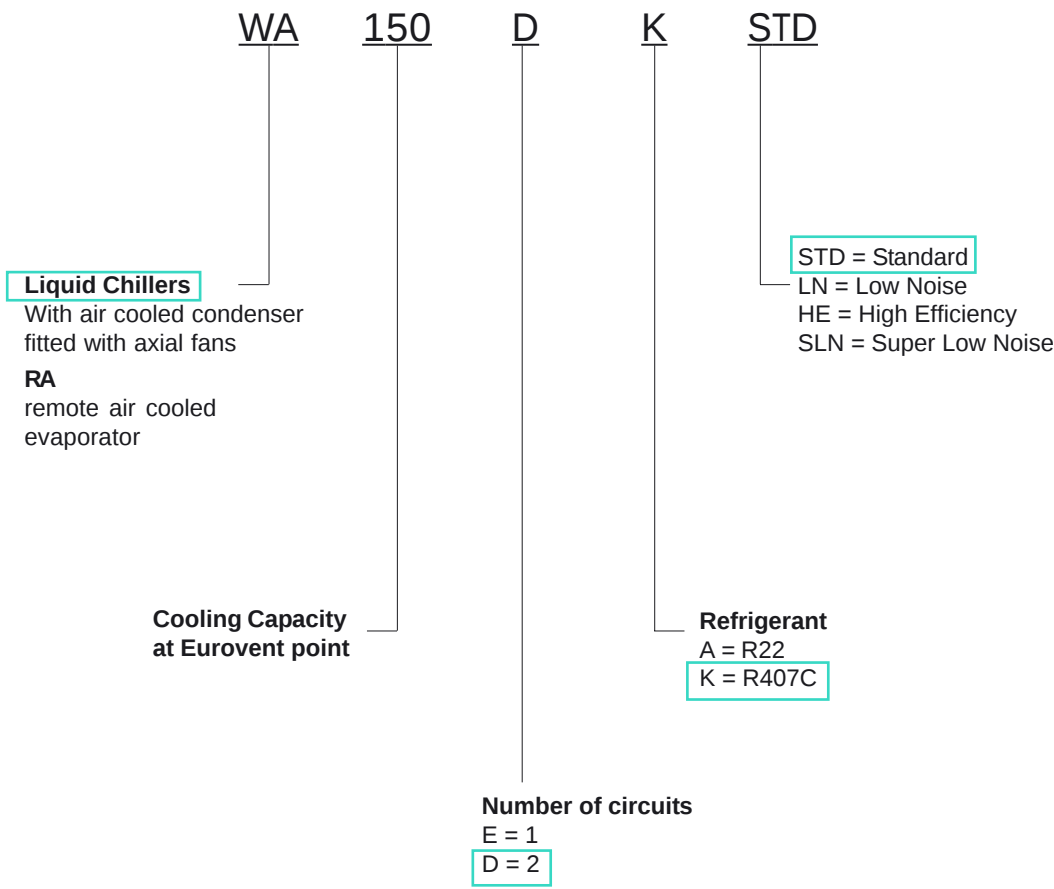




W a - d k

STANDa r d

ECOLOGIC	WA	150	200	230	270	300	370
Cooling mode							
Cooling capacity ⁽¹⁾	kW	144,6	184,7	220,8	266,7	283,4	350,9
Power input ⁽¹⁾	kW	68,4	79,5	95,3	118,8	134,2	157,1
Full load amps ⁽¹⁾	A	114,0	137,8	166,1	206,3	231,6	273,2
EER ⁽²⁾		2,4	2,7	2,6	2,6	2,4	2,5
EER global ⁽³⁾		2,1	2,3	2,3	2,2	2,1	2,2
Compressor							
Number of compressor	nr	4	4	Scroll - hermetic			
Capacity steps	%	0-25-50-75-100	0-17-33-50-67-83-100	0-17-33-50-67-83-100	0-22-28-50-55-78-100	0-25-50-75-100	0-17-33-50-67-83-100
Oil charge per compressor	l	4,1	6,3 & 4,1	5,9 & 4,1	5,9 & 6,3	5,9	6,3
Oil type	type	MOBIL EAL Arctic 22CC or ICI EMKARATE RL32CF					
Refrigerant							
Expansion	type	R407C Thermostatic expansion valve					
Number of circuit	nr	2	2	2	2	2	2
Charge per circuit	kg	19,8	18,6	28,2	28,2	28,2	42,6
Condenser							
Face area	m²	5,85	8,4	8,4	12,6	12,6	12,6
Number of rows	nr	3	2	3	2	2	3
Fin per inch	mm	2	1,8	2	1,8	1,8	2
Fan & Motor							
Number of fan	nr	3	4	4	6	6	6
Diameter	mm	710	710	710	710	710	710
Maximum speed	RPM	1350	1350	1350	1350	1350	1350
Nominal air flow	m³/h	57 500	78 000	75 400	117 000	117 000	113 600
External static pressure	Pa	0	0	0	0	0	0
Total motor power input	kW	7,5	10	10	15	15	15
Evaporator							
Water flow ⁽¹⁾	m³/h	24,4	31,1	37,2	44,9	47,7	59,1
Water volume	l	12,4	19,1	19,1	23,9	23,9	31,5
Pressure drop ⁽¹⁾	kPa	38,6	31,6	44,4	36,3	41	39
Water operating pressure	kPa	600	600	600	600	600	600
Hydraulic connections							
Water inlet/outlet with Hydro	Inches	2"1/2	2"1/2	2"1/2	4	4	4
Water inlet/outlet without Hydro	Inches	2"	2"	2"	2"1/2	2"1/2	2"1/2
Acoustic							
Global sound power level ⁽¹⁾	dB(A)	92	94	95	96	97	97
