

# INDIRECTA HTU serie

**ERP READY**


## DESCRIPTION

The INDIRECTA HTU module is a wall-mounting substation for indirect heating.

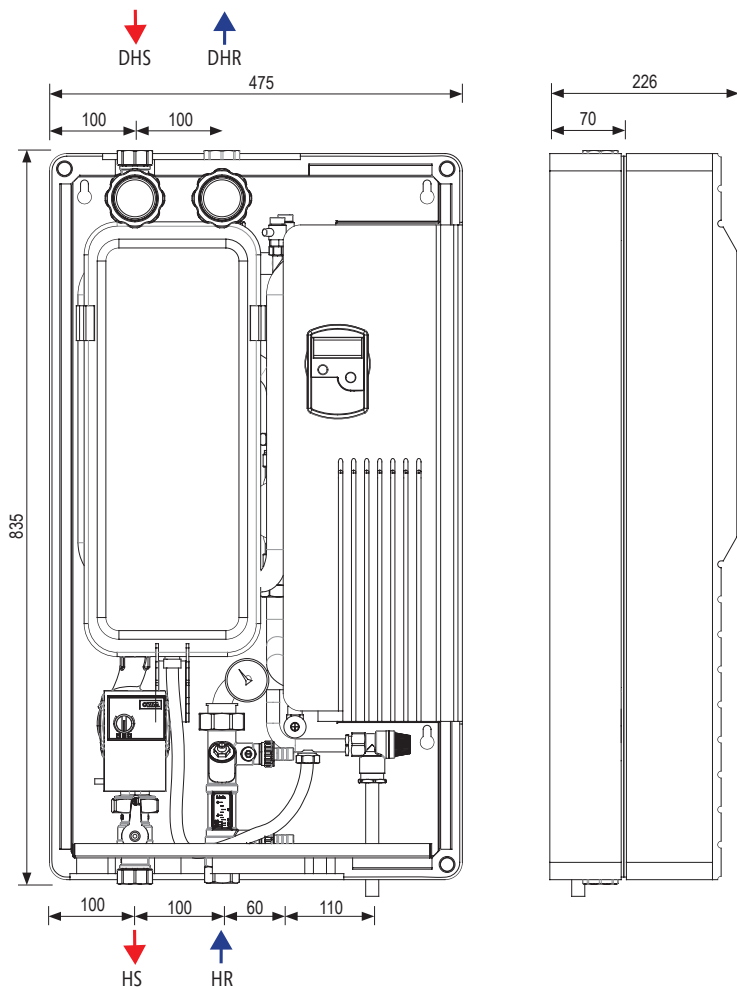
HTU modules with compact design, efficient energy transfer service-friendly construction are suitable for centralised production and distribution of heating energy from the heating plant to the heating system of commercial or residential buildings

The substation is prefabricated completely insulated with a independent differential pressure control valve integrated with ON/OFF actuator, expansion tank, fitting piece and sensor pockets for installation of an energy meter, isolation valves with thermometers. All pipes are in copper.

## BENEFITS

- CAPACITY: 30-65 KW HEATING
- COMPLETELY INSULATED
- COMPACT
- CONDENSATION DRAIN PAN
- EASY INSTALLATION
- EASY MAINTENANCE
- AUTOMATIC BALANCING VALVE
- HIGH PERFORMANCE HEAT EXCHANGER
- HIGH EFFICIENCY PUMP
- BALANCING FLOW METER
- FAST CONNECTIONS

# INDIRECTA HTU 30-45



Max pressure	10 bar
Max supply temperature	85°C
Weight	20 Kg
Electrical supply	230 V
Dimensions with cover (mm)	835x475x226

**Primary side**

DHS District heating supply G 1" (int. thread)  
 DHR District heating return G 1" (int. thread)

**Secondary side**

HR heating return G 1" (int. thread)  
 HS heating supply G 1" (int. thread)



**INDIRECTA HTU serie**  
 Heating function

COD.

