Munters

Product sheet

Munters ISA

Integrated Standard Air handler desiccant dehumidifier



Specially developed for industrial dehumidification

The Munters ISA is a standardized, energy-efficient dehumidification solution for industrial environments where reliable climate control is essential. Equipped with Munters industry-leading HPS rotor, the ISA is designed to maintain stable dry room conditions with dew points from 40°F down to -40°F – operating 24/7/365 to ensure consistent product quality.

The ISA is available for both indoor and outdoor installation, with airflow capacities ranging from 5,000 to 32,000 SCFM. Its compact, modular construction offers a 40% smaller footprint compared to typical industry designs. Built for operational excellence, the ISA combines simplified installation and service with Munters patented PowerPurge[™] system.

Key features

- → Munters HPS desiccant for superior low dew point performance
- → 4 rotor and 2 plenum size combinations to match supply dew point and flow needs
- → Operates with varied air inlet conditions (from 100% return air to 100% outside air*)
- → Gas, steam, or electric reactivation options
- → Combined heating and cooling coils pre- and postrotor for reduced footprint
- → Optimized PowerPurge[™] system reduces energy use by up to 45%
- → Configurable fans with VFDs for precise flow control

- → Flexible communication protocols: AB Ethernet, Modbus TCP/IP & RTU, BACnet IP
- → Offered with either 460V or 575V at 60Hz
- → Advanced controls for humidity, dew point, and airflow management
- → Standardized components simplify operation and maintenance
- → Leakage rate of <1% rated airflow at ±10" w.c.
- → Manufactured in an ISO 9001:2015 certified facility
- → Certified to UL 1995 safety standards
- *In certain conditions

The Munters advantage

The Munters ISA offers a standardized yet configurable platform that operates across a wide range of airflow rates, while maximizing serviceability and efficiency. With its compact design featuring a 40% smaller footprint than conventional systems, the ISA frees up space for other revenue-generating activities, making it an ideal choice for high-performance manufacturing environments. Munters patented PowerPurge technology ensures up to 45% energy-savings and operating cost reduction versus the industry-standard 3 zone purge designs.

At Munters, we deliver more than a dehumidifier. As a global partner in climate control, we provide support from system design and quotation through commissioning and long-term service from our offices all over the world.

Munters rotor expertise

The ISA is built around desiccant rotor technology originally patented by Munters. Munters ISA provides high moisture absorption year after year, enhanced by energy recovery and certified bacteriostatic desiccant rotors.

Proven quality

Munters highly hygroscopic rotors are made from a nonmetallic, ceramic composite and engineered for exceptional strength and durability. Our patented manufacturing process produces a robust, stable structure with a smooth, uniform surface. Every rotor undergoes strict quality control to eliminate imperfections that could impact performance – ensuring long-lasting, reliable operation.

Technical specifications

Model	Dimensions L x W x H (in.)	Nominal weight (lbs)	Flow range (SCFM)
ISA-2500-1008	385 x 145 x 159	17,300	15,000 - 32,000
ISA-2000-1008	367 x 145 x 142	15,500	15,000 - 32,000
ISA-1500-1008	367 x 145 x 142	15,500	15,000 - 32,000
ISA-1500-706	367 x 109 x 106	9,900	9,000 - 15,000
ISA-1000-706	367 x 109 x 106	9,700	5,000 - 9,000

The reliable choice for industrial dehumidification

Munters HPS

The HPS rotor is Munters trusted workhorse, using water-resistant silica gel as the adsorbent. Developed with Munters patented manufacturing method, it features a strong, stable structure that delivers consistent drying performance across a wide range of applications.

- → Antibacterial treatment to ensure no contamination into the airstream
- → Maintains performance even when exposed to air at 100% relative humidity
- → Resistant to acids, sulfur compounds, and most industrial chemicals
- → Fully washable if air pathways become blocked by dust or debris



Advanced controls and communication

The Munters ISA is equipped with a configured control system mounted in a separate enclosure for safety and convenience. Integrated features include:

- → Local and remote HMI access capability
- → Support for multiple communication protocols, including but not limited to AB Ethernet, Modbus TCP/IP & RTU, and BACnet IP
- → Control by absolute humidity, relative humidity, or dew point
- → Full-function VFD flow control

All controls are wired and factory-tested on-site before shipment, delivery, and implementation.

Quality from the inside out

All components – including fans, filters, and coils – can be configured to meet specific application requirements. While a broad range of standardized options are available, configurable designs are also possible to ensure the Munters ISA is precisely matched to your needs. Each system is carefully balanced in its component selection and engineered to operate with maximum energy efficiency.

Smart selection with Genesys

Our intuitive Genesys selection tool ensures that every ISA unit is perfectly matched to your project's requirements. Munters sales engineers can quickly provide system drawings, flow diagrams, technical data, and pricing – giving you everything you need to make a confident, informed decision.

