



ID45compact
Heat Interface Unit

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Rhico compact ID45

Direct Heat Interface Unit

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Illustrated with all insulation removed

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DESCRIPTION

The **ID45 Compact** is a direct heat interface unit for heating and hot water applications. Instantaneous hot water is produced via a plate heat exchanger and proportional valve with built in thermostatic head, allowing hot water priority at the desired temperature quickly to the tap thanks to a built in bypass function insuring instantaneous hot water without delay even in periods of low demand. Heating is provided directly from the primary circuit but temperature controlled either for underfloor heating or for return temperature back to the primary circuit allowing the system to work at its highest efficiency. Remote billing options are available upon request.

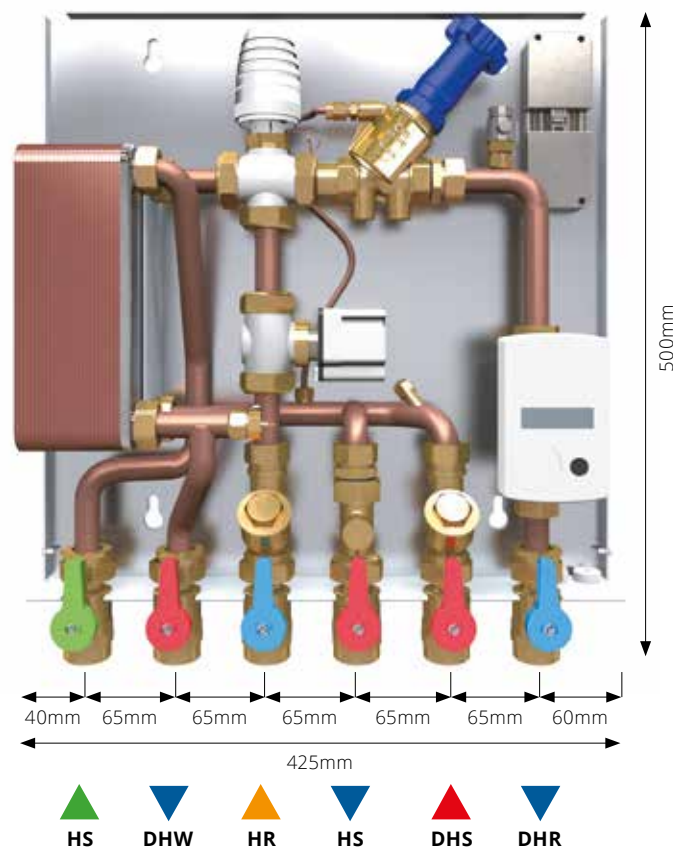
ID45 Compact - Technical Data

GENERAL DATA

Max temperature:	85°C
Primary circuit max flow rate:	1250 l/h
Necessary primary circuit head:	7 m H ₂ O
Max pressure:	10 bar
Differential pressure range:	5÷30 KPa
Flow rate range differential pressure valve:	100÷1250 l/h
Primary hydraulic connection:	M/R M-F 1" - 3/4"
Heating hydraulic connection:	M/R M-F 1" - 3/4"
Connections DCW:	M-F 1" - 3/4"
Dimensions (LxHxP):	428 x 500 x 110mm
Weight (including interception jig):	18 Kg
Electrical supply:	230 V

CONNECTIONS

DHS	District heating supply G 1" (int. thread)
DHR	District heating return G 1" (int. thread)
HR	Heating return G 1" (int. thread)
HS	Heating supply G 1" (int. thread)
DHW	Domestic hot water G 1" (int. thread)
DCW	Domestic cold water G 1" (int. thread)



