Robotina d.o.o.
OIC Hrpelje 38
SI-6240 Kozina
Slovenia

Heat pump

RDX charger supports monitoring and control of heat pump.

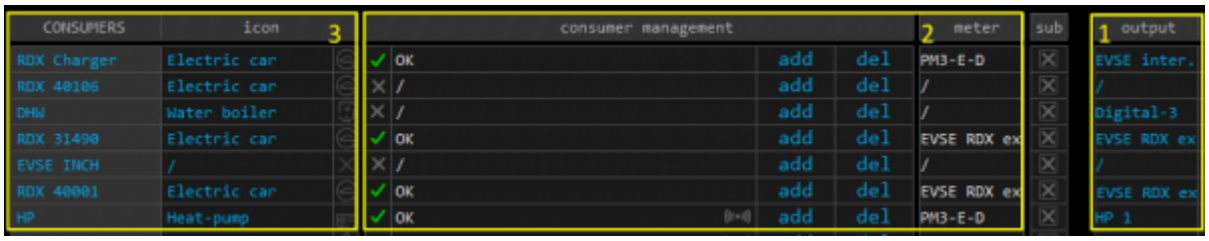
Monitoring consists of tracking power and electricity consumption in real time as well as storing measured data on cloud service.

Control depends on heat pump model if it supports control by an external device.

Note: Max 4 heat pumps are supported by RDX Charger.

Add a heat pump device by configurator:

- settings page → column 'output' → select heat pump 1..4,
- connect power sensor or define P nominal,
- enter name and select icon.

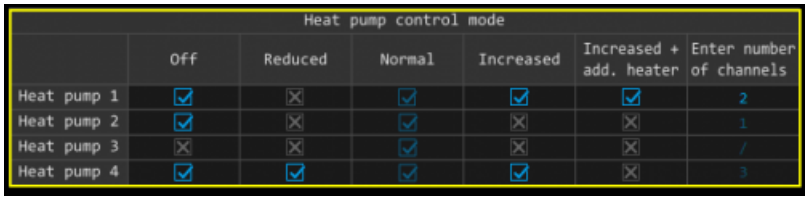


CONSUMERS	icon 3	consumer management			2 meter	sub	1 output
RDX Charger	Electric car	✓ OK	add	del	PM3-E-D	☒	EVSE inter.
RDX 40106	Electric car	✗ /	add	del	/	☒	/
DHW	Water boiler	✗ /	add	del	/	☒	Digital-3
RDX 31490	Electric car	✓ OK	add	del	EVSE RDX ex	☒	EVSE RDX ex
EVSE INCH	/	✗ /	add	del	/	☒	/
RDX 40001	Electric car	✓ OK	add	del	EVSE RDX ex	☒	EVSE RDX ex
HP	Heat-pump	✓ OK	add	del	PM3-E-D	☒	HP 1

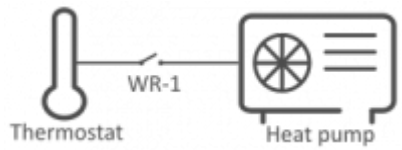
Define control for heat pump:  check for heat pump control capabilities

- io mux page → Heat pump control mode → select control modes,

Examples of settings for heat pump:
HP has 3 control channels (supports off, reduced power and increased power), then select as is for **Heat pump 4**,
HP has 2 control channels and is designed as SGRHP (Smart Grid Ready Heat Pump), select as is for **Heat pump 1**,
Control over WR-1 module installed between thermostat and heat pump, select as is for **Heat pump 2**.



Heat pump control mode	Off	Reduced	Normal	Increased	Increased + add. heater	Enter number of channels
Heat pump 1	☑	☒	☑	☑	☑	2
Heat pump 2	☑	☒	☑	☒	☒	1
Heat pump 3	☒	☒	☑	☒	☒	/
Heat pump 4	☑	☑	☑	☑	☒	3



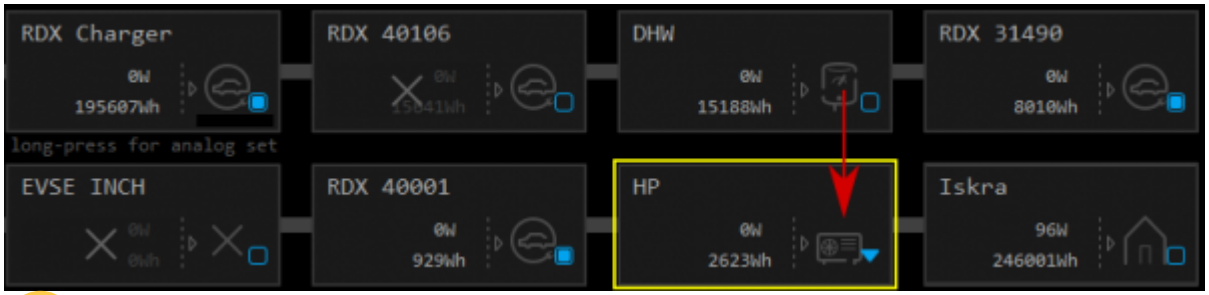
Define WR-1 output function:

- io mux page → wireless relay WR-1 output function → select HP channels,
- to each WR module wired to heat pump,

Wireless relay WR-1 output function				
	act.	status	output function	out mode
WR 1	☒		/	normal
WR 2	☒		/	normal
WR 3	☑	OK	HP 1 channel 0	inverted
WR 4	☒		/	normal
WR 5	☒		/	normal
WR 6	☒		/	normal
WR 7	☒		/	normal
WR 8	☑	OK	HP 1 channel 1	inverted

Change heat pump control state:

- home page → press consumer HP icon



Possible states are those defined in Heat pump control modes

Heat pump output state	
▼	Off
⌄	Reduced
▬	Normal
⌃	Increased
▲	Increased + additional el.heater