HTU30

49048688

HTU45

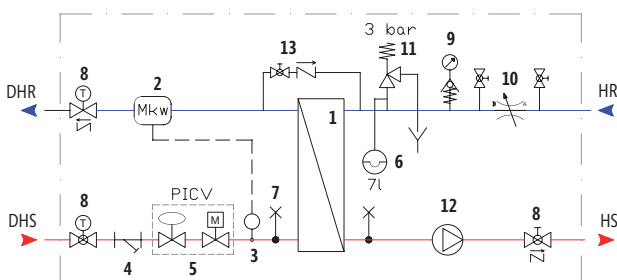
49048691



**COMPONENTS**

Ultrasonic energy meter - Qn 2,5 m<sup>3</sup>/h - 130 x 1" - CL2  
 ULTRA CFMUS M-BUS  
 Cod. 20319086

**INDIRECTA HTU 30-45 HYDRAULIC CIRCUIT**



**COMPONENTS**

1. Insulated brazed plate iron steel heat exchanger
2. Ultrasonic energy meter G 1" - 130 mm
3. Sensor pocket for heat meter
4. Filter
5. Pressure independent control balancing valve with electric actuator 230V
6. Expansion tank
7. Manual air vent valve
8. Ball valve
9. Manometer
10. Flow regulator 5+40 with load and washing system
11. 3 bar safety valve
12. High efficiency pump Wilo
13. Loading system

**TECHNICAL DATA**

**PRIMARY SIDE**

SUBSTATIONS TYPE	Heating capacity	Supply temp.	Return temp.	Flow rate	Pressure loss
	kW	°C	°C	l/h	KPa
HTU 30	30	80	60	1350	60
HTU 45	45	80	60	1980	90

