

**Designed for *reducing*
to the maximum the
installation procedure
“plug and cool” concept
ready to operate**



Use

The AQUALIS chillers or air/water reversible units are ideal for the air conditioning and heating applications of residential (houses, apartments) or small tertiary (offices, banks, hotels...) types.

They are EUROVENT certified, guaranteeing comfort, quality and economy.

They can be associated with a large choice of fan coil units or heating floor.

The reversible models can be connected in parallel on an exis-

ting fuel or gas heating installation.

In heating only, they can be linked to a heating floor or low temperature radiators.

In heating and cooling, they can be associated with :

- a standard network of fan coil units (Eolis, cassette type units...),
- a heating/cooling floor,
- a mixed cooling / heating installation with, for example, floor heating on the ground floor and fan coil units on the first floor.

Range

The AQUALIS series includes a large range of refrigeration units and heat pumps ; they give to the client the possibility of getting the units which suit most of customers requirements in terms of comfort.

Available in 2 versions :

– cooling only and air/water reversible heat pumps.

The units are designed to operate with negative outside temperatures ;

- Down to -10°C in heating mode ; below this temperature, the

heating will be ensured by an independant electrical boiler.

- In relief of a boiler, up to the equilibrium point, temperature below which the generator can no longer cover the heating requirements (alternative or simultaneous operation with a boiler).

1 compressor, 1 refrigerant circuit

■ 7 models :

- Cooling only AQUALIS 20, 28, 35, 35T, 50, 65, 75
- Reversible AQUALIS 20H, 28H, 35H, 35HT, 50H, 65H, 75H

Description

Standard equipment :

- **SCROLL** compressor.
- Brazed plates heat exchanger made of stainless steel.
- Copper tubes / aluminium fins coil.
- Propeller fan (1 or 2, depending on model).

All year around operation in heating and in cooling through speed control as a function of the outside temperature.

Control :

MICRO CONNECT microprocessor control module or remotely mounted (2 wire link).

Hydraulic circuit with integrated pump and expansion vessel.

Recyclable plastic casing, anti-UV treated

- Complies with norms EN 60.335 - EN 378.2

Complies with directives :

EML 89/336 CEE

PED 9723 CEE →category 1

QUICK SELECTION

AQUALIS COOLING ONLY AQUALIS REVERSIBLE		R410A						
		20 20 H	28 28 H	35 35 H	35 T 35 HT	50 T 50 HT	65 T 65 HT	75 T 75 HT
Cooling output	kW	5.25	7.04	8.49	8.54	11.81	14.71	17.16
Power input	kW	2.06	2.71	3.81	3.52	4.46	5.08	6.39
EER		2.65	2.60	2.23	2.43	2.65	2.89	2.69
LwA sound level	dBA	64	70	70	70	67	73	80
Heating capacity	kW	5.97	8.14	10.10	10.10	12.83	15.87	19.03
Power input	kW	1.81	2.41	2.83	2.83	3.58	4.25	5.15
COP		3.29	3.37	3.56	3.56	3.58	3.73	3.69
Power supply		230 V - 1 ph - 50 Hz + Terre			400 V - 3 ph - 50 Hz + Terre			

NOTE : Quick selection table as per EUROVENT conditions

COOLING 7 / 12 °C AIR 35 °C - HEATING 35 / 30 °C AIR - BS 7 °C / BH 6 °C

COMPOSITION

■ Hermetic compressor

- SCROLL type. Compression achieved by 2 spirals (one fixed, one with an orbital movement).
- Integrated electrical motor, cooled by suction gas.
- Internal motor protection by coil sensor.

■ Water/refrigerant exchanger

- Brazed plate type.
- End and internal plates in stainless steel AISI 316.
- High performance optimized plates pattern.
- Efficient thermal insulation.

■ Condenser coil

- Copper tubes/aluminium fins curved coil.

■ Standard accessories

- Reverse cycle valve (reversible model).
- Anti-slugging accumulator.
- Liquid receiver (reversible models).
- Expansion valve.
- Dryer.

■ Control panel

- Complies with norms NFC 15-100 and EN 60335.
- Overload protection.
- Compressor motor contactor.
- Main earthing.
- Microprocessor electronic module ensuring the following functions :

Chilled or hot water temperature control (reversible heat pump).

From a water law as a function of the outside temperature.

Self-adaptive control, when the compressor operates in short cycling, increase of the stage differential.

In relief of a boiler (reversible models), alternative operation with the heat pump and the boiler.

The shifting is controlled automatically by the control as a function of the outside temperature, using an adjustable parameter.

- Control of the operating parameters.
- Temperature display on terminal.
- Operating with terminal units : control of water temperature
- Operating with heating floor : control of air temperature
- Control of the unit.
- Remote control (2-wire liaison).

TOR control (2 entries, automatic/shedding, hot-cold/absence)

- Anti-short cycle (5 mn).

■ Control and safety devices

- High pressure safety pressostats.
- 2 antifrost sensors (exchanger water outlet and exchanger freon outlet).
- Chilled and hot water sensors (on the exchanger water inlet).

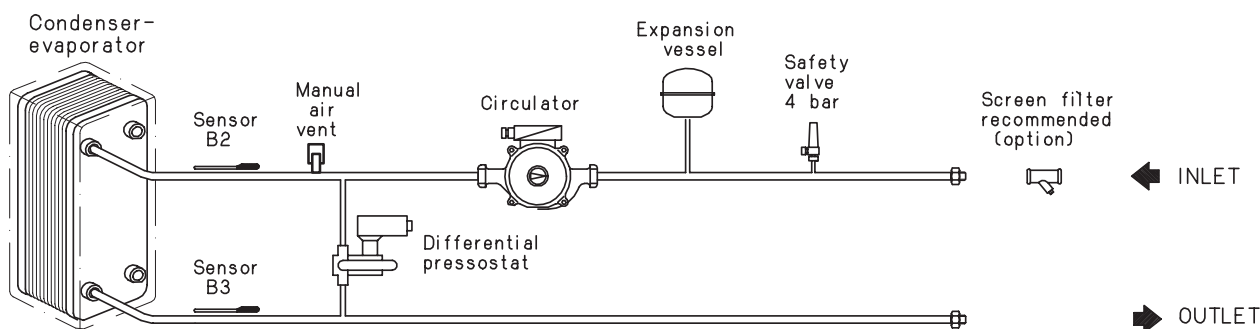
■ Integrated hydraulic module

- 1 safety valve calibrated at 4 bars.
- 1 expansion vessel.
- 1 manual air vent.
- 1 multi-speed circulator.
- 1 differential water pressostat.