Electrical data							
Start-up intensity	A	299,1	385,8	456,6	500,9	524,8	536,3
Maximum current	A	129,7	160,4	195,2	239,5	263,3	310,9
Operating limits							
Min. outlet water temperature	°C	5	5	5	5	5	5
Max. inlet water temperature	°C	20	20	20	20	20	20
Min. difference water inlet/outlet	°C	3	3	3	3	3	3
Max. difference water inlet/outlet	°C	8	8	8	8	8	8
Min. outside air temperature	°C	6	6	6	6	6	6
Max. outside air temperature ⁽⁴⁾	°C	51	49	49	51	51	48
Dimensions							
Length	mm	4704	3304	3304	4704	4704	4704
Width	mm	1054	1904	1904	1904	1904	1904
Height	mm	1940	1959	1959	1961	1961	1961
Footprint	m²	4,9	6,2	6,2	8,9	8,9	8,9
Operating weight	kg	1480	1860	2019	2559	2627	2986
Shipping weight	kg	1468	1841	2000	2535	2603	2954
Construction							
Frame		Galvanised steel base					
Casing		ALUZINC					
Painting		Polyester - RAL 9002					
Insulation class		M1					

(1) All data are at Eurovent condition,
Gross cooling capacity with 12/7°C water temperature and 35°C air ambient,
Gross heating capacity with 7°C air inlet temperature and 40/45°C water temperature,

(2) EER and COP compressors only,

(3) EER and COP with fans,

(4) Normal cooling operation with CLIMATIC™ 50, 12°C/7°C water and one compressor unloaded

(NA) Not available,

w a / RA

STD

Spectrum per octave band (dBa)									Global sound power Lw dB(A)	Sound pressure at 10 meters (1) Pw dB(A)	Sound pressure at 10 meters enveloping surface (2) Pw dB(A)
	63 Hz	125 Hz	250 Hz	500 Hz	1000 Hz	2000 Hz	4000 Hz	8000 Hz			
150	51	74	78	84	86	88	84	75	92	64	61
200	55	79	83	87	91	93	88	79	94	66	63
230	55	79	83	87	91	93	88	79	95	67	64
270	57	81	84	89	93	95	90	80	96	68	65
300	57	81	84	89	93	95	90	80	97	69	65
370	57	81	84	89	93	95	90	80	97	69	65

