



# Centrometal

HEATING TECHNIQUE

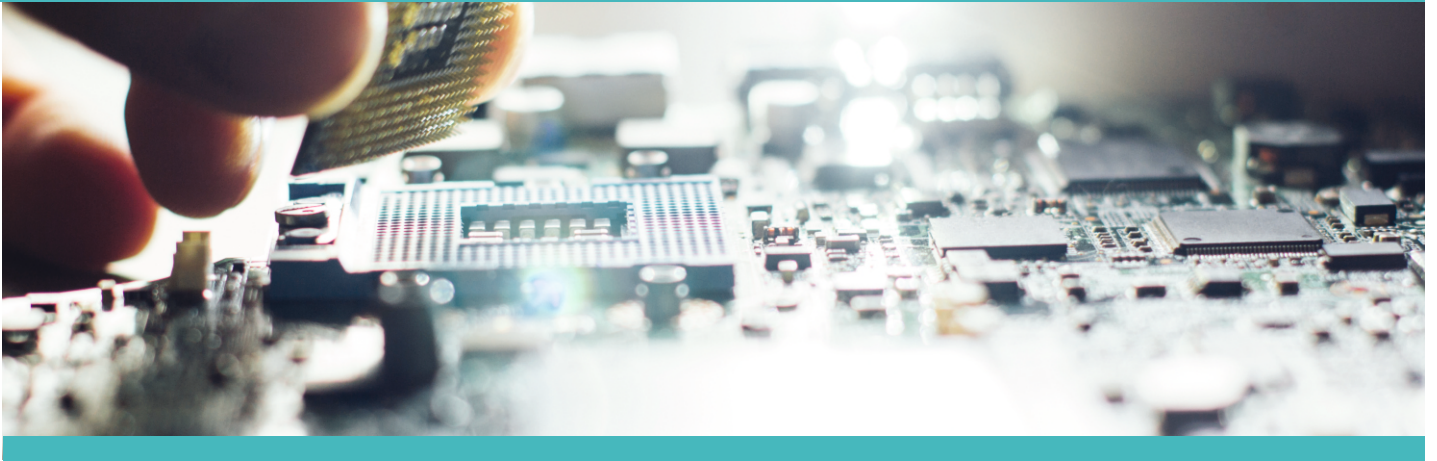
## HEAT PUMPS

**PRESENT AND THE  
FUTURE OF HEATING  
AND COOLING**

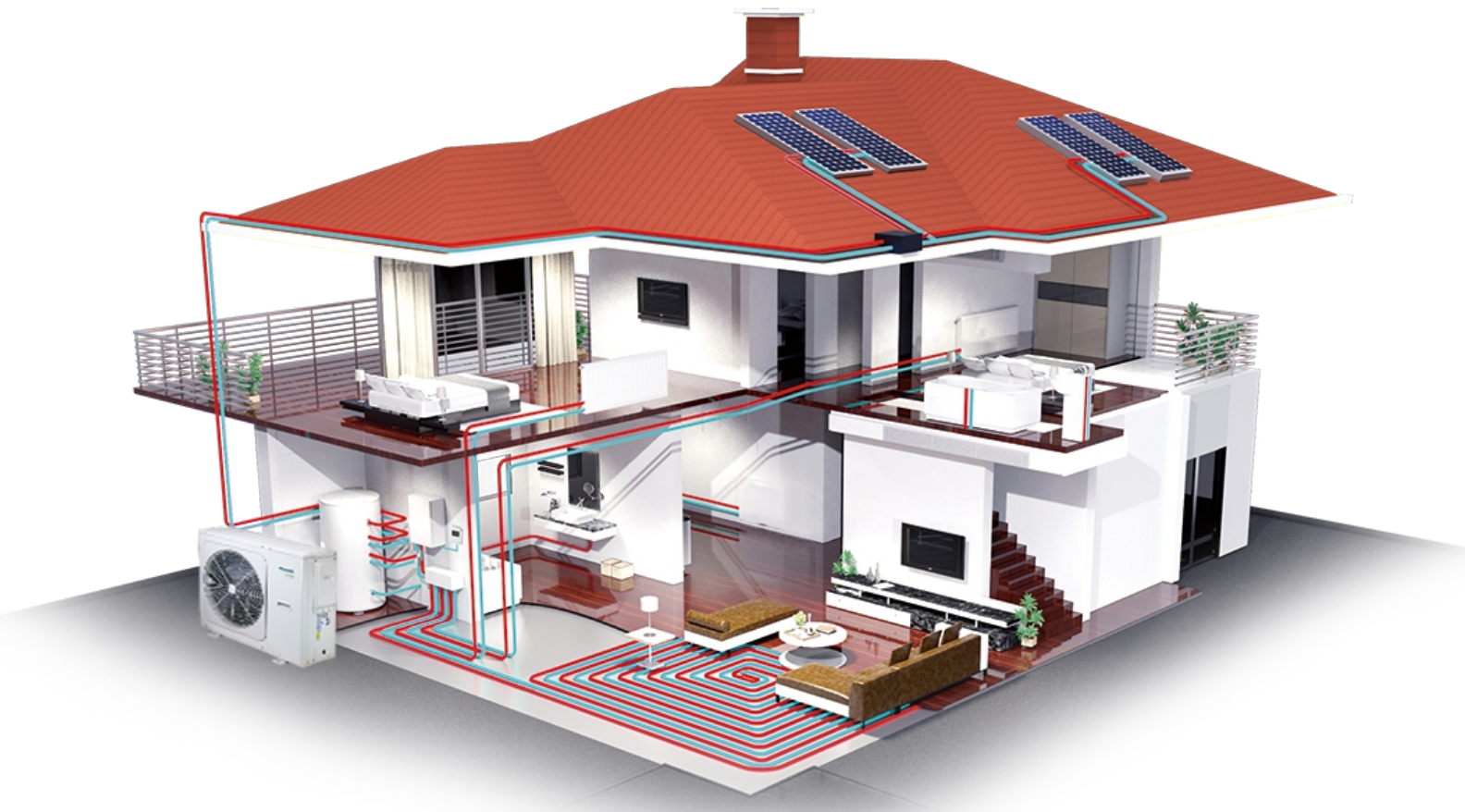
Split models  
Monoblock models

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# Heat pumps mono and split



A heat pump can be defined as a universal solution for a space comfort achieving. It is an integrated system that combines space heating and cooling function, and domestic hot water (DHW) preparation as well. It, therefore, offers versatile solution, which can be used throughout the whole year. It can replace any type of boiler or operate in combination with it, as an integrated hybrid system.



## CHARACTERISTICS of monoblock and split types

- Air to water heat pump
- Mono models 5-30 kW and split models 6-16kW
- Eco-friendly refrigerant R32
- Lower space heating and cooling cost
- Lower CO<sub>2</sub> emissions
- High-efficiency space heating and cooling source
- Control with a color touch screen controls the heat pump, up to two mixed heating/cooling circuits, one direct heating/cooling circuit and DHW heating (with recirculation).
- It can be connected to systems with floor heating/cooling, fan coils and/or low-temperature radiator heating
- Possible subsequent connection to the web portal



Control panel with a color touch screen



Specifications - MONO:

			5 kW	9 kW	16 kW P3	22 kW P3	30 kW P3
Power supply	V/ph/Hz		220-240/1/50		380-415/3/50	380-415/3/50	380-415/3/50
Capacity	Heating <sup>2</sup> A7/W35	kW	6.50	10.00	16.00	22.00	30.10
Rated input		kW	1.23	2.13	3.56	5.00	7.70
COP			5.30	4.70	4.50	4.40	3.91
Capacity	Heating <sup>3</sup> A7/W55	kW	6.30	9.40	16.00	22.00	30.00
Rated input		kW	1.97	3.03	5.61	8.30	13.04
COP			3.20	3.10	2.85	2.65	2.30
Capacity	Cooling <sup>4</sup> A35/W18	kW	6.50	10.00	15.40	23.00	31.00
Rated input		kW	1.28	2.33	3.67	5.00	7.75
EER			5.10	4.30	4.20	4.60	4.00
Capacity	Cooling <sup>5</sup> A35/W7	kW	5.50	9.00	14.00	21.00	29.50
Rated input		kW	1.69	3.10	4.83	7.12	11.57
EER			3.25	2.90	2.90	2.95	2.55
Seasonal space heating energy efficiency class <sup>6</sup>	Main flow 35°C		A+++		A+++	A+++	A++
	Main flow 55°C		A++		A++	A++	A+
SCOP <sup>6</sup>	Main flow 35°C		5.12	5.12	4.84	4.53	4.20
	Main flow 55°C		3.59	3.71	3.59	3.23	3.15
ηs	Main flow 35°C		201.8	201.9	190.5	178	165
	Main flow 55°C		140.7	145.5	140.7	126	123
SEER <sup>6</sup>	Main flow 7°C		5.09	5.08	5.14	4.70	4.49
	Main flow 18°C		7.81	8.31	7.54	5.67	5.71
Sound power level <sup>7</sup>			64	68	74	73	77
Sound pressure level <sup>7</sup>			48	53	59	59.8	63.5
Compressor	Type		Twin rotary DC inverter				
Outdoor fan	Air flow		3900	4500	5200	10650	11200
Water side heat exchanger type			Plate				
Water pump	Pump head	m	9.0		9.0	12	12
Expansion vessel	Volume	L	5.0		5.0	8.0	8.0
Net dimensions (WxHxD)	mm		865x1040x410		865x1040x410	1129x1558x440	1129x1558x440
Packed dimensions (WxHxD)	mm		970x1190x560		970x1190x560	1220x1735x565	1220x1735x565
Net/Gross weight	kg		87/103	87/103	120/136	177/206	177/206
Piping connections (water)	R		1"		5/4"	5/4"	5/4"
Safety valve set pressure (water)	bar		3				
Operating temperature range	Cooling	°C	-5 do 43		-5 do 43	-5 do 46	-5 do 46
	Heating	°C	-25 do 35		-25 do 35	-25 do 35	-25 do 35
	DHW	°C	-25 do 43		-25 do 43	-25 do 43	-25 do 43
Main flow temperature range	Cooling	°C	5 do 25		5 do 25	5 do 25	5 do 25
	Heating	°C	25 do 65		25 do 65	25 do 60	25 do 60
	DHW	°C	20 do 60		20 do 60	30 do 60	30 do 60
Refrigerant	Type/GWP	°C	R32 / 675				
	Factory charge	kg	1.25	1.25	2.8	5.0	5.0
Backup electric heater	Standard mounted	kW	-		-	-	-
	Optional	kW	2/4		2/4	2/4	2/4
	Capacity steps		1		1	1	1

1. EU standards: EN14511: 2016; EN14825: 2016; EN50564: 2011; EN12102: 2017; (EU) N° 811/2013; (EU) N° 813/2013; OJ 2014/C 207/02; OJ 2017/C 229/01.  
2. Outdoor air temperature 7°C, 85% R.H.; water temperature main flow/return 35/30°C.

3. Outdoor air temperature 7°C, 85% R.H.; water temperature main flow/return 55/47°C.  
4. Outdoor air temperature 35°C; water temperature main flow/return 18/23°C.  
5. Outdoor air temperature 35°C; water temperature main flow/return 7/12°C.  
6. Seasonal space heating energy efficiency class tested in average climate conditions.