■ Options (to be assembled on site)

- Insulated flexible connections.
- Antivibration mounts.
- Strainer kit with isolating valves.
- Filling kit.
- Wall support kit (models 20, 28, 35).
- Starting kit (models 20, 28, 35) 1 ph only.
- Crankcase heating element kit (only cooling models)
- Loop heater

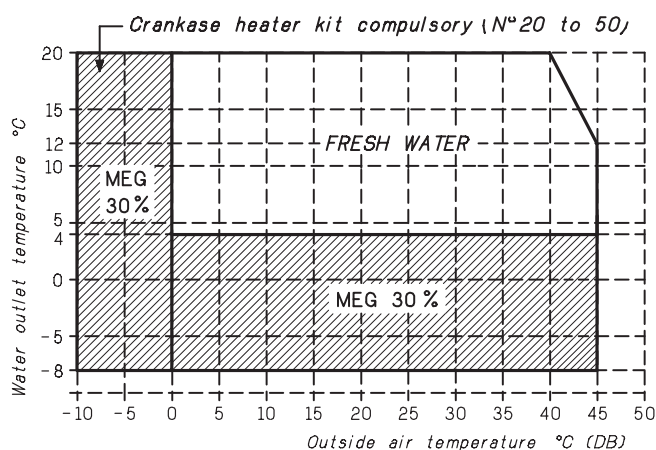
HYDRAULIC MODULE PRINCIPLE DIAGRAM



OPERATING LIMITS

CHILLED WATER PRODUCTION

Max. water return temperature for standard operating conditions : + 30 °C



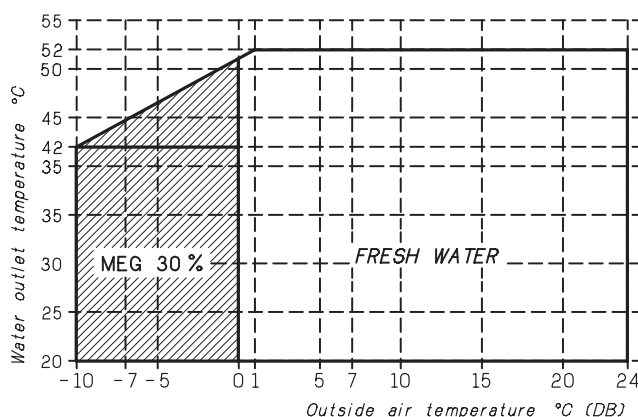
PROPELLER
FAN

HOT WATER PRODUCTION

Min. water return temperature for standard operating conditions : + 5 °C

Min. water return temperature in operation :
— glycol water = + 5 °C — fresh water = + 20 °C

Max. water inlet temperature : + 65 °C



Water flows to be respected

AQUALIS	20	28	35	50	65	75
Min. flow m ³ /h	0.7	0.9	1.1	1.5	2	2.45
Cooling nominal flow m ³ /h	0.9	1.2	1.5	2.0	2.7	3.0
Heating nominal flow	1	1.4	1.7	2.3	2.8	3.5

The nominal flows correspond to conditions below - Cooling = 12/7°C - Heating = 40/45°C - Air = 7/6°C