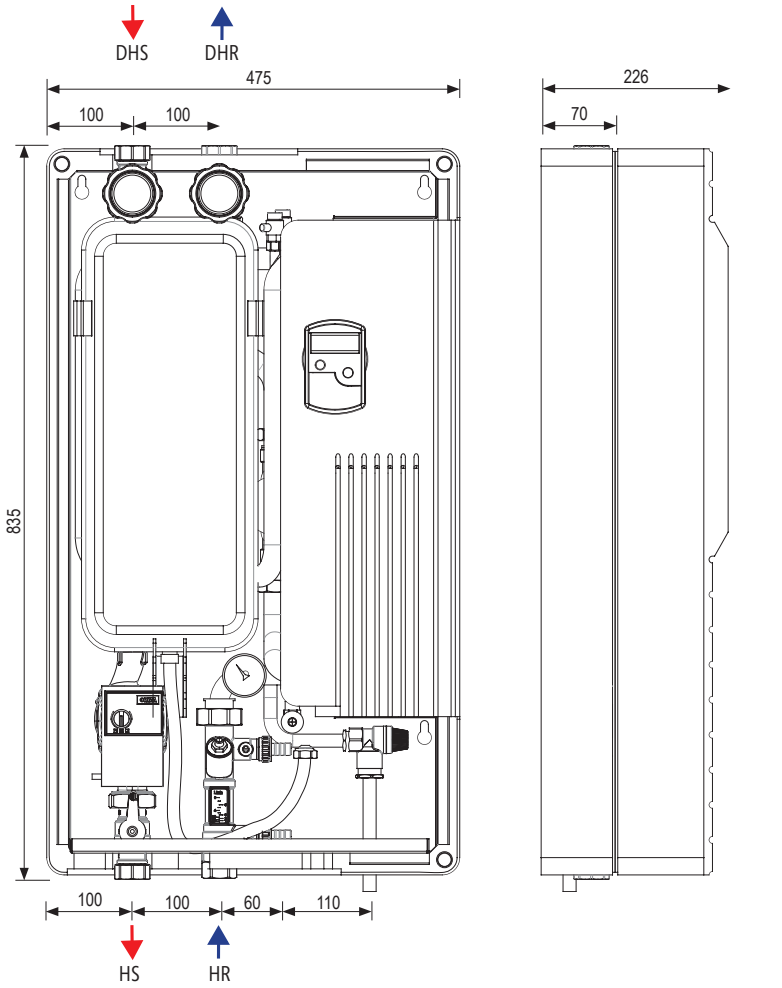
**SECONDARY SIDE**

Heating capacity	Supply flow	Return flow	Flow rate	Exchange surface	Pump Wilo YONOS PARA	Residual head
kW	°C	°C	l/h	m <sup>2</sup>	m.c.a.	KPa
30	70	50	1350	0,82	6	28
45	70	50	1900	1,13	7,5	27,5

**PICV DN25 PRE-SETTING (HTU 30-45)**

Pre-Set	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	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

# INDIRECTA HTU 65



Max pressure	<b>10 bar</b>
Max supply temperature	<b>85°C</b>
Weight	<b>22 Kg</b>
Electrical supply	<b>230 V</b>
Dimensions with cover (mm)	<b>835x475x226</b>

**Primary side**  
**DHS** District heating supply G 1" (int. thread)  
**DHR** District heating return G 1" (int. thread)

**Secondary side**  
**HR** heating return G 1" (int. thread)  
**HS** heating supply G 1" (int. thread)

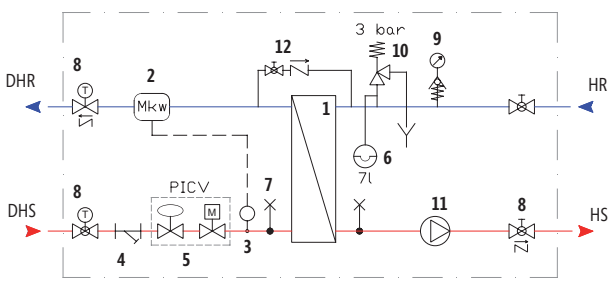


<b>INDIRECTA HTU serie</b>	COD.
<b>Heating function</b>	
<b>HTU65</b>	49048694



**COMPONENTS**  
 Ultrasonic energy meter - Qn 2,5 m³/h - 130 x 1" - CL2  
 ULTRA CFMUS M-BUS  
 Cod. 20319086

## INDIRECTA HTU 65 HYDRAULIC CIRCUIT



COMPONENTS	
1. Insulated brazed plate iron steel heat exchanger	7. Manual air vent valve
2. Ultrasonic energy meter G 1"¼ - 150 mm	8. Ball valve
3. Sensor pocket for heat meter	9. Manometer
4. Filter	10. 3 bar safety valve
5. Pressure independent control balancing valve with electric actuator 230V	11. High efficiency pump Wilo
6. Expansion tank	12. Loading system

## TECHNICAL DATA

PRIMARY SIDE						SECONDARY SIDE				Pump Wilo STRATOS PARA		
SUBSTATIONS TYPE	Heating capacity	Supply temp.	Return temp.	Flow rate	Pressure loss	Heating capacity	Supply temp.	Return temp.	Flow rate	Exchange surface	Residual head	
	kW	°C	°C	l/h	KPa	kW	°C	°C	l/h	m²	m.c.a.	KPa
HTU 65	65	80	60	2850	55	65	70	50	2850	1,76	7	29

## PICV DN32 PRE-SETTING (HT65)

Pre-Set	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	922	1150	1377	1600	1816	2024	2221	2405	2574	2726	2858	2969	3056
	l/s	0.129	0.192	0.256	0.319	0.382	0.444	0.504	0.562	0.617	0.668	0.715	0.757	0.794	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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# INDIRECTA CTU serie

**ERP READY**


## DESCRIPTION

INDIRECTA CTU module is a wall-mounting substation for indirect cooling.

