FFAM-FGAM

- Rhoss
- Cooling: 56,8 – 1343,8 kW

FREECOOLING Modules type FFAM-FGAM

- **FFAM-FGAM 1÷11** Packaged air-cooled water coolers in Freecooling mode (FFAM) and Freecooling NO-GLYCOLmode (FGAM) with axial fans

Brand

- Rhoss

Capacity

- Cooling: **56,8 - 1.343,8 kW**

Configuration

- B - Standard compact version (FFAMB-FGAMB)
- T - High efficiency version (FFAMT-FGAMT)
- Q - Supersilenced version complete with reduced speed fans (FFAMQ-FGAMQ)

Specifications

- Heat exchanger (water-water) in Freecooling NOGLYCOL:with stainless steel plates, complete with water flow differential pressure switch
- Air side heat exchanger: featuring finned coil with copper pipes and aluminium fins
- Fan: external rotor axial type electric fans equipped with internal thermal protection, accident protection grilles and proportional electronic device for continuous fan rotation speed regulation
- Structure: load-bearing structure made of galvanised and painted steel plate with polyester powder coating
- The unit is also complete with
  - fan circuit breaker switches
  - water side 3-way modulating valve

Models

- FFAMB: standard unit in Freecooling mode
- FFAMT: high efficiency unit in Freecooling mode
- FFAMQ: supersilenced unit in Freecooling mode
- FGAMB: standard unit in NO-GLYCOL Freecooling mode
- FGAMT: high efficiency unit in NO-GLYCOL Freecooling mode
- FGAMQ: supersilenced unit in NO-GLYCOL Freecooling mode

Accessories

- PUMP with single or double electric pump, including an automatic actuation pump in standby. The electric pumps are available in the low or high head versions
- TANK&PUMP with integrated 700 or 1000 litres buffer tank depending on models and single or double electric pump, complete with expansion tank, air vent valves and water side pressure gauge
- Bottom compartment protection nets
- Coil protection nets
- Plate exchanger antifreeze heater (FGAM)
- Electrical panel heater
- Control of min/max power supply voltage
- Pre-painted copper/coils coils
- Anti-vibration mounts

Technical data												
Standard compact version												
FFAMB Model		**1M**	**2M**	**3M**	**4M**	**5M**	**6M**	**7M**	**8M**	**9M**	**10M**	**11M**
1 Nominal cooling capacity	**kW**	123,5	247,1	370,8	494,1	617,2	738,7	860,4	981,5	1101,9	1221,6	1340,4
1 E.E.R.		20,2	20,8	21,0	20,9	20,5	19,5	18,9	18,2	17,5	16,8	16,1
1 Absorbed power	**kW**	6,1	11,9	17,6	23,7	30,0	37,9	45,5	53,9	62,9	72,6	83,2
2 Sound pressure FFAMB	**dB(A)**	53	56	58	59	60	60	61	61	62	62	62
3 Sound power FFAMB	**dB(A)**	85	88	90	91	92	93	93,5	94	94,5	95	95,5
Circuits	**n.**	1	1	1	1	1	1	1	1	1	1	1
Electrical supply	**V-ph-Hz**	400-3-50	400-3-50	400-3-50	400-3-50	400-3-50	400-3-50	400-3-50	400-3-50	400-3-50	400-3-50	400-3-50
Data at the following conditions:												
1 Air: 0°C – Water: 15/10°C – Ethylene glycol 30%												
2 In open field (Q = 2) at 10 m from the unit												
3 Total sound power level in dB(A) based on measurements carried out in accordance with regulation UNI EN-ISO 9614												

Technical data												
High efficiency version												
FFAMT Model		**1M**	**2M**	**3M**	**4M**	**5M**	**6M**	**7M**	**8M**	**9M**	**10M**	**11M**
1 Nominal cooling capacity	**kW**	108,1	216,4	324,6	432,6	540,5	647,3	754,2	860,7	966,7	1072,1	1177,0
1 E.E.R.		32,5	34,8	35,4	35,0	34,4	32,2	30,9	29,6	28,2	26,8	25,4
1 Absorbed power	**kW**	3,3	6,2	9,2	12,4	15,7	20,1	24,4	29,1	34,3	40,1	46,4
2 Sound pressure FFAMT	**dB(A)**	50	53	55	56	57	57	58	58	59	59	59
3 Sound power FFAMT	**dB(A)**	82	85	87	88	89	90	90,5	91	91,5	92	92,5
Circuits	**n.**	1	1	1	1	1	1	1	1	1	1	1
Electrical supply	**V-ph-Hz**	400-3-50	400-3-50	400-3-50	400-3-50	400-3-50	400-3-50	400-3-50	400-3-50	400-3-50	400-3-50	400-3-50
Data at the following conditions:												
1 Air: 0°C – Water: 15/10°C – Ethylene glycol 30%												
2 In open field (Q = 2) at 10 m from the unit												
3 Total sound power level in dB(A) based on measurements carried out in accordance with regulation UNI EN-ISO 9614												

Technical data												
Supersilenced version complete with reduced speed fans												
FFAMT-FFAMQ Model		**1M**	**2M**	**3M**	**4M**	**5M**	**6M**	**7M**	**8M**	**9M**	**10M**	**11M**
1 Nominal cooling capacity	**kW**	90,9	181,9	273,0	363,9	454,7	544,8	635,0	725,0	814,6	903,9	992,9
1 E.E.R.		36,0	39,0	40,2	40,0	39,5	37,4	36,1	34,8	33,4	32,0	30,5
1 Absorbed power	**kW**	2,5	4,7	6,8	9,1	11,5	14,6	17,6	20,8	24,4	28,3	32,5
2 Sound pressure FFAMQ	**dB(A)**	44	47	49	50	51	51	52	52	53	53	53
3 Sound power FFAMQ	**dB(A)**	76	79	81	82	83	84	84,5	85	85,5	86	86,5
Circuits	**n.**	1	1	1	1	1	1	1	1	1	1	1
Electrical supply	**V-ph-Hz**	400-3-50	400-3-50	400-3-50	400-3-50	400-3-50	400-3-50	400-3-50	400-3-50	400-3-50	400-3-50	400-3-50
Data at the following conditions:												
1 Air: 0°C – Water: 15/10°C – Ethylene glycol 30%												
2 In open field (Q = 2) at 10 m from the unit												
3 Total sound power level in dB(A) based on measurements carried out in accordance with regulation UNI EN-ISO 9614												
4 Weight referred to the unit without load and not accessorised												

Dimensions												
		1M	**2M**	**3M**	**4M**	**5M**	**6M**	**7M**	**8M**	**9M**	**10M**	**11M**
L – Width	**mm**	1.240	2.340	3.430	4.540	5.640	6.800	7.900	9000	10100	11200	12360
H – Height	**mm**	2.480	2.480	2.480	2.480	2.480	2.480	2.480	2480	2480	2480	2480
P – Depth	**mm**	2.260	2.260	2.260	2.260	2.260	2.260	2.260	2260	2260	2260	2260
4 FFAM Weight	**kg**	670	1.255	1.720	2.130	2.590	3.375	3.820	4230	4660	5135	5690
4 FGAM Weight	**kg**	825	1445	1985	2500	3000	3835	4320	4810	5315	6075	6710
Data at the following conditions:												
4 Weight referred to the unit without load and not accessorised												