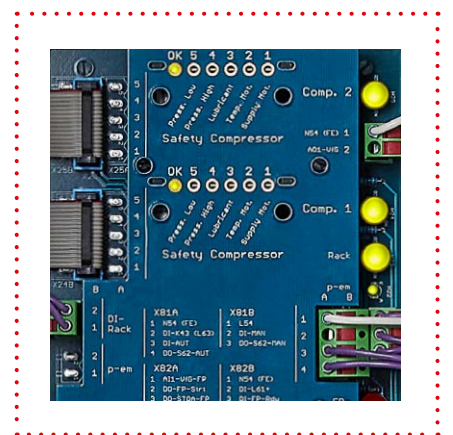


# FrigoPack® BLU kompakt

The standard electrical enclosure for fast installation



# FrigoPack® BLU kompakt

The field of knowledge required by refrigeration technicians is becoming more and more extensive. In addition to an understanding of thermodynamics, a knowledge of electrical engineering is required.

The **FrigoPack® BLU kompakt** is a ready-to-use system that saves the contractor on-site time. Up to two compressors with a maximum cooling capacity of up to 50 kW can be controlled with high energy efficiency.

### Fast commissioning

Only the power supply cable and the compressor motor cable must be connected in addition to the pressure transmitters and the safety circuits before commissioning. With the integrated FrigoComp module the operation of the system is clearly displayed by green and red LEDs.

### Integrated FrigoPack®E FU+

The heart of the **FrigoPack® BLU kompakt** is the preset frequency inverter **FrigoPack®E FU+**. The intelligent refrigeration software maintains a constant evaporating temperature by optimum rack control. With help of the four line full-text display all the important parameters can be monitored clearly.

### Single and dual compressor control

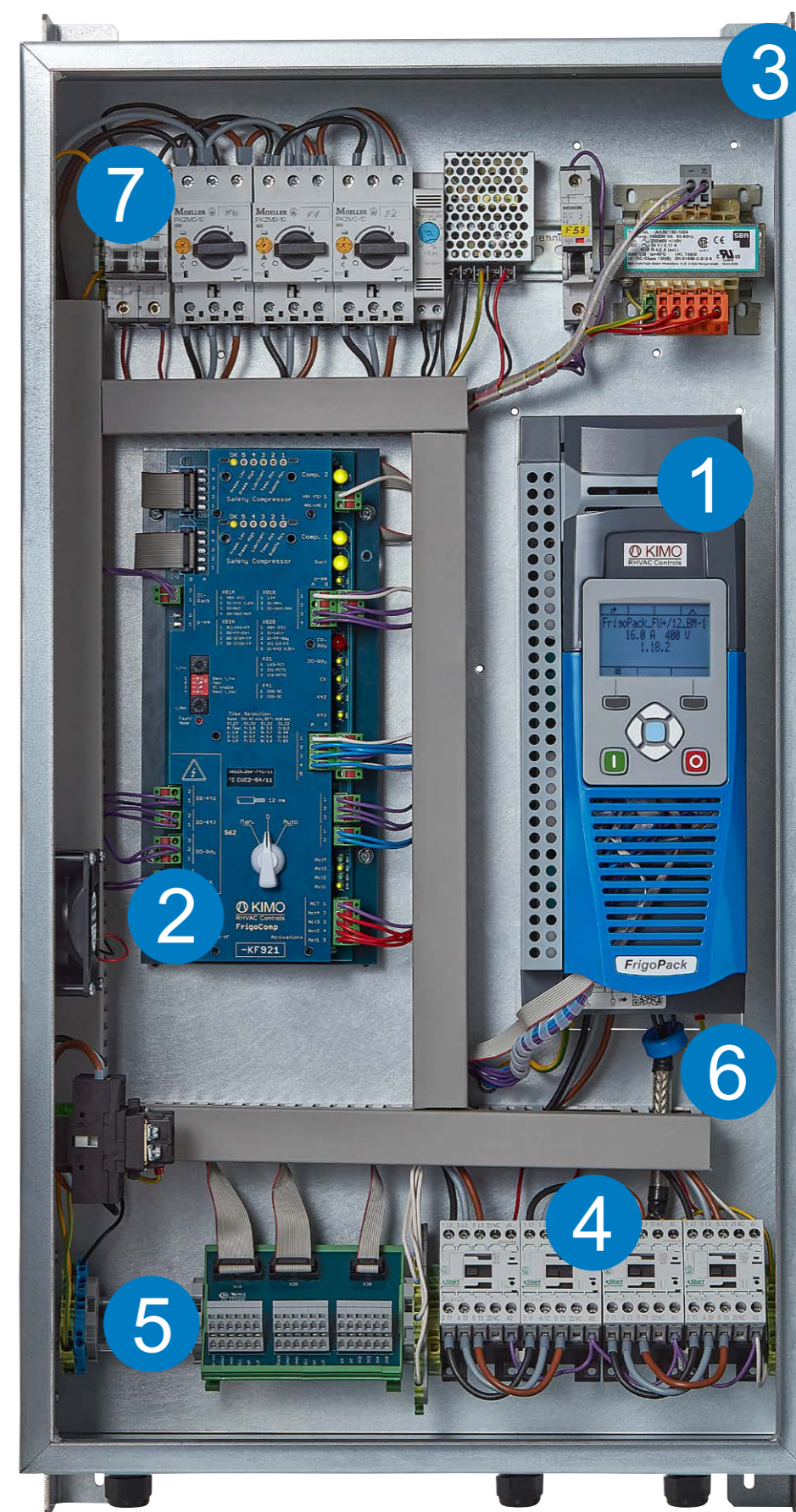
In the simplest **FrigoPack® BLU kompakt** version, a single compressor is frequency controlled. The two-compressor solution offers a choice between classic control and flying master with compressor rotation. For classic control the first compressor is controlled by the frequency inverter and the second compressor is connected to the supply when required. With flying-master control, the inverter speed-controls one of the two identical compressors (with rotation) and the other compressor is operated when required.