# SPLIT 6-16kW (with hydronic box)

Specifications - SPLIT:			6 kW	10 kW	16 kW P3
Power supply		V/ph/Hz	220-240/1/50		380-415/3/50
Capacity	Heating <sup>2</sup> A7/W35	kW	6.20	10.00	16.00
Rated input		kW	1.24	2.00	3.56
COP			5.00	5.00	4.50
Capacity	Heating <sup>3</sup> A7/W55	kW	6.00	9.50	16.00
Rated input		kW	2.00	3.06	5.52
COP			3.00	3.10	2.90
Capacity	Cooling <sup>4</sup> A35/W18	kW	6.55	10.00	14.90
Rated input		kW	1.34	2.08	4.38
EER			4.90	4.80	3.40
Capacity	Cooling <sup>5</sup> A35/W7	kW	7.00	8.20	14.00
Rated input		kW	2.33	2.48	5.71
EER			3.00	3.30	2.45
Seasonal space heating energy efficiency class <sup>6</sup>	Main flow 35°C		A+++	A+++	A+++
	Main flow 55°C		A++	A++	A++
SCOP <sup>6</sup>	Main flow 35°C		4.95	5.20	4.62
	Main flow 55°C		3.52	3.47	3.41
η <sub>s</sub> seasonal space heating efficiency	Main flow 35°C		195.0	204.8	181.6
	Main flow 55°C		137.9	135.7	133.2
SEER <sup>6</sup>	Main flow 7°C		5.34	5.98	4.67
Maximum overcurrent protection (MOP)		A	18	19	14
Minimum circuit ampacity (MCA)		A	14	17	12
Sound power level <sup>7</sup>		dB(A)	58	60	68
Compressor	Type		Twin rotary DC inverter		
Outdoor fan	Air flow	m <sup>3</sup> /h	2770	4030	4650
Net dimension (WxHxD)		mm	1008x712x426	1118x865x523	1118x865x523
Packed dimension (WxHxD)		mm	1065x800x485	1180x890x560	1180x890x560
Net/Gross weight		kg	58/64	77/88	112/125
Operating temperature range	Cooling	°C	-5 do 43	-5 do 43	
	Heating	°C	-25 do 35	-25 do 35	-25 do 35
	DHW	°C	-25 do 43	-25 do 43	-25 do 43
Refrigerant	Type		R32	R32	R32
	Factory charge	kg	1.50	1.65	1.84
Piping connections	Type			Flare	
	Liquid phase	mm	∅ 6.35	∅ 9.52	∅ 9.52
	Gas phase	mm		∅ 15.9	
	Min. pipe lenght	m		2	
	Max. pipe lenght	m	30	30	30
Installation height difference	Outdoor unit above	m	20	20	20
	Outdoor unit below	m	20	20	20

Hydronic box:			6 kW	10 kW	16 kW	
Compatible outdoor unit model			6	10	16	
Power supply		V/Ph/Hz	220-240/1/50	220-240/1/50	220-240/1/50	
Sound power level		dB(A)	38	42	43	
Dimensions (WxHxD)		mm	420x790x270	400x850x427	420x790x270	
Net/Gross weight		kg	37/43	37/43	39/45	
Water circuit	Piping connections	R	1"	1"	1"	
	Safety valve	bar	3.0	3.0	3.0	
	Internal water volume	L	5.0	5.0	5.0	
	Drainage	mm	∅25	∅25	∅25	
	Expansion vessel	L	8.0	8.0	8.0	
	Water side heat exchanger	Type		Plate	Plate	Plate
		Water pump head	m	9.0	9.0	9.0
Water flow range		m <sup>3</sup> /h	0.4-1.25	0.4-2.10	0.7-3.00	
Refrigerant circuit	Liquid phase	mm	∅ 6.35	∅ 9.52	∅ 9.52	
	Gas phase	mm	∅ 15.9	∅ 15.9	∅ 15.9	
Backup electric heater	Standard mounted	kW	3	3	9	
	Optional	kW	2/4	2/4	2/4	
	Capacity steps		1	1	1	
Main flow temperature range	Cooling	°C		5 do 25		
	Heating	°C		25 do 65		
	DHW	°C		30 do 60		
Room temperature range		°C		5 do 35		



- Control unit HPCU360iCM



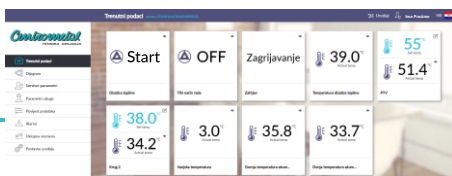
Thermostat HPxTouchCM

- Wireless thermostat HPx40CM



Pump group HS-DKG 1"

- Electric heater HPe2/4CM



Connection to Web portal with WiFi module HPnet300CM

- Enameled DHW tanks:  
WP/E 200 - 2000 liters  
WPS/E 400 - 2000 liters



Buffer tanks for hot and cold water:  
PUK 50 - 600 liters  
CAS-HV 300-5000 liters



## HEAT PUMPS



**NEW**

## UNIVERSAL SOLUTION FOR SPACE HEATING AND COOLING

- It is an integrated system that combines space heating and cooling function, and domestic hot water (DHW) preparation as well.
- It offers versatile solution, which can be used throughout the whole year.
- It can replace any type of boiler or operate in combination with it, as an integrated hybrid system.