Aqualis water chillers and reversible air/water heat pumps

aqualis

COOLING CAPACITIES

PROPELLER
FAN

R410A

AQUALIS		Chilled water outlet temperature °C	CONDENSER AIR INLET TEMPERATURE °C									
			28		32		36		40		45	
			Pf Kw	Pa kW	Pf kW	Pa kW	Pf kW	Pa kW	Pf kW	Pa kW	Pf kW	Pa kW
20	-8		2.90	1.50	2.82	1.66	2.74	1.82	2.57	1.96	2.40	2.10
	-6		3.26	1.52	3.12	1.68	2.99	1.83	2.80	1.98	2.62	2.12
	-4		3.61	1.55	3.42	1.69	3.23	1.84	3.04	1.99	2.84	2.13
	-2		3.91	1.56	3.70	1.71	3.50	1.86	3.28	2.01	3.06	2.15
	0		4.20	1.57	3.99	1.73	3.77	1.88	3.53	2.02	3.29	2.16
	2		4.81	1.57	4.56	1.74	4.31	1.90	3.97	2.04	3.63	2.18
	5		5.41	1.58	5.14	1.75	4.86	1.92	4.42	2.06	3.97	2.20
	6		5.59	1.59	5.31	1.76	5.04	1.93	4.57	2.09	4.10	2.25
	7		5.76	1.60	5.49	1.77	5.21	1.93	4.72	2.11	4.22	2.30
	8		6.03	1.65	5.74	1.80	5.46	1.95	5.05	2.13	4.64	2.30
	12		6.31	1.69	6.00	1.83	5.70	1.97	5.38	2.14	5.06	2.31
	16		6.90	1.73	6.57	1.86	6.24	1.99	5.88	2.15		
	18		7.49	1.76	7.14	1.88	6.79	2.00	6.38	2.16		
	20		8.08	1.80	7.71	1.91	7.33	2.02	6.80	2.18		
28	-8		4.10	2.03	3.96	2.28	3.83	2.52	3.57	2.77	3.31	3.02
	-6		4.58	2.05	4.37	2.29	4.16	2.53	3.89	2.78	3.63	3.03
	-4		5.07	2.08	4.78	2.31	4.49	2.54	4.22	2.79	3.95	3.04
	-2		5.46	2.09	5.15	2.32	4.84	2.55	4.56	2.85	4.27	3.15
	0		5.85	2.10	5.52	2.33	5.19	2.55	4.89	2.90	4.60	3.25
	2		6.67	2.11	6.32	2.33	5.98	2.56	5.61	2.89	5.25	3.23
	5		7.48	2.11	7.12	2.33	6.76	2.56	6.34	2.89	5.91	3.21
	6		7.65	2.12	7.30	2.34	6.94	2.58	6.53	2.90	6.11	3.22
	7		7.82	2.12	7.47	2.36	7.13	2.59	6.72	2.91	6.32	3.23
	8		7.90	2.13	7.52	2.37	7.14	2.61	6.83	2.92	6.53	3.24
	12		7.98	2.14	7.57	2.39	7.15	2.63	6.94	2.94	6.74	3.24
	16		8.68	2.18	8.35	2.41	8.02	2.65	7.70	2.95		
	18		9.38	2.22	9.13	2.44	8.88	2.66	8.46	2.96		
	20		10.07	2.26	9.91	2.47	9.75	2.68	9.22	2.97		
35	-8		5.31	2.72	5.02	3.03	4.74	3.34	4.40	3.67	4.06	4.00
	-6		5.75	2.74	5.44	3.05	5.14	3.36	4.77	3.70	4.40	4.04
	-4		6.19	2.77	5.86	3.08	5.54	3.39	5.14	3.74	4.75	4.09
	-2		6.66	2.80	6.31	3.11	5.96	3.42	5.55	3.79	5.14	4.17
	0		7.13	2.82	6.76	3.14	6.39	3.45	5.96	3.85	5.53	4.24
	2		8.15	2.83	7.72	3.14	7.30	3.46	6.81	3.85	6.33	4.25
	5		9.16	2.84	8.69	3.15	8.21	3.46	7.67	3.86	7.13	4.25
	6		9.46	2.87	8.97	3.17	8.48	3.48	7.92	3.88	7.37	4.27
	7		9.76	2.89	9.25	3.20	8.74	3.50	8.18	3.90	7.61	4.29
	8		10.09	2.95	9.57	3.26	9.05	3.57	8.47	3.96	7.89	4.35
	12		10.41	3.01	9.89	3.32	9.36	3.63	8.76	4.02	8.17	4.41
	16		11.27	3.06	10.72	3.38	10.17	3.69	9.26	4.08		
	18		12.13	3.11	11.56	3.43	10.98	3.75	9.75	4.14		
	20		12.98	3.16	12.39	3.49	11.80	3.81	10.24	4.19		
35T	-8		5.38	2.44	5.09	2.68	4.80	2.93	4.46	3.17	4.12	3.41
	-6		5.81	2.48	5.50	2.72	5.19	2.97	4.83	3.20	4.47	3.44
	-4		6.24	2.51	5.91	2.76	5.58	3.01	5.20	3.24	4.82	3.47
	-2		6.72	2.55	6.36	2.80	6.01	3.05	5.60	3.34	5.19	3.63
	0		7.19	2.60	6.82	2.85	6.44	3.10	6.00	3.45	5.56	3.79
	2		8.20	2.62	7.77	2.87	7.35	3.13	6.86	3.47	6.36	3.81
	5		9.20	2.65	8.73	2.90	8.26	3.15	7.71	3.49	7.16	3.83
	6		9.50	2.68	9.01	2.93	8.53	3.18	7.96	3.52	7.40	3.86
