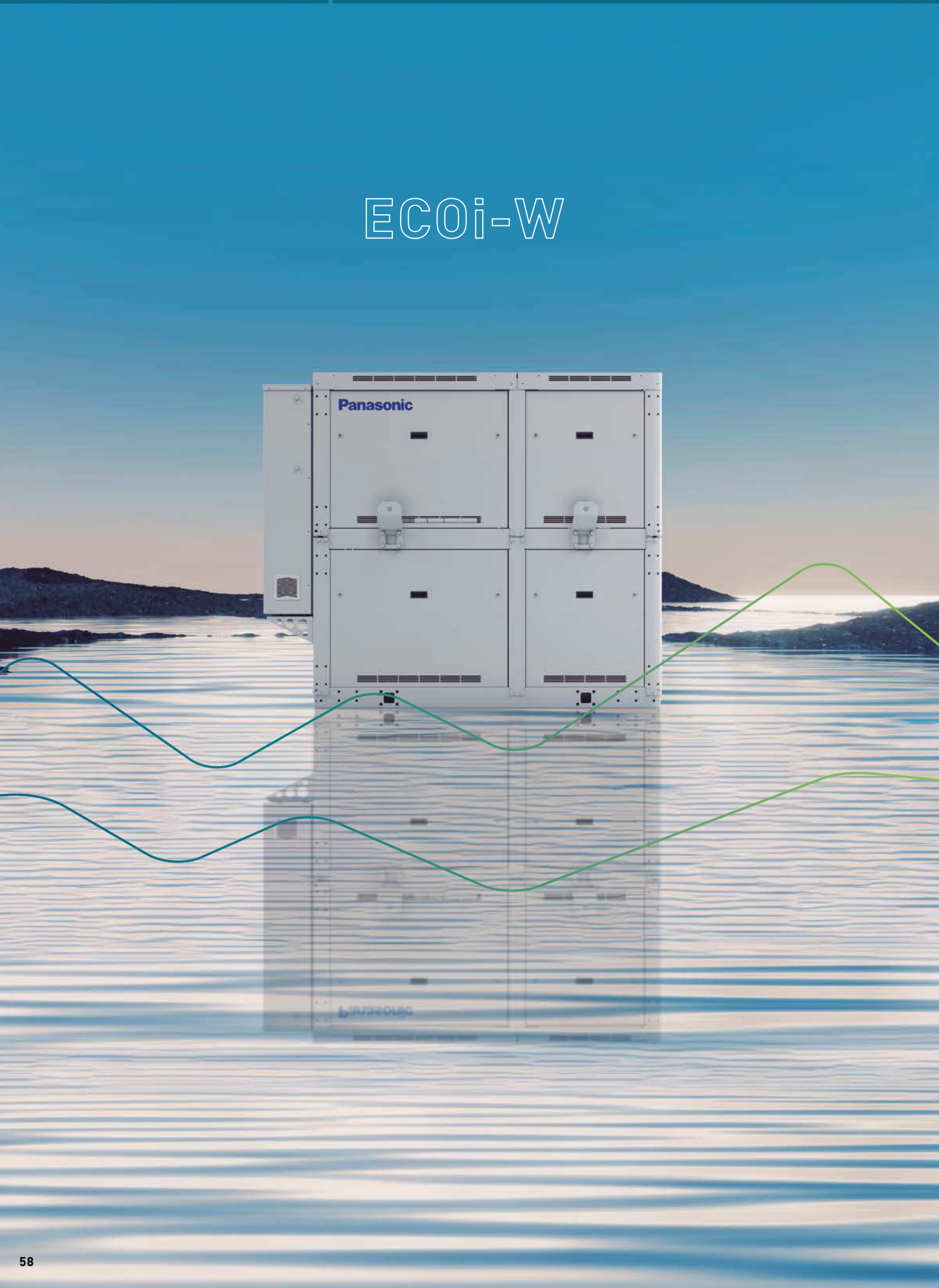
ECOi-W



Water cooled chillers, heat pumps and condenserless units

Water cooled chillers, heat pumps and condenserless units	→ 60
Quick selection guide - Water cooled chillers	→ 62
Quick selection guide - Water cooled heat pumps	→ 63
Quick selection guide - Water cooled condenserless units	→ 64
ECOi-W WQ 20-190 C/H/R	→ 66
ECOi-W WQ 524-1604 C/H/R	→ 68
ECOi-W WSW-N EVO 440-1550 C/H/R	→ 70

Water cooled chillers, heat pumps and condenserless units

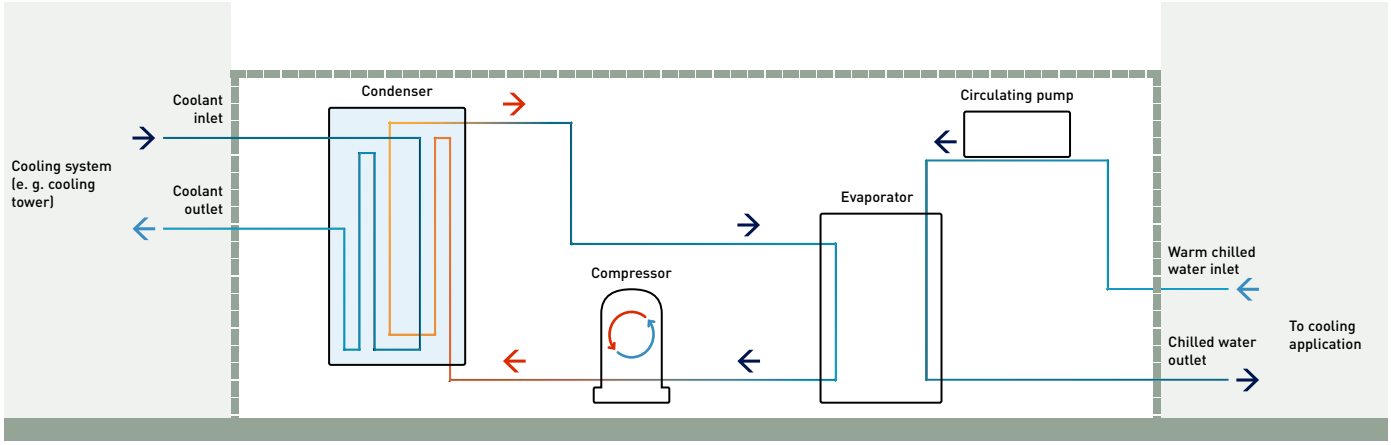
Quality and comfort for all your projects! Perfect for any type of building, the system consists of water cooled chillers or heat pumps that provide cold or hot water to water terminals. This system is particularly well suited for applications such as office buildings, hotels, shopping centers and hospitals.

Water cooled chillers use water as the cooling medium to extract heat from the cooling circuit by cooling and condensing the refrigerant.

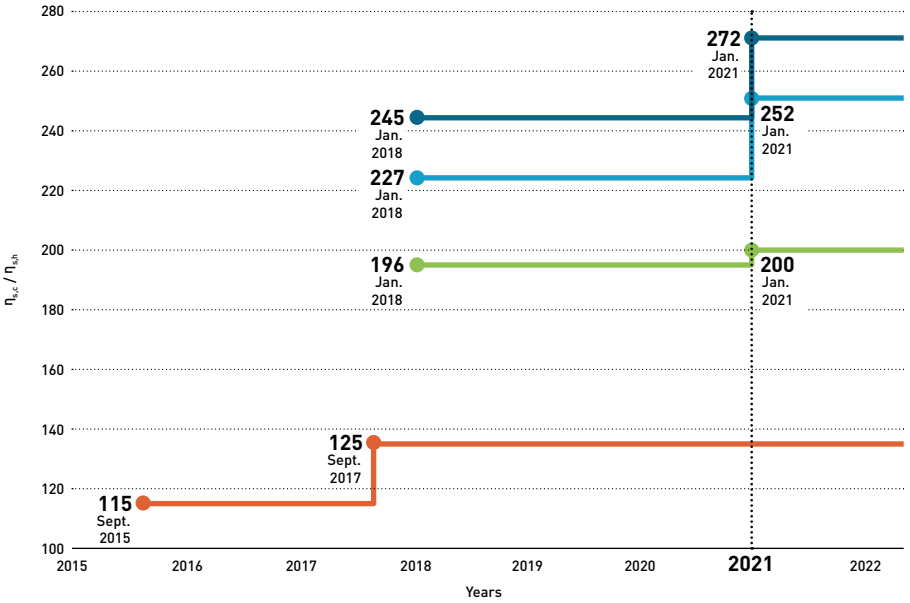
Advantages:

· Higher cooling efficiency compared to air cooled chillers
· Less impact on the environment with less waste heat or fan noise

* The below illustration show cooling application.



