



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 bring down here-and-now operating costs as well as longer-perspective lifecycle 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 setups) making it possible to reduce the starting current better than a Y/D starter.



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Advantages	Benefits
Competitively priced electrical panel solution for fixed-speed drive of compressors, chillers and heat pumps	Easy to opt for the Sabroe softstarter FSD panels, which will save you additional shop stops
The optimised compact design fits the Sabroe small footprint package philosophy	Saves valuable space and leaves room for other important purposes
Pre-vetted, documented and intelligently engineered solutions, containing everything needed for easy, compliant integration	Saves you a lot of time on electrical engineering, design, documentation, installation, and commissioning
Can be combined with UniSAB III systems controller, making an efficient and flexible integrated compressor control and motor start solution	A very low lifecycle cost of the compressor package

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 setup.



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
- ComPAC

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 the retrofit of existing electrical starter systems.

Technical data - panel	
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

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			
Nominal output	Dimensions in mm		
	kW	W	H
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