



Micro III for Compressor Control

The Micro III Compressor Control Panel is designed to replace outdated, obsolete or ineffective controls on most brands of compressors, including dual and two-stage packages. Advanced microprocessor technology, user friendly operation, advanced service features, easy installation and unparalleled interface capabilities make the Micro III the preferred refrigeration compressor control.

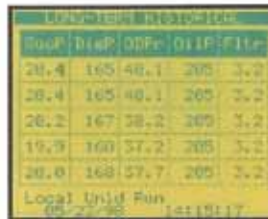
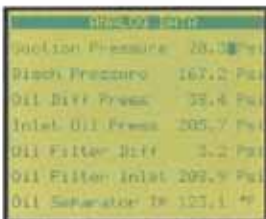
Easy To Operate

Keypad and Graphic Display are large, clear and easy to understand. The Compressor Control Keys each include individual LED's that light to always show the operating status of the compressor. The "Change Display" and Cursor (arrow) keys allow for efficient maneuvering between and within displays including Main Operating Data, Analog Data, Operating and Alarm Parameters (user setpoints), Historical Data, Compressor Data, Alarm messages, Shutdown messages and Diagnostics.



Easy To Service

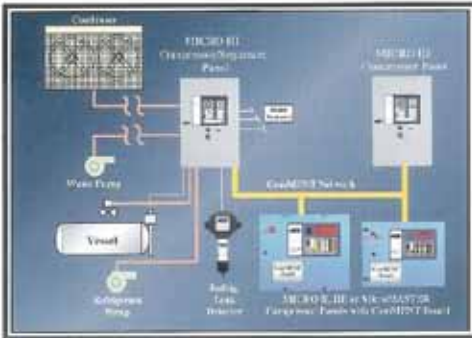
Built-in diagnostics software can quickly test the operation of hardware components including the display, keypad, I/O and communications interface. Alarm and Shutdown conditions are immediately and clearly annunciated by a flashing LED on the "Shutdown" or "Alarm" push button. Depressing the push button will immediately display a screen which lists descriptive and time stamped alarm and shutdown messages. Historical data displays, both short term and long term, allow the operator to view past analog parameters and compressor status at user selected time intervals and alarm events. And hardware enhancements including analog sensor overcurrent protection and FES' minimal component design further simplify operational troubleshooting (see Form No. 810G for more hardware details).



Easy To Install

Each panel is supplied with mounting bolts, vibration isolators and a retrofit installation manual complete with installation and electrical drawings. New Pressure and Temperature sensors are also included as "standard". A typical screw compressor application includes ICTD temperature probes with wells (shipped loose) for suction, discharge, oil separator, and inlet oil temperatures and pressure transducers for suction, discharge, inlet oil, and oil filter inlet pressures. Pressure transducers are mounted under the panel and are factory wired to the Micro III processor. Number and configuration of sensors can vary depending upon specific application.





Easy To Interface

With optional digital I/O features, the panel can provide numerous outputs indicating the current compressor status such as shutdown, operating in "remote" mode, etc. The panel can also be configured with inputs enabling such things as capacity mode changes, starting, slide valve control, etc. Better yet, virtually all control functions and operating parameters which are available using the display and keypad can also be accessed remotely using FES' built-in COMMENT network. Add a Comment Gateway to the network for a sophisticated yet simple interface with Supervisory Systems such as FES' MicroLINK or various manufacturers' DCS systems. (Refer to Comment Network Brochure Form No. 810C for additional information).

Other Options For Extreme Flexibility

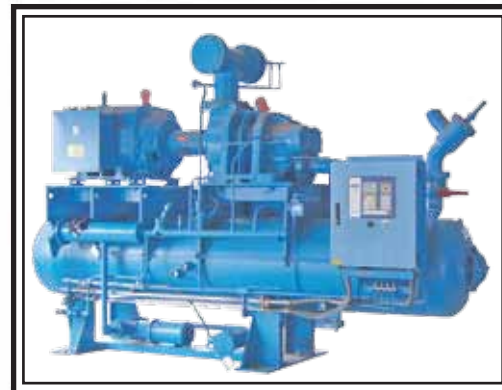
Micro III Compressor Control Panels can be configured to perform a multitude of additional functions such as compressor sequencing via FES' COMMENT Network communications, (up to four compressors on one suction level), condenser control (up to six devices), ammonia detector monitoring, vessel control, etc. Typically 6 analog inputs, 4 analog outputs, and as many as 32 digital I/O are unused and available on each Micro III screw panel. These can be configured for almost any use. (Refer to Micro III System Panel Brochures for additional information on sequencing, condenser control and miscellaneous functions). Other options include:

- Oversized Enclosure (required if many additional relays, switches, etc. are used for a custom application)
- Package Modification Kit with tubing and fittings (help out the installation process)
- 40 Module Digital I/O rack (22 is standard)
- Special Paint (for OEM equipment or customer specs)
- Hand-Off-Auto Switches (an extension to the 40 module rack)
- Keypad Lockout
- Additional Auxiliary Shutdown and Alarm Inputs
- Almost any customized monitoring or control function

COMPRESSOR	MODE	STATUS	ALARM
1	Run	Run	
2	Run	Run	
3	Run	Run	
4	Low	Run	
5	High	Run	
6	Run	Run	

AMMONIA DETECTOR	STATUS
1	Normal
2	Normal
3	Normal
4	Normal
5	Normal
6	Normal

CONDENSER CONTROL	STATUS
1	Normal
2	Normal
3	Normal
4	Normal
5	Normal
6	Normal



Built For Tough Environments

Weatherproof NEMA 4 enclosure is standard. Options include NEMA 4X (Stainless Steel or FRP Fiberglass enclosure) and Class 1, Division 2 (with Type Z air purge). Class 1, Division 1 service, panel heating or cooling and other special environmental needs can also be accommodated.

Specifications:

- Power requirements: 90-230 VAC, 50/60 Hz, 3KW typical (includes power requirements for two 1200 watt screw compressor oil heaters)
- Dimensions: 24" w x 30" h x 8" d (61cm x 76cm x 20cm); Approximate weight of standard panel: 90 lbs (41 kg)

Refer to Micro III Control Panel Brochure (Form No. 810G) for additional hardware technical details.