▲ HS
 ▼ DHW
 ▲ HR
 ▼ HS
 ▲ DHS
 ▼ DHR

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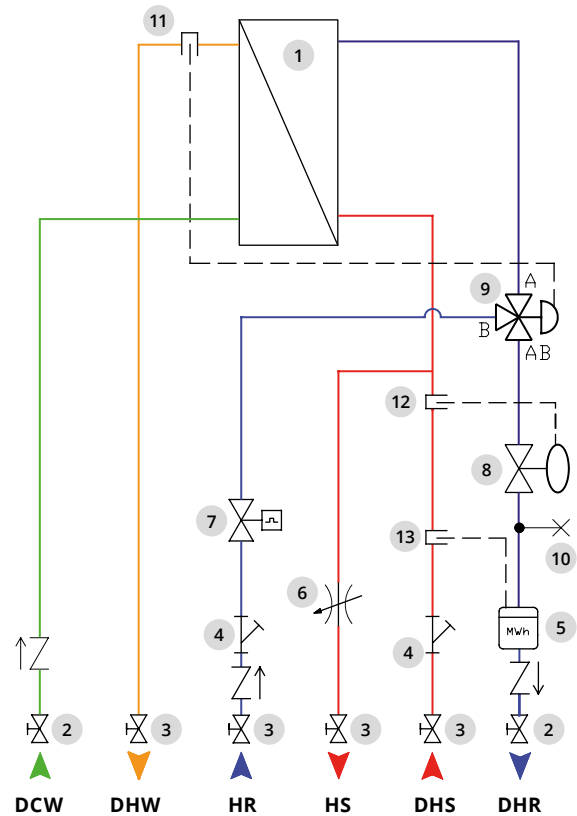
Hydraulic Circuit

COMPONENTS

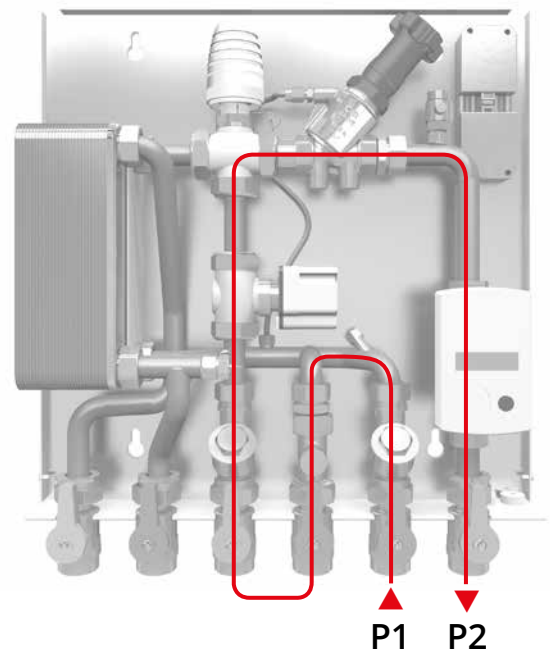
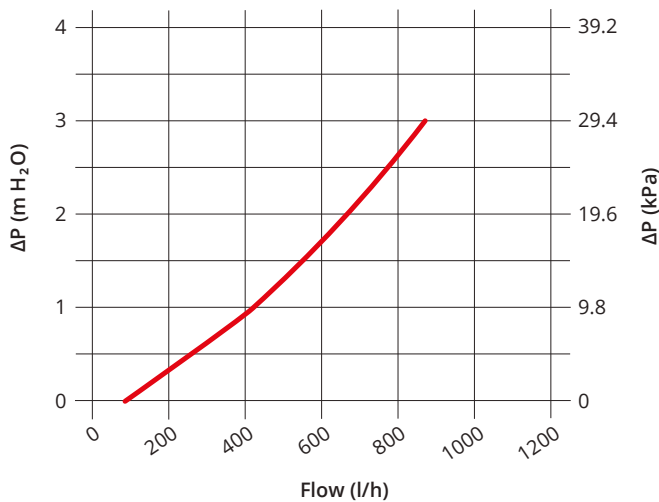
1. Insulated brazed plate iron steel heat exchanger
2. Ball valve with check valve
3. Ball valve
4. Filter
5. Fitting piece for energy meter G 1" - L 130 mm
6. Lockshield valve
7. 2 way ON/OFF valve with 230V electric actuator
8. Differential valve 5÷30 KPa
9. 3 way mixing valve
10. Manual air vent valve
11. Sensor pocket for thermostatic valve
12. Sensor pocket for differential valve
13. Sensor pocket for energy meter