W a - d k

STANDa r d

WA		150	200	230	270	300	370
UNITS - Electrical data				400V/3/50hZ			
Minimum and maximum voltage	V			360V/424V			
Maximum power	kW	78,5	97,0	116,3	143,1	156,2	187,7
Maximum current	A	129,7	160,4	195,2	239,5	263,3	310,9
Maximum current (with cos phi 0,95 option)	A	120,1	148,1	178,1	218,0	238,0	287,2
Start-up intensity	A	299,1	385,8	456,6	500,9	524,8	536,3
Start-up intensity (with sofstarter option)	A	219,9	277,0	328,6	372,9	396,8	427,5
Start-up intensity (with cos phi 0,95 option)	A	291,2	376,6	444,6	484,5	504,4	515,7
FANS - Electrical data							
Nominal air flow	m³/h	57 500	78 000	75 400	117 000	117 000	113 600
Available static pressure	kPa	0	0	0	0	0	0
Absorbed power	kW	7,5	10,0	10,0	15,0	15,0	15,0
OPTIONS - Electrical data							
Single pump	kW	1,85	3,0	3,0	4,0	4,0	4,0
Maximum current	A	4,61	6,0	6,0	7,5	7,5	7,5
Double pump	kW	2,2	3,0	3,0	4,0	4,0	4,0
Maximum current	A	5,2	6,0	6,0	7,5	7,5	7,5
Evaporator anti-freeze heater	kW	0,1	0,1	0,1	0,13	0,13	0,13
Maximum current	A	0,24	0,24	0,24	0,32	0,32	0,32
Hydraulic anti-freeze heater	kW	0,1	0,1	0,1	0,1	0,1	0,1
Maximum current	A	0,24	0,24	0,24	0,24	0,24	0,24
Hydronic anti-freeze heater	kW	0,13	NA	NA	NA	NA	NA
Maximum current	A	0,32	NA	NA	NA	NA	NA
Anti-freeze heater	kW	0,28	0,44	0,44	0,6	0,6	0,9
Maximum current	A	0,7	1,1	1,1	1,5	1,5	2,25

NA : Not available

w a H

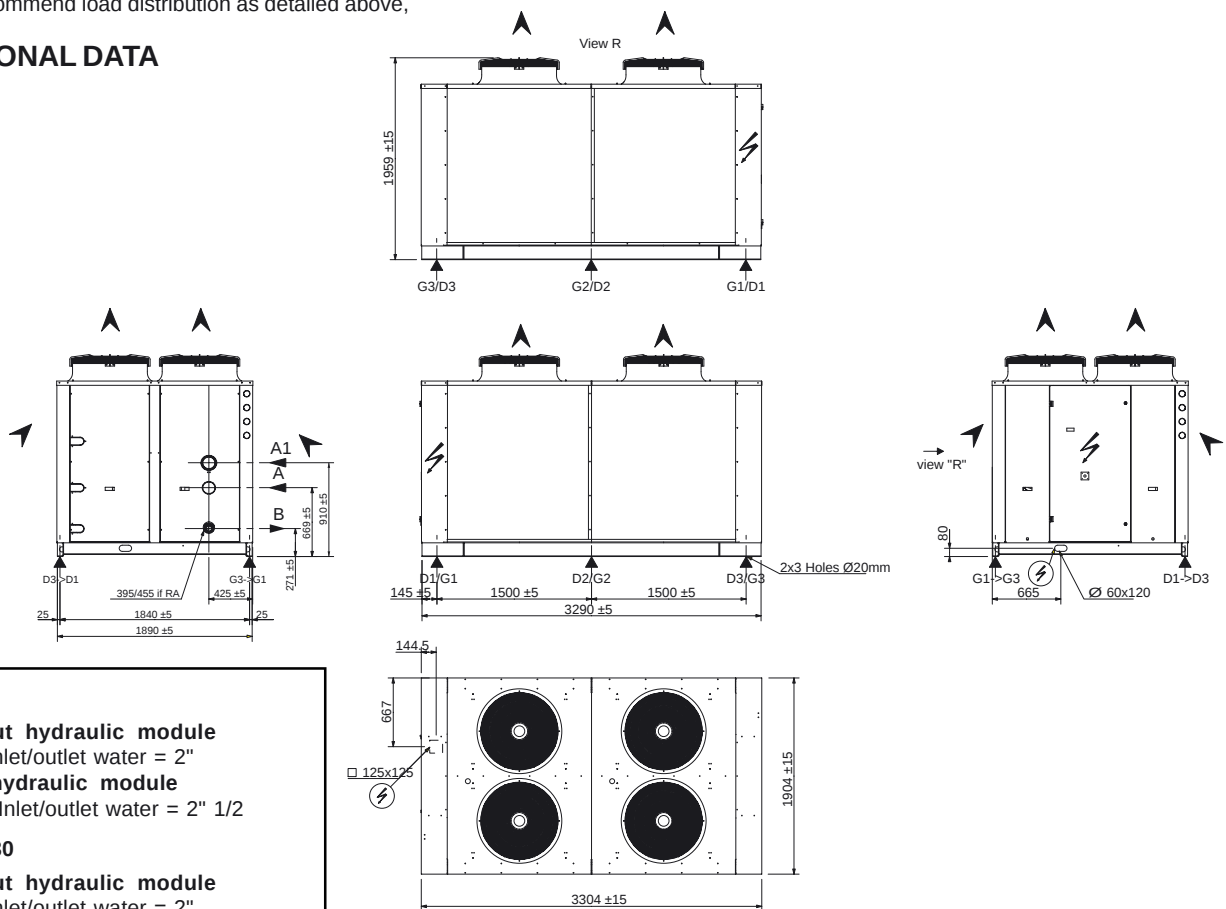
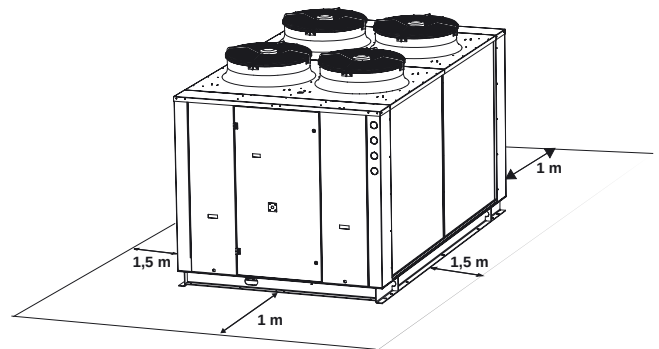
REVERSIBLE