Ecodesign



Water to water comfort cooling only [1].

≤400 kW.	>400 kW and ≤1500 kW.	>1500 kW.
Minimum $\eta_{s,c}$ to be Ecodesign compliant. COMMISSION REGULATION (EU) 2016/2281.	Minimum $\eta_{s,c}$ to be Ecodesign compliant. COMMISSION REGULATION (EU) 2016/2281.	Minimum $\eta_{s,c}$ to be Ecodesign compliant. COMMISSION REGULATION (EU) 2016/2281.

Water to water heat pumps [2].

≤400 kW.	>400 kW and ≤1500 kW.	>1500 kW.
Minimum $\eta_{s,h}$ to be Ecodesign compliant. COMMISSION REGULATION (EU) No813/2013.	Minimum $\eta_{s,h}$ to be Ecodesign compliant. COMMISSION REGULATION (EU) 2016/2281.	Minimum $\eta_{s,h}$ to be Ecodesign compliant. COMMISSION REGULATION (EU) 2016/2281.

1) Calculated at nominal conditions: chilled water inlet/outlet temperature: 12/7 °C, outdoor ambient temperature 30/35 °C DB.
2) Rated heat output of space heaters and combination heaters at reference design conditions (Tdesign -10 °C) as stated in COMMISSION REGULATION (EU) No 813/2013.

Quick selection guide - Water cooled chillers

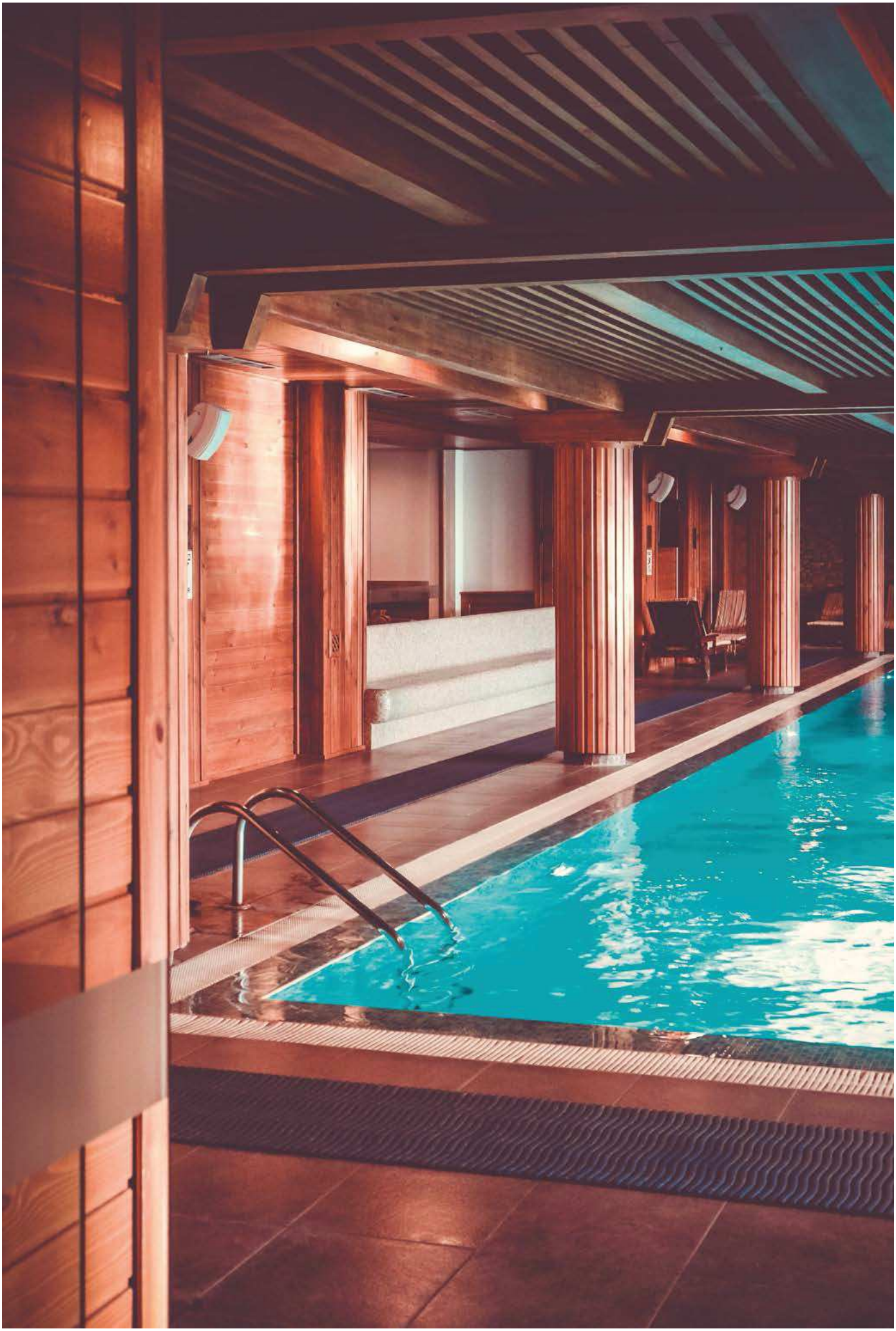
Page		Size	Cooling capacity	SEER	Water flow (m³/h)	Sound power (dB(A))	Dimensions (mm)
ECOi-W WQ C		20	21,2	**5,58**	3,67	65	821 x 1350 x 455
		25	26,2	**5,60**	4,54	67	821 x 1350 x 455
		30	31,1	**5,45**	5,40	67	821 x 1350 x 455
P. 66		35	34,8	**5,50**	6,05	68	821 x 1350 x 455
		40	39,2	**5,35**	6,80	68	821 x 1350 x 455
		45	46,6	**5,83**	8,06	70	821 x 1350 x 455
		50	50,9	**6,13**	8,78	70	1210 x 1500 x 850
		60	61,1	**6,38**	10,55	70	1210 x 1500 x 850
		75	77,3	**5,95**	13,36	72	1210 x 1500 x 850
P. 66		90	91,1	**6,70**	15,73	73	1210 x 1500 x 850
		120	118,4	**5,90**	20,45	78	1210 x 1500 x 850
		150	147,1	**6,13**	25,38	81	1210 x 1500 x 850
		170	170	**6,08**	29,34	81	1210 x 1500 x 850
		190	192,7	**6,20**	33,26	81	1210 x 1500 x 850
		524	154,3	**5,55**	26,64	81	2250 x 1845 x 850
		604	181,8	**6,28**	31,36	82	2250 x 1845 x 850
		704	208,9	**6,10**	36,04	85	2250 x 1845 x 850
		804	232,6	**5,75**	40,32	87	2250 x 1845 x 850
P. 68		904	265,8	**6,10**	45,72	89	2250 x 1845 x 850
		1004	295,6	**6,10**	50,76	90	2250 x 1845 x 850
		1104	338	**6,20**	58,32	90	2250 x 1845 x 850
		1204	379,2	**6,25**	65,52	90	2250 x 1845 x 850
		1404	421,1	**6,43**	72,36	92	2250 x 1845 x 850
		1604	459,8	**6,47**	79,20	94	2250 x 1845 x 850
ECOi-W WSW-N EVO C		440	418,6	**6,38**	72,00	95	4250 x 1650 x 1350
		490	471,6	**6,38**	81,10	95	4250 x 1650 x 1350
		570	539,3	**6,52**	92,80	95	4210 x 1650 x 1350
		630	601,9	**6,42**	103,50	95	4210 x 1650 x 1350
		700	664,4	**6,38**	114,30	95	4180 x 1650 x 1350
		770	734,6	**6,38**	126,40	95	4180 x 1650 x 1350
		860	825,0	**6,41**	141,90	98	4510 x 1710 x 1520
P. 70		920	874,1	**6,41**	150,30	98	4510 x 1710 x 1520
		990	936,6	**6,41**	161,10	98	4600 x 1710 x 1520
		1070	1019,1	**6,42**	175,30	98	4650 x 1710 x 1520
		1130	1071,8	**6,53**	184,30	98	4650 x 1710 x 1520
		1220	1159,3	**6,51**	199,40	98	4650 x 1710 x 1520
		1280	1226,1	**6,44**	210,90	98	4650 x 1710 x 1520
		1400	1334,6	**6,45**	229,50	98	5350 x 1710 x 1520
		1550	1457,9	**6,42**	250,80	98	5350 x 1710 x 1520