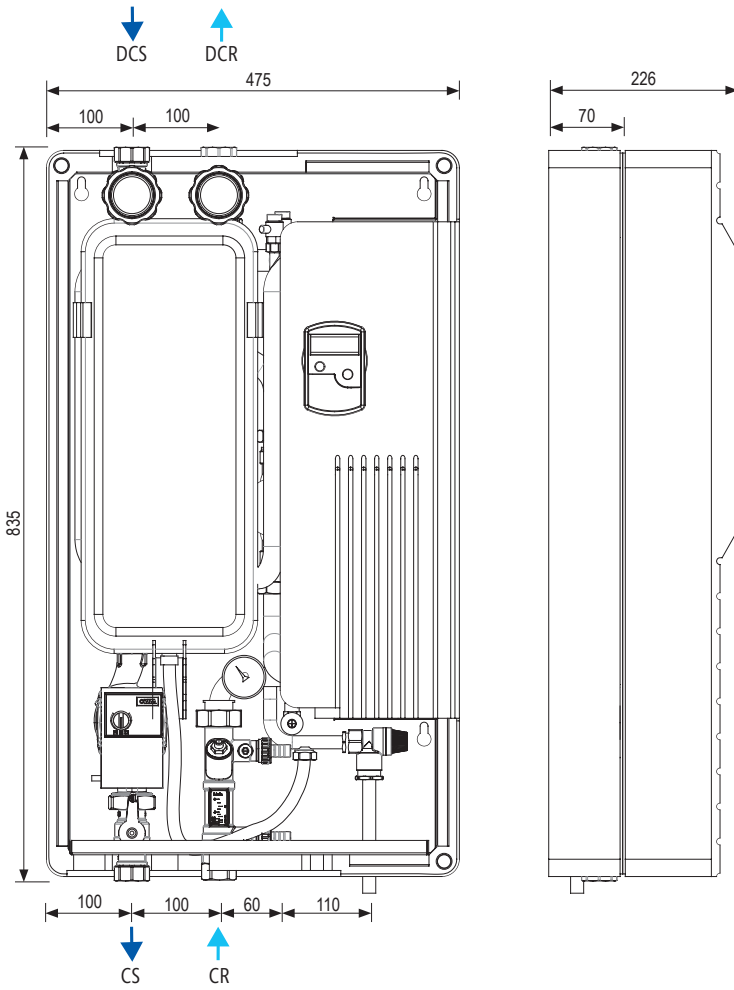
CTU modules with compact design, efficient energy transfer service-friendly construction are suitable for centralised production and distribution of cooling energy from the cooling plant to the air conditioning system of commercial or residential buildings

The substation is prefabricated completely insulated with a independent differential pressure control valve integrated with ON/OFF actuator, expansion tank, fitting piece and sensor pockets for installation of an energy meter, isolation valves with thermometers. All pipes are in copper.

## BENEFITS

- CAPACITY: 3-21 KW COOLING
- COMPLETELY INSULATED
- COMPACT
- CONDENSATION DRAIN PAN
- EASY INSTALLATION
- EASY MAINTENANCE
- AUTOMATIC BALANCING VALVE
- HIGH PERFORMANCE HEAT EXCHANGER
- HIGH EFFICIENCY PUMP
- BALANCING FLOW METER
- FAST CONNECTIONS

# INDIRECTA CTU 3÷14



Max pressure	10 bar
Max supply temperature	50°C
Min. temperature	5°C
Weight	20-22-25 Kg
Electrical supply	230 V
Dimensions with cover (mm)	835x475x226

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

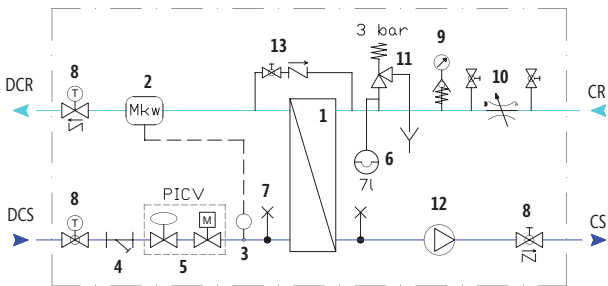


INDIRECTA CTU serie ❄️ Cooling function	COD.
INDIRECTA CTU 3	49048670
INDIRECTA CTU 6	49048673
INDIRECTA CTU 10	49048676
INDIRECTA CTU 14	49048679