	7		9.80	2.70	9.30	2.96	8.79	3.21	8.22	3.55	7.64	3.89
	8		10.13	2.77	9.61	3.03	9.09	3.29	8.51	3.63	7.93	3.98
	12		10.46	2.83	9.93	3.10	9.39	3.37	8.81	3.72	8.22	4.06
	16		11.33	2.88	10.77	3.14	10.21	3.40	9.63	3.99		
	18		12.21	2.93	11.62	3.18	11.02	3.43	10.45	4.27		
	20		13.08	2.98	12.46	3.22	11.84	3.46	11.27	4.54		

Glycol water

Pa : Compressor absorbed power

COOLING CAPACITIES

AQUALIS	Chilled water outlet temperature °C	CONDENSER AIR INLET TEMPERATURE °C									
		28		32		36		40		45	
		Pf Kw	Pa kW	Pf kW	Pa kW	Pf kW	Pa kW	Pf kW	Pa kW	Pf kW	Pa kW
50T	-8	7.48	3.33	7.07	3.72	6.66	4.11	6.27	4.43	5.88	4.75
	-6	8.07	3.36	7.64	3.75	7.21	4.15	6.71	4.56	6.21	4.98
	-4	8.65	3.40	8.20	3.79	7.75	4.18	7.14	4.70	6.54	5.21
	-2	9.28	3.45	8.80	3.83	8.32	4.22	7.69	4.76	7.06	5.29
	0	9.91	3.49	9.40	3.88	8.90	4.26	8.24	4.82	7.58	5.38
	2	10.93	3.52	10.38	3.90	9.84	4.28	9.19	4.83	8.43	5.37
	5	11.95	3.54	11.36	3.92	10.77	4.30	10.14	4.83	9.28	5.36
	6	12.32	3.57	11.72	3.95	11.11	4.33	10.35	4.86	9.59	5.39
	7	12.69	3.60	12.07	3.98	11.45	4.36	10.79	4.89	9.90	5.41
	8	13.51	3.78	12.86	4.16	12.20	4.55	11.40	5.08	10.59	5.61
	12	14.33	3.95	13.64	4.34	12.95	4.73	12.37	5.27	11.29	5.81
	16	15.48	4.04	14.77	4.39	14.06	4.74	13.37	5.30		
	18	16.64	4.12	15.90	4.44	15.16	4.75	14.38	5.32		
	20	17.79	4.20	17.03	4.48	16.26	4.76	14.88	5.34		
65T	-8	9.19	4.01	8.70	4.40	8.13	4.82	7.34	5.29	6.37	5.92
	-6	9.86	4.01	9.42	4.40	8.87	4.82	8.14	5.29	7.15	5.93
	-4	10.52	4.01	10.08	4.40	9.56	4.82	8.90	5.29	7.88	5.93
	-2	11.21	4.01	10.77	4.40	10.85	4.82	9.62	5.29	8.60	5.93
	0	11.88	4.01	11.43	4.40	12.17	4.82	10.29	5.29	9.26	5.93
	2	13.48	4.01	12.99	4.39	13.82	4.82	11.63	5.28	10.53	5.93
	5	14.86	4.01	14.33	4.39	15.96	4.82	12.73	5.28	11.60	5.92
	6	15.27	4.01	14.71	4.39	14.80	4.82	13.24	5.28	12.09	5.92
	7	15.67	4.01	15.09	4.39	14.80	4.81	13.73	5.28	12.52	5.92
	8	16.53	4.01	15.94	4.39	16.05	4.81	14.60	5.28	13.38	5.92
	12	19.19	4.02	18.57	4.39	18.74	4.81	17.16	5.27	15.81	5.91
	16	17.02	4.03	16.36	4.40	15.67	4.82	14.89	5.27	13.78	5.91
	18	17.31	4.04	16.62	4.41	15.90	4.82	15.10	5.27	14.00	5.91
	20	17.62	4.05	16.89	4.41	16.15	4.82	15.31	5.28	14.22	5.91
75T	-8	10.02	4.83	8.70	5.33	7.16	5.89	5.39	6.51	4.92	7.31
	-6	11.07	4.84	9.90	5.34	8.50	5.89	6.76	6.51	6.19	7.31
	-4	12.03	4.85	11.00	5.34	9.74	5.89	8.13	6.50	7.47	7.32
	-2	13.03	4.86	12.06	5.35	11.34	5.89	9.46	6.50	8.71	7.33
	0	13.93	4.87	13.03	5.35	13.04	5.89	10.68	6.50	9.75	7.35
	2	15.71	4.88	14.78	5.36	15.10	5.90	12.57	6.50	11.51	7.34
	5	17.30	4.90	16.28	5.38	17.63	5.91	14.23	6.50	13.07	7.34
	6	17.84	4.91	16.79	5.38	16.61	5.91	14.76	6.50	13.57	7.33
	7	18.37	4.92	17.29	5.39	16.61	5.92	15.25	6.50	14.04	7.33
	8	19.58	4.93	18.45	5.40	18.32	5.92	16.45	6.51	15.15	7.33
	12	23.00	4.98	21.74	5.44	21.67	5.95	19.64	6.52	18.26	7.33
	16	20.66	5.04	19.06	5.49	17.81	5.99	16.69	6.55	15.50	7.35
	18	21.05	5.08	19.30	5.53	17.93	6.02	16.74	6.57	15.58	7.36
	20	21.50	5.13	19.57	5.57	18.08	6.05	16.81	6.60	15.67	7.38

