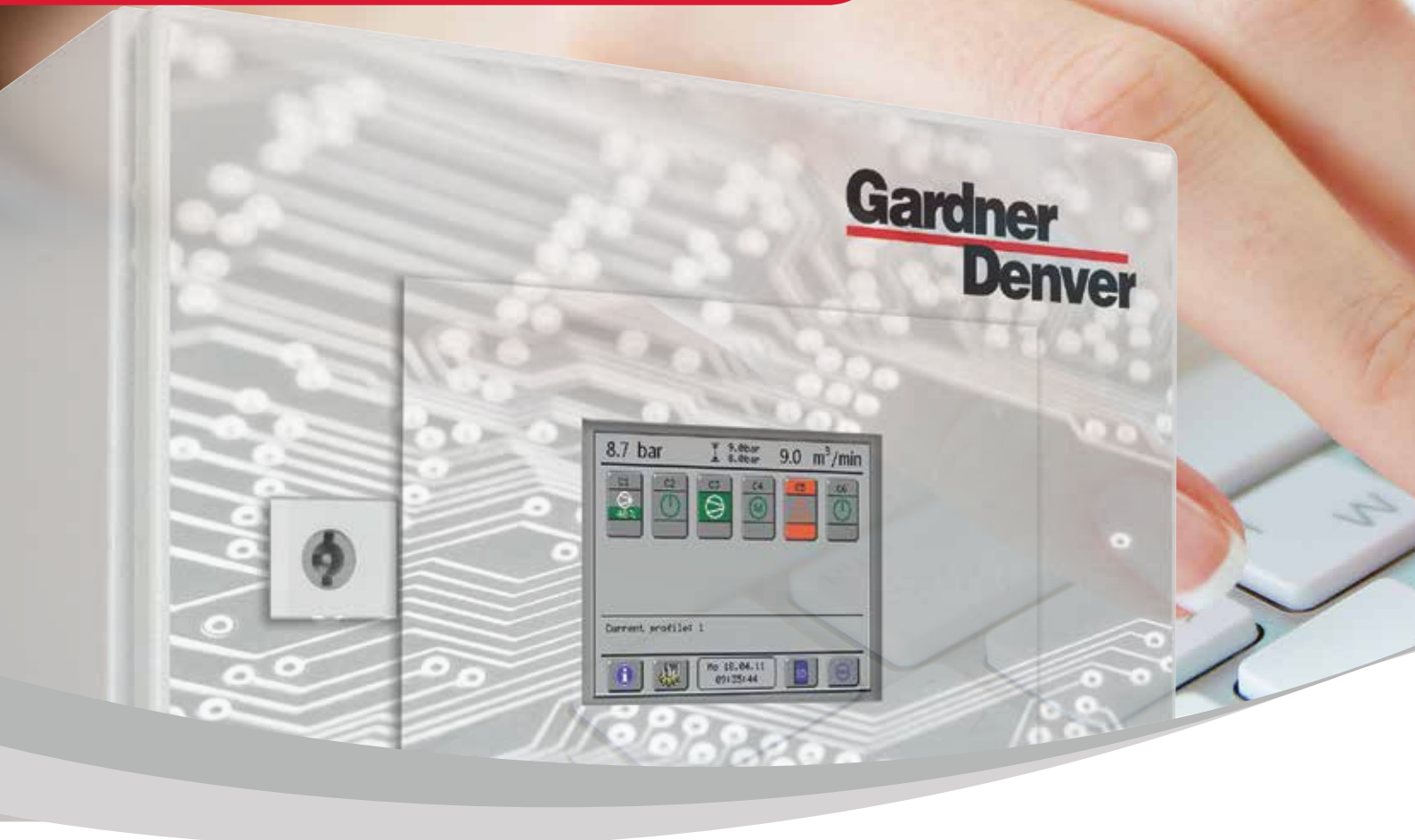**Gardner Denver**

GD Connect 12
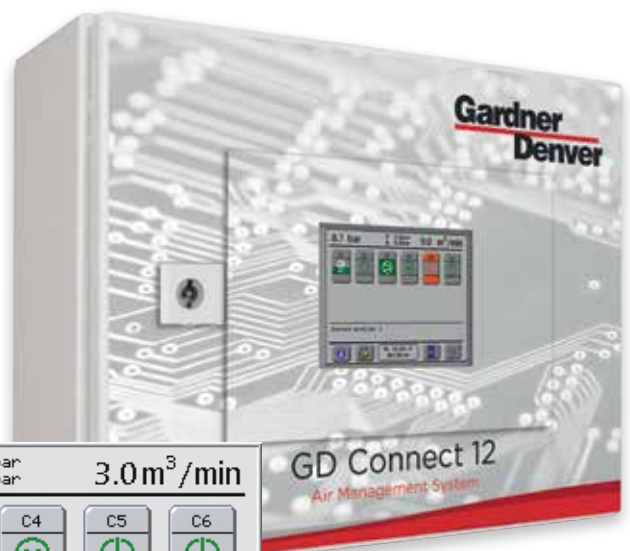
Unique Compressed Air
Management System

State-of-the-art Technology

Advanced Microprocessor Technology

Safe and fast exchange of large amounts of data is ensured