Quick selection guide - Water cooled heat pumps

Page		Size	Cooling and heating capacity	SEER	SCOP	Water flow (m³/h)	Sound power (dB(A))	Dimensions (mm)
ECOi-W WQ H		20	20,8 / 23,7	**5,13**	**5,17**	4,07	65	821 x 1350 x 455
		25	26,0 / 28,9	**5,00**	**5,45**	4,97	67	821 x 1350 x 455
		30	30,1 / 33,6	**4,88**	**5,33**	5,80	67	821 x 1350 x 455
P. 66		35	34,0 / 38,5	**5,10**	**5,05**	6,62	68	821 x 1350 x 455
		40	38,2 / 42,9	**5,00**	**4,83**	7,38	68	821 x 1350 x 455
		45	45,5 / 51,2	**5,47**	**5,28**	8,82	70	821 x 1350 x 455
		50	49,9 / 57,7	**4,70**	**5,70**	9,83	70	1210 x 1500 x 850
		60	58,9 / 68,2	**4,88**	**5,88**	11,63	70	1210 x 1500 x 850
		75	76,1 / 86,3	**4,47**	**5,70**	14,72	72	1210 x 1500 x 850
P. 66		90	88,6 / 102,2	**4,83**	**5,78**	17,42	73	1210 x 1500 x 850
		120	114,9 / 132	**4,92**	**5,75**	22,46	78	1210 x 1500 x 850
		150	144,3 / 164,2	**4,97**	**5,63**	28,01	81	1210 x 1500 x 850
		170	165,7 / 190,1	**5,65**	**5,95**	32,40	81	1210 x 1500 x 850
		190	185,4 / 212,3	**5,10**	**5,63**	36,18	81	1210 x 1500 x 850
		524	150,7 / 170,2	**4,65**	**5,40**	29,16	81	2250 x 1845 x 850
		604	176,2 / 201,1	**4,92**	**5,20**	34,45	82	2250 x 1845 x 850
		704	204,5 / 231,8	**4,92**	**5,38**	39,60	85	2250 x 1845 x 850
		804	225,4 / 256,5	**4,68**	**5,35**	43,92	87	2250 x 1845 x 850
		904	263,1 / 295,6	**5,15**	**5,73**	50,76	89	2250 x 1845 x 850
P. 68		1004	291,3 / 331	**5,10**	**5,85**	56,88	90	2250 x 1845 x 850
		1104	332 / 376,6	**5,27**	**5,83**	64,80	90	2250 x 1845 x 850
		1204	370,5 / 418,5	**5,30**	**5,85**	72,00	90	2250 x 1845 x 850
		1404	421,1 / 468,0	**6,43**	**—**	80,64	92	2250 x 1845 x 850
		1604	459,8 / 508,4	**6,47**	**—**	87,48	94	2250 x 1845 x 850
ECOi-W WSW-N EVO H		440	365,9 / 470,3	**6,53**	**4,46**	104,9	95	4590 x 1650 x 1450
		490	418,9 / 536,5	**6,38**	**4,52**	120,1	95	4590 x 1650 x 1450
		570	483,2 / 621,7	**6,40**	**4,4**	138,5	95	4630 x 1650 x 1450
		630	541,0 / 698,6	**6,38**	**4,31**	155,1	95	4630 x 1650 x 1450
		700	595,6 / 764,7	**6,45**	**4,47**	170,7	95	4320 x 1650 x 1450
		770	646,6 / 835,9	**6,60**	**4,37**	185,3	95	4560 x 1650 x 1450
		860	715,5 / 923,0	**6,40**	**4,39**	205,1	98	5110 x 1680 x 1520
P. 70		920	772,0 / 992,7	**6,50**	**4,44**	221,3	98	5110 x 1680 x 1520
		990	828,1 / 1063,0	**6,40**	**4,49**	237,4	98	5100 x 1680 x 1520
		1070	891,5 / 1146,0	**6,40**	**4,45**	255,6	98	5100 x 1680 x 1520
		1130	958,8 / 1231,8	**6,50**	**4,45**	274,9	98	5000 x 1680 x 1520
		1220	1023,8 / 1315,8	**6,48**	**4,41**	293,5	98	5000 x 1680 x 1520
		1280	1078,2 / 1386,1	**6,48**	**4,37**	309,1	98	5000 x 1680 x 1520
		1400	1186,9 / 1523,8	**6,50**	**4,45**	340,3	98	5300 x 1710 x 1580
		1550	1285,5 / 1654,6	**6,70**	**4,38**	368,5	98	5300 x 1710 x 1580

Quick selection guide - Water cooled condenserless units

Page		Size	Cooling and heating capacity	Water flow (m³/h)	Sound power (dB(A))	Dimensions (mm)
ECOi-W WQ R		20	18,3	4,07	65	821 x 1350 x 455
		25	22,7	4,97	67	821 x 1350 x 455
		30	27,1	5,80	67	821 x 1350 x 455
P. 66		35	30,0	6,62	68	821 x 1350 x 455
		40	34,2	7,38	68	821 x 1350 x 455
		45	43,1	8,82	70	821 x 1350 x 455
		50	45,0	9,83	70	1210 x 1500 x 850
		60	53,4	11,63	70	1210 x 1500 x 850
		75	67,5	14,72	72	1210 x 1500 x 850
P. 66		90	80,1	17,42	73	1210 x 1500 x 850
		120	104,0	22,46	78	1210 x 1500 x 850
		150	128,0	28,01	81	1210 x 1500 x 850
		170	148,0	32,40	81	1210 x 1500 x 850
		190	168,0	36,18	81	1210 x 1500 x 850
		524	130,0	29,16	81	2250 x 1845 x 850
		604	155,3	34,45	82	2250 x 1845 x 850
		704	177,6	39,60	85	2250 x 1845 x 850
		804	196,5	43,92	87	2250 x 1845 x 850
P. 68		904	224,2	50,76	89	2250 x 1845 x 850
		1004	247,2	56,88	90	2250 x 1845 x 850
		1104	285,9	64,80	90	2250 x 1845 x 850
		1204	316,1	72,00	90	2250 x 1845 x 850
		1404	368,0	80,64	92	2250 x 1845 x 850
		1604	397,0	87,48	94	2250 x 1845 x 850
ECOi-W WSW-N EVO R		440	358,6	104,9	95	4590 x 1650 x 1450
		490	405,3	120,1	95	4590 x 1650 x 1450
		570	472,7	138,5	95	4630 x 1650 x 1450
		630	535,6	155,1	95	4630 x 1650 x 1450
		700	586,2	170,7	95	4320 x 1650 x 1450
		770	638,1	185,3	95	4560 x 1650 x 1450
		860	708,9	205,1	98	5110 x 1680 x 1520
P. 70		920	758,1	221,3	98	5110 x 1680 x 1520
		990	817,2	237,4	98	5100 x 1680 x 1520
		1070	886,2	255,6	98	5100 x 1680 x 1520
		1130	947,7	274,9	98	5000 x 1680 x 1520
		1220	1015,0	293,5	98	5000 x 1680 x 1520
		1280	1075,9	309,1	98	5000 x 1680 x 1520
		1400	1181,4	340,3	98	5300 x 1710 x 1580
		1550	1277,8	368,5	98	5300 x 1710 x 1580



ECOi-W WQ 20-190 C/H/R · R410A

Water cooled chillers, heat pumps and condenserless units.

Cooling capacity: 21,2 to 192,7 kW.
Heating capacity: 23,7 to 212,3 kW.

The range at a glance

- 3 versions: C (cooling only), H (heat pump) and R (condenserless unit)
- 14 sizes
- 2 acoustic options: STD (standard) and S (super low noise)
- 2 frames: F1 (size from 20 to 45) and F2 (size from 50 to 190)

Advantages

- High full load efficiency: EER up to 4,50, COP up to 3,90
- High seasonal performances: SEER up to 6,70
- Compressor box: remarkable sound reduction
- Reduced refrigerant charge: less than 10 kg per circuit for units up to size 90
- Advanced electronic controller: auto-adaptive function to reduce water content in the piping system
- Condensing pressure control option suitable for well application
- Wide range of Plug & Play hydrokit: easy hydraulic installation
- DHW function available on the controller with DHW probe and 3 way valve available as options
- Desuperheater heat exchanger available as option (50-190 sizes)

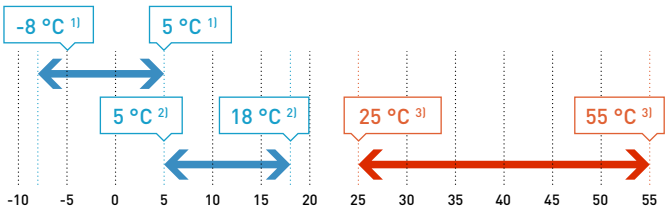
Equipment

- 1 refrigerant circuit
- 1 or 2 scroll compressors
- Plate evaporator (AISI 316)
- Compressor acoustic box (standard on S)
- Differential pressure switch
- Electronic expansion valve (standard C type 170-190)
- Phase sequence control

Operating limits

To be confirmed with AC SELECT:
https://acselect.panasonic.eu/

Leaving water temperature.



