

H V A C

Control Solutions

*Comprehensive
solutions
tailored
to the
application*



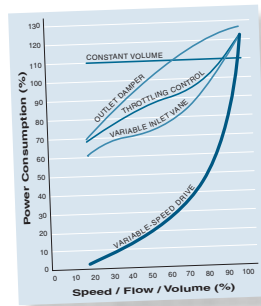
H V A C C o n t r o l S o l u t i o n

When you're in the market for HVAC motor speed controls, you want an experienced provider that delivers comprehensive solutions. Since pioneering the use of electronic servo drives in industry back in 1967, UNICO has been innovating answers to some of the world's toughest motion-control challenges. From designing and manufacturing our own drives and control products to engineering thousands of systems in wide-ranging applications, we've built our experience and reputation one system at a time.

Our approach to heating, ventilating, and cooling systems is a unique one that leverages upon our broad experience. We're more than just drive suppliers. We provide complete, individualized solutions that economically address all of today's HVAC issues—energy savings, environmental flexibility, power quality, integration, and aftermarket support. As a result, you get the best system at the best value from a single source. That's the UNICO advantage.

Energy

Variable-speed drives provide significant energy savings with centrifugal applications such as fans, pumps, and compressors. The amount of power drawn by these loads varies with the cube of motor speed. With traditional mechanical controls such as dampers, inlet vanes, or throttling valves, motors wastefully operate at full speed regardless of demand. By regulating motor speed to match actual need,



energy usage is optimized. A 20% reduction in motor speed, for example, will cut power consumption in half. Precise speed control also yields smoother operation and extends equipment life.

- Precise variable-speed control
- Internal PI or PID
- Plain-language interface
- Integral communications
- 1 1/2 to 1,200 hp



Environmental

UNICO engineers have proven solutions for every environmental situation. From unattended sites in the frozen provinces of Canada to the steamy climate of Venezuela—from oily, contaminated factory air to the rooftops of office buildings, UNICO drives thrive in the harshest extremes.



Our packaging know-how frees you to locate your equipment wherever you deem it most convenient and economical with the assurance of reliable, uninterrupted performance.

c o m p r e h e n s i v e

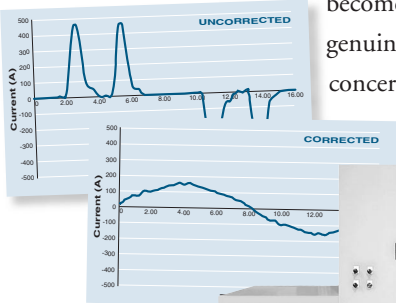
- Standard NEMA 4 indoor and outdoor packages
- High temperature and elevation solutions
- Integral option panels in enhanced enclosures
- NEMA 4X available





Power Quality

With the proliferation of sophisticated electronic equipment in most buildings today, power quality has become a genuine concern.

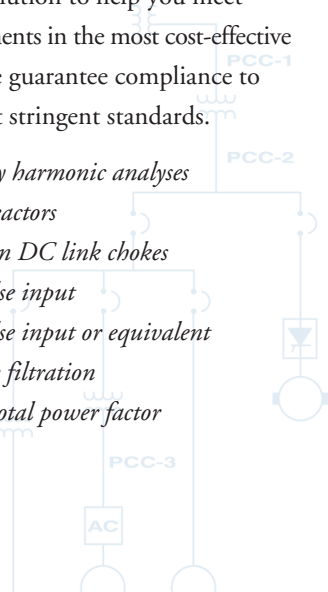


Getting installations to meet IEEE standards while satisfying utility restrictions can be challenging. Harmonic distortion, power factors, and other concepts can seem com-



plex and confusing. We understand harmonics and have developed a complete arsenal of harmonic-reducing designs. Give us your system data, identify the point of common coupling, and we'll select the appropriate solution to help you meet requirements in the most cost-effective way. We guarantee compliance to the most stringent standards.

- Facility harmonic analyses
- Line reactors
- Built-in DC link chokes
- 12-pulse input
- 18-pulse input or equivalent
- Passive filtration
- High total power factor



Integration

We integrate solutions that are as simple or sophisticated as your application requires. From basic air-handlers to complex field-engineered systems, our coordinated approach provides superior performance, efficiency, reliability, and safety. Our preengineered packages save time and money with typical applications, or we can custom engineer a solution. An extensive array of design templates accommodates the unique requirements that individual building systems may have. Drive systems can easily be integrated with a building automation system using popular communication protocols.



- Pre-engineered and custom systems
- Small footprint packages
- Single- and multimotor coordination
- Bypass flexibility
- Short circuit and overload protection
- Contactor motor selection
- BAS logic and communications interface
- Custom application software

Support

Our commitment to you does not end with installation. We offer a full complement of products and services to help keep your equipment running reliably and



efficiently. From service and training to customized diagnostic tools and technical aids, our support products, like our systems, are highly flexible

to adapt to the needs of your staff.

- Factory and on-site training
- Custom classes
- Global service and start-up assistance
- 24/7 technical support
- Spare parts and repair service
- Support CD-ROMs
- DriveLink™ drive monitoring software
- Custom diagnostic hardware
- Internet support





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