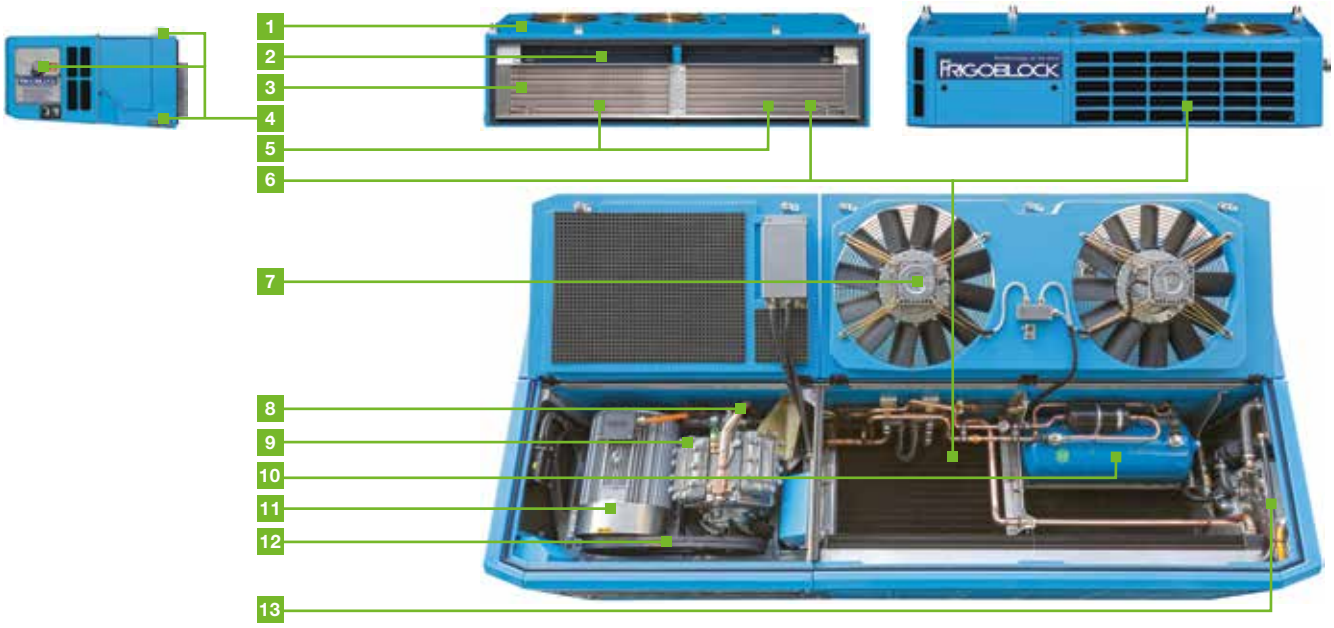
Technology at its best

FRIGOBLOCK

FK 25i



1 GRP housing: Extremely robust, noise absorbing and lightweight. Patented tilting device saves up to 300 mm total height.

2 Crossflow fans across the entire width of the body: Longest airthrow and constant maximum air volume of more than 8,500 m^3/h. Uniform through-flow of the total vehicle box. Air discharge height only 100 mm, thus allowing double deck loading up to the bulkhead, 100% use of load space. Robust fan drive by direct-coupled 3-phase motors, no carbon brush or V-belt wear.

3 2 evaporators outside the body across the full vehicle width: For the first time no additional evaporators needed for multi-temp operation in longitudinally divided bodies. No danger of damaging evaporators or goods during loading/unloading the vehicle.

4 Quick release fasteners: Only one electrical plug-in connection. Automatically closing refrigerant couplings, also for additional connections for multi-temperature systems or additional cold holdover systems with eutectic beams. Unit exchanged within minutes, therefore increase of readiness for use up to 100%.

5 Independent defrosting of the evaporators within minutes: No interruption of the cooling cycle and no additional energy consumption due to the powerful 4-way heat pump system.

6 Extremely large evaporator and condenser surface areas: High efficiency, considerable extension of cooling periods between defrost cycles.

7 Considerable reduction of noise level by more than 15 dB(A) = 95% thanks to large, low speed axial fans.

8 No failure-prone flexible refrigerant hoses: Vibration-free alternator drive system. No thermal losses due to the waste heat of a built-in diesel engine.

9 Robust, long-life refrigeration compressor in noise-encapsulated housing, with oil pump: Designed for R410A. High operational reliability and efficiency, speed range between 500 and 3,000 rpm. Unsurpassed volumetric efficiency, low energy consumption.

10 High capacity refrigerant R410A: 20% less energy consumption and 80% less global warming potential. Highest refrigeration capacities, box temperatures down to -40°C, no reduced capacity with mains operation.

11 Special FRIGOBLOCK-designed electric motor with high reserve capacities: Safe running over whole speed range. Large ball bearings, regreaseable for extremely long life-time.