WA		150	200	230
UNITS - Electrical data		400V/3/50hZ		
Minimum and maximum voltage	V	360V/424V		
Minimum power	kW	81,0	97,0	116,3
Maximum current	A	134,4	160,4	195,2
Maximum current (with cos phi 0,95 option)	A	123,9	148,1	178,1
Start-up intensity	A	303,8	385,8	364,5
Start-up intensity (with sofstarter option)	A	224,6	277,0	285,3
Start-up intensity (with cos phi 0,95 option)	A	295,0	376,6	349,2
FANS - Electrical data				
Nominal air flow	m³/h	57 500	57 500	78 000
Available static pressure	kPa	0	0	0
Absorbed power	kW	10,0	10,0	10,0
OPTIONS - Electrical data				
Single pump	kW	1,85	3,0	3,0
Maximum current	A	4,61	3,0	6,0
Double pump	kW	2,20	3,0	3,0
Maximum current	A	5,20	6,0	6,0
Evaporator anti-freeze heater	kW	0,1	0,1	0,1
Maximum current	A	0,24	0,24	0,24
Anti-freeze heater	kW	0,28	0,44	0,44
Maximum current	A	0,70	1,10	1,10

wa RA 150	SLN
wa 150	HE
wa RA 200 / 230	STD - LN
wah 200 / 230	STD

	G1	G2	G3	
WA150HE/SLN	261	348	257	
WA200STD/LN	304	394	255	
WA230STD/LN	305	449	344	
WAH 200	315	408	264	
WAH 230	313	461	354	
	249	333	223	RA 150 SLN
	291	377	244	RA200 STD/LN
	295	434	283	RA230 STD/LN
	G1	G2	G3	
WA150HE/SLN	250	318	202	
WA 200STD/LN	286	353	268	
WA 230 STD/LN	277	373	271	
WAH 200	296	365	277	
WAH 230	285	384	279	
	273	304	223	RA 150 SLN
	273	337	244	RA200 STD/LN
	269	362	283	RA230 STD/LN

OVERHEAD OBSTRUCTIONS ARE NOT PERMITTED



- **Without hydraulic module**
A/B : Inlet/outlet water = 2"
- **With hydraulic module**
A1/B : Inlet/outlet water = 2" 1/2

- **Without hydraulic module**
A/B : Inlet/outlet water = 2"
- **With hydraulic module**
A1/B : Inlet/outlet water = 2" 1/2

- **Suction Line** : 2" 1/8
- **Liquid Line** : 7/8"