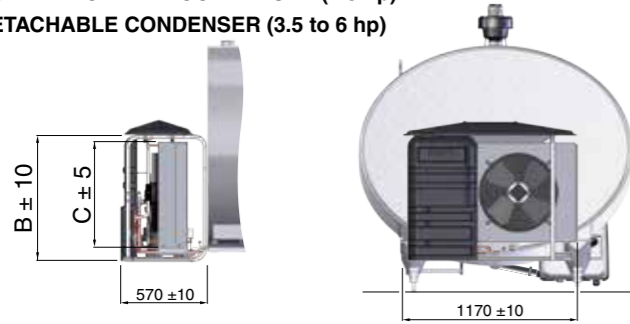


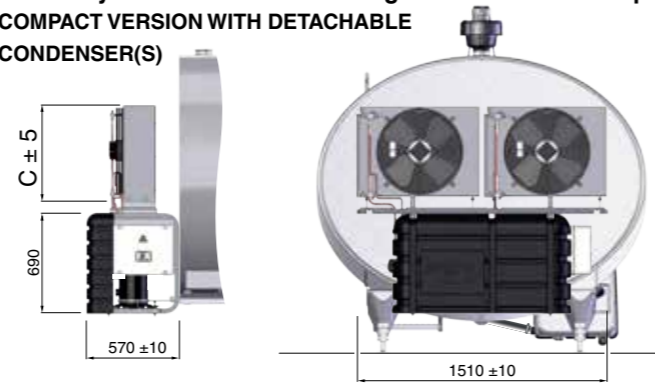
# Milk cooler FIRST.SE

## Executions

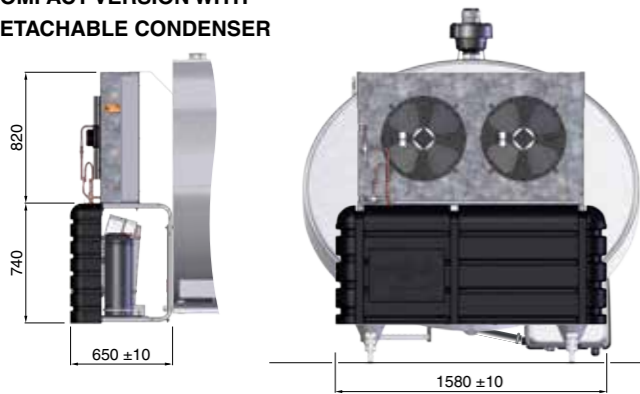
**Assembly C/1V with 1 cooling unit from 2.5 to 6 hp**  
**COMPACT VERSION WITH**  
**NON-DETACHABLE CONDENSER (2.5 hp)**  
**DETACHABLE CONDENSER (3.5 to 6 hp)**



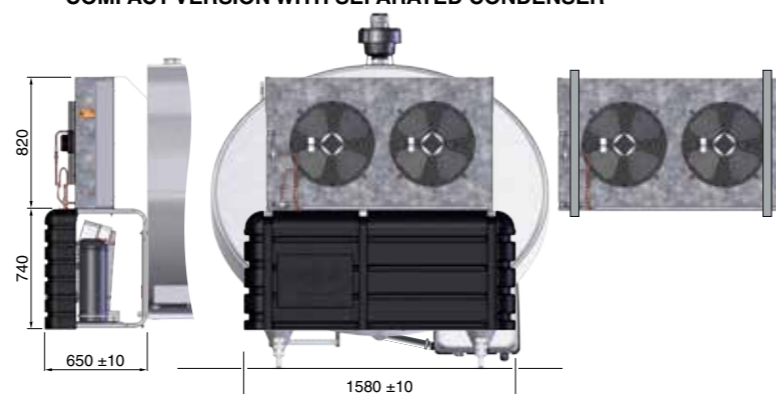
**Assembly CCD/2x1V with 2 cooling units from 2.5 to 6 hp**  
**COMPACT VERSION WITH DETACHABLE**  
**CONDENSER(S)**



