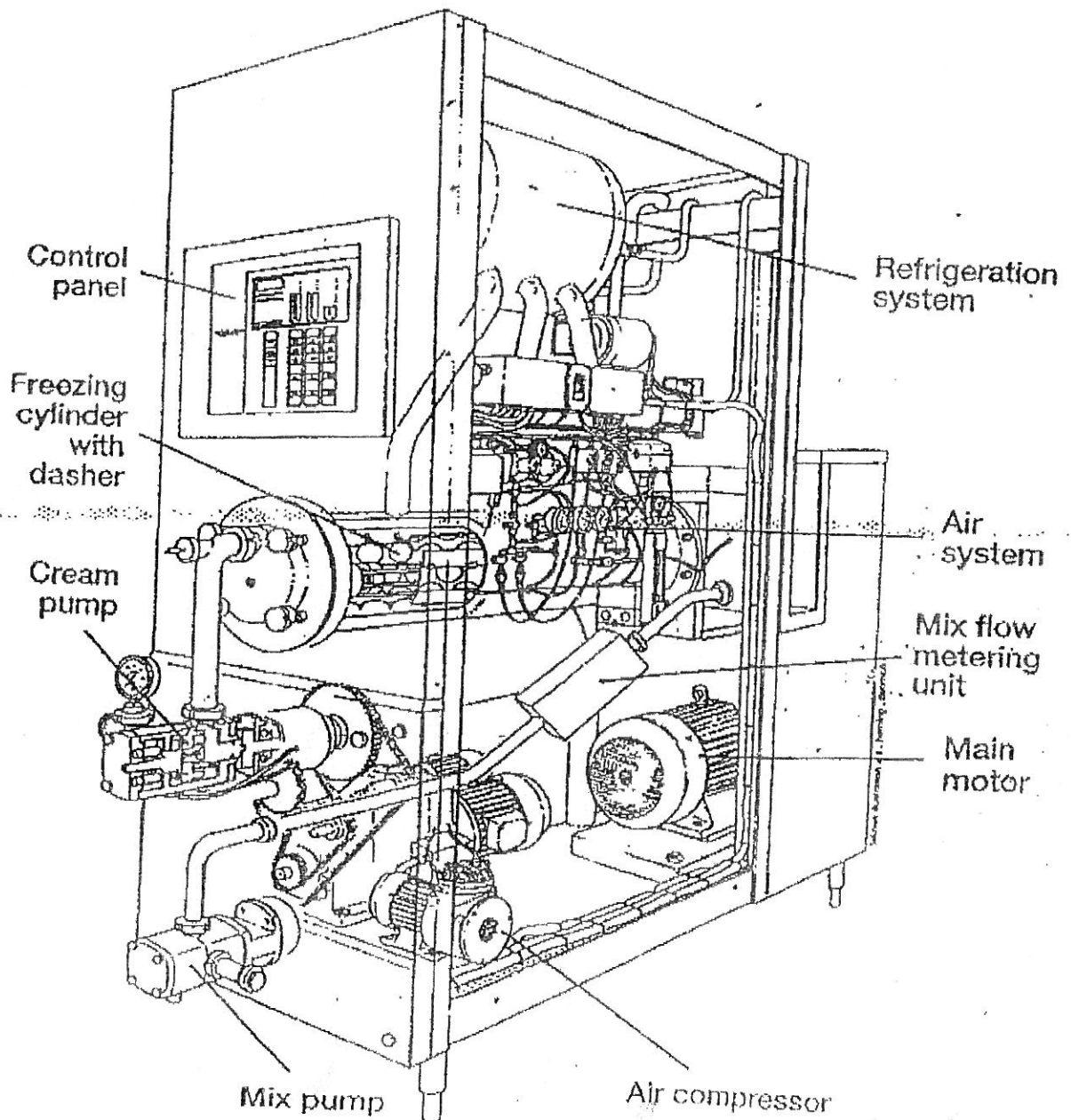


# Continuous Freezer KF 1200XC



**Manufactured in Denmark**

## THE KF-SERIES

~~FREZZER~~ **FREZZER**

FEEZER TYPE	NOMINAL ICE CREAM OUTPUT	
	MIN.	MAX.

KF300	35 l/h	300 l/h
KF500	80 l/h	500 l/h
KF1150	200 l/h	1000 l/h
KF1200	460 l/h	2300 l/h
KF1200E X.C.	600 l/h	3000 l/h

*Output figures are based on normal ice cream mix containing 38% solids produced under the following conditions:*

INLET TEMPERATUR OF MIX +5 C

OUTLET TEMPERATUR OF MIX -5 C

OVERRUN 100%

SUCTION TEMPERATUR -34 C

OIL CONTENT IN AMMONIA max. 30 P.P.M.