1) With glycol + EEV.
2) Without glycol + EEV.
3) Only C/H types 20-190.
Note: maximum % glycol (ethylenic or propilenic): 40%.

ECOi-W WQ 20-190 C/H/R				
Cooling	Leaving water temperature	ΔT	°C	From 3 to 8
Heating 1)	Leaving water temperature	ΔT	°C	From 3 to 15

1) Only C/H types 20-190.

Accessories and options
BMS interface
Compressor jackets
Desuperheater available for frame 2
Hydrokit with 1 or 2 pumps for evaporator and condenser
Mechanical gauges kit

Accessories and options
Power factor corrector capacitors
Soft starter
Water filter
Water flow switch

AC SELECT.

Smart and user-friendly the new air conditioning selection program: https://acselect.panasonic.eu/

Technical performance

Power supply	Voltage	V	400	400	400	400	400	400	400	400	400	400	400	400	400	400
	Phase		Three phase	Three phase	Three phase	Three phase	Three phase	Three phase	Three phase	Three phase	Three phase	Three phase	Three phase	Three phase	Three phase	Three phase
	Frequency	Hz	50	50	50	50	50	50	50	50	50	50	50	50	50	50
Size			**20**	**25**	**30**	**35**	**40**	**45**	**50**	**60**	**75**	**90**	**120**	**150**	**170**	**190**
ECOi-W WQ 20-190 C - cooling only	**P-WQE****CA**		**0020**	**0025**	**0030**	**0035**	**0040**	**0045**	**0050**	**0060**	**0075**	**0090**	**0120**	**0150**	**0170**	**0190**
Cooling capacity [1]		kW	21,2	26,2	31,1	34,8	39,2	46,6	50,9	61,1	77,3	91,1	118,4	147,1	170,0	192,7
Input power [1]		kW	4,56	5,67	6,84	7,54	8,60	10,1	11,7	13,5	17,1	20,7	26,5	33,0	37,7	42,8
EER [1]			4,67	4,65	4,57	4,64	4,58	4,65	4,35	4,53	4,52	4,40	4,48	4,47	4,51	4,51
SEER [2] [3]			**5,58**	**5,6**	**5,45**	**5,5**	**5,35**	**5,83**	**6,13**	**6,38**	**5,95**	**6,7**	**5,90**	**6,13**	**6,08**	**6,2**
$\eta_{s,c}$ [2] [3]			**220**	**221**	**215**	**217**	**211**	**230**	**242**	**252**	**235**	**265**	**233**	**242**	**240**	**245**
Sound power (STD / S) [4]		dB(A)	65/62	67 / 64	67 / 64	68 / 65	68 / 66	70 / 67	70 / 68	70 / 68	72 / 70	73 / 71	78 / 76	81 / 79	81 / 79	81 / 79
Sound pressure at 10 m (STD / S) [5]		dB(A)	34/31	36 / 33	36 / 33	37 / 34	38 / 35	39 / 36	39 / 37	39 / 37	40 / 39	42 / 40	47 / 45	50 / 48	50 / 48	50 / 48
ECOi-W WQ 20-190 H - heat pump	**P-WQE****HA**		**0020**	**0025**	**0030**	**0035**	**0040**	**0045**	**0050**	**0060**	**0075**	**0090**	**0120**	**0150**	**0170**	**0190**
Cooling capacity [1]		kW	20,8	26,1	30,2	34,1	38,3	45,7	49,9	58,9	76,1	88,6	114,9	144,3	165,7	185,4
Input power [1]		kW	4,61	5,71	6,90	7,68	8,69	10,2	12,0	13,9	17,5	21,1	27,0	33,3	38,2	43,3
EER [1]			4,52	4,56	4,37	4,44	4,41	4,46	4,23	4,31	4,42	4,25	4,31	4,36	4,37	4,30
SEER [2]			**5,13**	**5**	**4,88**	**5,1**	**5**	**5,48**	**4,7**	**4,88**	**4,47**	**4,83**	**4,92**	**4,97**	**5,65**	**5,1**
$\eta_{s,c}$ [2]			**202**	**197**	**192**	**201**	**197**	**216**	**185**	**192**	**176**	**190**	**194**	**196**	**223**	**201**
Heating capacity [6]		kW	23,9	29,1	34,0	38,8	43,3	51,5	58,8	65,9	87,7	104	134	167	193	215
Input power [6]		kW	5,77	7,06	8,36	9,50	10,6	12,5	14,1	16,8	20,8	24,9	32,1	39,4	45,9	51,4
COP [6]			4,13	4,13	4,07	4,09	4,08	4,11	4,16	3,93	4,22	4,16	4,17	4,23	4,20	4,19
COP [7]			5,66	5,62	5,58	5,60	5,52	5,24	5,32	5,12	5,43	5,23	5,29	5,38	5,33	5,33
SCOP [8] [9]			**5,30**	**5,45**	**5,33**	**5,05**	**4,83**	**5,28**	**5,70**	**5,88**	**5,70**	**5,78**	**5,75**	**5,63**	**5,95**	**5,63**
Energy efficiency class [8] [9]			**A+++**	**A+++**	**A+++**	**A+++**	**A+++**	**A+++**	**A+++**	**A+++**	**—**	**—**	**—**	**—**	**—**	**—**
$\eta_{s,h}$ [8] [9]			**204**	**210**	**205**	**194**	**185**	**203**	**220**	**227**	**220**	**223**	**222**	**217**	**230**	**217**
SCOP [8] [10]			**4,00**	**4,48**	**4,45**	**4,30**	**4,28**	**4,45**	**4,63**	**4,78**	**4,75**	**4,75**	**4,73**	**4,48**	**4,88**	**4,68**
Energy efficiency class [8] [10]			**A+++**	**A+++**	**A+++**	**A+++**	**A+++**	**A+++**	**A+++**	**A+++**	**—**	**—**	**—**	**—**	**—**	**—**
$\eta_{s,h}$ [8] [10]			**152**	**171**	**170**	**164**	**163**	**170**	**177**	**183**	**182**	**182**	**181**	**171**	**187**	**179**
Sound power (STD / S) [4]		dB(A)	65 / 62	67 / 64	67 / 64	68 / 65	69 / 66	70 / 67	70 / 68	70 / 68	72 / 70	73 / 71	78 / 76	81 / 79	81 / 79	81 / 79
Sound pressure at 10 m (STD / S) [5]		dB(A)	34 / 31	36 / 33	36 / 33	37 / 34	38 / 35	39 / 36	39 / 37	39 / 37	40 / 39	42 / 40	47 / 45	50 / 48	50 / 48	50 / 48
ECOi-W WQ 20-190 R - condenserless unit	**P-WQE****RA**		**0020**	**0025**	**0030**	**0035**	**0040**	**0045**	**0050**	**0060**	**0075**	**0090**	**0120**	**0150**	**0170**	**0190**
Cooling capacity [11]		kW	18,3	22,7	27,1	30,0	34,2	43,1	45,0	53,4	67,5	80,1	104,0	128,0	148,0	168,0
Input power [11]		kW	5,70	6,97	8,07	9,15	10,1	12,2	13,7	16	20,1	23,9	30,8	38,1	44,2	49,7
Sound power (STD / S) [4]		dB(A)	65/62	67 / 64	67 / 64	68 / 65	69 / 66	70 / 67	70 / 68	70 / 68	72 / 70	73 / 71	78 / 76	81 / 79	81 / 79	81 / 79
Sound pressure at 10 m (STD / S) [5]		dB(A)	34/31	36 / 33	36 / 33	37 / 34	38 / 35	39 / 36	39 / 37	39 / 37	41 / 39	42 / 40	47 / 45	50 / 48	50 / 48	50 / 48