**COMPONENTS**  
 Ultrasonic energy meter - Qn 2,5 m³/h - 130 x 1" - CL2  
 ULTRA CFMUS M-BUS  
 Cod. 20319086

## INDIRECTA CTU 3÷14 HYDRAULIC CIRCUIT



COMPONENTS	
1. Insulated brazed plate iron steel heat exchanger	7. Manual air vent valve
2. Ultrasonic energy meter G 1" - 130 mm	8. Ball valve
3. Sensor pocket for heat meter	9. Manometer
4. Filter	10. Flow regulator 5÷40 with load and washing system
5. Pressure independent control balancing valve with electric actuator 230V	11. 3 bar safety valve
6. Expansion tank	12. High efficiency pump Wilo
	13. Loading system

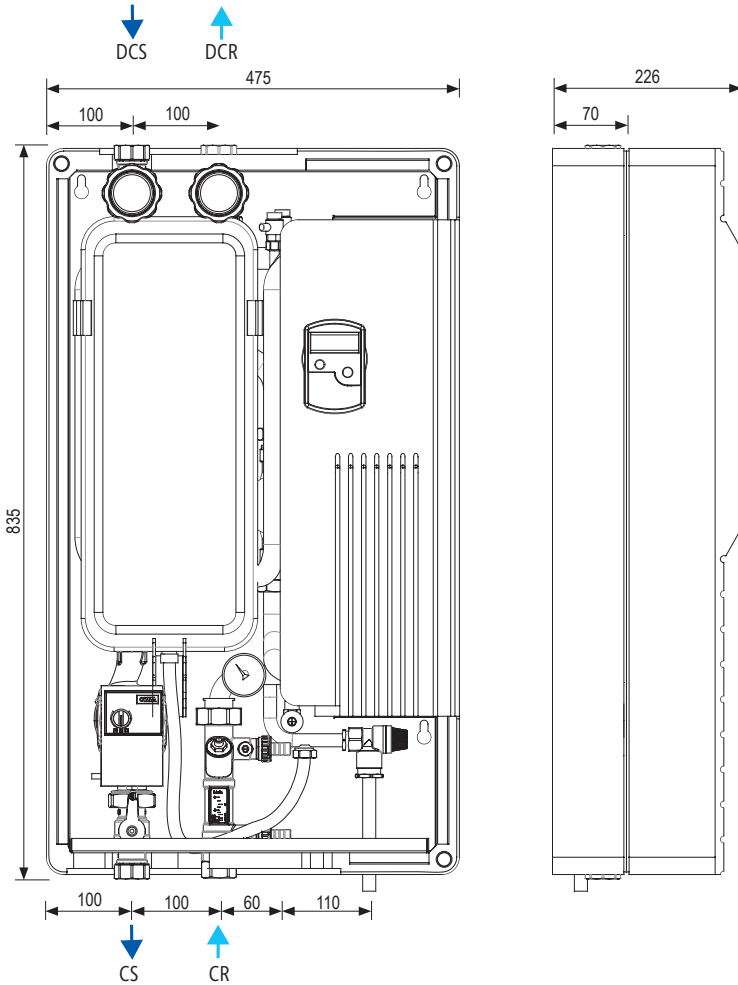
## TECHNICAL DATA

PRIMARY SIDE						SECONDARY SIDE						
SUBSTATIONS TYPE	Heating capacity	Supply temp.	Return temp.	Flow rate	Pressure loss	Heating capacity	Supply temp.	Return temp.	Flow rate	Exchange surface	Pump Wilo YONOS PARA	Residual head
	kW	°C	°C	l/h	KPa	kW	°C	°C	l/h	m²	m.c.a.	KPa
CTU 3	3	6	12	430	25	3	8	14	430	0,82	6	49,8
CTU 6	6	6	12	870	45	6	8	14	870	1,13	6	49
CTU 10	10	6	12	1450	65	10	8	14	1450	1,76	6	34
CTU 14	14	6	12	2035	95	14	8	14	2035	2,39	7,5	41