Glycol water

Pa : Compressor absorbed power

PROPELLER FAN



Aqualis water chillers and reversible air/water heat pumps

aqualis

HEATING CAPACITIES

PROPELLER
FAN

R410A

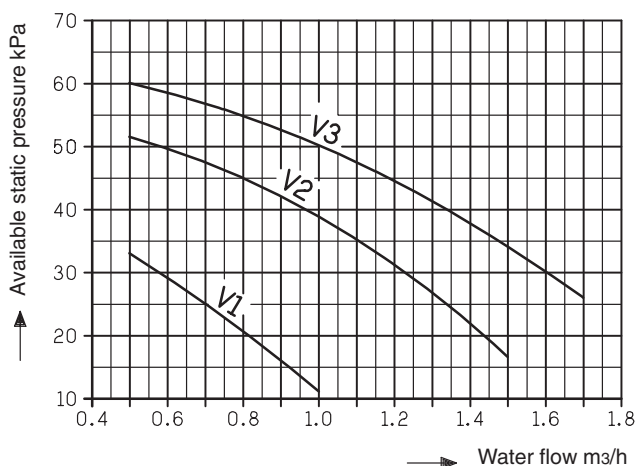
AQUALIS	Outside air temperature °C	HOT WATER OUTLET TEMPERATURE IN °C											
		25		30		35		40		45		50	
		Pc Kw	Pa kW	Pc kW	Pa kW	Pc kW	Pa kW	Pc kW	Pa kW	Pc kW	Pa kW	Pc kW	Pa kW
20 H	-10	3.68	1.24	3.65	1.41	3.62	1.57	3.61	1.78				
	-5	4.44	1.23	4.40	1.40	4.35	1.57	4.32	1.77	4.31	1.98		
	0	5.21	1.23	5.14	1.40	5.07	1.57	5.03	1.77	4.99	1.97	4.96	2.17
	5	5.97	1.22	5.89	1.40	5.80	1.57	5.72	1.77	5.64	1.97	5.56	2.17
	10	6.66	1.22	6.58	1.39	6.50	1.56	6.39	1.76	6.27	1.95	6.16	2.14
	15	7.36	1.21	7.28	1.38	7.20	1.56	7.05	1.74	6.91	1.93	6.76	2.11
	20	8.05	1.20	7.98	1.38	7.90	1.55	7.72	1.73	7.54	1.91	7.36	2.09
28 H	-10	5.39	1.65	5.22	1.88	5.05	2.11	4.59	2.39				
	-5	6.27	1.62	6.12	1.86	5.97	2.09	5.64	2.38	5.31	2.67		
	0	7.16	1.60	7.03	1.83	6.90	2.07	6.68	2.37	6.47	2.66	6.25	2.96
	5	8.04	1.57	7.93	1.81	7.82	2.05	7.73	2.36	7.63	2.66	7.54	2.97
	10	8.95	1.55	8.80	1.79	8.65	2.03	8.56	2.34	8.46	2.64	8.37	2.95
	15	9.87	1.53	9.67	1.77	9.48	2.01	9.39	2.32	9.30	2.62	9.21	2.93
	20	10.78	1.51	10.55	1.75	10.31	1.99	10.22	2.30	10.13	2.60	10.04	2.91
35 H	-10	6.75	2.17	6.71	2.53	6.66	2.88	6.69	3.27				
	-5	7.80	2.15	7.74	2.49	7.67	2.82	7.66	3.22	7.65	3.61		
	0	8.85	2.13	8.77	2.44	8.68	2.76	8.63	3.16	8.58	3.55	8.52	3.94
	5	9.90	2.10	9.80	2.40	9.69	2.71	9.60	3.10	9.50	3.48	9.41	3.87
	10	11.01	2.07	10.90	2.38	10.79	2.68	10.63	3.05	10.46	3.42	10.30	3.79
	15	12.12	2.04	12.00	2.35	11.88	2.66	11.66	3.01	11.43	3.36	11.20	3.71
	20	13.23	2.01	13.11	2.32	12.98	2.64	12.69	2.97	12.39	3.29	12.10	3.62
35 HT	-10	6.11	2.00	6.04	2.24	5.96	2.49	6.01	2.79				
	-5	7.35	1.99	7.25	2.24	7.14	2.49	7.12	2.79	7.10	3.09		
	0	8.59	1.98	8.46	2.24	8.32	2.49	8.23	2.79	8.15	3.09	8.06	3.39
	5	9.83	1.98	9.67	2.23	9.50	2.48	9.35	2.79	9.19	3.09	9.04	3.39
	10	11.01	1.97	10.82	2.22	10.62	2.47	10.41	2.78	10.20	3.08	9.98	3.39
	15	12.18	1.96	11.97	2.21	11.75	2.46	11.48	2.77	11.20	3.08	10.93	3.38
	20	13.36	1.95	13.12	2.20	12.87	2.45	12.54	2.76	12.21	3.07	11.88	3.38
50 HT	-10	8.65	2.56	8.62	2.95	8.60	3.33	8.59	3.78				
	-5	9.95	2.54	9.88	2.91	9.81	3.28	9.77	3.74	9.76	4.20		
	0	11.24	2.51	11.13	2.88	11.01	3.24	10.93	3.71	10.85	4.17	10.76	4.64
	5	12.54	2.49	12.38	2.84	12.22	3.19	12.11	3.67	12.00	4.15	11.90	4.63
	10	14.64	2.48	14.42	2.84	14.19	3.19	14.06	3.65	13.92	4.11	13.78	4.57
	15	16.74	2.48	16.46	2.83	16.17	3.18	16.00	3.62	15.83	4.06	15.67	4.50
	20	18.85	2.47	18.49	2.83	18.14	3.18	17.94	3.60	17.75	4.02	17.55	4.44
65 HT	-10	10.59	2.96	10.94	3.32	10.92	3.73	10.22	4.18				
	-5	12.09	2.97	12.27	3.33	12.20	3.74	11.86	4.20	11.29	4.71		
	0	13.98	2.97	14.02	3.33	13.84	3.74	13.63	4.20	13.24	4.71	12.76	5.29
	5	15.69	2.97	15.54	3.34	15.18	3.74	15.03	4.20	14.76	4.71	14.46	5.29
	10	17.43	2.99	18.84	3.34	16.77	3.74	16.54	4.20	16.24	4.71	15.92	5.28
	15	19.15	3.02	18.76	3.36	18.22	3.75	17.88	4.20	17.47	4.70	17.08	5.27
	20	21.12	3.05	20.62	3.38	19.98	3.76	19.53	4.20	19.02	4.71	18.53	5.27
75 HT	-10	14.72	3.47	14.10	3.93	13.08	4.45	12.04	5.05				
	-5	16.01	3.50	15.76	3.96	15.19	4.48	13.84	5.07	12.74	5.74		
	0	17.74	3.53	17.38	3.99	17.02	4.50	16.26	5.08	14.88	5.75	13.63	6.51
	5	19.65	3.53	18.86	4.02	18.40	4.53	17.92	5.10	17.26	5.75	16.13	6.50
	10	22.60	3.63	21.08	4.07	20.18	4.56	19.56	5.12	19.11	5.76	18.57	6.50
	15	24.82	3.73	23.74	4.15	22.06	4.63	20.96	5.18	20.27	5.80	19.83	6.51
	20	26.65	3.81	25.55	4.23	24.35	4.70	22.75	5.23	21.75	5.84	21.15	6.54