CONNECTIONS

- DHS** District heating supply G 1" (int. thread)
DHR District heating return G 1" (int. thread)
HR Heating return G 1" (int. thread)
HS Heating supply G 1" (int. thread)
DHW Domestic hot water G 1" (int. thread)
DCW Domestic cold water G 1" (int. thread)



ID45 Compact - Heating Circuit Residual Head



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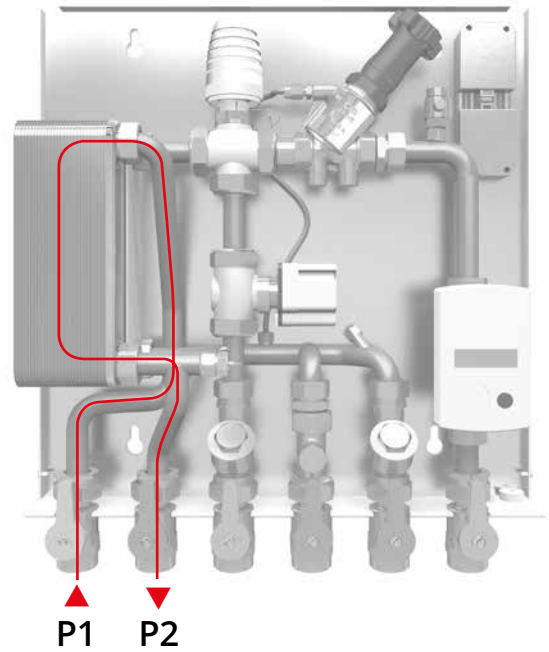
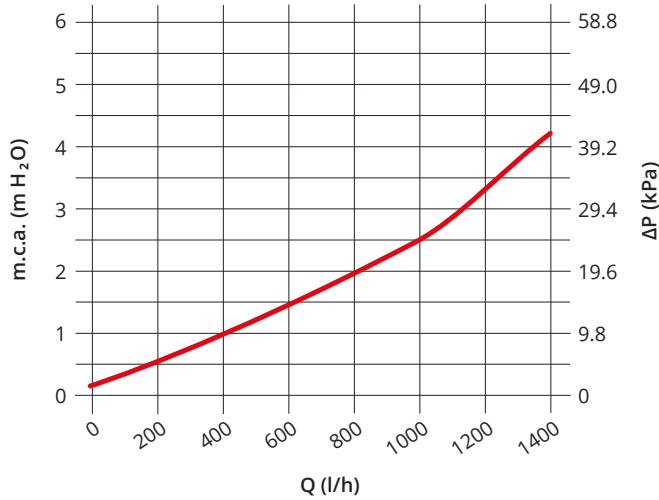
ID45 Compact - Domestic Hot Water Data

TECHNICAL DATA DOMESTIC WATER ID45 COMPACT 20 PLATE - 0.392m²

Primary circuit flowrate	Primary circuit supply temp.	ΔT 35°C (10/45°C)		ΔT 40°C (10/50°C)		ΔT45°C (10/55°C)	
		Heat exchanger max. capacity	Flowrate	Heat exchanger max. capacity	Flowrate	Heat exchanger max. capacity	Flowrate
m ³ /h	°C	kW	l/m	kW	l/m	kW	l/m
0.6	55	16.15	6.6	12.66	4.5	-	-
0.8	55	19.45	8	15	5.4	-	-
1.0	55	22.29	9.1	16.9	6.1	-	-
1.2	55	24.8	10.21	18.57	6.7	-	-
0.6	60	20.2	8.3	17.43	6.3	13.72	4.4
0.8	60	24.6	10.1	20.94	7.5	16.19	5.2
1.0	60	28.5	11.8	23.9	8.7	18.27	5.8
1.2	60	32.1	13.2	26.6	9.5	20	6.4
0.6	65	24	9.9	21.5	7.78	16.68	6
0.8	65	29.5	12.16	26.2	9.45	22.41	7.2
1.0	65	34.6	14.26	30.31	10.93	25.61	8.2
1.2	65	39.2	16.1	34.1	12.32	28.4	9.15
0.6	70	27.65	11.39	25.5	9.18	22.98	7.4
0.8	70	34.4	14.17	31.2	11.27	27.84	8.9
1.0	70	44.5	16.7	36.6	13.2	32.14	10.31
1.2	70	46.2	19	41.4	14.9	36.18	11.6
0.6	75	31.3	12.9	29	10.53	26.96	8.6
0.8	75	39	16.14	36	13.08	33	10.59
1.0	75	46.3	19.09	42	15.39	38.6	12.38
1.2	75	53	21.8	48.54	17.5	43.6	14
0.6	80	34.9	14.38	47.43	11.87	30.75	9.86
0.8	80	43.9	18.06	57	14.83	38.12	12.23
1.0	80	52	21.44	67.8	17.52	44.78	14.36
1.2	80	59.6	24.5	55.4	20	50.8	16.32
0.6	85	38.5	15.84	36.6	13.2	34.55	11.08
0.8	85	48.5	19.96	45.7	16.54	43	13.81
1.0	85	57.6	23.75	54	19.6	50.79	16.29
1.2	85	66.2	27.2	62	22	57.8	18.57