by large memory capacity using the latest microprocessor technology at the heart of the **GD Connect 12.**

- Easy to install
- Improved performance and efficiency
- Simple to operate
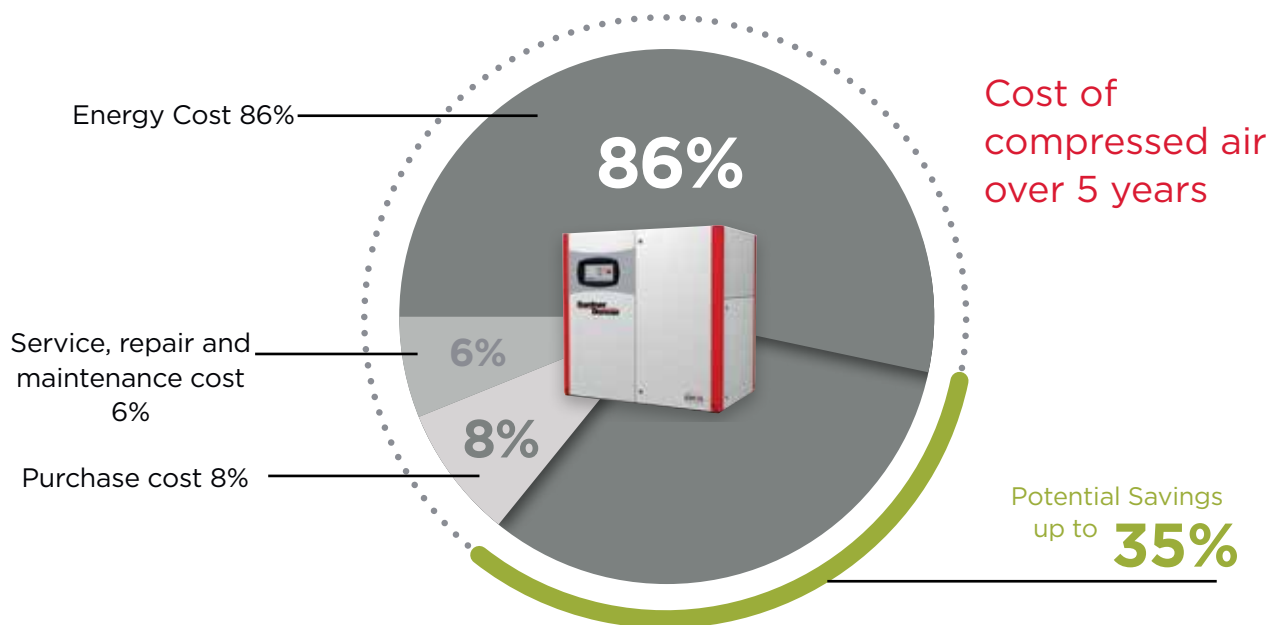- Reduced downtime
- Detailed management reports

