

**2025**

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**CHILLERS  
AND HEAT PUMPS**

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## The majority of people around the world prefer to work with professionals when it comes to choosing complex equipment

Thermex Energy is Thermex Corporation's engineering division, specializing in the production of energy-efficient chillers and heat pumps.

### High energy efficiency

Thermex Energy chillers are designed using the latest technology to ensure optimal energy efficiency. It is of particular significance in countries where cooling systems are operational throughout the year, as energy savings can markedly reduce operating costs.

### Reliability in extreme conditions

The chillers are designed to operate in high-temperature conditions, making them an excellent choice for deployment in hot climates. The equipment is designed to perform reliably in the most challenging weather conditions.

### Eco-friendliness and compliance with standards

Thermex chillers use green coolants with low CO<sub>2</sub> emissions that meet international standards.

### Smart control system

Thermex Energy chillers are equipped with integrated smart control systems to optimize equipment operation, monitor conditions in real time and cut maintenance costs.

### Wide range of possibilities

Thermex Energy chillers fulfill the industrial cooling needs of small and large manufacturing plants, production and warehouse complexes, shopping and business centers, data centers, hotels and restaurants, medical centers, sport centers, and other infrastructure facilities.

### Local support and service

We provide prompt technical service and support. Our team of qualified specialists is always available to assist with installation, setup, and repair of equipment, should you require it.

### Competitive price

Thermex Energy chillers offer an attractive price-quality ratio, which may be of interest to customers looking for a reliable and efficient solution at an affordable cost.

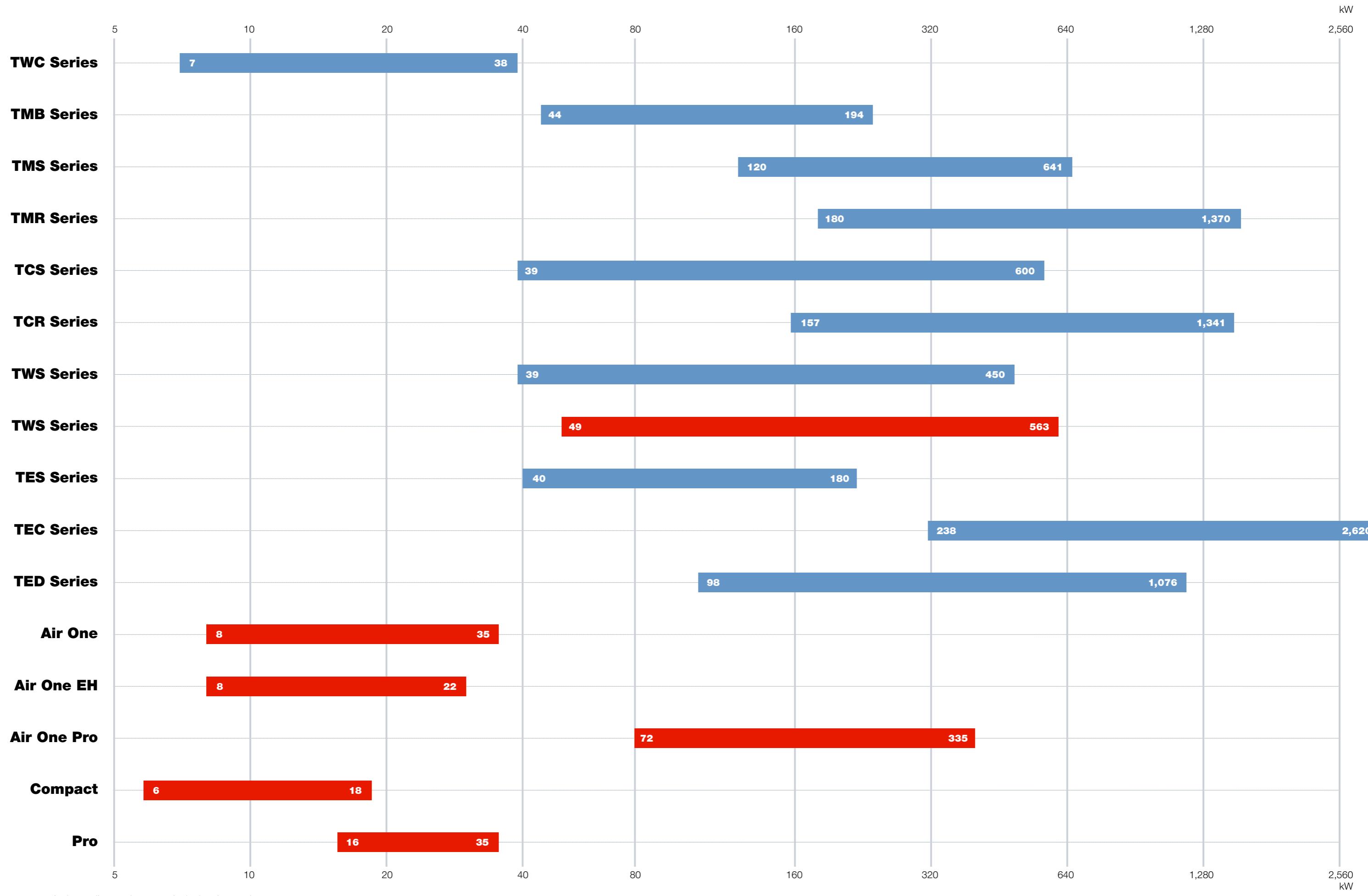
“ We draw on Thermex's 75 years of experience in designing and manufacturing advanced heating equipment and energy-saving products.

“ We provide energy-efficient solutions for residential, commercial and industrial facilities of any scale.

“ We are committed to improving our product range and developing new products through technological development and innovation.

“ Thermex Energy's production team consists of highly qualified specialists, winners of international championships in workmanship.





## SMART THERMEX ENERGY CONTROLLERS

**Comfortable climate or technological processes cooling**



Accuracy of maintaining specified parameters



Floating condensing temperature technology



Remote control and service



Possibility of combining several devices into one system



Daily fault log



Intuitive interface

### Unique software

Smart Thermex Energy (STE) controllers are tailored to the specific operating conditions of modern environments. Unique software incorporates the properties of equipment components and adapts as accurately as possible to tasks ranging from comfortable air conditioning to the technological processes cooling. Equipment featuring STE controllers guarantees the accuracy of maintaining specified parameters while ensuring energy-efficient operation.

### Ergonomics

The STE controller's intuitive interface displays all the information you need. Thermex Energy appliances equipped with STE controllers can be integrated into a single system, enabling to configure all appliances using a single controller. To facilitate initial commissioning, the controller has an interface to manually control any component.

All components can be tested quickly and conveniently during commissioning or service work. Daily fault logs are provided to monitor the correct operation of the equipment. The last 1,000 faults and/or accidents are stored in non-volatile storage. The STE software has been tested and updated based on operational experience at existing facilities.

### Efficiency

Controllers with STE technology use floating condensing temperature technology to achieve the highest average daily performance factor. The controller automatically adjusts the freon condensing temperature based on the ambient temperature. This significantly increases the seasonal efficiency of the compressors. The fan speed can also be reduced at night. This allows for virtually silent operation.