12 Only one low wear, short, direct V-belt drive: Straight belt runs using standard V-belts.

13 Compact FRIGOBLOCK inverter technology with electronic controller:
- Minimum 80% of the rated capacity at vehicle engine idle speed
- Soft start of refrigeration machine and FRIGOBLOCK alternator
- Possibility of optimised individual control of up to 8 three-phase-motors in the range of 500 to 2,500 rpm for compressor and fans at full or partial loads depending on the cooling and heating demands
- Optimised operation of the water-cooled FRIGOBLOCK alternator in the complete speed range, producing a constant 400/500V/3ph/50Hz supply
- Up to 75% less fuel consumption and 95% polluting emissions when applying the energy recovery mode (braking/accelerating).

03/2015

FRIGOBLOCK Grosskopf GmbH
Weidkamp 274, D-45356 Essen
email@frigoblock.de
www.frigoblock.com

FRIGOBLOCK UK Limited
Chandos House, School Lane
Buckingham, Bucks. MK18 1HD
sales@frigoblockuk.com

Ingersoll Rand

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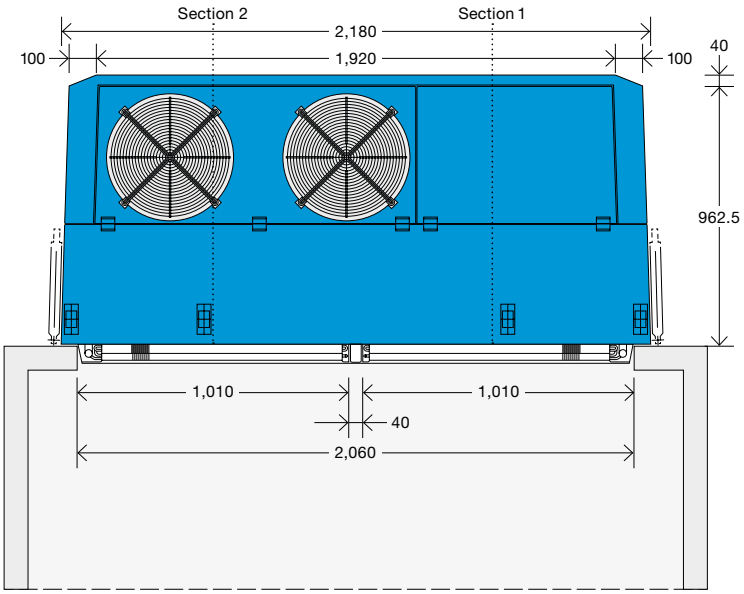

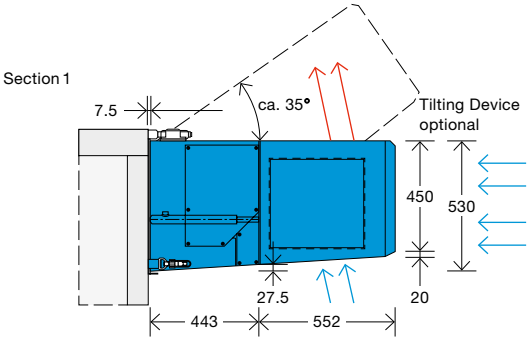

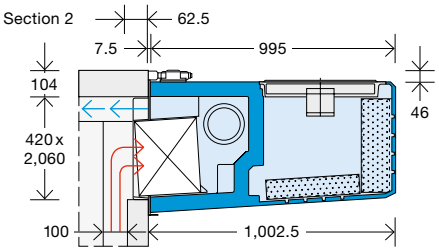

TECHNICAL SPECIFICATIONS FK 25i

Number of evaporators	2 evaporators	DIM.
Refrigeration capacity at +30°C		
box temperature at ±0°C	14,500 / 23,300 / (26,000) **	**W**
box temperature at -20°C	7,900 / 13,700 / (16,000) **	**W**
Refrigeration capacity coefficient at +30°C		
box temperature at ±0°C	6.90 / 5.80 *	**kWh/l**
box temperature at -20°C	5.30 / 4.70 *	**kWh/l**
Heating capacity		
heat pump system up to	40,000	**W**
Refrigerant		
H-FC	R410A	
Compressor		
cylinder	4	
piston displacement	14.0 – 55.9 / (69.8) **	**m³/h**
rpm	500 / 2,000 / (2,500) **	**1/min**
Electric motor		
capacity	11	**kW**
Evaporator		
surface area	2 x 35	**m²**
crossflow fan Ø x L	2 x 864	**mm**
motor capacity	2 x 0.75	**kW**
air capacity	> 8,500	**m³/h**
air velocity	14 – 18	**m/sec**
air throw, without duct	10	**m**
Condenser		
surface area	72	**m²**
axial fan Ø	2 x 440	**mm**
3-phase-alternator		
capacity	30.0 / 37.5	**kVA**
Mains		
fuse protection (slow)	32	**A**
Weight		
refrigeration unit	410	**kg**
alternator	60	**kg**

* Average refrigeration capacity coefficient in energy save mode/standard inverter mode in kWh refrigeration per one litre of diesel fuel.

** Data in brackets for recuperation (braking/accelerating) mode without any fuel consumption at compressor speeds of 2,500 rpm.

Subject to technical changes without prior notice.

FRIGOBLOCK Grosskopf GmbH
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