Pa : Compressor absorbed power

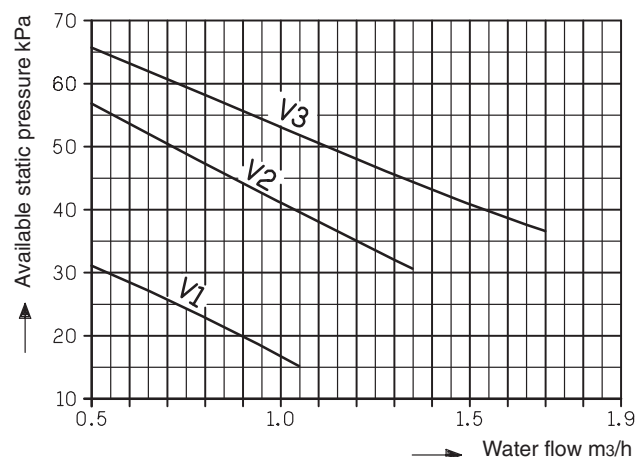
PUMPS CHARACTERISTICS

- Available pressure in the pipework

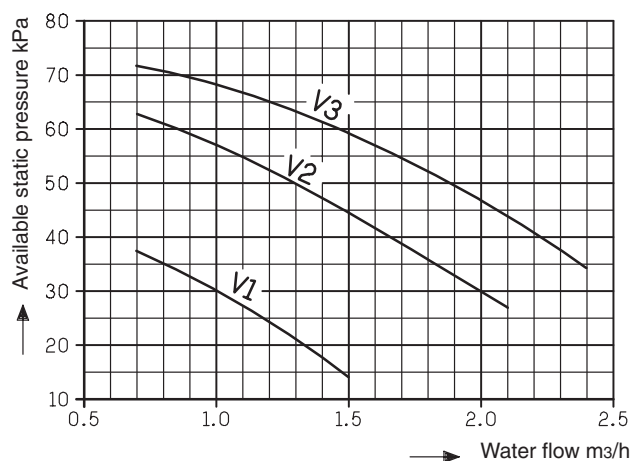
AQUALIS 20 - 20H



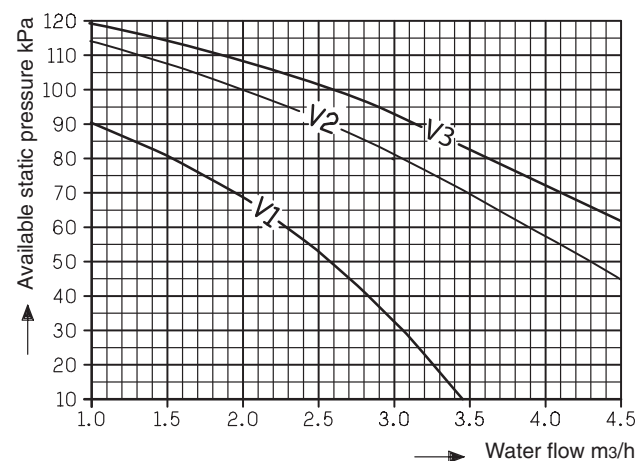
AQUALIS 28 - 28H



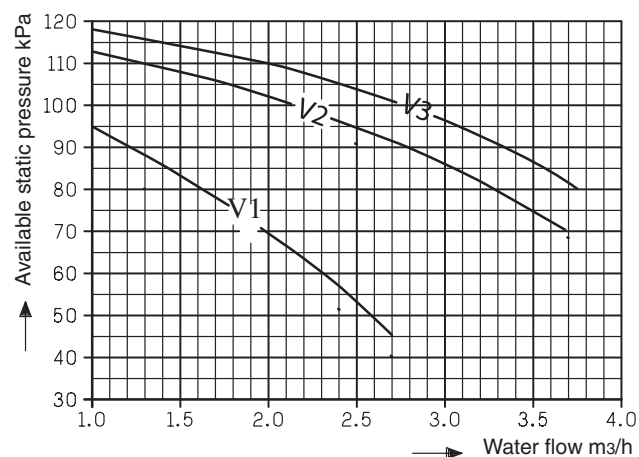
AQUALIS 35T - 35HT



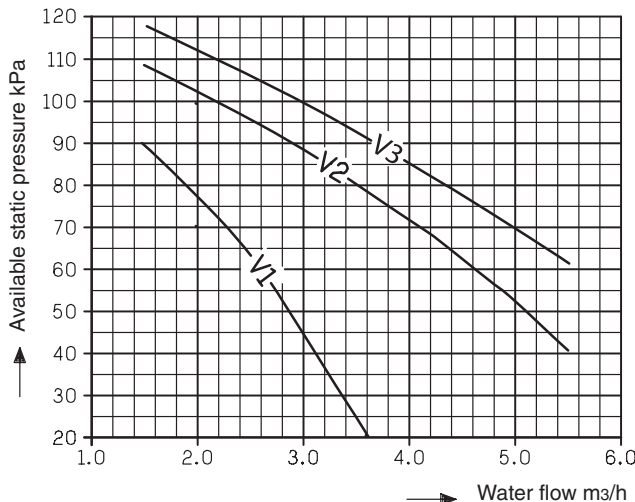
AQUALIS 50 - 50H



AQUALIS 65 - 65H



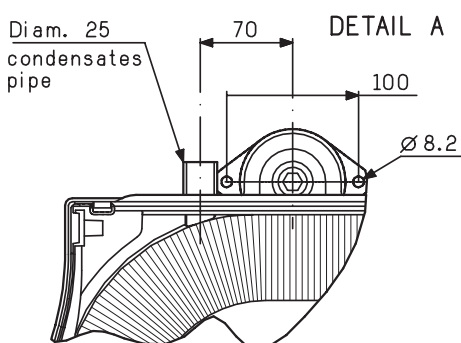
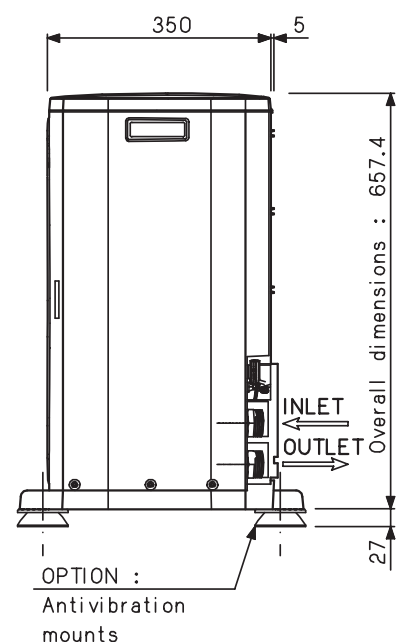
AQUALIS 75 - 75H



ENCOMBREMENT

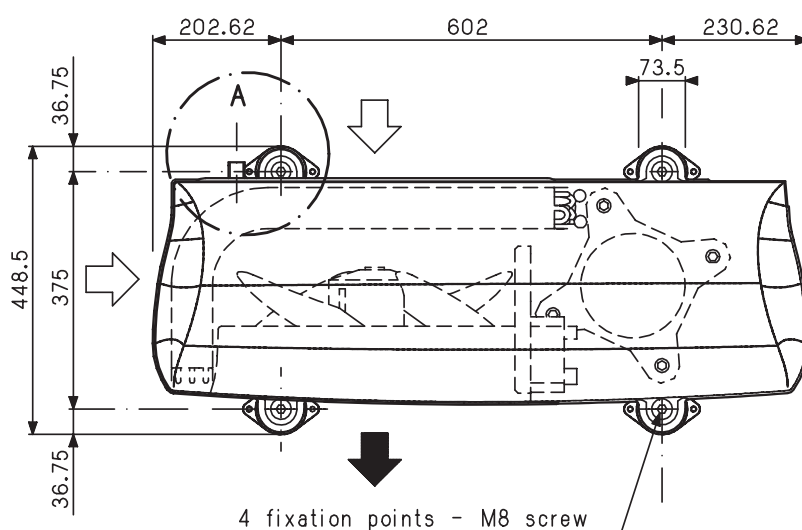
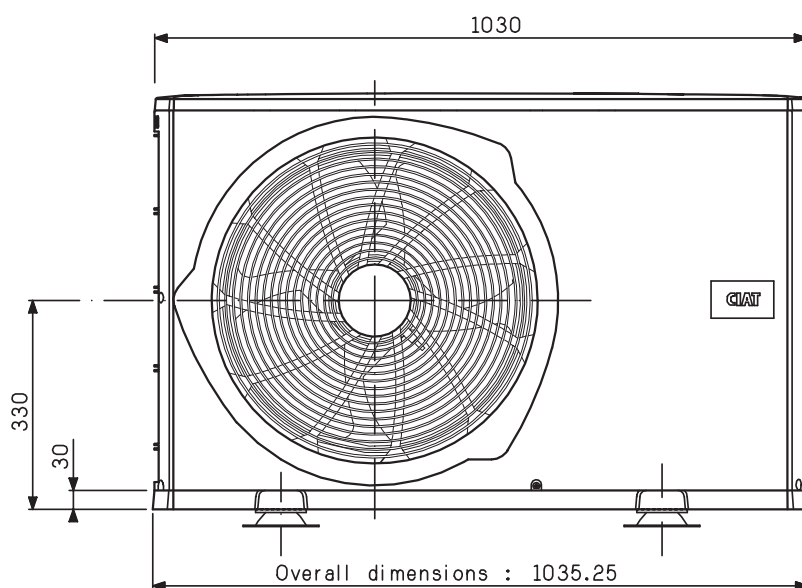
AQUALIS 20 - 28 - 35