### Automatic emergency operation

The **FrigoPack® BLU kompakt** is always implemented with emergency and manual operation. In the event of a fault, the drive automatically switches to emergency operation. Due to the individually monitored safety circuits, the inverter can change the variable speed-controlled compressor.

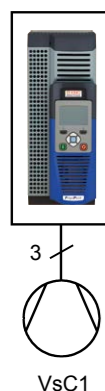
- 1 **FrigoPack®E FU+**  
 State-of-the-art frequency inverter with integrated refrigeration software. The suitable selection you can find at [frigokimo.com](http://frigokimo.com) under [FrigoPack-select](#).
- 2 **FrigoComp control module**  
 Space-saving and clearly arranged. The status of the system can immediately be observed. Simplified troubleshooting assisted by the LED display of the safety circuits.
- 3 **Compact design**  
 Dimensions: 780 x 434 x 200 mm (HxWxD). One enclosure size for up to 30 kW electrical power. Maximum frequency inverter size is **FrigoPack®E FU+45**.
- 4 **Various versions possible**  
 Single compressor with automatic emergency operation. Two compressors in classic control or flying master with automatic emergency operation.
- 5 **Simple fast commissioning**  
 The customer's connection is well arranged and clearly separated from the internal electronics.
- 6 **Electromagnetic compatibility (EMC)**  
 The frequency inverter meets the requirements of category C2 with an internal EMC-filter.
- 7 **Connection for the condenser fan**  
 Single- and three-phase fans with EC motors are possible. Speed control is via the 0...10 V signal from **FrigoPack®E FU+**.