### Well-designed cloud service

All Smart Thermex Energy controllers in the basic version are connected to the service via Ethernet, allowing real-time monitoring of equipment operation from any location in the world. The service department performs remote diagnostics on equipment as needed. Since most visits by service technicians are related to incorrect configuration and/or operation of the equipment, the cloud technology of the service enables a significant reduction in operating costs. The data in the cloud service is updated every 10 seconds. It is stored on the server for up to 90 days.

## AIR COOLED CHILLERS

Thermex Energy air cooled monoblock chillers are designed for air conditioning and cooling of residential, commercial, and industrial premises of any size. Reliable and energy-efficient chillers are available in a wide range of capacities and can operate efficiently at high ambient temperatures up to +43 °C.



*Application areas:*



Residential buildings



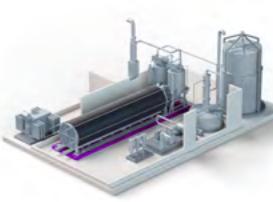
Office centers, hotels, shopping centers, sport centers, etc.



Medical facilities, social facilities



Warehouses, factories



Technological processes  
(mechanical engineering and metalworking, chemical industry, food industry, data centers, etc.)



## MONOBLOCK PROCESS EQUIPMENT AIR-TO-WATER CHILLERS

**TWC Series**

4 standard sizes  
with cooling capacities  
from 7 to 38 kW

- Scroll compressors
- Outside air temperature range for chiller operation is -5 to +43 °C
- Operating coolant temperature range at chiller outlet is -7 to 17.5 °C
- Body treatment with zinc-rich paint, RAL 7035 powder coating
- Up to two compressors per circuit
- EC fans with adjustable speed for noise reduction
- Reduced freon charge due to the use of microchannel heat exchangers



## Model range and specifications:

Model	UoM	TWC 11-10-1EC-HM1	TWC 11-15-1EC-HM1	TWC 12-20-1EC-HM1	TWC 12-30-1EC-HM1
Cooling capacity 12/7/35	kW	9	16	20	33
Compressor electrical power	kW	3	5	5	9
Total electrical power	kW	4	6	7	12
EER brutto		3.22	3.45	3.98	3.62
EER netto		2.04	2.56	2.70	2.81
Number of cooling circuits		1	1	1	1
Number of compressors		1	1	2	2
Fan diameter	mm	500	500	500	500
Number of fans	pcs.	1	1	1	1
Coolant consumption	m³/h	2	3	3	6
Evaporator flow resistance	kPa	10	32	27	49
Length	mm	950	950	1,180	1,180
Width	mm	640	640	760	760
Height	mm	900	900	1,070	1,070
Weight	kg	150	150	220	220

## AIR-TO-WATER MONOBLOCK CHILLERS

**TMB Series**

- Scroll compressors
- Outside air temperature range for chiller operation is -5 to +43 °C
- Operating coolant temperature range at chiller outlet is -7 to 17.5 °C
- Body treatment with zinc-rich paint, RAL 7035 powder coating
- Up to three compressors per circuit
- EC fans with adjustable speed for noise reduction
- Reduced freon charge due to the use of microchannel heat exchangers



## Model range and specifications:

Model	UoM	TMB 12-35-2EC-HM1	TMB 12-50-2EC-HM1	TMB 12-70-1EC-HM1	TMB 12-100-2EC-HM1	TMB 12-120-2EC-HM1	TMB 12-140-2EC-HM1	TMB 13-180-2EC-HM1	TMB 13-210-4EC-HM1	TMB 14-240-4EC-HM1
Cooling capacity 12/7/35	kW	45	60	80	110	129	155	192	238	253
Compressor electrical power	kW	11	18	25	37	36	47	67	67	76
Total electrical power	kW	15	22	30	45	45	56	77	83	92
EER brutto		4.04	3.30	3.22	2.97	3.54	3.33	2.86	3.54	3.35
EER netto		2.96	2.69	2.70	2.43	2.89	2.78	2.51	2.86	2.76
Number of cooling circuits		1	1	1	1	1	1	1	1	1
Number of compressors		2	2	2	2	2	2	3	3	4
Fan diameter	mm	500	500	800	800	800	800	800	800	800
Number of fans	pcs.	2	2	1	2	2	2	2	4	4
Coolant consumption	m³/h	8	10	14	19	22	27	33	41	43
Evaporator flow resistance	kPa	28	48	40	36	48	49	49	46	43
Length	mm	1,620				2,350			2,367	
Width	mm	840				1,000			2,367	
Height	mm	1,100				1,480			1,700	1,700
Weight	kg	400	450	600	650	700	750	800	1,350	1,450

9 standard sizes  
with cooling capacities  
from 44 to 194 kW

## AIR-TO-WATER MONOBLOCK CHILLERS

**TMS Series**

Scroll compressors



Outside air temperature range for chiller operation is -15 to +43 °C



Operating coolant temperature range at chiller outlet is -14 to 17.5 °C

**18 standard sizes  
with cooling capacities  
from 120 to 641 kW**



Body treatment with zinc-rich paint, RAL 7035 powder coating



EC fans with adjustable speed for noise reduction



Reduced freon charge due to the use of microchannel heat exchangers



Integration into a common control system with Smart Thermex Energy (STE) condenserless chillers

**Basic equipment:**

- Ethernet Cloud Service
- Built-in pressure gauges
- Electronic expansion valve
- Touchpad controller
- UPS for controllers
- Cooling circuit thermal insulation
- Electronic condensation pressure control
- Stainless steel hydraulic module pipelines
- W/o hydraulic module insulation
- Freon filling

**Options available:**

- Built-in hydraulic module with a pump
- Built-in hydraulic module with two pumps
- Built-in buffer tank volume
- Built-in free cooling unit
- GSM modem for connection to a Cloud Service
- 7" remote operator's panel
- Cascade control of up to 16 chillers
- Protective body panels
- Sound insulation (body + compressors)
- Vibration dampers
- Control panel (included but not installed)
- Carbon steel hydraulic module pipelines
- Pneumatic tank
- Hydraulic module/tank thermal insulation thickness
- Hydraulic module pumps frequency converter
- Nitrogen filling

**Model range and specifications:**

Model	UoM	TMS 12-118-2EC	TMS 12-128-2EC	TMS 12-159-2EC	TMS 13-177-4EC	TMS 13-192-4EC
Cooling capacity 12/7/35	kW	120	129	155	176	187
Compressor electrical power	kW	32	36	47	51	58
Total electrical power	kW	37	42	52	61	68
EER brutto		3.74	3.54	3.33	3.45	3.26
EER netto		3.21	3.10	2.99	2.86	2.75
Number of cooling circuits		1	1	1	1	1
Number of compressors		2	2	2	3	3
Fan diameter	mm	800	800	800	800	800
Number of fans	pcs.	2	2	2	4	4
Coolant consumption	m³/h	21	22	27	30	32
Evaporator flow resistance	kPa	43	48	32	41	29
Length	mm		1,000			1,990
Width	mm			2,650		2,350
Height	mm				2,350	
Weight	kg	1,084	1,093	1,121	1,241	1,255