PROPELLER
FAN

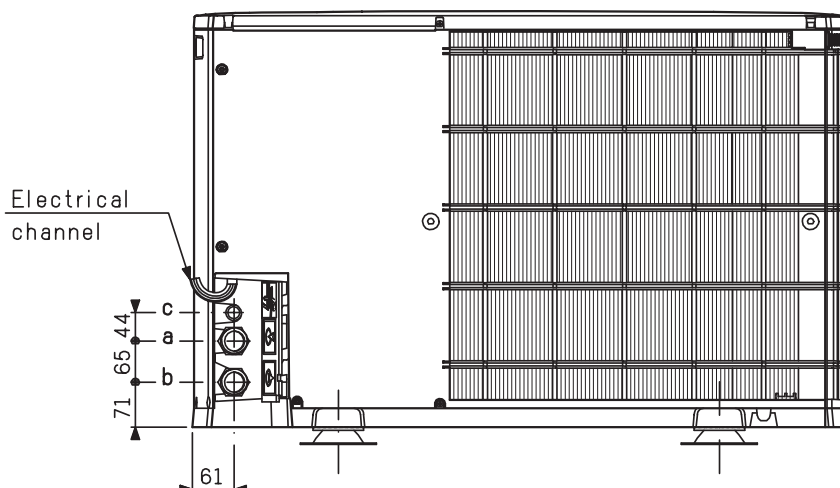


- a Water inlet diam. G 1" (28 mm)
- b Water outlet diam. G 1" (28 mm)
- c Valve outlet diam. 1/2"

AQUALIS	Weight in kg	
	Empty	in operation
20 (H)	73	82
28 (H)	79	88
35 (H)	82	91
35 (HT)	82	91

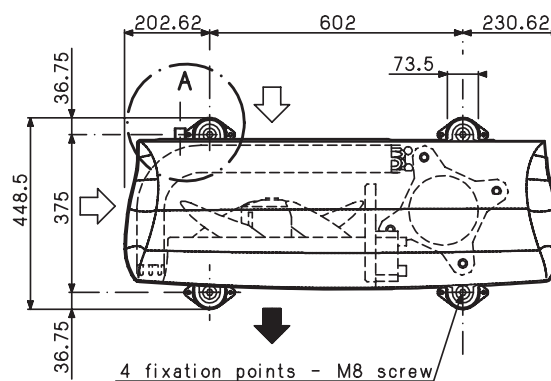
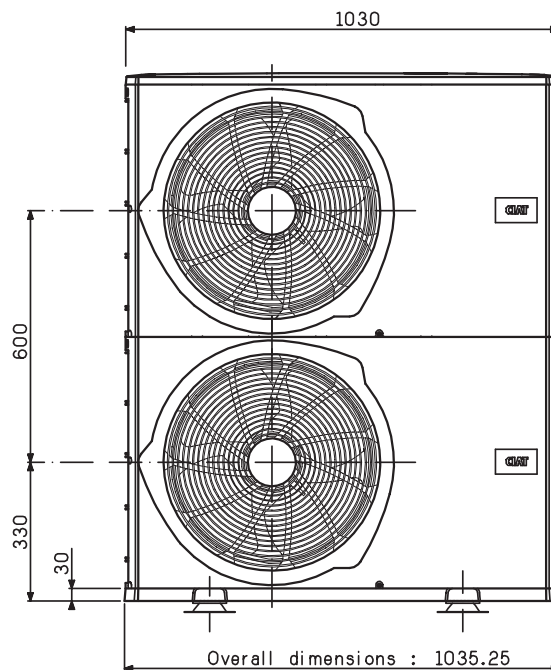
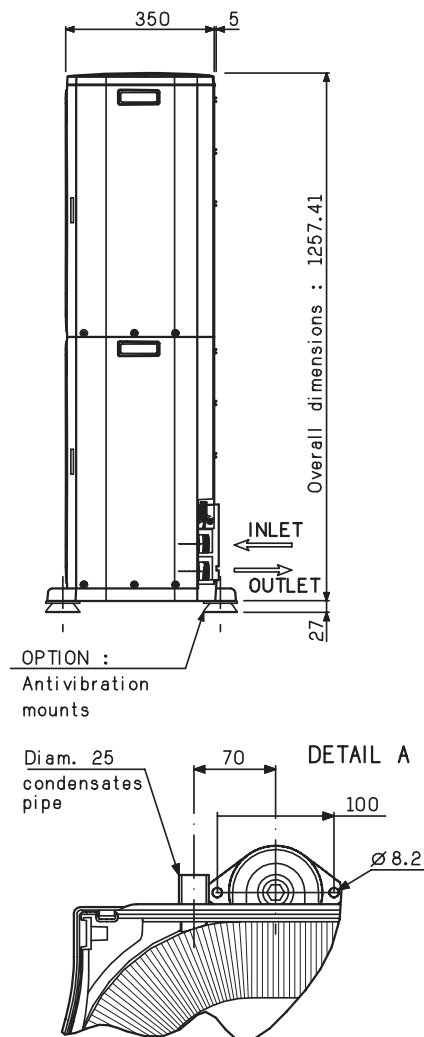


REAR VIEW

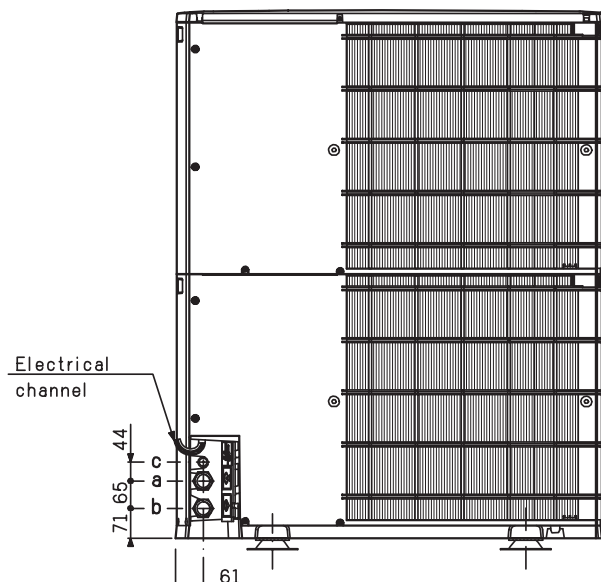


ENCOMBREMENT

AQUALIS 50 T - 65 T - 75 T



REAR VIEW



- a Water inlet diam G 1 ¹/₄ male (32 mm)
- b Water outlet diam G 1 ¹/₄ male (32 mm)
- c Valve outlet diam. ¹/₂ "

AQUALIS	Weight in kg	
	Empty	in operation
50T(H)	120	135
65T(H)	145	156
75T(H)	140	158

