAL  
PROCESS  
COOLING,  
**PRECISION** AIR  
CONDITIONING AND  
**AIR TREATMENT.**



# CLOSE CONTROL LINE FOR MEDIUM-DENSITY DATA CENTRES

## <20 KW/RACK

### 1 DIRECT EXPANSION CLOSE CONTROL UNITS WITH FULL INVERTER TECHNOLOGY



Close Control units with INVERTER Scroll compressors and EC INVERTER Plug-Fans.

**RANGES:**

**XIP:** Aircooled direct expansion units with full Inverter technology.

**TIP:** Aircooled direct expansion Dual Fluid units with full Inverter technology.

**INVERTER COMPRESSOR TECHNOLOGY**

**EC INVERTER PLUG FAN**



- ✓ Cooling capacity: 17÷136 kW (5÷39 TON)
- ✓ Inverter Scroll Compressors
- ✓ EC Inverter Plug-Fans
- ✓ EER up to 4,5
- ✓ Compact dimensions
- ✓ Low noise level
- ✓ Electronic expansion valve
- ✓ Constant airflow and static pressure
- ✓ Suitable for high external ambient temperature (up to 52°C)

### 2 DIRECT EXPANSION CLOSE CONTROL UNITS



Close Control units with Scroll compressors and EC INVERTER Plug-Fans or radial fans.

**RANGES:**

**XOP:** Aircooled direct expansion units with EC Inverter Plug-Fans.

**XOC:** Aircooled direct expansion units with radial fans.

**TOP:** Aircooled direct expansion Dual Fluid units with EC Inverter Plug-Fans.

**TOC:** Aircooled direct expansion Dual Fluid units with radial fans.

**HOP:** Watercooled direct expansion units with EC Inverter Plug-Fans.

**HOC:** Watercooled direct expansion units with radial fans.

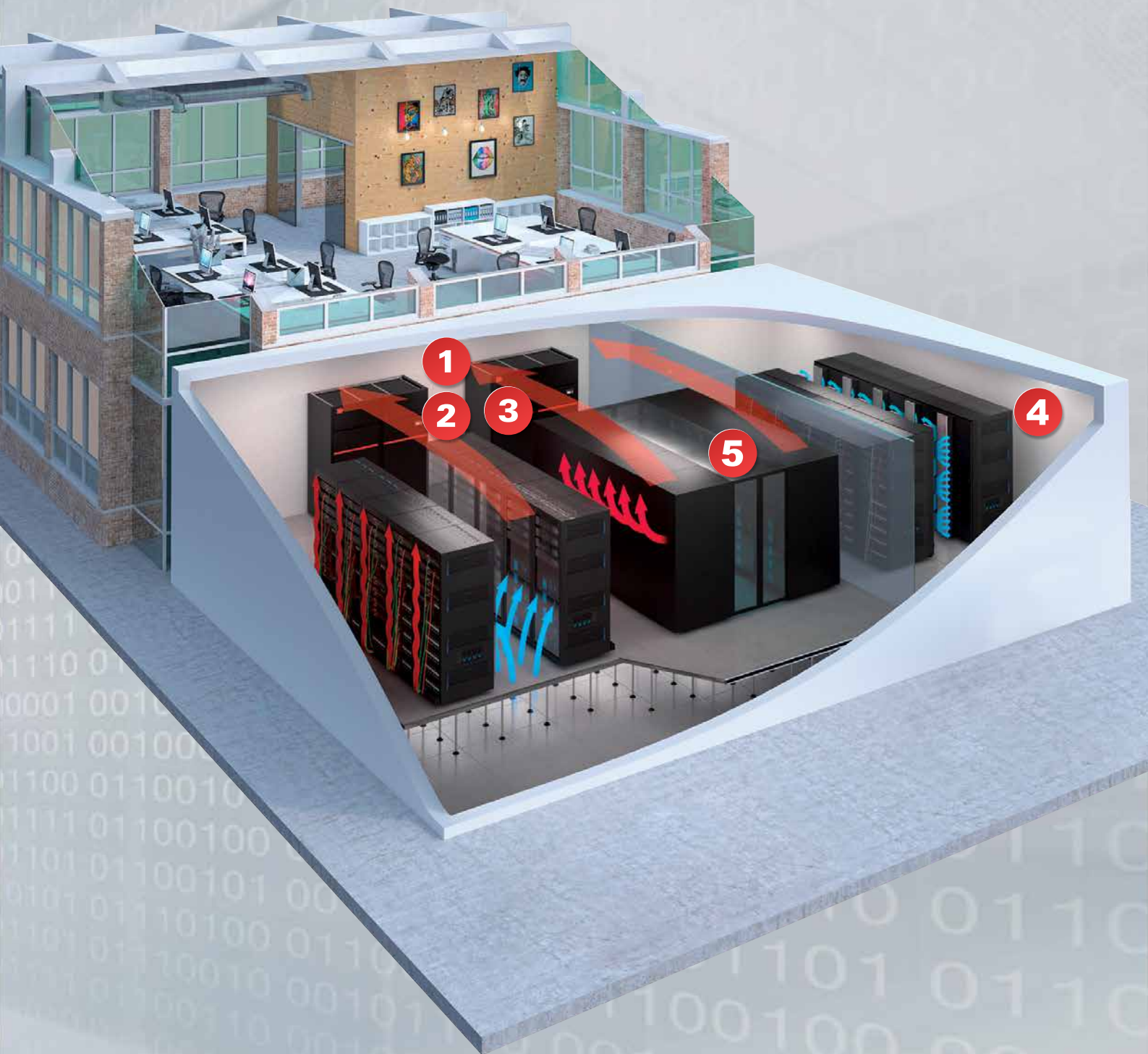
**FOP:** Watercooled direct expansion Free-Cooling units with EC Inverter Plug-Fans.