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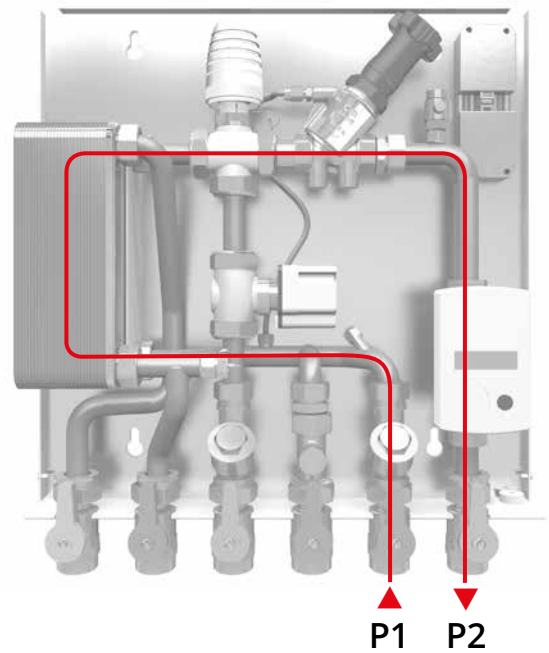
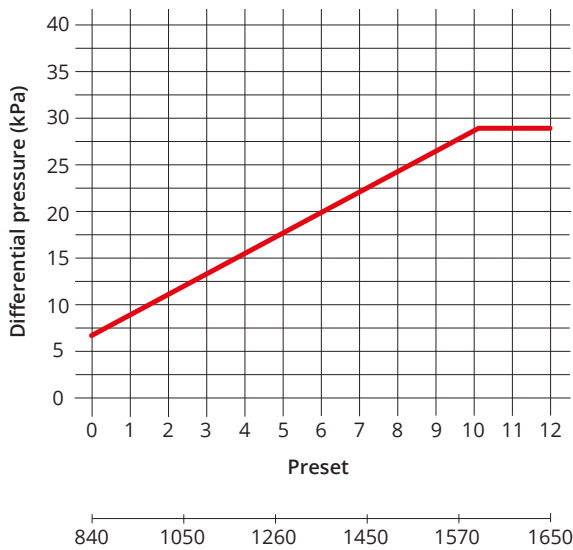


TECHNICAL DATA DOMESTIC WATER ID45 COMPACT 20 PLATE - 0.392m²

Max working pressure DHW circuit: 6 bar
 Min pressure domestic water: 0.2 bar
 Heat exchanger material: Stainless steel AISI 316

If the hardness of the water exceeds 25 French degrees, it should be treated at the inlet to the central heating system, so as to prevent fouling caused by hard water or corrosion due to aggressive water. Remember that even small deposits measuring just a few millimetres in thickness will cause, due to their low thermal conductivity, a reduction in performance on the DHW side.

DPC Valve - Preset / Differential Pressure (with ISTA Energy Meter)



Notes

A series of horizontal dotted lines for writing notes.



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