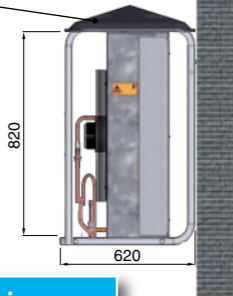
**Assembly CCD/1x2V with 1 cooling unit from 7 to 10 hp**  
**COMPACT VERSION WITH**  
**DETACHABLE CONDENSER**



**Assembly CS/2X2V with 2 cooling units from 7 to 10 hp**  
**COMPACT VERSION WITH SEPARATED CONDENSER**

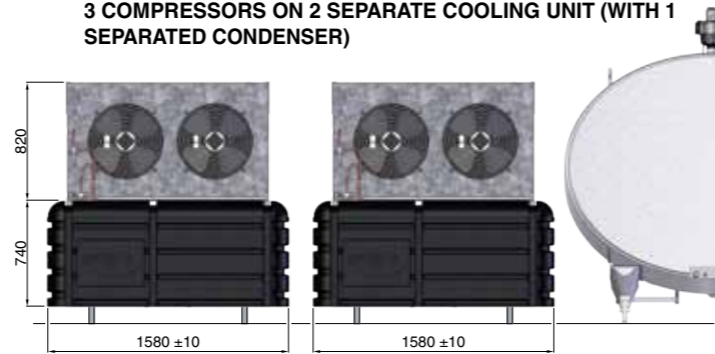


Cover as an option



**Assembly GS/2 x 2V ( 2 x 10 hp \*CD+)**  
**2 SEPARATE COOLING UNITS**

**Assembly GS/3 x 2V ( 3 x 10 ch \*CD+)**  
**3 COMPRESSORS ON 2 SEPARATE COOLING UNIT (WITH 1**  
**SEPARATED CONDENSER)**



Add 135 mm to get height of separated condensing unit

### References for executions :

C	Compact with non-detachable condenser
CCD	Compact with detachable condenser(s)
CS	Remote condenser (1 on 2)
1V	Condenser with 1 fan
2V	Condenser with 2 fans
GS	Separate cooling unit

Cooling unit Assembly	C/1V	CCD/1V	CCD/1V	CCD/1V	CCD/1V	CCD/2V	CCD/2V	CCD/2V	CCD/2x1V
Power (hp)	2.5	3.5	4	5	6	7	8	10	2x2.5
B	740	740	740	840	840	-	-	-	-
C	515	550	570	670	670	-	-	-	515

Cooling unit Assembly	CCD/2x1V	CCD/2x1V	CCD/2x1V	CCD/2x1V	CS/2x2V	CS/2x2V	CS/2x2V	GS/2x2V *CD+	GS/3x2V *CD+	GS/4x2V
Power (hp)	2x2.5	2x4	2x5	2x6	2x7	2x8	2x10	2x10	3x10	4x7
B	-	-	-	-	-	-	-	-	-	-
C	515	550	570	670	-	-	-	-	-	-

\*CD+ : Oversize condenser



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WP-1D-A19-1-B ed. 04/19



www.groupe-serap.com

# Milk cooler FIRST.SE RAINBOW

Capacities  
 from 900 to 30,000 litres

Direct expansion  
 milk cooler

**50 Hz**



Model shown : FIRST 8,000.SE  
 With outlet valve thread cleaning system option.  
 With FIRST.LEVEL 2 option.  
 Non contractual photo

### Tank

Elliptical enclosed type with self-supporting structure. Sandwich construction with high density CFC free insulation and austenitic stainless steel AISI 304 walls. Full flow evaporator. Manhole Ø 500 mm without seal, with easy access by fixed stainless steel ladder. 2 openings Ø 76 on the manhole cover. Non leaking vent.  
 1 opening Ø 76 mm back till B3,000 L.  
 2 openings Ø 104 mm back from 2,550 L.  
 Outlet valve Ø 76 with SMS reduction, (other threads on request). Adjustable stainless steel legs mounted without thermal bridges. Dipstick support outside of the tank.

