



IC Series
Cooling Interface Unit

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Rhico IC series

Indirect Cooling Interface Units

IC3-14/18/21



DESCRIPTION

The Rhico **IC Indirect Heat Interface Unit** is a cooling only module, offering total system separation between the primary and secondary cooling circuit. The **IC range** of HIU's is an efficient way of utilising the advantages of district cooling and central plant systems, whilst offering individual utility billing via either a credit or pre-payment facility. The compact, service-friendly design is fully insulated and ideal for both commercial or residential buildings.

Remote billing options are available upon request.



Illustrated with front cover and all insulation removed

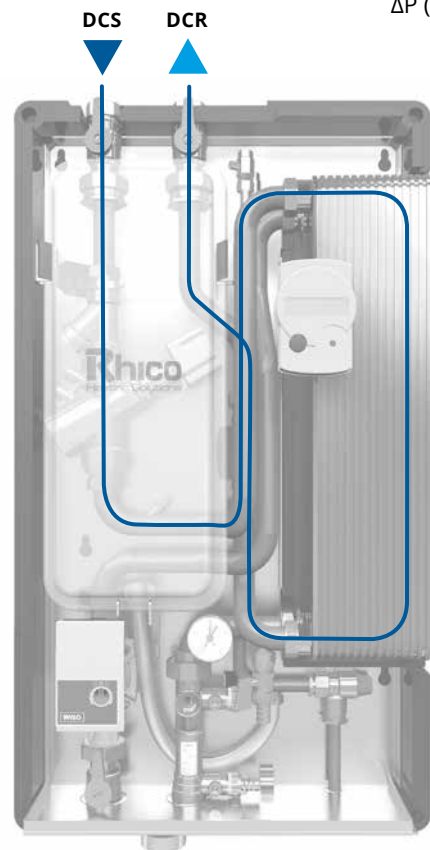
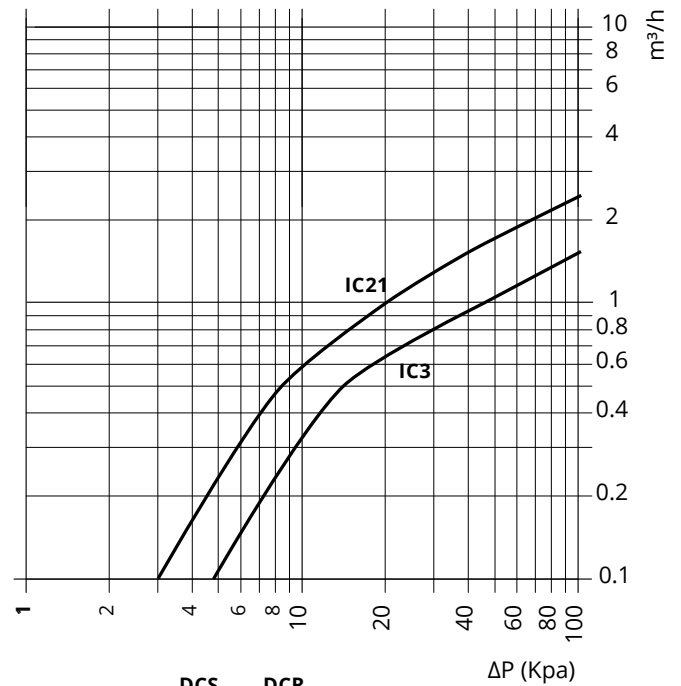
Dimensions and Connections



CONNECTIONS

- DCS** District cooling supply G 1" (int. thread)
- DCR** District cooling return G 1" (int. thread)
- CR** Cooling return G 1" (int. thread)
- CS** Cooling supply G 1" (int. thread)