Physical features

ECOi-W WQ 20-190 C/H - cooling only / heat pump			**20**	**25**	**30**	**35**	**40**	**45**	**50**	**60**	**75**	**90**	**120**	**150**	**170**	**190**
Dimension	Height	mm	1350	1350	1350	1350	1350	1350	1500	1500	1500	1500	1500	1500	1500	1500
	Width	mm	455	455	455	455	455	455	850	850	850	850	850	850	850	850
	Length	mm	821	821	821	821	821	821	1210	1210	1210	1210	1210	1210	1210	1210
Operating weight	Cooling only	kg	162	182	179	185	191	214	352	371	392	411	597	666	701	745
	Heat pump	kg	165	187	184	190	195	219	360	379	403	422	610	683	718	762
Water connection (evaporator and condenser)																
Connection type			Victaulic®	Victaulic®	Victaulic®	Victaulic®	Victaulic®	Victaulic®	Victaulic®	Victaulic®	Victaulic®	Victaulic®	Victaulic®	Victaulic®	Victaulic®	Victaulic®
Inlet/outlet diameter		Inch	1 ½	1 ½	1 ½	1 ½	1 ½	1 ½	2 ½	2 ½	2 ½	2 ½	2 ½	2 ½	2 ½	2 ½
ECOi-W WQ 20-190 R - condenserless unit			**20**	**25**	**30**	**35**	**40**	**45**	**50**	**60**	**75**	**90**	**120**	**150**	**170**	**190**
Dimension	Height	mm	1350	1350	1350	1350	1350	1350	1500	1500	1500	1500	1500	1500	1500	1500
	Width	mm	455	455	455	455	455	455	850	850	850	850	850	850	850	850
	Length	mm	821	821	821	821	821	821	1210	1210	1210	1210	1210	1210	1210	1210
Operating weight		kg	144	164	166	166	172	172	332	344	365	376	558	612	643	674
Water connection (evaporator)																
Connection type			Victaulic®	Victaulic®	Victaulic®	Victaulic®	Victaulic®	Victaulic®	Victaulic®	Victaulic®	Victaulic®	Victaulic®	Victaulic®	Victaulic®	Victaulic®	Victaulic®
Inlet/outlet diameter		Inch	1 ½	1 ½	1 ½	1 ½	1 ½	1 ½	2 ½	2 ½	2 ½	2 ½	2 ½	2 ½	2 ½	2 ½
Remote condenser refrigerant connections																
Connection type			To be brazed	To be brazed	To be brazed	To be brazed	To be brazed	To be brazed	To be brazed	To be brazed	To be brazed	To be brazed	To be brazed	To be brazed	To be brazed	To be brazed
Inlet diameter		Inch	⅝	⅝	⅝	⅝	⅝	⅝	⅝	⅝	⅞	⅞	⅞	⅞	1 ⅛	1 ⅛
Outlet diameter		Inch	⅝	⅞	⅞	⅞	⅞	⅞	⅞	⅞	1 ⅛	1 ⅛	1 ⅜	1 ⅝	1 ⅝	1 ⅝

1) According to EN14511 standard: evaporator EWT/LWT 12 °C/7 °C, condenser EWT/LWT 30 °C/35 °C. 2) According to EN14825 standard. 3) ErP compliant: following COMMISSION REGULATION (EU) 2016/2281. 4) Sound levels are at fully loaded conditions. Sound power values refers to ISO 3744 standard. 5) Sound pressures refer to ISO 3744 standard, parallelepiped shape. 6) According to EN14511 standard: evaporator EWT/LWT 10 °C/7 °C, condenser EWT/LWT 40 °C/45 °C. 7) According to EN14511 standard: evaporator EWT/LWT 10 °C/7 °C, condenser EWT/LWT 30 °C/35 °C. 8) ErP compliant: following COMMISSION REGULATION (EU) No 813/2013. 9) According to EN14825 standard - low temperature application (35 °C). 10) According to EN14825 standard - medium temperature application (55 °C). 11) Data refers to evaporator water temperature 12/7 °C and condensing temperature 50 °C.

ErP | HIGH SEER 6,70 | HIGH SCOP 5,88 | WATER COOLED | PLATE HEAT EXCHANGER | SCROLL COMPRESSOR | SUPER QUIET | VERY HIGH PERFORMANCE

ECOi-W WQ 524-1604 C/H/R · R410A

Water cooled chillers, heat pumps and condenserless units.

Cooling capacity: 154,3 to 459,8 kW.
Heating capacity: 170,2 to 508,4 kW.

The range at a glance

- 3 versions: C (cooling only), H (heat pump) and R (condenserless unit)
- 10 sizes
- 2 acoustic options: STD (standard) and S (super low noise)

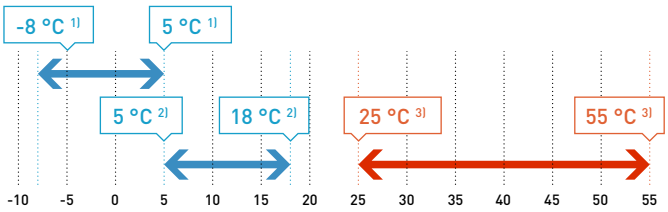
Advantages

- High full load efficiency: EER up to 4,50, COP up to 3,90
- High seasonal performances: SEER up to 6,50
- Advanced electronic controller: auto-adaptive function to reduce water content in the piping system
- Condensing pressure control option: suitable for well application
- Wide range of Plug & Play hydrokit: easy hydraulic installation
- Desuperheater heat exchanger available as option: heating capacity for free thanks to heat recovery

Operating limits

To be confirmed with AC SELECT:
https://acselect.panasonic.eu/

Leaving water temperature.



1) With glycol + EEV.
2) Without glycol + EEV.
3) Only C/H types 20-190.
Note: maximum % glycol (ethylenic or propilenic): 40%.

Equipment

- 2 refrigerant circuits
- Four scroll compressors (tandem)
- Plate evaporator (AISI 316)
- Differential pressure switch
- Electronic expansion valve (standard 1104-1604)
- Phase sequence control

ECOi-W WQ 524-1604 C/H/R				
Cooling	Leaving water temperature	ΔT	°C	From 3 to 8
Heating 1)	Leaving water temperature	ΔT	°C	From 3 to 15

1) Only C/H types 20-190.

Accessories and options
Desuperheater
Hydrokit with 1 or 2 pumps for evaporator and condenser
Mechanical gauges

Accessories and options
Soft starter
Water filter
Water flow switch

AC SELECT.

Smart and user-friendly the new air conditioning selection program: https://acselect.panasonic.eu/

Technical performance

Power supply	Voltage	V	400	400	400	400	400	400	400	400	400	400
	Phase		Three phase	Three phase	Three phase	Three phase	Three phase	Three phase	Three phase	Three phase	Three phase	Three phase
	Frequency	Hz	50	50	50	50	50	50	50	50	50	50
Size			**524**	**604**	**704**	**804**	**904**	**1004**	**1104**	**1204**	**1404**	**1604**
ECOi-W WQ 524-1604 C - cooling only		**P-**	**WQE0524CA**	**WQE0604CA**	**WQE0704CA**	**WQE0804CA**	**WQE0904CA**	**WQE1004CA**	**WQE1104CA**	**WQE1204CA**	**WQE1404CA**	**WQE1604CA**
Cooling capacity [1]		kW	154,3	181,8	208,9	232,6	265,8	295,6	338,0	379,2	421,1	459,8
Input power [1]		kW	34,2	41,6	47,5	53,3	59,3	65,7	74,9	83,4	95,0	107,3
EER [1]			4,51	4,37	4,40	4,36	4,48	4,51	4,51	4,56	4,43	4,28
SEER [2] [3]			**5,55**	**6,28**	**6,1**	**5,75**	**6,1**	**6,1**	**6,2**	**6,25**	**6,43**	**6,47**
$\eta_{s,c}$ [2] [3]			**219**	**248**	**241**	**227**	**241**	**241**	**245**	**247**	**254**	**256**
Sound power (STD / S) [4]		dB(A)	81 / 75	82 / 76	85 / 79	87 / 81	89 / 83	90 / 84	90 / 84	90 / 84	92 / 86	94 / 88
Sound pressure at 10 m (STD / S) [5]		dB(A)	49 / 43	50 / 44	53 / 47	55 / 49	57 / 51	58 / 52	58 / 52	58 / 52	60 / 54	62 / 56
ECOi-W WQ 524-1604 H - heat pump		**P-**	**WQE0524HA**	**WQE0604HA**	**WQE0704HA**	**WQE0804HA**	**WQE0904HA**	**WQE1004HA**	**WQE1104HA**	**WQE1204HA**	**WQE1404HA**	**WQE1604HA**
Cooling capacity [1]		kW	150,7	176,2	204,5	225,4	263,1	291,3	332,0	370,5	421,1	459,8
Input power [1]		kW	34,9	42,7	48,3	54,3	59,8	66,4	76,2	85,2	95,0	107,3
EER [1]			4,32	4,13	4,23	4,15	4,40	4,39	4,36	4,35	4,43	4,28
SEER [2]			**4,65**	**4,92**	**4,92**	**4,68**	**5,15**	**5,1**	**5,27**	**5,3**	**6,43**	**6,47**
$\eta_{s,c}$ [2]			**183**	**194**	**194**	**184**	**203**	**201**	**208**	**209**	**254**	**256**
Heating capacity [6]		kW	172	203	234	259	298	333	380	422	471	509
Input power [6]		kW	41,9	50,8	57,6	65,1	72,5	80,8	92,1	103	121	135
COP [6]			4,11	4,00	4,07	3,99	4,12	4,12	4,12	4,10	3,91	3,76
COP [7]			5,36	5,08	5,25	5,11	5,33	5,44	5,30	5,30	5,08	4,99
SCOP [8] [9]			**5,40**	**5,20**	**5,38**	**5,35**	**5,73**	**5,85**	**5,83**	**5,85**	**—**	**—**
$\eta_{s,h}$ [8] [9]			**208**	**200**	**207**	**206**	**221**	**226**	**225**	**226**	**—**	**—**
SCOP [8] [10]			**4,55**	**4,38**	**4,48**	**4,43**	**4,53**	**4,58**	**4,60**	**4,60**	**—**	**—**
$\eta_{s,h}$ [8] [10]			**174**	**167**	**171**	**169**	**173**	**175**	**176**	**176**	**—**	**—**
Sound power (STD / S) [4]		dB(A)	81 / 75	82 / 76	85 / 79	87 / 81	89 / 83	90 / 84	90 / 84	90 / 84	92 / 86	94 / 88
Sound pressure at 10 m (STD / S) [5]		dB(A)	49 / 43	50 / 44	53 / 47	55 / 49	57 / 51	58 / 52	58 / 52	58 / 52	60 / 54	62 / 56
ECOi-W WQ 524-1604 R - condenserless unit		**P-**	**WQE0524RA**	**WQE0604RA**	**WQE0704RA**	**WQE0804RA**	**WQE0904RA**	**WQE1004RA**	**WQE1104RA**	**WQE1204RA**	**WQE1404RA**	**WQE1604RA**
Cooling capacity [11]		kW	130,0	155,3	177,6	196,5	224,2	247,2	285,9	316,1	368,0	397,0
Input power [11]		kW	43,2	51,5	59,5	66,4	74,8	83	95	106	120	134
Sound power (STD / S) [4]		dB(A)	81 / 75	82 / 76	85 / 79	87 / 81	89 / 83	90 / 84	90 / 84	90 / 84	92 / 86	94 / 88
Sound pressure at 10 m (STD / S) [5]		dB(A)	49 / 43	50 / 44	53 / 47	55 / 49	57 / 51	58 / 52	58 / 52	58 / 52	60 / 54	62 / 56