### Agitation and homogenization

Agitator with low-speed gear motor (25 rpm), clockwise and counterclockwise rotation. Programmable automatic agitation. Homogenization of milk fat in 2 minutes according to norm ISO 5708.

### Cooling equipment

Hermetic type cooling units with power adapted to performance requirements according to the ISO 5708 standard. SCROLL cooling unit with low electrical consumption. Refrigerant anti-migration solenoid valve during compressor stop. All types can be installed in (please consult us for the configuration to be supplied) :  
 - compact (until 2x6 hp),  
 - separate condenser and compressor fixed on the tank (from 2x7 hp to 2x10 hp),  
 - separate cooling unit (all),  
 - without cooling unit.  
 R 449A refrigerant.

### Electric equipment

Electronic control unit RAINBOW with microcontroller (refer to sheet ref. WP-1K-A40). Electric box fixed on cooling unit support. Standard main supply : 400 V / 3 P + N / 50 Hz.

### Washing system RAINBOW

Automatic built-in washing system (refer to sheet ref. WP-1K-A40).

### Options :

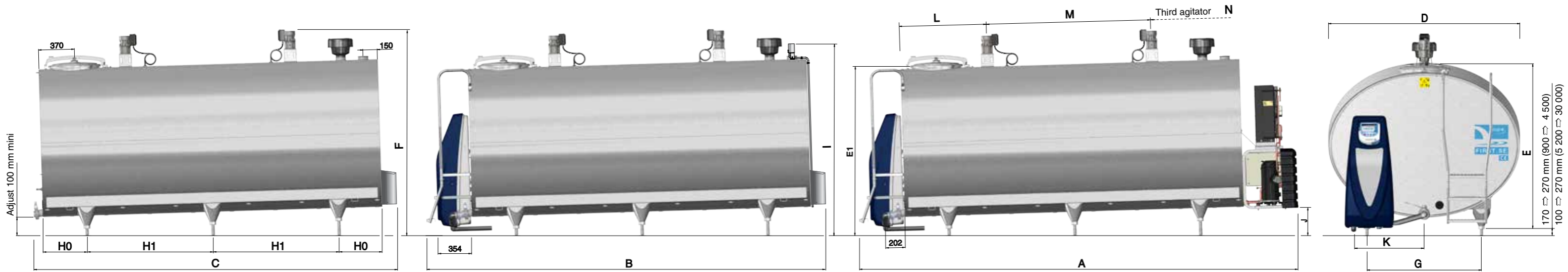
- FIRST.LEVEL digital dipstick (from 1,100L),
- Exact calibration (accuracy 0.5%), with dipstick and chart,
- Over current relay for cooling unit,
- Voltage relay,
- Safety cooling switch,
- Heat recovery system SERATEMP,
- Power Heat,
- Outlet valve thread cleaning system,
- Waste water separation in washing unit,
- Third product intake pump in washing unit for disinfection,
- Detection of open and closed position of outlet valve,
- Outlet valve threads on request,
- Quick coupling on milk outlet valve SERAP.ID,
- Power supply 5 metre cable,
- Electric plug and socket.

### Norms

According to international standard ISO 5708 and european standard EN 13732. According to european CE norms. Calibration approved by the French Metrology service.