Connect 12
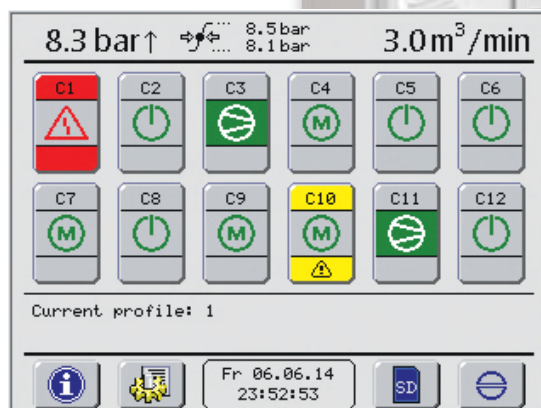
Huge Energy Savings in multicompressor stations

The **GD Connect 12** is the first choice when looking to optimise an existing compressed air system. The pressure reductions are achieved as a result of the narrow pressure band control helping to considerably reduce power consumption both of small and larger compressed air systems.

Energy Cost 86%

86%

Service, repair and maintenance cost 6%

6%

Purchase cost 8%

8%

Cost of compressed air over 5 years

Potential Savings up to **35%**

Your benefits at a glance:

- The GD Connect 12 can intelligently control up to 12 fixed speed or variable speed compressors

- Intelligently selecting the right combination of compressors

- It reduces energy consumption by tightening the network pressure to the smallest possible band

- Keeping off load running to the absolute minimum

- Each 1 bar decrease potentially results in a 7% reduction in energy consumption and as much as 25% decrease in air leakage losses

All key information via easy-to-use Touchscreen Display

A visual touchscreen, gives plant managers a comprehensive overview of the complete system, including downstream equipment to help improve the complete network performance.

This can include information such as the status of the whole system or of each compressor connected, as well as network pressure, compressed air consumption and pressure range, all of which can be presented in graphs or tables.

In addition, data can be transferred via removable SD card to a PC for further analysis and management reports.

"Easy datalogging via SD card
for extensive energy saving analysis
(also Excel compatible)."

Unique Setting-Up Function

Thanks to our modern Commissioning Wizard, the set-up time is reduced to a minimum.

Gardner Denver has designed the controller to be very easy to install, with a series of on-screen prompts that guide the commissioning engineer through the set up and confirm when each parameter has been programmed correctly.

Analog inputs for:

- Network pressure
- Volume flow sensor
- Temperature sensor
- Dew point sensor
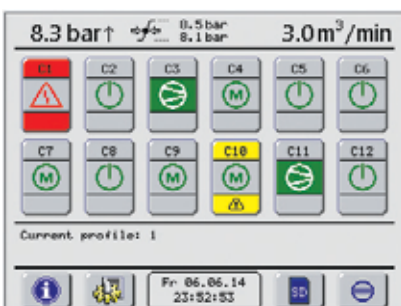
User friendly intuitive display

Compressed air demand

Characteristics of each compressor

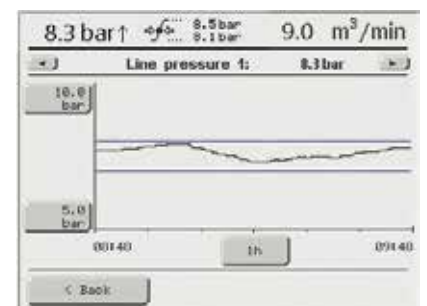# Everything under Control

The GD Connect 12 compressor management controller ensures reduced energy consumption whilst enhancing the control of the compressed air equipment.

Control Transparency

Unlike traditional control systems, crucial efficiency related parameters are visually displayed. This provides a transparent log of compressor station behaviour and its ongoing efficiency.

Intelligent "Self-Learning" Control

The GD Connect 12 control system is designed to continuously balance demand and supply, enabling the most efficient compressor combination to work at all times. A permanent consumption calculation ensures efficient operation of interconnected compressors at all times.

Multi-Functionality

Connection of various peripheral equipment (e.g. temperature sensors, flow meter, pressure dew point, operating state of dryers, airless drains, filters, etc).

