

## Unisab II

### Advanced control system for screw and reciprocating compressors



The ability to monitor and control a large number of different refrigeration compressor types from one control unit on each compressor provides major practical advantages.

Sabroe Unisab II control units do this in an efficient, user-friendly way, which provides a substantial boost to a company's operational competitiveness.

#### Easy to operate

The overall Unisab II control structure features intuitive, user-friendly menus that require no special knowledge or training to operate. An added feature is that all Unisab II control panels have the same design and appearance.

#### Maximum reliability

All Unisab II controllers are individually certified to have passed rigorous factory test procedures.

To ensure the highest overall performance of Unisab II units in both industrial and marine environments, they have been rigorously tested in relation to factors that include electrical and EMC interference, vibrations, heat and cold, shock.

#### Advanced operation and monitoring

Unisab II control systems provide access to all monitoring, control and limitation functions, ensuring safer and more efficient compressor operation. The Unisab II control panel enables the operator to view several different measurement parameters simultaneously and in real time.

The system also provides easy access to an alarm log for use in subsequent diagnostics in case of any shutdown.

#### Advanced sequencing

Unisab II features optimised sequence control for most combinations of up to 14 compressors in virtually

any combination of types. Unisab II was specially developed for use with all types of Sabroe screw and reciprocating compressors, as well as several other makes of refrigeration compressors.

#### Significant advantages

Unisab II provides highly advanced technology that is easy and straightforward to use. Advantages include

- one single control system
- safe operation/reduced downtime
- completely flexible communication for integration with other systems
- advanced sequencing.

#### Customer benefits

The Unisab II control system provides absolute reliability at no additional cost. The customer benefits include

- same "look and feel" for all compressor types
- all control functions located in one single unit
- monitoring and supervisory functions ensure safe and secure compressor operation even under extreme load
- reduced downtime
- remote monitoring and control, easily adaptable to specific requirements
- built-in sequence control for both screw and reciprocating compressors, for load sharing and energy savings
- communication cable is the only additional cost for sequencing.





## Technical data

Compressors	Control of screw and reciprocating compressors as well as combinations of both types
Refrigerants	All refrigerants normally used
Display	LCD display with 4 lines of 20 characters each
Read-out values	4
Communication	RS 485 interface. Communication speed at 19,200 Baud
Diagnostic functions	Storage/analysis of up to 30 alarms
External control	Possible via 4-20 mA or via external communication
V <sub>i</sub> regulation	From 0-100%
Sequential operation	Unisab II controls and monitors virtually any combination of up to 14 screw and reciprocating compressors through the built in Multisab program
Emergency stop	Included
Ambient temperature	0-55°C
Enclosure	IP54
Dimensions	Cabinet 450 x 210 x 130 mm
Voltage	24/115/230 V AC
Retrofit	Unisab II can easily be fitted onto all existing compressors. Unisab II also communicates with previous Unisab and Prosab II systems
Factory test	A computer test is performed on all Unisab II units and certificate is issued

All information is subject to change without previous notice.