Physical features

ECOi-W WQ 524-1604 C/H/R - cooling only / heat pump / condenserless unit			**524**	**604**	**704**	**804**	**904**	**1004**	**1104**	**1204**	**1404**	**1604**
Dimension	Height	mm	1845 [12] / 1880 [13]	1845 [12] / 1880 [13]	1845 [12] / 1880 [13]	1845 [12] / 1880 [13]	1845 [12] / 1880 [13]	1845 [12] / 1880 [13]	1845 [12] / 1880 [13]	1845 [12] / 1880 [13]	1845 [12] / 1880 [13]	1845 [12] / 1880 [13]
	Width	mm	850 [12] / 854 [13] / 885 [12] [14] - 1005 [13] [14]	850 [12] / 854 [13] / 885 [12] [14] - 1005 [13] [14]	850 [12] / 854 [13] / 885 [12] [14] - 1005 [13] [14]	850 [12] / 854 [13] / 885 [12] [14] - 1005 [13] [14]	850 [12] / 854 [13] / 885 [12] [14] - 1005 [13] [14]	850 [12] / 854 [13] / 885 [12] [14] - 1005 [13] [14]	850 [12] / 854 [13] / 885 [12] [14] - 1005 [13] [14]	850 [12] / 854 [13] / 885 [12] [14] - 1005 [13] [14]	850 [12] / 854 [13] / 885 [12] [14] - 1005 [13] [14]	850 [12] / 854 [13] / 885 [12] [14] - 1005 [13] [14]
	Length	mm	2250	2250	2250	2250	2250	2250	2250	2250	2250	2250
Operating weight - cooling only	STD	kg	890	971	1156	1329	1340	1453	1552	1660	1743	1798
	S	kg	993	1074	1259	1432	1443	1556	1655	1763	1846	1901
Operating weight - heat pump	STD	kg	909	989	1187	1360	1376	1500	1598	1704	1787	1842
	S	kg	1012	1092	1290	1463	1479	1603	1701	1807	1890	1945
Operating weight - condenserless unit	STD	kg	770	812	988	1163	1188	1241	1328	1388	1463	1502
	S	kg	873	915	1091	1266	1291	1344	1431	1491	1566	1605
Water connection												
Connection type			Victaulic®	Victaulic®	Victaulic®	Victaulic®	Victaulic®	Victaulic®	Victaulic®	Victaulic®	Victaulic®	Victaulic®
Inlet/outlet diameter		Inch	2 ½	2 ½	2 ½	2 ½	4	4	4	4	4	4
ECOi-W WQ 524-1604 R - condenserless unit			**524**	**604**	**704**	**804**	**904**	**1004**	**1104**	**1204**	**1404**	**1604**
Remote condenser refrigerant connections												
Connection type			To be brazed	To be brazed	To be brazed	To be brazed	To be brazed	To be brazed	To be brazed	To be brazed	To be brazed	To be brazed
Inlet diameter		Inch	⅞	⅞	1 ⅛	1 ⅛	1 ⅛	1 ⅛	1 ⅛	1 ⅛	1 ⅛	1 ⅛
Outlet diameter		Inch	1 ⅛	1 ⅛	1 ⅜	1 ⅜	1 ⅝	1 ⅝	1 ⅝	1 ⅝	1 ⅝	1 ⅝

1) According to EN14511 standard: evaporator EWT/LWT 12 °C/7 °C, condenser EWT/LWT 30 °C/35 °C. 2) According to EN14825 standard. 3) ErP compliant: following COMMISSION REGULATION (EU) 2016/2281. 4) Sound levels are at fully loaded conditions. Sound power values refers to ISO 3744 standard. 5) Sound pressures refer to ISO 3744 standard, parallelepiped shape. 6) According to EN14511 standard: evaporator EWT/LWT 10 °C/7 °C, condenser EWT/LWT 40 °C/45 °C. 7) According to EN14511 standard: evaporator EWT/LWT 10 °C/7 °C, condenser EWT/LWT 30 °C/35 °C. 8) ErP compliant: following COMMISSION REGULATION (EU) No 813/2013. 9) According to EN14825 standard - low temperature application (35 °C). 10) According to EN14825 standard - medium temperature application (55 °C). 11) Data refers to evaporator water temperature 12/7 °C and condensing temperature 50 °C. 12) Standard version. 13) S version. 14) Only for handling.

ErP | HIGH SEER 6,47 | HIGH SCOP 5,85 | WATER COOLED | PLATE HEAT EXCHANGER | SCROLL COMPRESSOR | VERY HIGH PERFORMANCE

ECOi-W WSW-N EVO 440-1550 C/H/R · R513A

Water cooled chillers, heat pumps and condenserless units.

Cooling capacity: 410 to 1460 kW.
Heating capacity: 470 to 1650 kW.

The range at a glance

- 3 versions: C (cooling only), H (heat pump water side) and R (condenserless unit)
- 15 sizes
- 2 acoustic options: STD (standard) and S (super low noise)

Advantages

- High full load performances: EER up to 4,90
- High seasonal performances: SEER up to 6,70
- Compressor optimization (high / low pressure ratio), according application: Maximum benefit in terms of efficiency design
- Electronic expansion device: excellent control of superheating for the best performance at full and partial load and for a safe operation
- New generation of pure counter-current shell and tube evaporators and condensers: maximum efficiency and new levels of competitiveness
- Control platform: modular architecture, compressor envelope integration, corrective actions in border line areas, easy-friendly user interface

Operating limits

To be confirmed with AC SELECT:
https://acselect.panasonic.eu/

ECOi-W WSW-N EVO 440-1550 C - cooling only				
Evaporator	Leaving water temperature	Water	°C	From 5 to 15
		Water + glycol	°C	From 0 to 5
		Brine	°C	From -8 to 0
		ΔT	°C	From 3 to 7
Condenser	Leaving water temperature		°C	From 25 to 45
ECOi-W WSW-N EVO 440-1550 H - heat pump				
Evaporator	Leaving water temperature	Water	°C	From 5 to 15
		Water + glycol	°C	From -8 to 5
		ΔT	°C	From 3 to 7
Condenser	Leaving water temperature		°C	From 25 to 60
ECOi-W WSW-N EVO 440-1550 R - condenserless unit				
Evaporator	Leaving water temperature	Water	°C	From 5 to 15
		Water + glycol	°C	From -8 to 5
		ΔT	°C	From 3 to 7
Condenser	Condensing temperature		°C	From 30 to 63

Equipment

- 1/2 refrigerant circuit(s)
- Twin-screw compressors
- Shell and tube evaporator and condenser
- Electronic expansion valve
- Compressor acoustic box (standard for S version)
- Phase sequence control

Accessories and options
Automatic circuit breaker
BMS interface
Compressor stepless control
Mechanical gauges

Accessories and options
Power factor corrector capacitors
Soft starter
Water filter
Water flow switch

AC SELECT.