Model	UoM	TMS 13-239-4EC	TMS 24-236-4EC	TMS 24-256-4EC	TMS 24-287-4EC
Cooling capacity 12/7/35	kW	243	242	258	285
Compressor electrical power	kW	65	64	73	83
Total electrical power	kW	75	75	83	93
EER brutto		3.74	3.75	3.55	3.44
EER netto		3.22	3.22	3.10	3.06
Number of cooling circuits		1	2	2	2
Number of compressors		3	4	4	4
Fan diameter	mm	800	800	800	800
Number of fans	pcs.	4	4	4	4
Coolant consumption	m³/h	42	42	44	49
Evaporator flow resistance	kPa	48	41	47	40
Length	mm		1,990		
Width	mm			2,350	
Height	mm			2,350	
Weight	kg	1,833	1,939	1,968	1,978

Model	UoM	TMS 24-318-4EC	TMS 26-354-6EC	TMS 26-384-6EC	TMS 26-415-8EC
Cooling capacity 12/7/35	kW	311	362	387	428
Compressor electrical power	kW	93	97	109	112
Total electrical power	kW	104	112	125	133
EER brutto		3.33	3.75	3.55	3.83
EER netto		3.00	3.22	3.10	3.22
Number of cooling circuits		2	2	2	2
Number of compressors		4	6	6	6
Fan diameter	mm	800	800	800	800
Number of fans	pcs.	4	6	6	8
Coolant consumption	m³/h	53	62	67	74
Evaporator flow resistance	kPa	48	43	49	41
Length	mm	1,990		3,410	4,400
Width	mm		2,350		2,418
Height	mm			2,350	
Weight	kg	1,992	2,820	2,867	3,566

Model	UoM	TMS 26-446-8EC	TMS 26-477-8EC	TMS 28-472-10EC	TMS 28-512-10EC	TMS 28-636-10EC
Cooling capacity 12/7/35	kW	457	485	494	530	641
Compressor electrical power	kW	121	130	123	139	176
Total electrical power	kW	142	151	150	166	202
EER brutto		3.79	3.73	4.01	3.80	3.65
EER netto		3.23	3.21	3.30	3.20	3.18
Number of cooling circuits		2	2	2	2	2
Number of compressors		6	6	8	8	8
Fan diameter	mm	800	800	800	800	800
Number of fans	pcs.	8	8	10	10	10
Coolant consumption	m³/h	79	83	85	91	110
Evaporator flow resistance	kPa	47	43	44	51	56
Length	mm		4,400		5,390	
Width	mm			2,418		
Height	mm			2,350		
Weight	kg	3,566	3,588	4,656	4,742	4,772

## AIR-TO-WATER MONOBLOCK CHILLERS

**TMR Series**

Screw compressors



Operating coolant temperature range at chiller outlet is -7 to 17.5 °C



Operating coolant temperature range at chiller outlet is -14 to 20 °C



Body treatment with zinc-rich paint, RAL 7035 powder coating



EC fans with adjustable speed for noise reduction



Reduced freon charge due to the use of microchannel heat exchangers



Integration into a common control system with Smart Thermex Energy (STE) condenserless chillers



**28 standard sizes  
with cooling capacities  
from 180 to 1,370 kW**

**Basic equipment:**

- Ethernet Cloud Service
- Built-in pressure gauges
- Electronic expansion valve
- Touchpad controller
- UPS for controllers
- Electronic condensation pressure control
- Stainless steel hydraulic module pipelines
- W/o hydraulic module insulation
- Freon filling

**Options available:**

- Built-in hydraulic module with a pump
- Built-in hydraulic module with two pumps
- Built-in buffer tank volume
- Built-in free cooling unit
- GSM modem for connection to a Cloud Service
- 7" remote operator's panel
- Cooling circuit thermal insulation
- Cascade control of up to 16 chillers
- Protective body panels
- Vibration dampers
- Carbon steel hydraulic module pipelines
- Pneumatic tank
- Hydraulic module/tank thermal insulation thickness
- Hydraulic module pumps frequency converter
- Nitrogen filling

**Model range and specifications:**

Model	UoM	TMR 11-160-4EC	TMR 11-180-4EC	TMR 11-200-4EC	TMR 11-210-4EC	TMR 11-260-4EC	TMR 11-290-4EC	TMR 11-330-6EC
Cooling capacity 12/7/35	kW	183	203	222	233	278	304	363
Compressor electrical power	kW	48	54	60	65	80	89	94
Total electrical power	kW	58	64	71	75	90	99	110
EER brutto		3.83	3.78	3.67	3.59	3.49	3.42	3.85
EER netto		3.14	3.16	3.12	3.09	3.08	3.05	3.30
Number of cooling circuits		1	1	1	1	1	1	1
Number of compressors		1	1	1	1	1	1	1
Fan diameter	mm	800	800	800	800	800	800	800
Number of fans	pcs.	4	4	4	4	4	4	6
Coolant consumption	m³/h	32	35	38	40	48	52	62
Evaporator flow resistance	kPa	50	50	50	50	50	50	50
Length	mm					4,400		
Width	mm					2,350		
Height	mm					2,350		
Weight	kg	2,064	2,073	2,220	2,227	2,361	2,389	2,979

Model	UoM	TMR 11-390-6EC	TMR 11-440-6EC	TMR 11-460-8EC	TMR 11-480-8EC	TMR 11-540-8EC	TMR 11-610-8EC	TMR 11-670-10EC
Cooling capacity 12/7/35	kW	417	457	505	520	574	628	710
Compressor electrical power	kW	118	133	133	139	162	183	200
Total electrical power	kW	134	149	154	160	183	204	226
EER brutto		3.54	3.44	3.81	3.74	3.55	3.43	3.56
EER netto		3.12	3.07	3.29	3.25	3.14	3.08	3.15
Number of cooling circuits		1	1	1	1	1	1	1
Number of compressors		1	1	1	1	1	1	1
Fan diameter	mm	800	800	800	800	800	800	800
Number of fans	pcs.	6	6	8	8	8	8	10
Coolant consumption	m³/h	72	79	87	89	99	108	122
Evaporator flow resistance	kPa	50	50	50	50	50	50	50
Length	mm					4,400		5,390
Width	mm		2,350			2,418		
Height	mm					2,350		
Weight	kg	3,265	3,287	3,901	4,099	4,484	4,551	5,194

Model	UoM	TMR 22-320-6EC	TMR 22-360-6EC	TMR 22-400-6EC	TMR 22-420-6EC	TMR 22-520-8EC	TMR 22-580-8EC	TMR 22-660-10EC
Cooling capacity 12/7/35	kW	351	387	420	441	556	607	705
Compressor electrical power	kW	100	112	127	137	160	178	195
Total electrical power	kW	115	128	143	153	181	199	222
EER brutto		3.52	3.44	3.31	3.22	3.49	3.42	3.61
EER netto		3.04	3.02	2.94	2.88	3.08	3.05	3.18
Number of cooling circuits		2	2	2	2	2	2	2
Number of compressors		2	2	2	2	2	2	2
Fan diameter	mm	800	800	800	800	800	800	800
Number of fans	pcs.	6	6	6	6	8	8	10
Coolant consumption	m³/h	60	67	72	76	96	104	121
Evaporator flow resistance	kPa	50	50	50	50	50	50	50
Length	mm					4,400		5,390
Width	mm					2,418		
Height	mm					2,350		
Weight	kg	3,353	3,371	3,423	3,437	4,473	4,540	5,347