TECHNICAL CHARACTERISTICS

AQUALIS		20	28	35	50	65	75	
Compressor	Number	1						
	Type	scroll						
	Refrigerant fluid	R410A						
	Capacity control	%	0-100					
Coil	Type	Copper tubes, aluminium fins						
	Type of fan	Propeller - direct drive						
	Number and diameter	1 / Ø 450			2 / Ø 450			
	Motor output (max.)	W	110	160		2 x 110	2 x 160	
	Rotation speed (max.)	rpm	718	897		718	897	
	Air flow	m³/h	2540	2970		5100	5980	5820
Water/ refrigerant exchanger	Number	1						
	Type	Brazed plates						
	Water contents	l	1.04	1.24	1.62	2.38	2.76	3.7
Hydraulic module	Expansion vessel content	l	5			8		
	Expansion vessel inflation pressure	bar	1.5					
	Installation max. water capacity Water only / 30% glycol water	l	200/120			330/190		
	Installation mini water capacity	l	35	48	61	82	95	123
	Circulator number of speeds / Available pressure	KPa	3/54	3/41	3/46	3/103	3/100	3/95

SOUND PRESSURE LEVELS*

AQUALIS	20	28	35	50	65	75
Acoustic pressure	43	49		48	51	58

* at 5m from the unit, 1.5m from the ground, free field, directivity 2

ELECTRICAL CHARACTERISTICS

AQUALIS			230 V - 1 ph - 50 Hz + earth + Neutral			400 V - 3 ph - 50 Hz + earth + Neutral			
			20	28	35	35 T	50 T	65 T	75 T
Compressor	max. operating intensity (1)	A	12.9	17.5	22.2	7.6	10.3	11.2	14.3
Fan motor assembly	output	W	110	160			2 x 110	2 x 160	
	nominal intensity	A	0.47	0.74			0.47 x 2	0.74 x 2	
Compressor + Fan motor assembly	max. operating intensity	A	13.4	18.2	23	8.4	11.3	12.7	15.8
Circulator	Min/max. output	W	50 to 140		80 to 190		180 to 400		
	Min/max. nominal intensity	A	0.32 to 0.61		0.76 to 0.92		0.91 to 2.02		
Complete unit	Unit max. intensity*	A	14	19	24	9.3	13.3	14.7	17.8
Compressor starting intensity		A	58	82	97	48	64	74	101
Electrical cables not supplied (2)		mm ²	3G2.5	3G4	3G6	5G2.5			5G4
Isolating switch		Am	16	20	25	16			20

Intensity corresponding to the compressor max. operating intensity.

(1) intensity corresponding to the max. intensity of the compressor in operation

(2) cable with 2 or 3 loaded conductors, type PR in a channel or conduit, apparent mounting, for temperatures below 50°C

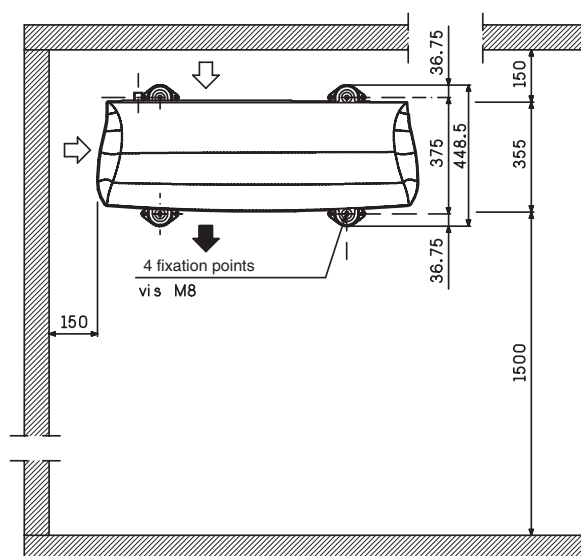
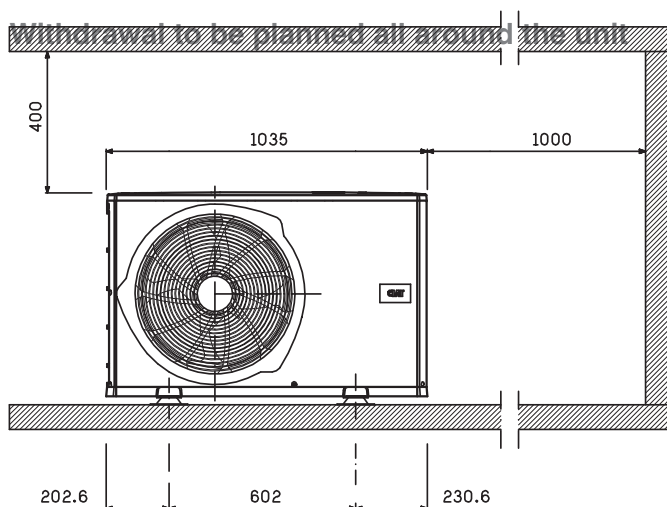
Note : For different conditions, refer to norm NFC 15.100

RECOMMENDATIONS FOR ASSEMBLY

■ Siting

The AQUALIS units are designed for outside location, close to the house, on a terrace or in a garden.

- There must be no obstacle to the air intake or discharge
- Choose with care the location of the unit, select a place compatible with the environment requirements (sound level, integration on the site...)
- It is necessary to plan a withdrawal all around the unit for connections, servicing and maintenance operations



■ Electrical connections

All the recommendations for electrical connections are mentioned on the diagram stuck inside the unit (they must be respected).

These connections will be carried out according to good engineering practice and conform to the existing standards.

An isolator on a circuit breaker at the electrical supply line departure must be planned (to be supplied by the installer).

NOTE : For the anti-frost protection, leave the unit under voltage to allow water circulation in the hydraulic network, glycol the installation for outside temperatures below 0°C.

■ Hydraulic connections

The hydraulic connections are to be carried out in accordance with accepted engineering practice.

In order to avoid ground or piping noise transmission, it is recommended to install flexible connections for the hydraulic connections, as well as antivibratil mounts underneath the unit.

- Place a $< 600\mu$ screen filter on the water circuit to avoid the plate exchanger fouling.

■ Commissioning

- Conform to our assembly and maintenance guides

■ Maintenance

- Conform to the maintenance brochure
- Subscribe for a maintenance contract

NOTES

[illegible]