DE-3000+
Configurable Safety Shutdown and Control System with Integrated 10" MIDAS HMI

- State-of-the-art control system specifically designed to protect, monitor and control critical rotating machinery, such as engine or motor-driven compressors, pumps and generators operating in harsh/hazardous areas

- Completely scalable and expandable system allowing for use across a range of low, medium, and high-spec applications

- Automatically and continuously optimizes compressor efficiency and throughput via speed and capacity control

- Low/high, safety/control setpoints and PID control loops configured through the MIDAS HMI

- Raw values from DE-3000+ viewable on the MIDAS HMI allows for easier troubleshooting and tech support

- Communication to SCADA and other local/remote networks via MIDAS HMI

- IP configuration screen allows for user to modify IP address directly from the MIDAS HMI

The DE-3000+ includes computer, terminal, and power supply modules, plus an integrated 10" color MIDAS HMI. It incorporates all of the functionality of the standard DE-3000 annunciator, including support for standard I/O expansion options. DE-3000+ adds an easy-to-use interface for local and remote monitoring and configuring. The user can easily configure the DE-3000+ via the included Windows™-based terminal program, then quickly and safely make configuration changes through the HMI without the need to connect to a PC.

Several new features allow for a greater range of control applications. A simplified operator interface allows control and safety setpoints, along with PID control, to be made with the touch of a finger.

User Manager Feature – Allows the operator, with appropriate credentials, the ability to change the default password(s).

View HMI screen while in the control room – The DE-3000+ enables the operator to view and control the MIDAS HMI on a remote system. Remote access is password protected.

Event Viewer – Shows the live status of the DE-3000+ along with a corresponding time stamp for operation verification.

Password protection – All setpoint and configuration screens are password protected to prevent unauthorized access.

Enable/disable individual alarms – The DE-3000+ allows the alarms (not shutdowns) feature to be enabled or disabled through the HMI. If the alarms feature is enabled, individual channel high or low alarms may be disabled.

View channel input class and class timers — The MIDAS HMI shows the class timers timing down along with the status of the input class. Through this feature, users can monitor exactly which channel is armed or unarmed at any time during the startup sequence.

Save setpoints as a text file – When the setpoint configuration on the MIDAS HMI is completed, reports can be printed to allow text files to save on the SD card. These text files can be saved on a computer to serve as backup in case of data failure.

Transfer SD card contents to a USB drive – Automatically back up the contents of a mounted SD card to a USB drive when one is attached to the MIDAS HMI.

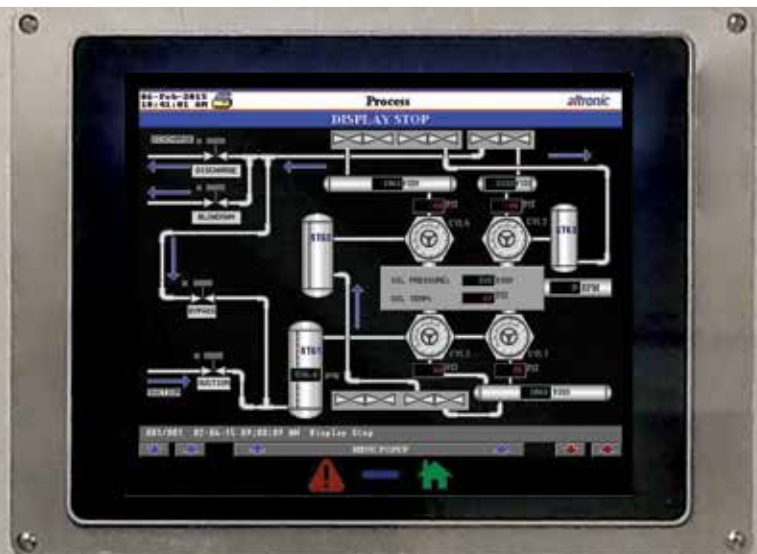**Time Manager** – User can select time zone, daylight saving feature, set time and date on the MIDAS HMI (to be used for all logging activity).