Model	UoM	TMR 22-780-12EC	TMR 22-880-12EC	TMR 22-920-14EC	TMR 22-960-14EC	TMR 22-1080-16EC	TMR 22-1220-16EC	TMR 22-1340-18EC
Cooling capacity 12/7/35	kW	834	914	988	1,016	1,148	1,257	1,393
Compressor electrical power	kW	235	266	273	286	324	366	409
Total electrical power	kW	267	298	310	323	366	408	457
EER brutto		3.54	3.44	3.62	3.55	3.55	3.43	3.40
EER netto		3.12	3.07	3.19	3.15	3.14	3.08	3.05
Number of cooling circuits		2	2	2	2	2	2	2
Number of compressors		2	2	2	2	2	2	2
Fan diameter	mm	800	800	800	800	800	800	800
Number of fans	pcs.	12	12	14	14	16	16	18
Coolant consumption	m³/h	143	157	170	175	197	216	239
Evaporator flow resistance	kPa	50	50	50	50	50	50	50
Length	mm		6,380		7,370		8,360	9,350
Width	mm					2,418		
Height	mm					2,350		
Weight	kg	6,514	6,536	7,107	7,294	8,603	8,647	9,542

## CONDENSERLESS CHILLERS

Low and high capacity air cooled condenserless chillers. Designed for indoor installation.

### High reliability

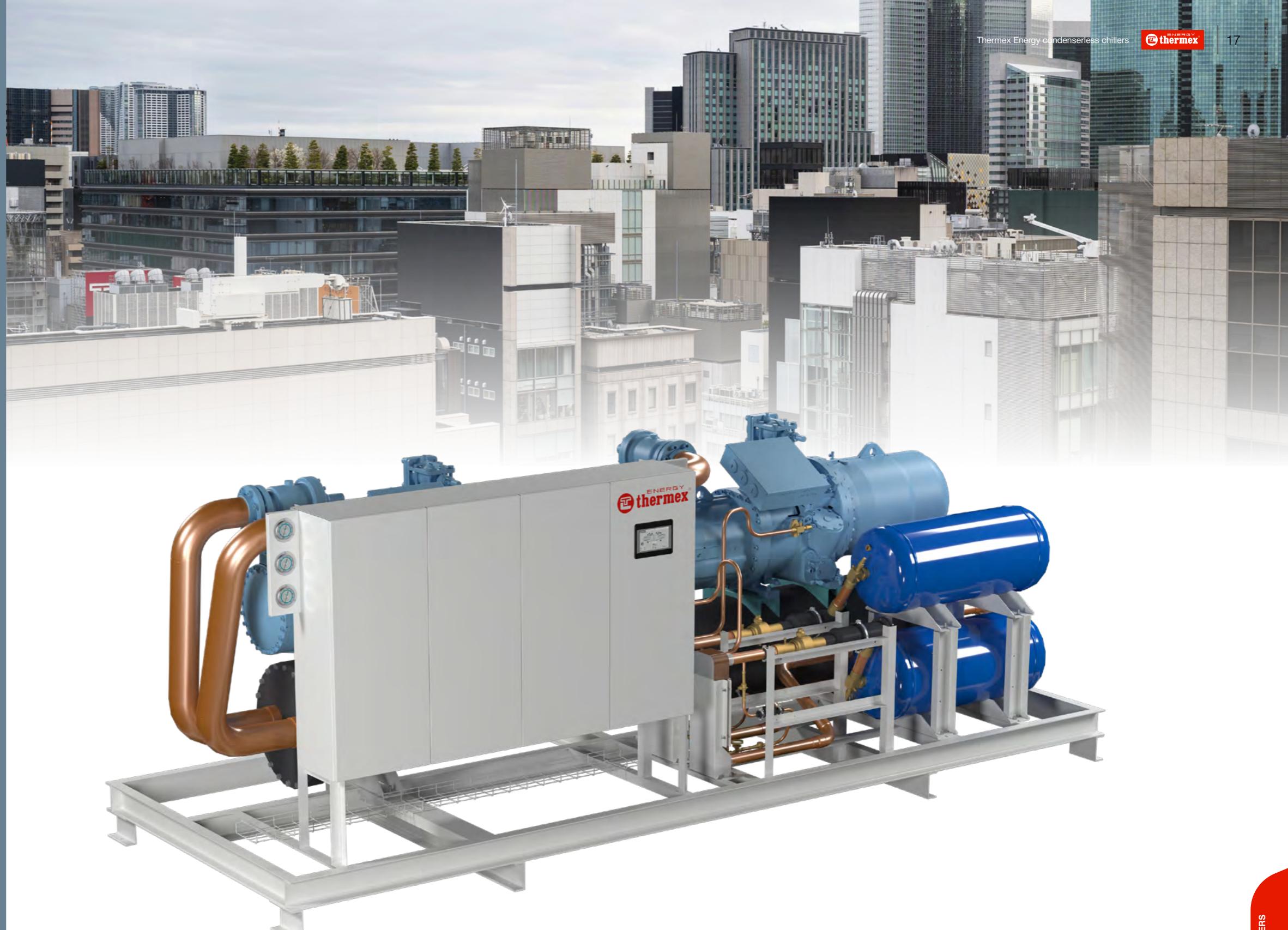
- Compressor with external thermal protection and crankcase heating
- Built-in voltage monitoring relay protects the chiller from phase-shift and other possible power supply failures
- Built-in flow relay
- Built-in high- and low-pressure relays
- Built-in high- and low-pressure gauges
- Built-in receivers
- Modular freon circuit filter for easy maintenance
- Thick-wall copper pipe
- UPS controller (standard option)

### Wide range of control system options

- 7" touchpad controller
- Chiller mimic diagram on the main screen
- Simple and user-friendly interface
- Accident log with time stamps
- Basic equipment for connection to a Cloud service for remote control and maintenance (requires Ethernet connection)
- Convenient service menu for testing all actuators in manual mode
- ModBus protocol support (TCP IP) (standard option)
- Cooling capacity control by:
  - Coolant temperature
  - Boiling pressure (compressors turn off when it drops)
  - Overheating (compressors turn off in case of heavy overheating)
  - Discharge pressure (compressors turn off when it rises)
- Remote TEC condensers control
- External THM hydraulic modules control
- Remote TED dry cooler control

### Convenient and fast installation

- Loading/unloading by forklift or crane



*Application areas:*



Residential buildings



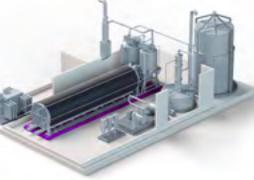
Office centers, hotels, shopping centers, sport centers, etc.



Medical facilities, social facilities



Warehouses, factories



Technological processes (mechanical engineering and metalworking, chemical industry, food industry, data centers, etc.)