*We keep control!*



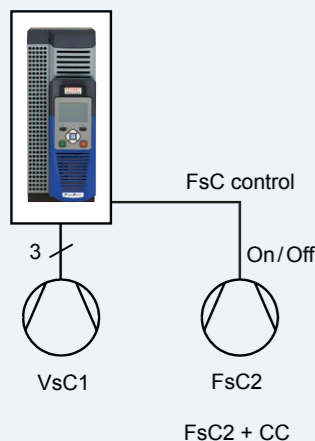
## Control system

### Single Compressor



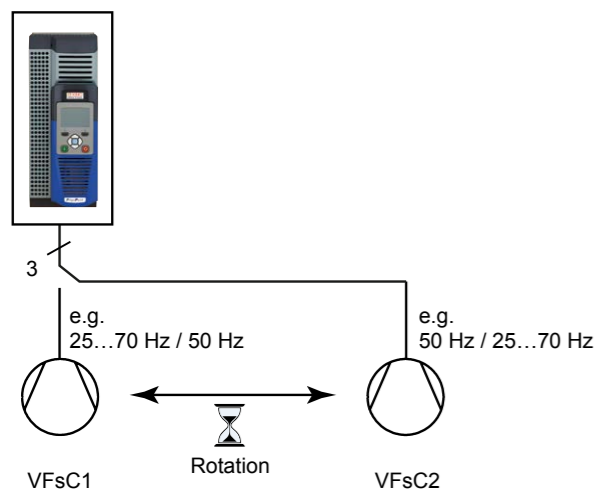
- One single compressor speed controlled
- Bypass of the frequency inverter for Manual control and emergency operation
- Maximum rated current 45 A
- Connection in star, part winding or delta is possible

### Classic control



- Rack control of two compressors
- Compressor VsC1 is frequency controlled, compressor FsC2 is switched on directly, if required
- Manual control and emergency operation with both compressors if connected in star
- Manual control and emergency operation via FsC2 if connected in part winding
- Maximum rated current 30 A

### Flying master



- Rack control of two identical compressors
- Compressors VFSc1 and VFSc2 are frequency controlled in rotation
- The other VFSc functions as a FsC until rotation
- Maximum rated current 30 A
- Load dependant equalization of the runtimes

#### Designations

VsC: Variable-speed Compressor  
 FsC: Fixed speed Compressor  
 VFSc: Variable- and Fixed-speed Compressor  
 CC: Capacity Control (4 cylinders or more)

## Versions

Size FPE FU+	Control system	Motor connection	Product code	Order no.
FPE FU+12	Single compressor	Star	FPBk FU+12-1VB/12	28676.314-612/12
	Classical control	Star	FPBk FU+12-1V-2FC/12	28676.314-621/12
	Flying master	Star	FPBk FU+12-1VB-2VB/12	28676.314-623/12
FPE FU+16	Single compressor	Star	FPBk FU+16-1VB/12	28676.315-612/12
		Part winding	FPBk FU+16-1VBP/12	28676.315-614/12
	Classical control	Star	FPBk FU+16-1V-2FC/12	28676.315-621/12
		Part winding	FPBk FU+16-1VB-2FPC/12	28676.315-622/12
	Flying master	Star	FPBk FU+16-1VB-2VB/12	28676.315-623/12
	FPE FU+23	Single compressor	Stern	FPBk FU+23-1VB/12
Part winding			FPBk FU+23-1VBP/12	28676.316-614/12
Classical control		Star	FPBk FU+23-1V-2FC/12	28676.316-621/12
		Part winding	FPBk FU+23-1VB-2FPC/12	28676.316-622/12
Flying master		Star	FPBk FU+23-1VB-2VB/12	28676.316-623/12
FPE FU+32		Single compressor	Star	FPBk FU+32-1VB/12
	Part winding		FPBk FU+32-1VBP/12	28676.320-614/12
	Classical control	Star	FPBk FU+32-1V-2FC/12	28676.320-621/12
		Part winding	FPBk FU+32-1VB-2FPC/12	28676.320-622/12
	Flying master	Star	FPBk FU+32-1VB-2VB/12	28676.320-623/12
	FPE FU+38	Single compressor	Part winding	FPBk FU+38-1VBP/12
FPE FU+45	Single compressor	Part winding	FPBk FU+45-1VBP/12	28676.322-614/12

A connection for a three-phase condenser fan is included.  
 Different motor connections possible on request.

## Dimensions