Color Trends with dynamic scaling – Allows operators to zoom in on the trends in order to set up scaling for optimal monitoring.

CSA®

C   US
CERTIFIED
CLASS I, DIVISION 2,
GROUPS C and D,
TEMP CODE T4

Refer to DE-3000 IOI and Brochure for additional product features and details.

General Specifications

MIDAS HMI

Power...24Vdc ±20%, 18W

Operating Temperature Range.. -20°C to 60°C

Size ....10" Operator Interface Terminal for Outdoor Use

Type ....TFT, 640 x 480 pixels, 1500 cd/m²

Communication Ports............................... Ethernet, RS-232 (2), RS-485

COMPUTER MODULE

Power.. 10-32 Vdc, 0.20A max

Ambient Temperature Range.............. -40°C to +85°C (-40°F to +185°F)

Mounting.. 35mm DIN rails

Enclosure ....Extruded Aluminum, NEMA Type 1

Led Indicators .... RX/TX and Power

Connector, Ethernet Port......................................Shielded RJ45 socket

Communication Protocols: ....Modbus TCP/IP

Hazardous Area Classification

    Class I, Div. 2, Groups C & D for Direct Hookup, Temp Code T4,
    Maximum Ambient Temperature 80°C

To Order

HUMAN/MACHINE INTERFACE

MIDAS HMI G10S0000

COMPUTER MODULE

DE-3000+ System .... DE-3000+

POWER SUPPLY MODULE

All Standard DE Systems 691122-1

TERMINAL MODULE

DE-3000+ System

    First Terminal Module (30 input) 691171-1

    Second Terminal Module (15 input) 691175-2

    Second Terminal Module (30 input) 691171-2

TELEMETRY MODULE TE-1000

CABLE ASSEMBLIES

Computer to Terminal Module (DB-25) 693115-1

Power Supply to Terminal Module (DB-25) 693115-1

Computer Module RS-232 Port (DB-9) 693116-1

Computer Module to MIDAS HMI .... CAT 5e

Expansion cable for optional added Terminal modules 693133-1

(Use only if Power Supply and Terminal Modules are mounted separately)

OUTPUT RELAY MODULES (common to all DE systems)

C.D. Fuel Valve/Ignition 691124

5-48 Vdc, 5.0 A. 691125

5-60 Vdc, 2.0 A. 691056

5-200 Vdc, 0.67 A. 691066

24-280 Vac, 2.0 A. 691065

Available Altronic Transducers

PRESSURE TRANSDUCERS

				Orifice Included
0-15	psia	691204-15		
0-50	psia	691204-50	or	691204-50N-ST8
0-100	psia	691204-100	or	691204-100-ST8
0-300	psia	691204-300	or	691204-300N-ST8
0-500	psia	691204-500		
0-100	psig/0-680 Kpa	691201-100	or	691204-100-ST8
0-300	psig/0-2040 Kpa	691201-300	or	691204-300-ST8
0-500	psig/0-3400 Kpa	691201-500	or	691204-500-ST8
0-1000	psig/0-6800 Kpa	691201-1000	or	691204-1000-ST8
0-2000	psig/0-136 bar	691201-2000	or	691204-2000-ST8
0-5000	psig/0-340 bar	691201-5000		

TEMPERATURE TRANSDUCERS

Range: +5°F to 350°F / −15°C to 176°C (±3°F / ±2°C)

    1.75" length.. 691202-300

    5.75" length.. 691203-300

Range: −40°F to 450°F / −40°C to 232°C (±6°F / ±4°C)

    1.75" length...691212-450

    5.75" length.. 691213-450

TRANSDUCER CABLES

5 ft. length... 693008-5

25 ft. length 693008-25

50 ft. length 693008-50

Refer to DE-3000+ IOI for additional product features and details.

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