## CONDENSERLESS CHILLERS

**TCS Series**

Scroll compressors



Operating coolant temperature range at chiller outlet is -14 to 17.5 °C



Body treatment with zinc-rich paint, RAL 7035 powder coating



EC fans with adjustable speed for noise reduction



Integration into a common control system with Smart Thermex Energy (STE) condenserless chillers



**24 standard sizes with cooling capacities from 39 to 600 kW**

**Basic equipment:**

- Ethernet Cloud Service
- Built-in pressure gauges
- Electronic expansion valve
- Touchpad controller
- UPS for controllers
- Cooling circuit thermal insulation
- Electronic condensation pressure control
- Stainless steel hydraulic module pipelines
- W/o hydraulic module insulation
- Nitrogen filling

**Options available:**

- Built-in hydraulic module with a pump
- Built-in hydraulic module with two pumps
- GSM modem for connection to a Cloud Service
- 7" remote operator's panel
- Cascade control of up to 16 chillers
- Protective body panels
- Sound insulation (body + compressors)
- Vibration dampers
- Carbon steel hydraulic module pipelines
- Pneumatic tank
- Hydraulic module/tank thermal insulation thickness
- Hydraulic module pumps frequency converter

**Model range and specifications:**

Model	UoM	TCS 11-42	TCS 11-59	TCS 11-64	TCS 11-80	TCS 12-72	TCS 12-83
Cooling capacity 12/7/35	kW	39	55	60	75	68	78
Compressor electrical power	kW	13	18	20	25	23	26
Total electrical power	kW	13	18	20	25	23	26
EER brutto		2.99	3.01	2.98	3.03	2.92	2.98
EER netto		2.99	3.01	2.98	3.03	2.92	2.98
Number of cooling circuits		1	1	1	1	1	1
Number of compressors		1	1	1	1	2	2
Fan diameter	mm	-	-	-5	-	-	-
Number of fans	pcs.	-	-	-	-	-	-
Coolant consumption	m³/h	7	10	10	13	12	13
Evaporator flow resistance	kPa	14	15	18	17	17	18
Length	mm			1,500			
Width	mm			800			
Height	mm			920			
Weight	kg	300	325	350	375	400	425

Model	UoM	TCS 12-118	TCS 12-128	TCS 12-144	TCS 12-159	TCS 13-177	TCS 13-192
Cooling capacity 12/7/35	kW	110	121	135	150	166	181
Compressor electrical power	kW	37	40	45	49	55	61
Total electrical power	kW	37	40	45	49	55	61
EER brutto		3.00	2.98	3.01	3.04	3.00	2.98
EER netto		3.00	2.98	3.01	3.04	3.00	2.98
Number of cooling circuits		1	1	1	1	1	1
Number of compressors		2	2	2	2	3	3
Fan diameter	mm	-	-	-	-	-	-
Number of fans	pcs.	-	-	-	-	-	-
Coolant consumption	m³/h	19	21	23	26	29	31
Evaporator flow resistance	kPa	36	43	24	30	23	27
Length	mm			2,300			2,800
Width	mm			800			
Height	mm			975			
Weight	kg	550	560	570	585	825	840

Model	UoM	TCS 13-239	TCS 24-236	TCS 24-256	TCS 24-318	TCS 26-354	TCS 26-384
Cooling capacity 12/7/35	kW	225	221	241	301	332	363
Compressor electrical power	kW	74	74	81	99	110	122
Total electrical power	kW	74	74	81	99	110	122
EER brutto		3.04	3.01	2.98	3.05	3.01	2.99
EER netto		3.04	3.01	2.98	3.05	3.01	2.99
Number of cooling circuits		1	2	2	2	2	2
Number of compressors		3	4	4	4	6	6
Fan diameter	mm	-	-	-	-	-	-
Number of fans	pcs.	-	-	-	-	-	-
Coolant consumption	m³/h	39	38	42	52	57	62
Evaporator flow resistance	kPa	35	34	29	45	36	43
Length	mm	2,800		2,300		2,800	
Width	mm			800			
Height	mm	975		1,900			
Weight	kg	855	1,000	1,100	1,200	1,250	1,300

Model	UoM	TCS 26-415	TCS 26-446	TCS 26-477	TCS 28-472	TCS 28-512	TCS 28-636
Cooling capacity 12/7/35	kW	391	421	450	442	483	600
Compressor electrical power	kW	130	139	148	147	162	197
Total electrical power	kW	130	139	148	147	162	197
EER brutto		3.00	3.02	3.04	3.01	2.98	3.04
EER netto		3.00	3.02	3.04	3.01	2.98	3.04
Number of cooling circuits		2	2	2	2	2	2
Number of compressors		6	6	6	8	8	8
Fan diameter	mm	-	-	-	-	-	-
Number of fans	pcs.	-	-	-	-	-	-
Coolant consumption	m³/h	67	72	77	76	83	103
Evaporator flow resistance	kPa	34	39	37	36	42	49
Length	mm		2,800			3,200	
Width	mm			800			
Height	mm			1,900			
Weight	kg	1,350	1,400	1,450	1,600	1,650	

## CONDENSERLESS CHILLERS

**TCR Series**

Screw compressors



Operating coolant temperature range at chiller outlet is  $-14$  to  $20$  °C



Body treatment with zinc-rich paint, RAL 7035 powder coating

**28 standard sizes  
with cooling capacities  
from 157 to 1,341 kW**



Integration into a common control system with Smart Thermex Energy (STE) condenserless chillers



Built-in oil flow relay



Built-in oil level relay

**Basic equipment:**

- Ethernet Cloud Service
- Built-in pressure gauges
- Electronic expansion valve
- Touchpad controller
- UPS for controllers
- Electronic condensation pressure control
- Nitrogen filling

**Options available:**

- GSM modem for connection to a Cloud Service
- 7" remote operator's panel
- Cooling circuit thermal insulation
- Cascade control of up to 16 chillers
- Vibration dampers



Low-flow resistance shell-and-tube evaporators

**Model range and specifications:**

Model	UoM	TCR 11-160	TCR 11-180	TCR 11-200	TCR 11-210	TCR 11-260	TCR 11-290	TCR 11-330
Cooling capacity 12/7/35	kW	157	177	197	209	261	291	332
Compressor electrical power	kW	54	59	66	70	83	91	102
Condenser power	kW	211	236	262	279	345	382	434
EER brutto		2.93	2.98	2.99	2.98	3.14	3.2	3.24
Number of cooling circuits		1	1	1	1	1	1	1
Number of compressors		1	1	1	1	1	1	1
Coolant consumption	m³/h	29	33	37	39	48	54	61
Evaporator flow resistance	kPa	17.1	22	20	23	34	36	35
Length	mm	4,100	4,100	4,100	4,100	4,100	4,100	4,100
Width	mm	1,620	1,620	1,620	1,620	1,620	1,620	1,620
Height	mm	1,680	1,680	1,680	1,680	1,680	1,680	1,680
Weight	kg	1,300	1,308	1,442	1,448	1,578	1,603	1,638