KF300:

WATER CONSUMPTION inlet+10 C/outlet +25 C 1,0m<sup>3</sup>/h

WATER CONSUMPTION inlet+30 C/outlet +34 C 4,0m<sup>3</sup>/h

**Technical data**

	KF 1150 XC	KF 1200 XC	KF 1200 EXC
<b>Shipping data</b>			
- Net weight	1500 kg	2000 kg	2100 kg
- Gross weight	1900 kg	2500 kg	2600 kg
- Volume	5.9 m <sup>3</sup>	7 m <sup>3</sup>	8 m <sup>3</sup>
<b>Weight, ready for operation</b>	1700 kg	2200 kg	2300 kg
<b>Floor load</b>	425 kg/cm <sup>2</sup>	550 kg/cm <sup>2</sup>	575 kg/cm <sup>2</sup>
<b>Mains connection</b>	Local voltage	Local voltage	Local voltage
<b>Power consumption</b>	17 kW	24 kW	32 kW
<b>Cooling agent volume (NH<sub>3</sub>)</b>	20 kg	40 kg	60 kg
<b>Maximum cooling requirements</b> (34° C. / 29° F. suction temperature)	30 kW 26000 kcal/h	63 kW 54000 kcal/h	86 kW 74000 kcal/h
<b>Compressed air</b> (6 bar operating pressure required)	2 n m <sup>3</sup> /h. (n = normal)	3 n m <sup>3</sup> /h. (n = normal)	4 n m <sup>3</sup> /h. (n = normal)
<b>Pump capacity</b> (100% swelling)	200-1000 l/h (52-260 USG/h)	460-2300 l/h (120-600 USG/h)	600-3000 l/h (156-780 USG/h)
<b>Freezing capacity</b>	30 kW 26000 kcal/h.	63 kW 54000 kcal/h.	86 kW 74000 kcal/h.
<b>Pipe dimensions, external measures:</b>			
Suction pipe	48.3 mm	76.1 mm	76.1 mm
Fluid pipe	17.2 mm	21.3 mm	26.9 mm
Hot-gas pipe	21.3 mm	21.3 mm	21.3 mm
Vacuumizer pipe	17.2 mm	17.2 mm	21.3 mm
Safety cable (must comply with local regulations)	21.3 mm	26.9 mm	33.7 mm
Compressed air pipe	21.3 mm	21.3 mm	21.3 mm
Mix inlet pipe	25.4 mm	38.1 mm	38.1 mm
Ice cream outlet pipe	38.1 mm	50.8 mm	63.5 mm
<b>Ice cream capacity</b>	1000 litres/h. (270 USG/h)	2300 litres/h. (600 USG/h)	3000 litres/h. (810 USG/h)
<b>Prerequisites:</b>			
Mix temperature +5° C.			
Ice cream temperature -5° C.			
Evaporation temperature -30° C.			
Suction temperature -34° C.			
Dry matter content 38 %			
Swelling 100 %			
Oil content, max. 30 ppm.			
	15 kW DASHER.	22 kW DASHER	32 kW DASHER.

**Units**

All pressure figures in this manual are stated in bar and "excess pressure" unless otherwise stated.

1 bar = 1.02 kp/cm<sup>2</sup> = 100 kPa = 14.5 psi  
1 litre = 0.2642 U.S. gallon  
1 litre = 1.22 imp. gallon

### Connection to the cooling plant

The KF XC freezer must be connected to an external NH<sub>3</sub> cooling plant which is required to meet the following specifications :

1. Suction pressure :
  - below - 0.02 bar (-2.6 PSIG)
2. Fluid temperature :
  - cooling agent under-cooled (bubble-free) and warmer than 0° C. (32° F).

Note : Fluid temperatures below 0° C. (32° F) require a special KF cooling system with constant hot-gas feeding and a fluid pressure of min. 4 bar absolute pressure (58 PS absolute pressure).

3. Oil content ;
  - Oil content below 30 ppm and oil coagulation temperature lower than -40° C. (-40° F).

### Connection, Mix inlet / Ice cream outlet

Cf. dimensional sketch.

Ensure that the following is in order :

- The mix pump inlet (suction side) must be connected to the storage tank in such a manner that a vacuum will not occur. The mix feeding pressure must be constant and keep within 0,05 - 2 bar.

- The outlet (pressure side) of the ice cream pump must be connected to a pipe/filling system which is dimensioned so that the maximum counter pressure at the pump will not exceed 1,5 times the air pressure available for CIP pumps, however max. 12 bar..

### Connection to compressed air unit

Cf. dimensional sketch and diagram for compressed air.

The KF XC freezer must be connected to an external compressed air unit which must meet the following specifications :

1. Pressure
  - min. 6 bar (100 PSI), excess pressure
  - max. 8 bar (130 PSI), excess pressure

2. Water content
  - Max. 15 g. (0.033 lbs) per m<sup>3</sup> air.

3. Purity
  - Oil-free in accordance with local norms and regulations.

- Purified of particles and micro organisms larger than 0.9 mikro (Balston filter type grade A is recommended).