Increased Control & Efficiency

Reduced Energy Consumption
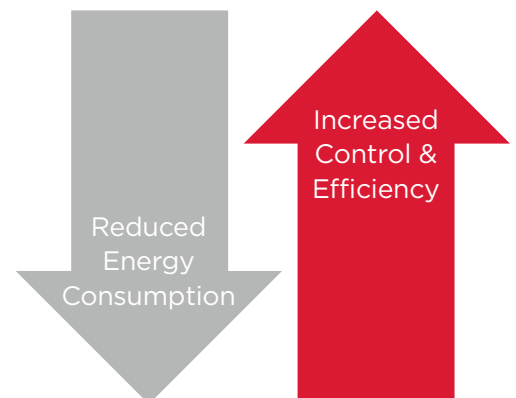
Remote monitoring & visualisation

1 Visualize your complete compressed air installation via LAN network. Any number of users can access the online visual display system via the Webserver Module without any loss in speed. The user can visualise selected data of a compressor system via PC which can also be viewed on the screen of the GD Connect 12. Email messaging ensures automatic notification of faults, warnings and statistics.

2 Monitor your complete compressed air installation via field bus. Features include warning indications, compressor shutdown warning and maintenance scheduling – easy connection to a PROFIBUS or ModBus-RTU network ensured.

Visualisation

Webserver Module for easy "Email Messaging"

1

2

PROFIBUS

ModBus RTU

GD Connect 12
Air Management System

Compressors

Dryers

Filters & Drains

(controlled and monitored via RS 485 interface)

(monitored via Digital Input)

7

Gardner Denver

Electrical connection	
System	1-/N/PE
Voltage	110/230V +/-10% 50/60 Hz
Display	
Type	Colour graphics display with touch function
Screen Size	5, 7"
Interfaces	
Analogue inputs	2
Digital inputs	3
Relay outputs	2
Memory card	
Type	SD card
Connection for compressors	
Quantity	max. 12 compressors
Interface	RS485
Distance from GD Connect 12	max. 1200m
Customer interface	
Interface	RS485
Distance from GD Connect 12	max. 1200m
Protocol	ModBus-RTU or PROFIBUS (optional)
Permissable ambient temperatures	
Operations	0 to 55˚C
Storage	-25 to 75˚C

EMC Conformity	
Emissions	DIN EN 610000-6-3
Interface suppression	DIN EN 610000-6-2
Housing	
Dimensions (W x H x D)	380 x 300 x 155 mm
Design	Steel plate housing
Type of protection	IP54
Weight	11kg

Scope of supply

- GD Connect 12 including cable glands
- Network pressure sensor
- Set of plugs for connecting to compressor controllers
- SD card
- Documentation

Options	
Compressor module (STD)	For connecting fixed speed compressors (non-GD)
Compressor module (VSD)	For connecting variable speed compressors (non-GD)
Extension module	For extending the programmable inputs / outputs
PROFIBUS module	For connection to a PROFIBUS network
Webserver module	For visualising via LAN

GD Connect 12

Analog input

☑ AI-1 Line pressure sensor

☑ AI-2 Programmable option to one additional function:
- 2nd line pressure sensor
- Volume flow sensor
- Temperature sensor
- Dew point sensor

RS485-1

RS485-2

Gardner Denver Compressors

GD Pilot

GD Pilot MK

GD Pilot TS

AirSmart with Communication Module

RS485-3

(three options on customer side)

Digital input
DI-1..3

Digital output
DO-1..2

SD card

Non-Gardner Denver Compressors

Compressor module (STD)
for fixed speed compressors

Compressor module (VSD)
for variable speed compressors

PROFIBUS module

Webserver module (Visualization)
230V/50-60Hz
110V/50-60Hz

ModBus-RTU

Extension module
230V/50-60Hz
110V/50-60Hz
Digital input DI-1..8
Digital output DO-1..2
Analog input AI-1..2

gdcompressors.eu@gardnerdenver.com
www.gardnerdenverproducts.com

For additional information please contact
Gardner Denver or your local representative.

Specifications subject to change without notice.