Model	UoM	TCR 11-390	TCR 11-440	TCR 11-460	TCR 11-480	TCR 11-540	TCR 11-610	TCR 11-670
Cooling capacity 12/7/35	kW	392	438	465	482	543	607	670
Compressor electrical power	kW	123	136	143	148	168	186	208
Condenser power	kW	515	574	608	630	711	792	879
EER brutto		3.18	3.23	3.27	3.25	3.22	3.27	3.22
Number of cooling circuits		1	1	1	1	1	1	1
Number of compressors		1	1	1	1	1	1	1
Coolant consumption	m³/h	72	76	79	88	100	112	124
Evaporator flow resistance	kPa	53	46	50	31	39	43	52
Length	mm	4,100	4,100	4,100	4,100	4,100	4,100	4,100
Width	mm	1,620	1,620	1,620	1,620	1,620	1,620	1,620
Height	mm	1,680	1,680	1,680	1,680	1,680	1,680	1,680
Weight	kg	1,898	1,913	1,923	2,103	2,468	2,529	2,569

Model	UoM	TCR 22-320	TCR 22-360	TCR 22-400	TCR 22-420	TCR 22-520	TCR 22-580	TCR 22-660
Cooling capacity 12/7/35	kW	315	354	393	418	523	582	663
Compressor electrical power	kW	107	119	132	140	167	182	204
Condenser power	kW	422	473	525	558	689	764	868
EER brutto		2.93	2.98	2.99	2.98	3.14	3.2	3.24
Number of cooling circuits		1	1	1	1	1	1	1
Number of compressors		1	1	1	1	1	1	1
Coolant consumption	m³/h	59	66	74	78	96	107	122
Evaporator flow resistance	kPa	32	40	44	49	36	39	33
Length	mm	4,100	4,100	4,100	4,100	4,100	4,100	4,100
Width	mm	1,620	1,620	1,620	1,620	1,620	1,620	1,620
Height	mm	1,680	1,680	1,680	1,680	1,680	1,680	1,680
Weight	kg	2,084	2,100	2,148	2,160	2,563	2,623	2,813

Model	UoM	TCR 22-780	TCR 22-880	TCR 22-920	TCR 22-960	TCR 22-1080	TCR 22-1220	TCR 22-1340
Cooling capacity 12/7/35	kW	783	877	931	1,341	670	670	670
Compressor electrical power	kW	246	272	285	416	208	208	208
Condenser power	kW	1,030	1,149	1,216	1,757	879	879	879
EER brutto		3.18	3.23	3.27	3.22	3.22	3.22	3.22
Number of cooling circuits		1	1	1	1	1	1	1
Number of compressors		1	1	1	1	1	1	1
Coolant consumption	m³/h	144	161	171	248	124	124	124
Evaporator flow resistance	kPa	144	41	46	47	52	52	52
Length	mm	5,000	5,000	5,000	5,000	4,100	4,100	4,100
Width	mm	1,870	1,870	1,870	1,870	1,620	1,620	1,620
Height	mm	1,880	1,880	1,880	1,880	1,680	1,680	1,680
Weight	kg	3,480	3,500	3,520	4,771	2,569	2,569	2,569

## WATER-TO-WATER CHILLERS

**TWS Series**

Water cooled chillers of TWS series

- 800 mm wide compact body
- Silent operation
- Suitable for heating systems



**24 standard sizes  
with cooling capacities  
from 39 to 450 kW**

**Basic equipment:**

- Ethernet Cloud Service
- Built-in pressure gauges
- Electronic expansion valve
- Touchpad controller
- Cooling circuit thermal insulation
- Electronic condensation pressure control
- Stainless steel hydraulic module pipelines
- W/o hydraulic module insulation
- Freon filling

**Options available:**

- Built-in hydraulic module with a pump
- Built-in hydraulic module with two pumps
- GSM modem for connection to a Cloud Service
- 7" remote operator's panel
- UPS for controllers
- Cascade control of up to 16 chillers
- Protective body panels
- Sound insulation (body + compressors)
- Vibration dampers
- Carbon steel hydraulic module pipelines
- Pneumatic tank
- Hydraulic module/tank thermal insulation thickness
- Hydraulic module pumps frequency converter
- Nitrogen filling

**Wide range of control system options**

- 7" touchpad controller
- Chiller mimic diagram on the main screen
- Simple and user-friendly interface
- Accident log with time stamps
- Basic equipment for connection to a Cloud service for remote control and maintenance (requires Ethernet connection)
- Convenient service menu for testing all actuators in manual mode
- ModBus protocol support (TCP IP) (standard option)
- Cooling capacity control by:
  - Coolant temperature
  - Boiling pressure (compressors turn off when it drops)
  - Overheating (compressors turn off in case of heavy overheating)
  - Discharge pressure (compressors turn off when it rises)
- External THM hydraulic modules control
- Remote TED dry cooler control

**High efficiency**

- Low-flow resistance stainless steel copper-brazed plate evaporators
- Electronic expansion valve (EEV)

**High reliability**

- Compressor with external thermal protection and crankcase heating
- Built-in voltage monitoring relay protects the chiller from phase-shift and other possible power supply failures
- Built-in high- and low-pressure relays
- Built-in high- and low-pressure gauges
- Modular freon circuit filter for easy maintenance
- Thick-wall copper pipe
- Discharge pressure sensor

**Convenient and fast installation**

- Loading/unloading by forklift or crane
- 800 mm wide compact body
- Easy initial run



**Model range and specifications:**

Model	UoM	TWS 11-42	TWS 11-59	TWS 11-64	TWS 11-80	TWS 12-72	TWS 12-83
Cooling capacity 12/7/35	kW	39	55	60	75	68	78
Compressor electrical power	kW	13	18	20	25	23	26
Total electrical power	kW	13	18	20	25	23	26
EER brutto		2.99	3.01	2.98	3.03	2.92	2.98
EER netto		2.99	3.01	2.98	3.03	2.92	2.98
Number of cooling circuits		1	1	1	1	1.00	1.00
Number of compressors		1	1	1	1	2.00	2.00
Fan diameter	mm	-	-	-	-	-	-
Number of fans		-	-	-	-	-	-
Coolant consumption	m³/h	7	10	10	13	12	13
Evaporator flow resistance	kPa	14	15	18	17	17	18
Length	mm			1,500			
Width	mm			800			
Height	mm			1,900			
Weight	kg	500	525	550	575	600	675

Model	UoM	TWS 12-118	TWS 12-128	TWS 12-144	TWS 12-159	TWS 13-177	TWS 13-192
Cooling capacity 12/7/35	kW	110	121	135	150	166	181
Compressor electrical power	kW	37	40	45	49	55	61
Total electrical power	kW	37	40	45	49	55	61
EER brutto		3.00	3	3	3	3.00	2.98
EER netto		3.00	3	3	3	3.00	2.98
Number of cooling circuits		1.00	1	1	1	1.00	1.00
Number of compressors		2.00	2	2	2	3.00	3.00
Fan diameter	mm	-	-	-	-	-	-
Number of fans		-	-	-	-	-	-
Coolant consumption	m³/h	19	21	23	26	29	31
Evaporator flow resistance	kPa	36	43	24	30	23	27
Length	mm		2,300			2,800	
Width	mm		800				
Height	mm		1,900				
Weight	kg	950	1,000	1,050	1,100	1,150	1,200