## PICV DN25 PRE-SETTING (CTU 3÷14)

Flow Rate	Pre-Set	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
	l/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

# INDIRECTA CTU 18÷21



Max pressure	<b>10 bar</b>
Max supply temperature	<b>50°C</b>
Min. temperature	<b>5°C</b>
Weight	<b>27 Kg</b>
Electrical supply	<b>230 V</b>
Dimensions with cover (mm)	<b>835x475x226</b>

**Primary side**  
**DCS** District cooling supply G 1" (int. thread)  
**DCR** District cooling return G 1" (int. thread)

**Secondary side**  
**CR** Cooling return G 1" (int. thread)  
**CS** Cooling supply G 1" (int. thread)

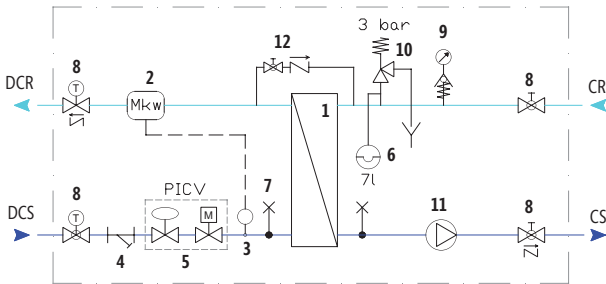


<b>INDIRECTA CTU serie</b>	COD.
<b>❄️ Cooling function</b>	
<b>INDIRECTA CTU 18</b>	49048682
<b>INDIRECTA CTU 21</b>	49048685



**COMPONENTS**  
 Ultrasonic energy meter - Qn 2,5 m³/h - 130 x 1" - CL2  
 ULTRA CFMUS M-BUS  
 Cod. 20319086

## INDIRECTA CTU 18÷21 HYDRAULIC CIRCUIT



COMPONENTS											
1. Insulated brazed plate iron steel heat exchanger	7. Manual air vent valve										
2. Ultrasonic energy meter G 1" - 150 mm	8. Ball valve										
3. Sensor pocket for heat meter	9. Manometer										
4. Filter	10. 3 bar safety valve										
5. Pressure independent control balancing valve with electric actuator 230V	11. High efficiency pump Wilo										
6. Expansion tank	12. Loading system										

## TECHNICAL DATA

PRIMARY SIDE						SECONDARY SIDE						
SUBSTATIONS TYPE	Heating capacity	Supply temp.	Return temp.	Flow rate	Pressure loss	Heating capacity	Supply temp.	Return temp.	Flow rate	Exchange surface	Pump Wilo YONOS PARA	Residual head
	kW	°C	°C	l/h	KPa	kW	°C	°C	l/h	m²	m.c.a.	KPa
CTU18	18	6	12	2580	30	18	8	14	2580	3,1	7,5	30
SUBSTATIONS TYPE	Heating capacity	Supply temp.	Return temp.	Flow rate	Pressure loss	Heating capacity	Supply temp.	Return temp.	Flow rate	Exchange surface	Pump Wilo STRATOS PARA	Residual head
	kW	°C	°C	l/h	KPa	kW	°C	°C	l/h	m²	m.c.a.	KPa
CTU 21	21	6	12	3010	65	21	8	14	3010	3,1	7	32

## PICV DN32 PRE-SETTING (CTU 18-21)

Pre-Set	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	0.129	0.192	0.256	0.319	0.382	0.444	0.504	0.562	0.617	0.668	0.715	0.757	0.794	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