**FOC:** Watercooled direct expansion Free-Cooling units with radial fans.

**EC INVERTER PLUG FAN**



- ✓ Cooling capacity: 9÷152 kW (3÷43 TON)
- ✓ EC Inverter Plug-Fans
- ✓ Radial fans
- ✓ Free-Cooling technology
- ✓ Compact dimensions
- ✓ Electronic expansion valve
- ✓ Constant airflow and static pressure
- ✓ Suitable for high external ambient temperature (up to 52°C)



## PRODUCT RANGE

**MONTAIR** offers an innovative energy efficient and reliable range of cooling systems for medium and high-density Data Centres as well as Packaged units for telecom application systems.

### 3 CHILLED WATER CLOSE CONTROL UNITS



Close Control units with EC INVERTER Plug-Fans or radial fans.

#### RANGES:

**WOP:** Chilled Water units with EC Inverter Plug-Fans.

**WOC:** Chilled Water units with radial fans.

**DOP:** Chilled Water Dual Coil units with EC Inverter Plug-Fans.

**DOC:** Chilled Water Dual Coil units with radial fans.

**WOPU:** Chilled Water Underfloor units with EC Inverter Plug-Fans.

**DOPU:** Chilled Water Dual Coil Underfloor units with EC Inverter Plug-Fans.

#### EC INVERTER PLUG FAN



- ✓ Cooling capacity: 9÷282 kW (3÷80 TON)
- ✓ EC Inverter Plug-Fans
- ✓ Radial fans
- ✓ Underfloor installation
- ✓ Compact dimensions
- ✓ Constant airflow and static pressure
- ✓ Pressure independent balancing and control valve (CW)

## HIGH-DENSITY DATA CENTRES >20 KW/RACK

### 4 LOGICA\*: THE HYDRONIC COOLING DOOR



LOGICA SYSTEM is the latest generation solution for high density server rooms: a system of cooling doors installed on the racks and operating with liquid Chillers to provide localized cooling directly to server hot spots.