Model	UoM	TWS 13-239	TWS 24-236	TWS 24-256	TWS 24-318	TWS 26-354	TWS 26-384
Cooling capacity 12/7/35	kW	225	221	241	301	332	363
Compressor electrical power	kW	74	74	81	99	110	122
Total electrical power	kW	74	74	81	99	110	122
EER brutto		3.04	3.01	2.98	3.05	3.01	2.99
EER netto		3.04	3.01	2.98	3.05	3.01	2.99
Number of cooling circuits		1.00	2.00	2.00	2.00	2.00	2.00
Number of compressors		3.00	4.00	4.00	4.00	6.00	6.00
Fan diameter	mm	-	-	-	-	-	-
Number of fans		-	-	-	-	-	-
Coolant consumption	m³/h	39	38	42	52	57	62
Evaporator flow resistance	kPa	35	34	29	45	36	43
Length	mm	2,800		2,300		2,800	
Width	mm	800					
Height	mm	1,900					
Weight	kg	1,250	1,300	1,350	1,400	1,450	1,500

Model	UoM	TWS 26-415	TWS 26-446	TWS 26-477	TWS 28-472	TWS 28-512	TWS 28-636
Cooling capacity 12/7/35	kW	391	421	450	442	483	600
Compressor electrical power	kW	130	139	148	147	162	197
Total electrical power	kW	130	139	148	147	162	197
EER brutto		3.00	3.02	3.04	3.01	2.98	3.04
EER netto		3.00	3.02	3.04	3.01	2.98	3.04
Number of cooling circuits		2.00	2.00	2.00	2.00	2.00	2.00
Number of compressors		6.00	6.00	6.00	8.00	8.00	8.00
Fan diameter	mm	-	-	-	-	-	-
Number of fans		-	-	-	-	-	-
Coolant consumption	m³/h	67	72	77	76	83	103
Evaporator flow resistance	kPa	34	39	37	36	42	49
Length	mm	2,800		2,800		3,200	
Width	mm	800					
Height	mm	1,900					
Weight	kg	1,550	1,600	1,650	1,900	1,950	

**AIR COMPRESSOR CONDENSING UNITS****TES Series**

Scroll compressors



Outside air temperature range for chiller operation is -5 to +43 °C



Up to three compressors per circuit



Body treatment with zinc-rich paint, RAL 7035 powder coating



EC fans with adjustable speed for noise reduction



Reduced freon charge due to the use of microchannel heat exchangers

**Model range and specifications:**

	UoM	TES-11-35-35-2EC	TES-12-35-35-2EC	TES-11-50-50-2EC	TES-12-50-50-2EC	TES-11-60-60-1EC	TES-12-60-60-1EC	TES-11-70-70-1EC	TES-12-70-70-1EC	TES-12-100-100-2EC	TES-12-120-120-2EC	TES-12-140-140-2EC	TES-13-150-150-2EC	TES-13-180-180-2EC
<b>Cooling capacity</b>														
5/35 °C*	kW	47	49	62	63	70	71	84	87	119	141	169	183	207
0/35 °C	kW	40	41	53	54	60	61	72	75	103	119	144	157	179
0/30 °C	kW	43	44	56	57	63	64	76	79	110	126	152	167	189
<b>Electric power</b>														
5/35 °C	kW	16	17	23	24	23	23	29	30	52	51	62	70	84
0/35 °C	kW	16	16	22	23	23	23	28	29	50	49	60	67	80
0/30 °C	kW													

## REMOTE CONDENSERS

**TEC Series**

11 standard sizes  
with cooling capacities  
from 238 to 2,620 kW



Outside air  
temperature range  
for chiller operation  
is -5 to +43 °C



Body treatment with zinc-rich  
paint, RAL 7035 powder  
coating



EC fans with adjustable speed  
for noise reduction



R134/R404/R407/  
R410 freon



Reduced freon charge due to  
the use of microchannel heat  
exchangers



Integration into a common control  
system with Smart Thermex Energy  
(STE) condenserless chillers



## Model range and specifications:

Model	UoM	TEC-802	TEC-804	TEC-806	TEC-808	TEC-810	TEC-812	TEC-814	TEC-816	TEC-818	TEC-820	TEC-822
Condenser type												
Fan type		EC										
Fan diameter	mm	800	800	800	800	800	800	800	800	800	800	800
Number of fans	pcs.	2	4	6	8	10	12	14	16	18	20	22
Electric power	kW	5.26	10.52	15.78	21.04	26.3	31.56	36.82	42.08	47.34	52.6	57.86
R134A thermal power Tk = 50 °C*	kW	190	380	569	759	949	1,139	1,329	1,519	1,708	1,898	2,088
R134A thermal power Tk = 52 °C	kW	215	430	645	861	1,076	1,291	1,506	1,721	1,936	2,151	2,366
R410A thermal power Tk = 50 °C	kW	210	421	631	841	1,051	1,262	1,472	1,682	1,892	2,103	2,313
R410A thermal power Tk = 52 °C	kW	238	477	715	953	1,192	1,430	1,668	1,906	2,145	2,383	2,621
R407C thermal power Tk = 50 °C	kW	177	353	530	706	883	1,059	1,236	1,412	1,589	1,766	1,942
R407C thermal power Tk = 52 °C	kW	200	400	600	800	1,000	1,201	1,401	1,601	1,801	2,001	2,201
L, mm		1,000	1,990	2,980	3,970	4,960	5,950	6,940	7,930	8,920	9,910	10,900
Overall dimensions (L × W × H)	W, mm	2,350	2,350	2,350	2,350	2,350	2,350	2,350	2,350	2,350	2,350	2,350
	H, mm	1,825	1,825	1,825	1,825	1,825	1,825	1,825	1,825	1,825	1,825	1,825
Weight	kg	408	706	1,004	1,364	1,662	1,960	2,319	2,618	2,916	3,275	3,573

\* At 35 °C outside air temperature.

## REMOTE DRY COOLERS

**TED Series**

11 standard sizes  
with cooling capacities  
from 98 to 1,076 kW



Body treatment with zinc-rich paint,  
RAL 7035 powder coating



EC fans with adjustable speed  
for noise reduction



Integration into a common control  
system with Smart Thermex Energy (STE)  
condenserless chillers



## Basic equipment:

- Ethernet Cloud Service
- Built-in pressure gauges

## Options available:

- GSM modem for connection to a Cloud Service
- Touchpad controller
- 7" remote operator's panel
- Protective body panels
- Vibration dampers
- One cooling circuit
- Two cooling circuits
- W/o control panel
- Control panel (included but not installed)



## Basic equipment:

- Ethernet Cloud Service
- Stainless steel hydraulic module pipelines
- W/o hydraulic module insulation

## Options available:

- GSM modem for connection to a Cloud Service
- Touchpad controller
- 7" remote operator's panel
- Protective body panels
- Vibration dampers
- One cooling circuit
- Two cooling circuits
- W/o control panel
- Control panel (included but not installed)
- Carbon steel hydraulic module pipelines
- Hydraulic module/tank thermal insulation thickness