# Milk cooler FIRST.SE

Capacities 900 to 30,000 litres



Type	900	1100	1300	1500	1700	2060	2500	B3000	2550	3000	3500	4000	4500	
<b>DIMENSIONS in mm - WEIGHT in kg - VOLUME in litres</b>														
Nominal volume	900	1100	1300	1500	1700	2060	2500	3000	2550	3000	3500	4000	4500	
Maximum volume	950	1100	1300	1550	1750	2100	2500	3200	2600	3050	3550	4100	4600	
Total length (compact type)	A	2200	2430	2660	2430	2610	2895	3285	3890	2680	2960	3255	3595	4000
Tank length (without cooling unit)	B	1765	1995	2225	1995	2175	2460	2850	3455	2245	2525	2820	3160	3550
Minimal tank length	C	1505	1735	1965	1735	1915	2200	2590	3195	1955	2235	2530	2870	3265
Width	D	1310	1310	1310	1510	1510	1510	1510	1790	1790	1790	1790	1790	1790
Tank height, legs and agitator not included	E	1230	1230	1230	1280	1280	1280	1280	1600	1600	1600	1600	1600	1600
Maximum overflow height	E1	1194	1191			1316		1311		1563		1558		
Total height	F	1520	1515	1515	1640	1640	1645	1650	1655	1890	1890	1895	1895	1900
Lateral distance between centres of legs	G	760	760	760	925	925	925	925	925	925	925	925	925	925
Distance legs / drain	H0	202	302	302	302	302	302	453	300	300	300	452	452	
Longitudinal distance between centres of legs	H1	840	870	1100	870	1050	1337	1727	2029	1094	1373	1670	1706	2030
Height with FIRST.LEVEL	I	-	1390	1395	1515	1520	1525	1540	1555	1765	1775	1785	1790	1800
Mean distance condensing unit / ground	J	270	270	280	250	255	265	275	290	290	295	305	310	320
Distance between drain valve and outlet valve	K		560				690				655			
Number of legs / Number of agitators		4/1	4/1	4/1	4/1	4/1	4/1	4/1	4/1	4/1	4/1	4/1	4/1	
Distance front - agitator axis No. 1	L	844	884	873	890	917	970	1165	1467	895	987	1136	1306	1468
Tank weight without cooling unit(s)		201	275	282	300	308	352	388	416	410	445	491	550	597
<b>SPECIFICATIONS (4 milkings - ISO 5708 - performance 4 B II) with R 449A cooling unit</b>														
Cooling unit Power (h.p.)		-	-	-	2,5	2,5	3,5	4	4	4	4	5	6	7
Executions		-	-	-	C/1V	C/1V	CCD/1V	CCD/1V	CCD/1V	CCD/1V	CCD/1V	CCD/1V	CCD/1V	CCD/2V
Cooled nominal volume		900	1100	1300	1500	1700	2060	2500	3000	2550	3000	3500	4000	4500
Cooling unit weight		-	-	-	80	80	90	105	105	105	105	110	110	145
<b>SPECIFICATIONS (2 milkings - ISO 5708 - performance 2 B II) with R 449A cooling unit</b>														
Cooling unit Power (h.p.)		2,5	3,5	3,5	4	4	5	2x3,5	2x4	2x3,5	2x4	2x5	2x5	2x6
Executions		C/1V	CCD/1V	CCD/1V	CCD/1V	CCD/1V	CCD/1V	CCD/2x1V	CCD/2x1V	CCD/2x1V	CCD/2x1V	CCD/2x1V	CCD/2x1V	CCD/2x1V
Cooled nominal volume		900	1100	1300	1500	1700	2060	2500	3100	2550	3000	3500	4000	4400
Cooling unit weight		80	90	90	105	105	110	165	180	165	180	190	190	190

Heights F are given with front legs adjusted at minimum height with tank in its use position on a horizontal floor.  
 Provide for 250 mm under ceiling for eventual removal of the agitator motor(s).  
 In these tanks the rise of the milk temperature, initially at 4°C, does not exceed 1.8°C in 12 hours, in an ambient temperature of 38°C.  
 Cooling unit(s) are indicated for information only.

