GREEN BOX

FREE - COOLERS
FC - 90

The new free-coolers FC-90 have been designed for capacities from 120 to 1400 kW .
The free-coolers are air/water heat exchangers, which cool water by using ambient air. Axial fans make the air circulate through the coil (s), with very low energy demand.
FC-90 units are for outdoor installation; glycol is required to be added to the circuits to avoid freezing if ambient temperature can reach 0°C or lower values.

ADVANTAGES OF A FREE-COOLER INSTALLATION:

- Low energy consumption;
- No water consumption;
- No contamination of process water;
- No deposits: the closed circuit system keeps quantity of salts unchanged and avoids deposit growth;
- Easy installation;
- Easy integration to existing cooling systems;
- Quick return of investment.

NEW

MAIN FEATURES

- Frame is made of galvanised steel coated with polyester paint RAL 9002;
- High efficiency finned coil heat exchangers; the peculiar "V" shape optimizes air circulation through coils with consequent high efficiency;
- "V" shaped heat exchangers minimize footprint;
- Low noise axial fans with external motor;
- Closed loop circuit allows installation in parallel with other units whenever requested and makes combination with any existing chilling system possible;
- Control panel with display of set/operating temperature and automatic rotation of fan sequence;
- Individual overload protection on each fan.

FC 51/90

OPTIONS

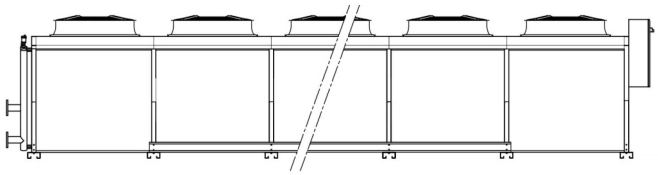
EXTREMELY HIGH EFFICIENCY "SSS" MISTING SYSTEM
Allows performance improvement :
- water temperature 5°C to 8°C lower than the temp erature reachable with traditional free - cooler
- water temperature lower than 30°C even in Summe r
- free-cooler coil is dry - no incrustation due to dirties or limestone

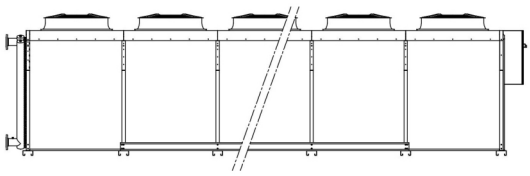
Additional Options:
- Softwater device to reduce limestone deposits;
- Water pump with control box;
- Automatic glycol filling system

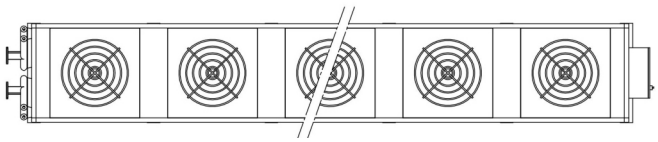
more than answers

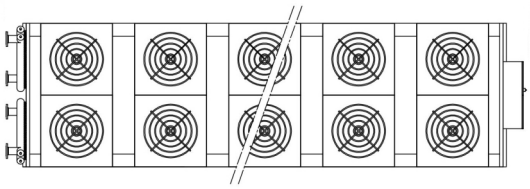
GREEN BOX

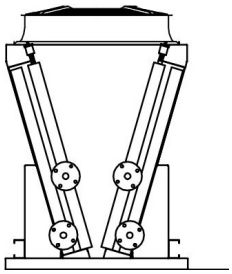
TECHNICAL DATA

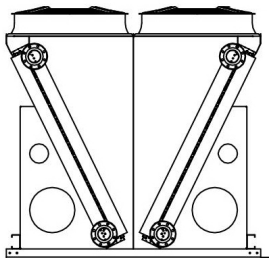












MOD.	FC 11/90	FC 21/90	FC 31/90	FC 41/90	FC 51/90	FC 61/90	FC 71/90	FC 82/90	FC 102/90	FC 122/90	FC 142/90
Cooling capacity (*)											
kW (*)	120	240	360	480	600	720	860	800	1000	1200	1400
kcal/h	103.200	206.400	309.600	412.800	516.000	619.200	739.600	688.000	860.000	1.032.000	1.204.000
Axial fans											
n°	1	2	3	4	5	6	7	8	10	12	14
input power kW	3,6	7,2	10,8	14,4	18,0	21,6	25,2	28,8	36,0	43,2	50,4
m3/h	32400	64800	97200	129600	162000	194400	226800	243200	304000	364800	425600
EC Fans											
n°	1	2	3	4	5	6	7	8	10	12	14
input power kW	2,8	5,6	8,4	11,2	14,0	16,8	19,6	22,4	28,0	33,6	39,2
Water content											
L	41	82	124	165	206	247	288	236	294	353	412
Pipe connections											
BSP	1" 1/2	2" 1/2	2" 1/2	4"	4"	4"	4"	4"	4"	4"	4"
Dimensions											
Length (mm)	2100	3500	4900	6300	7700	9100	10550	6350	7750	9150	10550
Width (mm)	1180	1180	1180	1180	1180	1180	1180	2140	2140	2140	2140
Height (mm)	1780	1780	1780	1780	1780	1780	1780	2160	2160	2160	2160
Net weight											
kg	350	650	950	1235	1470	1740	2010	2400	2900	3400	4000

(*) referred to temperature difference of 10°C betw een water outlet temperature and ambient air

more than answers

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