

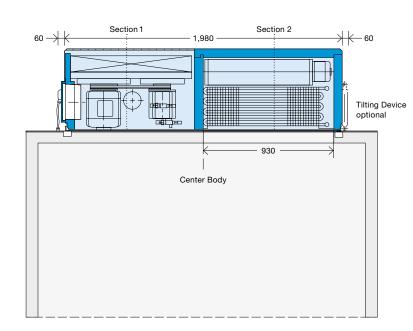
- Thereby space for extremely large heat exchanger surfaces with low-pressure levels. Increased life-time of the refrigeration compressor with considerably lower energy consumption, exhaust and noise emissions.
- 2 GRP plastic housing: Extremely robust, noise absorbing and lightweight. No diesel engine in the refrigeration unit, therefore very low height. Patented tilting device, only 30 mm gap to driver's cabin required, saves up to 300 mm total height.
- 3 Two low speed, low noise fans: Further speed and noise level reduction with L-speed or 2-speed SL-version option.
- 4 Loss-free electrical control for alternator and mains operation using reliable electric relays. Easy thermostatic stop/start of the compressor with continuously running evaporator fan. Fuel consumption and wear reduced by up to 50%, also when compared to the start/stop operation of a diesel engine; remote control from driver's cabin.

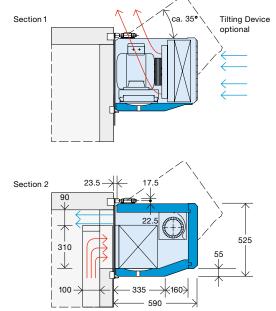
- 1 No diesel engine in the refrigeration unit: 5 Quick release fasteners: Only one electrical plug-in connection. Automatically closing refrigerant couplings, also for additional connections for multi-temperature systems or additional cold holdover system with eutectic beams. Unit exchange within minutes, thus increasing the operational readiness of the refrigeration machine to up to 100%.
 - Special FRIGOBLOCK designed electric 12 Reliable electric heating: Maximum motor with high capacity reserves: Safe running over whole speed range of the alternator. Large ball bearings regreasable for extremely long life-time.
 - Frames made of special high-strength aluminium sections with stainless steel bolts: Maintenance-friendly also after many years of operation on dirty roads and of exposure to de-icing salt.
 - Only one low-wear, short, direct V-belt drive: Straight belt runs use of standard V-belts.
 - 9 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.
 - 10 No failure-prone flexible refrigerant hoses: Vibration-free alternator drive system.

- 11 Robust, long-life refrigeration compressor with oil pump: Designed for the high capacity refrigerant R410A. High operational reliability and efficiency, speed range between 500 and 3,000 rpm. Unsurpassed volumetric efficiency, low energy consumption. No increase of the critical discharge temperature by the waste heat of a diesel engine.
- heating capacity also with lowest ambient temperatures. Optional: Extremely quick 4-way hot gas system, no 3-way-bypasscircuit. Defrosting and re-cooling within 5 to 10 minutes.
- Evaporator completely outside the vehicle box: No risk of damage of fridge unit/goods inside the vehicle box. Robust fan drive by directly coupled 3-phase motors, no carbon brush or V-belt wear. Large evaporator with doubled fin spacing, high efficiency, delayed icing.
- 14 Crossflow fan with longest air throw: Constant maximum air volume, uniform through-flow of the total vehicle box. Air discharge height only 100 mm, thus allowing double deck loading up to the bulkhead without any loss of loading height.









FRIGOBLOCK Type	FK 13 L	FK 13*	DIM.
Refrigeration capacity at +30 °C ambient temperature			
box temperature at 0°C	11,300	14,100	W
box temperature at -20°C	5,800	7,800	w
box temperature at -30°C	3,500	5,100	w
Heating capacity			
heat pump system up to	18,000	24,000	w
electric heaters	4,500	6,200	w
Refrigerant			
HFC	R410A	R410A	
Compressor			
cylinders	2	2	
piston displacement	16.9	24.8	m³/h
rpm	1,200	1,750	1/mi
Electric motor	·		
capacity	5	7.5	kW
rpm	1,450	1,450	1/mi
Evaporator			
surface area	41.6	41.6	m²
crossflow fan ØxL	160 x 720	160 x 720	mm
motor capacity	700	700	w
air capacity	2,800	2,800	m³/h
air velocity	12-16	12-16	m/se
air throw, without duct	7-8	7-8	m
Condenser			
surface area	38.6	38.6	m²
axial fans Ø	386/348	386/348	mm
3-phase alternator			
capacity	12	17	kVA
Mains			
fuse protection (slow)	20 (16)	20	Α
Weight			
refrigeration unit	215	210	kg
alternator	59	76	kg

^{*} Optional: 2-speed SL-version, high speed: technical data as mentioned above; low speed: approx. 60% of above capacities. Capacities at 60% of the rated vehicle engine speed or on mains operation, 400/415 V, 50 Hz. Subject to technical changes without prior notice.