Pressure Loss Primary Circuit - Pump Characteristics



IC3-14 Indirect Cooling Interface Unit

Cooling only

IC3-14



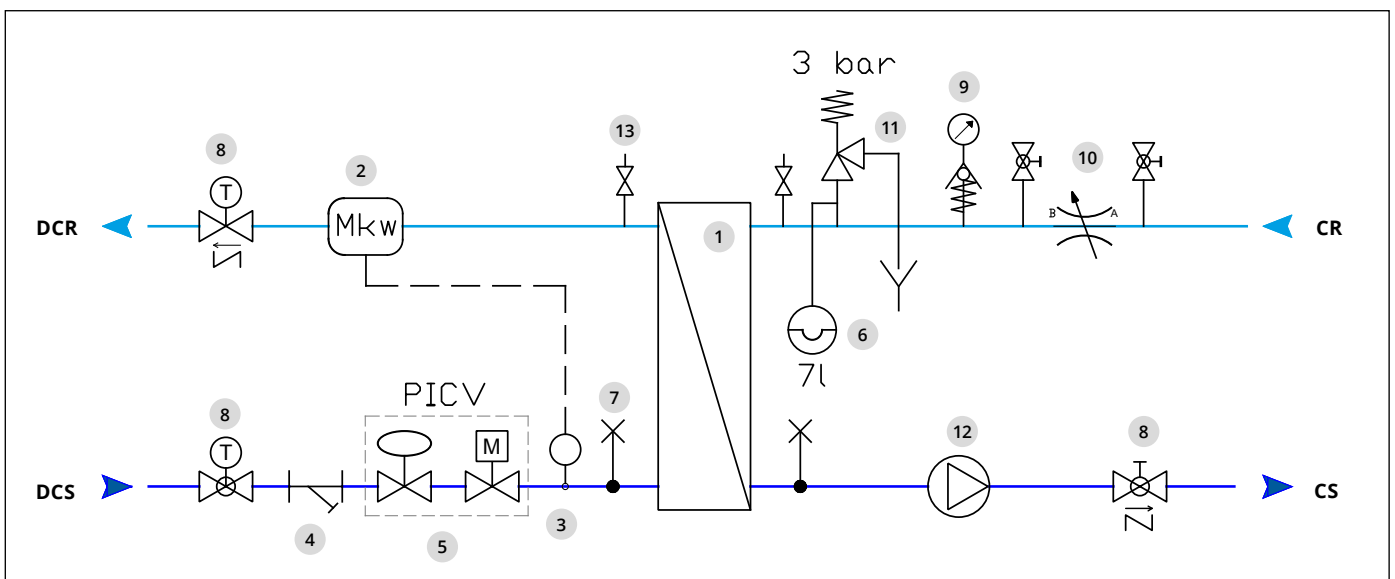
GENERAL DATA

Max pressure:	10 bar
Max supply temperature:	50°C
Min temperature:	5°C
Weight:	IC3 22kg, IC6 23, IC10 25kg, IC14 27kg
Electrical supply:	230 V
Dimensions with cover (H x W x D):	835 x 475 x 226mm

Hydraulic Circuit

COMPONENTS

1. Insulated brazed plate heat exchanger
2. Ultrasonic energy meter G 1" - 130mm
3. Sensor pocket for heat meter
4. Filter
5. Pressure independent control balancing valve with 230V electric actuator
6. Expansion tank
7. Manual air vent valve
8. Ball valve
9. Manometer
10. Flow regulator with load and washing system
11. 3 bar safety valve
12. High efficiency Wilo pump
13. Loading system



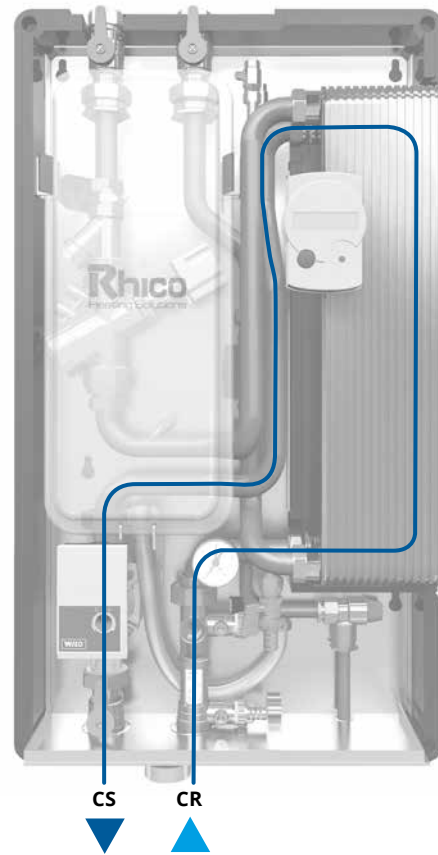
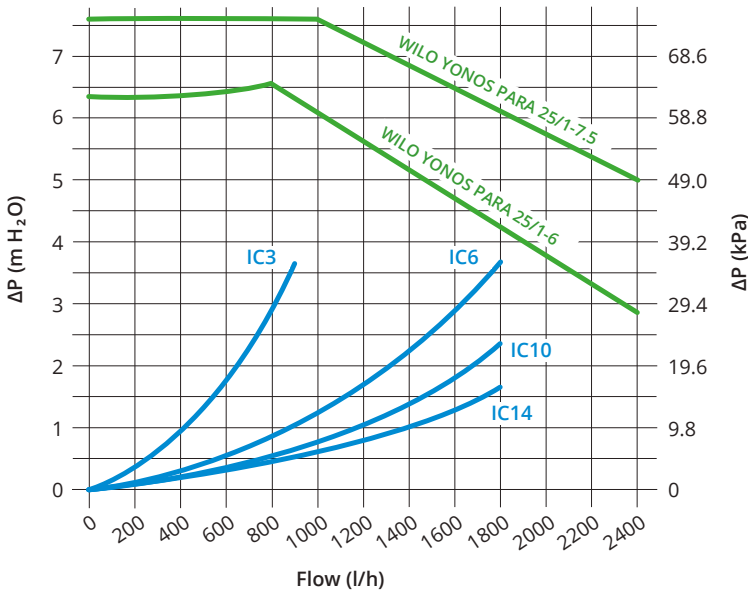
IC3-14 Indirect Cooling Interface Unit