Smart and user-friendly the new air conditioning selection program: https://acselect.panasonic.eu/

Technical performance

Power supply	Voltage	V	400							
	Phase		Three phase							
	Frequency	Hz	50							
Size			**440**		**490**	**570**		**630**	**700**	**770**
ECOi-W WSW-N EVO 440-770 C - cooling only			**P-WSWVN0440CA**		**P-WSWVN0490CA**	**P-WSWVN0570CA**		**P-WSWVN0630CA**	**P-WSWVN0700CA**	**P-WSWVN0770CA**
Cooling capacity [1]		kW	418,6		471,6	539,3		601,9	664,4	734,6
Input power [1]		kW	88,1		101,1	115,1		127,5	144	158,7
Total heat rejection [1]		kW	506,7		572,7	654,3		729,4	808,4	893,4
EER [1]			4,75		4,67	4,69		4,72	4,61	4,63
SEER [2]			**6,38**		**6,38**	**6,52**		**6,42**	**6,38**	**6,38**
$\eta_{s,c}$ [2]			**252**		**252**	**258**		**254**	**252**	**252**
Sound power STD / S [3]		dB(A)	95 / 85		95 / 85	95 / 85		95 / 85	95 / 85	95 / 85
Sound pressure at 1 m STD / S [4]		dB(A)	76 / 66		76 / 66	76 / 66		76 / 66	76 / 66	76 / 66
Size			**860**	**920**	**990**	**1070**	**1130**	**1220**	**1280**	**1400**	**1550**
ECOi-W WSW-N EVO 860-1550 C - cooling only		**P-**	**WSWVN0860CA**	**WSWVN0920CA**	**WSWVN0990CA**	**WSWVN1070CA**	**WSWVN1130CA**	**WSWVN1220CA**	**WSWVN1280CA**	**WSWVN1400CA**	**WSWVN1550CA**
Cooling capacity [1]		kW	825	874,1	936,6	1019,1	1071,8	1159,3	1226,1	1334,6	1457,9
Input power [1]		kW	177,2	190,3	201,4	215,7	228,1	243,8	257,9	286,3	319
Total heat rejection [1]		kW	1002,2	1064,3	1137,9	1234,7	1299,8	1403,0	1484,0	1620,9	1776,9
EER [1]			4,66	4,59	4,65	4,73	4,70	4,76	4,75	4,66	4,57
SEER [2]			**6,41**	**6,41**	**6,41**	**6,42**	**6,53**	**6,51**	**6,44**	**6,45**	**6,42**
$\eta_{s,c}$ [2]			**254**	**253**	**254**	**254**	**258**	**257**	**254**	**255**	**254**
Sound power STD / S [2]		dB(A)	98 / 89	98 / 89	98 / 89	98 / 89	98 / 89	98 / 89	98 / 89	98 / 89	98 / 89
Sound pressure at 1 m STD / S [3]		dB(A)	79 / 70	79 / 70	79 / 70	79 / 70	79 / 70	79 / 70	79 / 70	79 / 70	79 / 70
ECOi-W WSW-N EVO 440-770 H - heat pump			**P-WSWVN0440HA**		**P-WSWVN0490HA**	**P-WSWVN0570HA**		**P-WSWVN0630HA**	**P-WSWVN0700HA**	**P-WSWVN0770HA**
Cooling capacity [1]		kW	419		479	547		612	673	731
Input power [1]		kW	86,5		98	115		132	147	156
EER [1]			4,85		4,89	4,75		4,64	4,58	4,69
Cooling capacity [5]		kW	365,9		418,9	483,2		541	595,6	646,6
Input power [5]		kW	105,2		118,8	141,3		162,1	171,2	191,3
EER [5]			3,48		3,53	3,42		3,34	3,48	3,38
SEER [2]			**6,53**		**6,38**	**6,4**		**6,38**	**6,45**	**6,6**
$\eta_{s,c}$ [2]			**258**		**252**	**253**		**252**	**255**	**261**
Heating capacity [1]		kW	504		576	661		742	813	887
COP [1]			5,83		5,88	5,74		5,62	5,53	5,68
Heating capacity [5]		kW	470,3		536,5	621,7		698,6	764,7	835,9
COP [5]			4,46		4,52	4,4		4,31	4,47	4,37
Sound power STD / S [3]		dB(A)	95 / 85		95 / 85	95 / 85		95 / 85	95 / 85	95 / 85
Sound pressure at 1 m STD / S [4]		dB(A)	76 / 66		76 / 66	76 / 66		76 / 66	76 / 66	76 / 66
ECOi-W WSW-N EVO 860-1550 H - heat pump		**P-**	**WSWVN0860HA**	**WSWVN0920HA**	**WSWVN0990HA**	**WSWVN1070HA**	**WSWVN1130HA**	**WSWVN1220HA**	**WSWVN1280HA**	**WSWVN1400HA**	**WSWVN1550HA**
Cooling capacity [1]		kW	818	882	946	1013	1083	1156	1217	1340	1451
Input power [1]		kW	170	183	195	211	227	242	257	297	306
EER [1]			4,81	4,83	4,85	4,80	4,78	4,78	4,74	4,52	4,74
Cooling capacity [5]		kW	715,5	772	828,1	891,5	958,8	1023,8	1078,2	1186,9	1285,5
Input power [5]		kW	210,1	223,4	236,7	257,3	277	298,6	317,4	342,7	377,4
EER [5]			3,41	3,46	3,5	3,46	3,46	3,43	3,4	3,46	3,41
SEER [2]			**6,4**	**6,5**	**6,4**	**6,4**	**6,5**	**6,48**	**6,48**	**6,5**	**6,7**
$\eta_{s,c}$ [2]			**253**	**257**	**253**	**253**	**257**	**256**	**256**	**257**	**265**
Heating capacity [1]		kW	987	1064	1141	1222	1308	1396	1470	1619	1754
COP [1]			5,8	5,83	5,85	5,8	5,77	5,77	5,73	5,46	5,73
Heating capacity [5]		kW	923	992,7	1063	1146	1231,8	1315,8	1386,1	1523,8	1654,6
COP [5]			4,39	4,44	4,49	4,45	4,45	4,41	4,37	4,45	4,38
Sound power STD / S [3]		dB(A)	98 / 89	98 / 89	98 / 89	98 / 89	98 / 89	98 / 89	98 / 89	98 / 89	98 / 89
Sound pressure at 1 m STD / S [4]		dB(A)	79 / 70	79 / 70	79 / 70	79 / 70	79 / 70	79 / 70	79 / 70	79 / 70	79 / 70
ECOi-W WSW-N EVO 440-770 R - condenserless unit			**P-WSWVN0440RA**		**P-WSWVN0490RA**	**P-WSWVN0570RA**		**P-WSWVN0630RA**	**P-WSWVN0700RA**	**P-WSWVN0770RA**
Cooling capacity [6]		kW	358,6		405,3	472,7		535,6	586,2	638,1
Input power [6]		kW	106,9		120,2	143,4		161,4	174,9	192,6
Total heat rejection [6]			465,8		525,8	614,6		694	760,9	828,8
Sound power STD / S [3]		dB(A)	95 / 85		95 / 85	95 / 85		95 / 85	95 / 85	95 / 85
Sound pressure at 1 m STD / S [4]		dB(A)	76 / 66		76 / 66	76 / 66		76 / 66	76 / 66	76 / 66
ECOi-W WSW-N EVO 860-1550 R - condenserless unit		**P-**	**WSWVN0860RA**	**WSWVN0920RA**	**WSWVN0990RA**	**WSWVN1070RA**	**WSWVN1130RA**	**WSWVN1220RA**	**WSWVN1280RA**	**WSWVN1400RA**	**WSWVN1550RA**
Cooling capacity [6]		kW	708,9	758,1	817,2	886,2	947,7	1015,0	1075,9	1181,4	1277,8
Input power [6]		kW	213,7	226,9	240,7	263,1	284	306,3	325,4	348,4	384,4
Total heat rejection [6]			922,3	984,7	1057,4	1147,9	1230,6	1316,3	1395,1	1527,5	1657,7
Sound power STD / S [3]		dB(A)	98 / 89	98 / 89	98 / 89	98 / 89	98 / 89	98 / 89	98 / 89	98 / 89	98 / 89
Sound pressure at 1 m STD / S [4]		dB(A)	79 / 70	79 / 70	79 / 70	79 / 70	79 / 70	79 / 70	79 / 70	79 / 70	79 / 70

1) According to EN14511 standard: evaporator EWT/LWT 12 °C/7 °C, condenser EWT/LWT 30 °C/35 °C. 2) ErP compliant: following COMMISSION REGULATION (EU) 2016/2281 and according to EN14825 standard. 3) Sound levels are at fully loaded conditions. Sound power values refers to ISO 3744 standard. 4) Sound pressures refer to ISO 3744 standard, parallelepiped shape. 5) According to EN14511 standard: evaporator EWT/LWT 10 °C/7 °C, condenser EWT/LWT 40 °C/45 °C. 6) Conditions: evaporator EWT/LWT 12 °C/7 °C, condensing Temperature 49 °C.

