

SABROE® softstarter FSD panel

Electrical panel solution for refrigeration compressor units with fixed-speed drive (FSD)

SABROE® panel solutions for compressor units fitted with fixed-speed motors are the ideal way to integrate the unique SABROE combination of refrigeration compressor know-how with electrical and controls experience and technologies. This paves the way to optimising the operation of fixed-speed refrigeration compressor units, and thus bring down here-and-now operating costs as well as longer-perspective life cycle costs for the owner.

SABROE softstarter FSD panels are integrated electrical panel solutions with a built-in softstarter and additional control equipment that together make them very easy to integrate into your overall power supply and control system.

Adding an optional UniSAB systems controller makes the softstarter FSD panel a complete plug-and-play controls and motor starter solution, ready to supply the motor and ensure that the fixed-speed compressor unit delivers maximum cooling power at a minimum life cycle cost.

SABROE softstarter FSD panels are an advanced electronic alternative to conventional Y/D starters, enabling a smoother start and (in some set-ups) making it possible to reduce the starting current better than a Y/D starter.



SABROE softstarter FSD panel

Benefits of building in SABROE® softstarter FSD panels

Competitive prices

SABROE softstarter FSD panels are competitively priced electrical panel solutions that contain a softstarter FSD and everything needed for easy, compliant integration into the overall power supply and control system.

Saves you time

Integrating a SABROE softstarter FSD panel into any fixed-speed compressor unit will shave off a major part of the man-hours normally allocated to electrical engineering, design, documentation, installation and commissioning of the compressor, chiller or heat pump unit.

Low life cycle cost

Combining a SABROE softstarter FSD panel with a UniSAB systems controller brings down the life cycle cost of the compressor unit as a whole. The unique UniSAB yield control philosophy along with the load-based service utility (service on demand) integrated in the UniSAB unit, provides the owner with an extremely flexible and low life cycle cost compressor unit.

Factory-mounted units provide the best value by ensuring trouble-free operation and an electrical installation in full accordance with relevant standards and best practice. It also ensures end-users big savings on the man-hours required for configuring the overall equipment set-up.



Softstarter FSD panels are available for the SABROE compressor, chiller and heat pump units specified below. These panels are available as standard for power configurations up to 560 kW. Configurations above this are available on request.

Factory-mounted

- ChillPAC chillers
- PAC chillers
- HeatPAC heat pumps
- CompPAC.

Separate delivery for site mounting, all on request

- ChillPAC chillers
- PAC chillers
- HeatPAC heat pumps
- All screw compressors
- All reciprocating compressors.

Retrofit

SABROE softstarter FSD panels are also ideal for retrofit of existing electrical starter systems.

SABROE softstarter FSD panels are mounted in a standardised painted-steel cabinet, and include the following equipment:

- Electrical engineering and documentation
- ABB softstarter
- In-line contactor for breaking power supply in case of emergency stop
- UniSAB controller for panel mounting (optional – must be selected separately)
- Main circuit breaker
- Control voltage transformer
- Emergency stop and emergency stop safety relay
- Motor protection
- Current feedback signal to UniSAB
- Relays for signals to UniSAB
- Hour counter
- Terminals for interlock with pumps, etc.
- MCB for control voltage to panel
- MCB for control voltage to UniSAB
- MCB for power to immersion heater in oil separator
- Power inlet in panel top.

Technical data

Power supply: 3x400 V, 50/60 Hz, +/-10 %

Earthing/supply system: TN-S

Partitioning: Form 1

Colour: Light grey

Ingress protection class: IP54

Compliance: CE

Nominal output kW	Dimensions in mm		
	W	H	D
15	600	600	200
22	600	600	200
30	600	600	200
37	600	800	300
45	600	800	300
55	600	800	300
75	800	1000	300
90	800	1000	300
110	800	1000	300
132	800	1000	300
160	800	1200	300
200	1000	1400	300
250	1000	1400	300
315	1000	1400	300
355	1000	1800	400
400	1000	1800	400
450	1000	1800	400
500	1000	1800	400
560	1000	1800	400

PUBL-7799 01.2019

All information is subject to change without notice

Johnson Controls Denmark ApS
SABROE Factory
 Christian X's Vej 201 · 8270 Højbjerg · Denmark
 Phone +45 87 36 70 00 · www.sabroe.com