Cooling only

IC3-14

Pressure Loss and Pump Curves

PRESSURE LOSS COOLING CIRCUIT



IC3-14 - Technical Data

Model	Cooling capacity	Supply flow primary	Return flow primary	Flow rate primary	Pressure loss primary	Cooling capacity	Supply flow secondary	Flow rate secondary	Pressure loss secondary	Exchange surface	Pump Wilo YONOS PARA	Residual head
	kW	°C	°C	l/h	KPa	kW	°C	°C	l/h	m ²	mca	KPa
IC3	3	6	12	430	25	3	8	14	430	0.82	6	49.8
IC6	6	6	12	870	45	6	8	14	870	1.15	6	49
IC10	10	6	12	14.50	65	10	8	14	1450	1.76	6	34
IC14	14	6	12	2035	95	14	8	14	2035	2.39	7.5	41

PICV DN25 Pre-setting

Preset	0.50	0.75	1.0	1.25	1.50	1.75	2.00	2.25	2.50	2.75	3.00	3.25	3.50	3.75	4.00	
Flow rate	I/h	292	435	577	719	863	1007	1152	1296	1437	1573	1700	1815	1913	1990	2039
	l/s	0.081	0.121	0.160	0.200	0.240	0.280	0.320	0.360	0.399	0.437	0.472	0.504	0.531	0.553	0.566
	GPM	1.28	1.91	2.54	3.17	3.80	4.43	5.07	5.70	6.33	6.92	7.48	7.99	8.42	8.76	8.98

IC18/21 Indirect Cooling Interface Unit

Cooling only

IC18/21



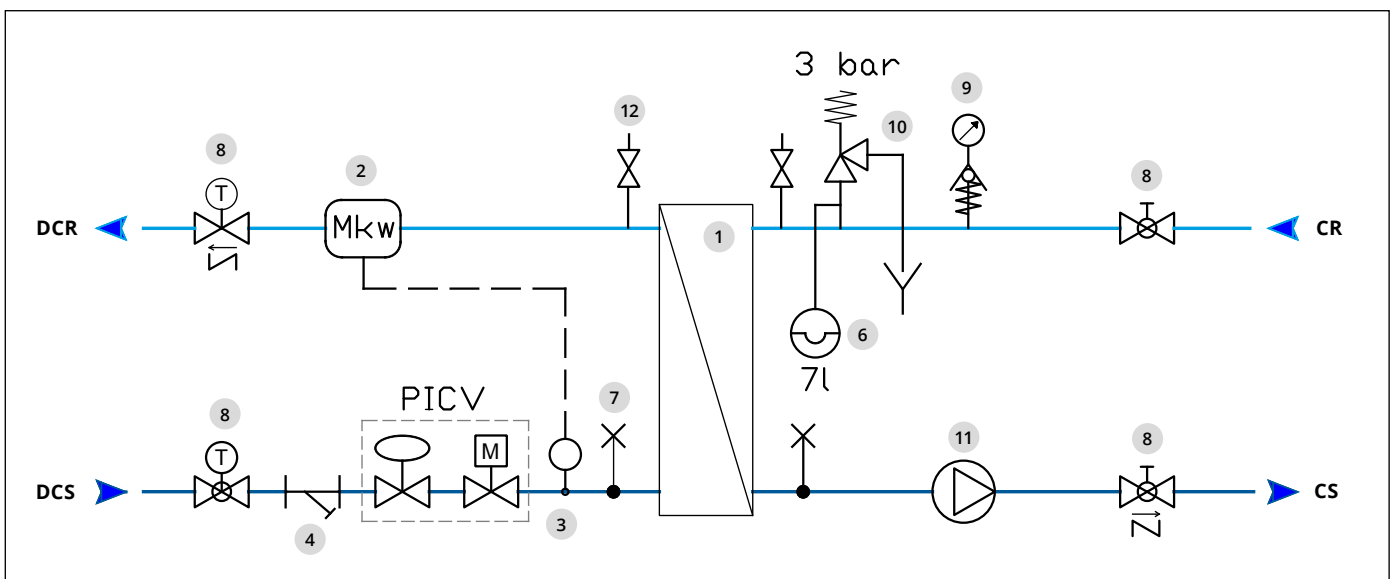
GENERAL DATA

Max pressure:	10 bar
Max supply temperature:	85°C
Min temperature:	5°C
Weight:	27kg
Electrical supply:	230 V
Dimensions with cover (H x W x D):	835 x 475 x 226mm