ErP | HIGH SEER 6.70 | HIGH SCOP 4.52 | WATER COOLED | SHELL AND TUBE EVAPORATOR | SCREW COMPRESSOR | VERY HIGH PERFORMANCE

Physical features

ECOi-W WSW-N EVO 440-770 C - cooling only			440	490	570	630	700	770
Dimension	Height	mm	1650	1650	1650	1650	1650	1650
	Height S	mm	1750	1750	1750	1750	1750	1750
	Width	mm	1350	1350	1350	1350	1350	1350
	Length	mm	4250	4250	4210	4210	4180	4180
Operating weight	STD	kg	2690	2700	2875	3003	3472	3521
	S	kg	2884	2894	3069	3197	3666	3715
Water connection								
Connection type	Evaporator		Victaulic®	Victaulic®	Victaulic®	Victaulic®	Victaulic®	Victaulic®
Inlet/outlet diameter		Inch	6	6	6	6	8	8
Connection type	Condenser		Female gas threaded	Female gas threaded	Female gas threaded	Female gas threaded	Female gas threaded	Female gas threaded
Inlet/outlet diameter		Inch	4	4	5	5	5	5

ECOi-W WSW-N EVO 860-1550 C - cooling only			860	920	990	1070	1130	1220	1280	1400	1550
Dimension	Height	mm	1710	1710	1710	1710	1710	1710	1710	1710	1710
	Height S	mm	1780	1780	1780	1780	1780	1780	1780	1780	1780
	Width	mm	1520	1520	1520	1520	1520	1520	1520	1520	1520
	Length	mm	4510	4510	4600	4650	4650	4650	4650	5350	5350
	Length S	mm	4510	4510	4690	4690	4690	4690	4690	5400	5400
Operating weight	STD	kg	5000	5010	5642	5818	6012	6077	6124	6698	6752
	S	kg	5388	5398	6030	6206	6400	6465	6512	7086	7140
Water connection											
Connection type	Evaporator		Victaulic®	Victaulic®	Victaulic®	Victaulic®	Victaulic®	Victaulic®	Victaulic®	Victaulic®	Victaulic®
Inlet/outlet diameter		Inch	8	8	10	10	10	10	10	10	10
Connection type	Condenser		Female gas threaded	Female gas threaded	Female gas threaded	Female gas threaded	Female gas threaded	Female gas threaded	Female gas threaded	Female gas threaded	Female gas threaded
Inlet/outlet diameter		Inch	4 / 4	4 / 4	5 / 5	5 / 5	5 / 5	5 / 5	5 / 5	5 / 5	5 / 5

ECOi-W WSW-N EVO 440-770 H - heat pump			440	490	570	630	700	770
Dimension	Height	mm	1650	1650	1650	1650	1650	1650
	Height S	mm	1750	1750	1750	1750	1750	1750
	Width	mm	1450	1450	1450	1450	1450	1450
	Length	mm	4590	4590	4630	4630	4320	4560
Operating weight	STD	kg	3055	3186	3277	3197	4027	3824
	S	kg	3249	3380	3471	3491	4221	4017
Water connection								
Connection type	Evaporator		Victaulic®	Victaulic®	Victaulic®	Victaulic®	Victaulic®	Victaulic®
Inlet/outlet diameter		Inch	6	6	6	6	8	8
Connection type	Condenser		Victaulic®	Victaulic®	Victaulic®	Victaulic®	Victaulic®	Victaulic®
Inlet/outlet diameter		Inch	4	4	5	5	5	5

ECOi-W WSW-N EVO 860-1550 H - heat pump			860	920	990	1070	1130	1220	1280	1400	1550
Internal heat exchanger											
Connection type	Evaporator		Victaulic®	Victaulic®	Victaulic®	Victaulic®	Victaulic®	Victaulic®	Victaulic®	Victaulic®	Victaulic®
Inlet/outlet diameter		Inch	8	8	10	10	10	10	10	10	10
Connection type	Condenser		Victaulic®	Victaulic®	Victaulic®	Victaulic®	Victaulic®	Victaulic®	Victaulic®	Victaulic®	Victaulic®
Inlet/outlet diameter		Inch	4 / 4	4 / 4	4 / 4	4 / 5	5 / 5	5 / 5	5 / 5	5 / 5	5 / 5
Weight											
Operating weight	STD	kg	5818	5841	6119	6545	6768	6807	6844	7991	8071
	S	kg	6205	6229	6506	6932	7155	7194	7232	8378	8458
Dimension	Height	mm	1680	1680	1680	1680	1680	1680	1680	1710	1710
	Height S	mm	1780	1780	1780	1780	1780	1780	1780	1780	1780
	Width	mm	1520	1520	1520	1520	1520	1520	1520	1580	1580
	Length	mm	5110	5110	5100	5100	5000	5000	5000	5300	5300
	Length S	mm	5130	5130	5120	5120	5020	5020	5020	5320	5320

Physical features

ECOi-W WSW-N EVO 440-770 R - condenserless unit			440	490	570	630	700	770
Dimension	Height	mm	1650	1650	1650	1650	1650	1650
	Height S	mm	1750	1750	1750	1750	1750	1750
	Width	mm	1350	1350	1350	1350	1350	1350
	Length	mm	3620	3620	4210	4210	4180	4180
Operating weight	STD	kg	2302	2312	2456	2476	2952	2992
	S	kg	2496	2506	2650	2670	3146	3186
Water connection (evaporator)								
Connection type			Victaulic®	Victaulic®	Victaulic®	Victaulic®	Victaulic®	Victaulic®
Inlet/outlet diameter		Inch	6	6	6	6	8	8
Remote condenser refrigerant connections								
Connection type			To be brazed	To be brazed	To be brazed	To be brazed	To be brazed	To be brazed
Inlet diameter circuit 1		Inch	1 5/8	1 5/8	2 1/8	2 1/8	2 1/8	2 1/8
Outlet diameter circuit 1		Inch	3 1/8	3 1/8	3 5/8	3 5/8	4 1/8	4 1/8

ECOi-W WSW-N EVO 860-1550 R - condenserless unit			860	920	990	1070	1130	1220	1280	1400	1550
Dimension	Height	mm	1710	1710	1710	1710	1710	1710	1710	1710	1710
	Height S	mm	1770	1770	1770	1770	1770	1770	1770	1770	1770
	Width	mm	1520	1520	1520	1520	1520	1520	1520	1520	1520
	Length	mm	4400	4400	4600	4650	4650	4650	4650	5350	5350
	Length S	mm	4650	4650	4650	4650	4650	4650	4650	5400	5400
Operating weight	STD	kg	4804	4814	4998	5071	5131	5170	5190	5596	5676
	S	kg	5191	5201	5385	5458	5518	5557	5577	5983	6063
Water connection (evaporator)											
Connection type			Victaulic®	Victaulic®	Victaulic®	Victaulic®	Victaulic®	Victaulic®	Victaulic®	Victaulic®	Victaulic®
Inlet/outlet diameter		Inch	8	8	10	10	10	10	10	10	10
Remote condenser refrigerant connections											
Connection type			To be brazed	To be brazed	To be brazed	To be brazed	To be brazed	To be brazed	To be brazed	To be brazed	To be brazed
Inlet diameter circuit 1		Inch	1 5/8	1 5/8	1 5/8	2 1/8	2 1/8	2 1/8	2 1/8	2 1/8	2 1/8
Outlet diameter circuit 1		Inch	3 1/8	3 1/8	3 1/8	3 1/8	3 1/8	3 1/8	3 1/8	4 1/8	4 1/8
Inlet diameter circuit 2		Inch	1 5/8	1 5/8	1 5/8	2 1/8	2 1/8	2 1/8	2 1/8	2 1/8	2 1/8
Outlet diameter circuit 2		Inch	3 1/8	3 1/8	3 1/8	3 1/8	3 1/8	3 1/8	3 1/8	4 1/8	4 1/8