#### COMPONENTS:

**1:** Rear Cooling Door.

**2:** High Efficiency liquid Chiller.

**3:** Management System.

- ✓ Cooling capacity: 25÷45 kW (7÷13 TON) each door
- ✓ Maximum data protection
- ✓ Compactness, flexibility and adaptability
- ✓ Easy maintenance
- ✓ Low installation costs
- ✓ Remote management



## 5 IN ROW & IN RACK COOLING SYSTEMS



In Row & In Rack Cooling units chilled water and direct expansion type.

### RANGES:

NEW

- XIPR:** Air cooled direct expansion In Row units.
- WOPR:** Chilled water In Row units.
- XIPR-E:** Air cooled direct expansion In Rack **Enclosure** units.
- WOPR-E:** Chilled water In Rack **Enclosure** units.
- XIPR-ER:** Air cooled direct expansion In Rack **Enclosure + Redundancy** units.
- WOPR-ER:** Chilled water In Rack **Enclosure + Redundancy** units.

**INVERTER** COMPRESSOR TECHNOLOGY 

**EC INVERTER PLUG FAN** 

- ✓ Cooling capacity: 12÷45 kW (3.4÷12.8 TON)
- ✓ One frame 300 mm
- ✓ Inverter Scroll compressor on outdoor unit

- ✓ EC Inverter Plug-Fans
- ✓ Pressure independent balancing and control valve with integrated water flow meter (CW) (optional)



## TELECOM APPLICATION SYSTEMS

### OUTDOOR AND INDOOR PACKAGED UNITS



Outdoor and Indoor Direct Expansion Packaged units for Telephone Exchangers and Telecommunication Shelters.

### RANGES:

- CZ:** Outdoor Packaged units with (EC Inverter) Plug-Fans.
- CY:** Indoor Packaged units with (EC Inverter) Plug-Fans.
- CZ...XT:** Outdoor Packaged units with (EC Inverter) Plug-Fans for high external ambient temperature (up to 52°C).
- CY...XT:** Indoor Packaged units with (EC Inverter) Plug-Fans for high external ambient temperature (up to 52°C).

**EC INVERTER PLUG FAN** 

- ✓ Cooling capacity: 4÷29 kW (1÷8 TON)
- ✓ EC Inverter Plug-Fans

- ✓ Free-Cooling technology
- ✓ Suitable for high external ambient temperature (up to 52°C)



## SOME OF OUR REFERENCES



MINISTRY OF NATIONAL DEFENSE COMPUTER CENTER SERVER ROOMS - ANKARA



MSU NATIONAL DEFENSE UNIVERSITY INFORMATION CENTER (LIBRARY) - ISTANBUL



HAVELSAN ANKARA



TEKIRDAG METROPOLITAN MUNICIPALITY BUILDING - TEKIRDAG



CANAKKALE TERRESTRIAL DIGITAL BROADCAST TOWER - CANAKKALE



OSYM CENTER ADANA



LARA BARUT COLLECTION HOTEL ANTALYA



SOFITEL HOTEL & CONGRE CENTER BENIN



SENEGAL DATA CENTER SENEGAL



CONTROL UNION TEKSTILE LABOROTORIES ISTANBUL



BIND CHOCOLATE FACTORY TEKIRDAG



BAYER MONSANTO AGRICULTURAL PHARMACEUTICAL FACTORY - ISTANBUL



## FORM ENDUSTRI URUNLERI

Form Endustri Urunleri is a sales and service company for Central Air Conditioning equipment. Form Endustri Urunleri provides equipment and also helps designers and investors in choosing the right system for their building due to long experience. The main desire is creating high efficiency and Green Certified Buildings. The company provides various different kinds of central air conditioning units for any size and type of project. The main equipment provided are Rooftops, Heat Pump units, Chillers, Cooling Towers, Fancoils, Air Handling units and Ventilation systems.

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