Hydraulic Circuit

COMPONENTS

1. Insulated brazed plate heat exchanger
2. Ultrasonic energy meter G 1" - 130mm
3. Sensor pocket for heat meter
4. Filter
5. Pressure independent control balancing valve with 230V electric actuator
6. Expansion tank
7. Manual air vent valve
8. Ball valve
9. Manometer
10. 3 bar safety valve
11. High efficiency Wilo pump
12. Loading system



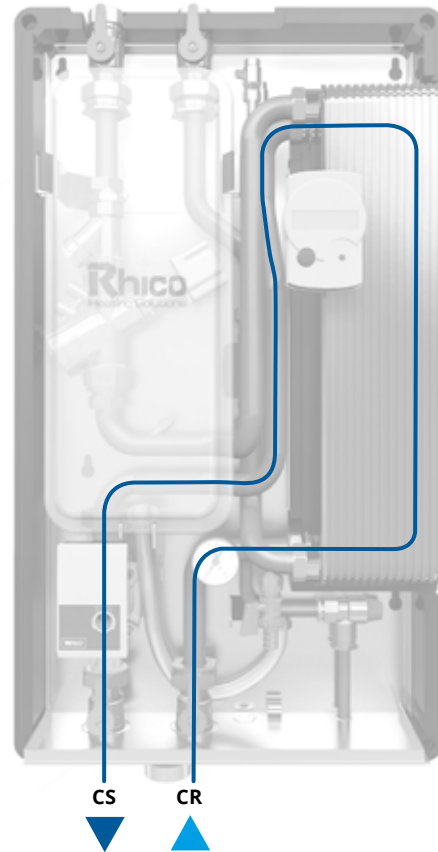
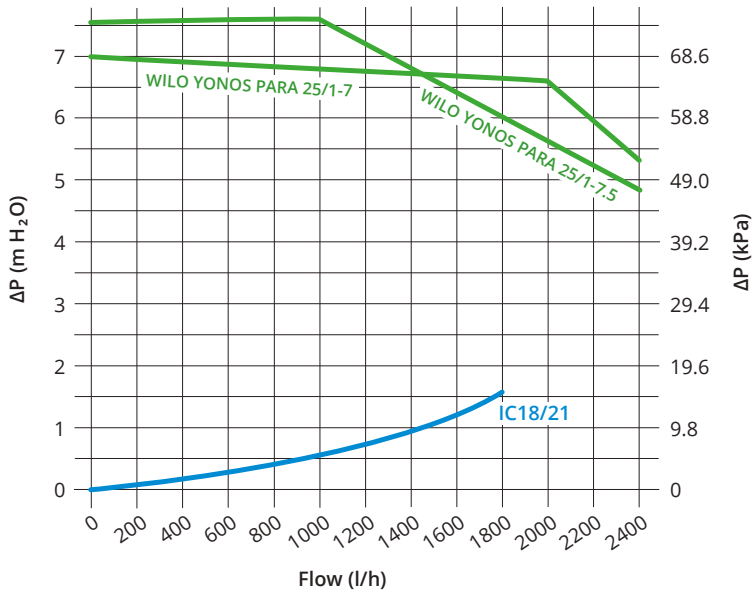
IC18/21 Indirect Cooling Interface Unit

Cooling only

IC18/21

Pressure Loss and Pump Curves

PRESSURE LOSS COOLING CIRCUIT



IC18/21 - Technical Data

Model	Cooling capacity	Supply flow primary	Return flow primary	Flow rate primary	Pressure loss primary	Cooling capacity	Supply flow secondary	Flow rate secondary	Pressure loss secondary	Exchange surface	Pump Wilo YONOS PARA	Residual head
	kW	°C	°C	l/h	KPa	kW	°C	°C	l/h	m ²	mca	KPa
IC18	18	6	12	2580	30	18	8	14	2580	3.1	7.5	30
IC21	21	6	12	3010	65	21	8	14	3010	3.1	7	32

PICV DN32 Pre-setting

Preset	0.50	0.75	1.0	1.25	1.50	1.75	2.00	2.25	2.50	2.75	3.00	3.25	3.50	3.75	4.00	
Flow rate	l/h	465	692	9221	1150	1377	1600	1816	2024	2221	2405	2574	2726	2858	2969	3056
	l/s	0.127	0.192	0.256	0.319	0.382	0.444	0.504	0.562	0.617	0.668	0.715	0.757	0.749	0.825	0.849
	GPM	2.05	3.05	4.05	5.06	6.06	7.04	7.99	8.91	9.78	10.59	11.33	12.00	12.58	13.07	13.45



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