Type	5200	6000	7000	8000	9000	10400	12000	15000	18000	21000	24000	27000	30000	
<b>DIMENSIONS in mm - WEIGHT in kg - VOLUME in litres</b>														
Nominal volume	5200	6000	7000	8000	9000	10400	12000	15000	18000	21000	24000	27000	30000	
Maximum volume	5300	6100	7100	8100	9100	10700	12250	15350	18400	21500	24500	27500	30500	
Total length (compact type)	A	3780	4140	4640	5140	4225	4725	5225	6225	-	-	-	-	
Tank length (without cooling unit)	B	3335	3695	4195	4695	3780	4280	4780	5775	6780	7895	8960	9955	11035
Minimal tank length	C	2965	3325	3820	4320	3325	3820	4320	5320	6320	7440	8505	9500	10575
Width	D	2005	2005	2005	2005	2310	2310	2310	2310	2310	2310	2310	2310	2310
Tank height, legs and agitator not included	E	1795	1795	1795	1795	2160	2160	2160	2160	2160	2240	2240	2240	
Maximum overflow height	E1		1741			2111		2115		2111		2113		
Total height	F	2075	2080	2115	2125	2450	2490	2500	2520	2525	2555	2575	2600	2620
Lateral distance between centres of legs	G	1200	1200	1200	1200	1400	1400	1400	1400	1400	1400	1400	1400	1400
Distance legs / drain	H0	450	450	450	450	597	452	452	597	597	597	597	602	603
Longitudinal distance between centres of legs	H1	1730	2090	1295	1545	1800	1295	1545	1900	1600	1930	1716	1572	1787
Height with FIRST.LEVEL	I	1970	1980	1995	2010	2350	2370	2385	2415	2415	2440	2470	2495	2520
Mean distance condensing unit / ground	J	280	290	305	320	290	310	325	350	-	-	-	-	-
Distance between drain valve and outlet valve	K		740						775					
Number of legs / Number of agitators		4/1	4/1	6/2	6/2	4/1	6/2	6/2	6/2	8/2	8/3	10/3	12/3	12/3
Distance front - agitator axis No. 1	L	1315	1495	897	997	1495	897	1022	1247	1532	1110	1204	1532	1730
Distance agitator No. 2	M	-	-	1695	1996	-	1695	1946	2500	2934	2270	2700	3000	3340
Distance agitator No.3	N	-	-	-	-	-	-	-	-	-	2270	2700	3000	3340
Tank weight without cooling unit(s)		796	877	993	1122	1110	1285	1465	1800	2100	2400	2630	3000	3400
<b>SPECIFICATIONS (4 milkings - ISO 5708 - performance 4 B II) with R 449A cooling unit</b>														
Cooling unit Power (h.p.)		7	8	10	10	2x7	2x7	2x8	2x10	2x10 <sup>*CD+</sup>	4x7	4x8	3x10 <sup>*CD+</sup>	4x10
Executions		CCD/2V	CCD/2V	CCD/2V	CCD/2V	CS/2x2V	CS/2x2V	CS/2x2V	CS/2x2V	GS/2x2V	GS/4x2V	GS/4x2V	GS/3x2V	GS/4x2V
Cooled nominal volume		5200	6000	7000	8000	9000	10400	12000	15000	18000	21000	24000	27000	30000
Cooling unit weight		145	177	182	182	200	200	265	280	407	434	530	610	560
<b>SPECIFICATIONS (2 milkings - ISO 5708 - performance 2 B II) with R 449A cooling unit</b>														
Cooling unit Power (h.p.)		2x7	2x8	2x10	2x10	2x10 <sup>*CD+</sup>	4x7	4x8	4x10	-	-	-	-	-
Executions		CS/2x2V	CS/2x2V	CS/2x2V	CS/2x2V	GS/2x2V	GS/4x2V	GS/4x2V	GS/4x2V	-	-	-	-	-
Cooled nominal volume		5200	6000	7000	8000	9000	10400	12000	15000	-	-	-	-	-
Cooling unit weight		217	265	280	280	407	434	530	560	-	-	-	-	-

Heights F are given with front legs adjusted at minimum height with tank in its use position on a horizontal floor.  
 Provide for 250 mm under ceiling for eventual removal of the agitator motor(s).  
 In these tanks the rise of the milk temperature, initially at 4°C, does not exceed 0.7°C in 12 hours, in an ambient temperature of 38°C.  
 Cooling unit(s) are indicated for information only.