## Model range and specifications:

Model	UoM	TED-802	TED-804	TED-806	TED-808	TED-810	TED-812	TED-814	TED-816	TED-818	TED-820	TED-822
Coolant temperature (Ethylene Glycol 45%) at inlet/outlet												
Coolant temperature (Ethylene Glycol 45%) at inlet/outlet	°C											12/7
Fan type												EC
Fan diameter	mm											800
Number of fans	pcs.	2	4	6	8	10	12	14	16	18	20	22
Electric power	kW	5.26	10.52	15.78	21.04	26.3	31.56	36.82	42.08	47.34	52.6	57.86
Cooling capacity	kW	98	196	293	391	489	587	685	782	880	978	1,076
Coolant consumption	m³/h	20	40	59	79	99	119	139	158	178	198	218
Hydraulic losses	kPa	56	56	56	56	56	56	56	56	56	56	56
Air flow rate	m³/h	40,114	80,228	120,342	160,456	200,570	240,684	280,798	320,912	361,026	401,140	441,254
L, mm		1,000	1,990	2,980	3,970	4,960	5,950	6,940	7,930	8,920	9,910	10,900
Overall dimensions (L × W × H)	W, mm	2,350	2,350	2,350	2,350	2,350	2,350	2,350	2,350	2,350	2,350	2,350
	H, mm	1,825	1,825	1,825	1,825	1,825	1,825	1,825	1,825	1,825	1,825	1,825
Weight	kg	401	700	1,004	1,364	1,662	1,960	2,319	2,618	2,916	3,275	3,573

## EXTERNAL HYDRAULIC MODULES

**THM Series**

**36 standard sizes**  
with 5 to 280 m<sup>3</sup>/h flow rates




4 versions depending  
on free head  
(low, standard, high, ultra-high)



Body treatment with zinc-rich  
paint, RAL 7035 powder  
coating



Integration into a common control  
system with Smart Thermex Energy  
(STE) condenserless chillers

**Basic equipment:**

- Ethernet Cloud Service
- Built-in pressure gauges
- Stainless steel hydraulic module pipelines
- W/o hydraulic module insulation

**Options available:**

- Built-in buffer tank volume
- GSM modem for connection to a Cloud Service
- Touchpad controller
- 7" remote operator's panel
- Cooling circuit thermal insulation
- Protective body panels
- Vibration dampers
- W/o control panel
- Carbon steel hydraulic module pipelines
- Pneumatic tank
- Hydraulic module/tank thermal insulation thickness
- Hydraulic module pumps frequency converter

**Model range and specifications:**

Model	UoM	THM-2-5-L	THM-2-10-L	THM-2-15-L	THM-2-25-L	THM-2-50-L	THM-2-80-L	THM-2-140-L	THM-2-175-L	THM-2-280-L	THM-2-5-S	THM-2-10-S	THM-2-15-S	THM-2-25-S	THM-2-50-S	THM-2-80-S	THM-2-140-S	THM-2-175-S	THM-2-280-S
Nominal flow rate	m <sup>3</sup> /h	5	10	15	25	50	80	140	175	280	5	10	15	25	50	80	140	175	280
Nominal hydraulic module head	kPa	147	150	150	150	150	150	150	150	150	250	250	250	250	250	250	250	250	250
Total hydraulic module head	kPa	147	163	166	180	194	189	158	177	218	250	256	261	284	296	284	327	265	260
Pump electrical power	kW	0.75	1.1	1.5	2.2	3	5.5	11	11	22	2.2	2.2	3	3	5.5	11	18.5	22	37
Connection diameter	DN	40	65	80	100	125	150	200	250	300	40	65	80	100	125	150	200	250	300
	L, mm	1,400	1,400	1,400	1,400	1,950	1,950	1,950	2,800	2,800	1,400	1,400	1,400	1,400	1,950	1,950	1,950	2,800	2,800
Overall dimensions (L × W × H)	W, mm	800	800	800	800	1,300	1,300	1,410	1,410	800	800	800	800	1,300	1,300	1,300	1,410	1,410	1,410
	H, mm	1,200	1,200	1,200	1,200	1,750	1,750	2,300	2,300	1,200	1,200	1,200	1,200	1,750	1,750	1,750	2,300	2,300	2,300
Weight	kg	381	352	407	392	807	848	944	1,939	2,064	397	397	404	413	845	899	1,039	2,037	2,245

Model	UoM	THM-2-5-H	THM-2-10-H	THM-2-15-H	THM-2-25-H	THM-2-50-H	THM-2-80-H	THM-2-140-H	THM-2-175-H	THM-2-280-H	THM-2-5-X	THM-2-10-X	THM-2-15-X	THM-2-25-X	THM-2-50-X	THM-2-80-X	THM-2-140-X	THM-2-175-X	THM-2-280-X
Nominal flow rate	m <sup>3</sup> /h	5	10	15	25	50	80	140	175	280	5	10	15	25	50	80	140	175	280
Nominal hydraulic module head	kPa	350	350	350	350	350	350	350	350	350	450	450	450	450	450	450	450	450	450
Total hydraulic module head	kPa	353	353	353	376	390	368	369	364	363	448	448	460	461	468	464	463	477	461
Pump electrical power	kW	2.2	2.2	4	4	7.5	15	30	30	55	5.5	5.5	7.5	7.5	15	18.5	30	45	75
Connection diameter	DN	40	65	80	100	125	150	200	250	300	40	65	80	100	125	150	200	250	300
	L, mm	1,400	1,400	1,400	1,400	1,950	1,950	1,950	2,800	2,800	1,400	1,400	1,400	1,400	1,950	1,950	1,950	2,800	2,800
Overall dimensions (L × W × H)	W, mm	800	800	800	800	1,300	1,300	1,410	1,410	800	800	800	800	1,300	1,300	1,300	1,410	1,410	1,410
	H, mm	1,200	1,200	1,200	1,200	1,750	1,750	2,300	2,300	1,200	1,200	1,200	1,200	1,750	1,750	1,750	2,300	2,300	2,300
Weight	kg	397	386	399	410	843	898	1,105	2,123	2,343	423	423	438	438	902	918	1,155	2,254	2,552

## BUFFER TANKS

**TBT Series**

**9 standard sizes with**  
**150 to 5,000 l volumes**



High-quality steel construction



Flanged connections



Designed for closed cold supply systems



The outer surface is coated with anticorrosive primer, the inner surface is uncoated

**Model range and specifications:**

Model	UoM	TBT-150	TBT-300	TBT-500	TBT-750	TBT-1000	TBT-1500	TBT-2000	TBT-3000	TBT-5000
Tank volume	l	150	300	500	750	1,000	1,500	2,000	3,000	5,000
Connection diameter	DN	50	65	80	100	125	150	150	200	200
Tank height	mm	973	1,710	1,269	1,768	2,266	2,245	2,121	2,348	2,984
Tank diameter	mm	508	508	808	808	808	1,010	1,212	1,412	1,612
Weight	kg	64	107	144	186	233	345	465	611	855



Independence from supplies, storage and rising prices for fossil fuel and raw materials



Saving up to 80% on heating costs



No combustion, soot, odor



No manual operations required



High efficiency the whole year



Compatibility with other eco-friendly and energy-efficient equipment



Fast system installation



Use of up to 80% renewable energy, no local carbon dioxide emissions



Durable system (up to 25 years of work)



## AIR AND GROUND SOURCE HEAT PUMPS THERMEX ENERGY

Independent energy-saving solution for heating, water heating, and cooling for life and business



## AIR SOURCE HEAT PUMPS

**Air ONE Series**

Efficiency  
and reliability  
with compact sizes



Weather compensation



Inverter compressor EVI



Ozone-safe freon R32



Operating range from -30 to +43 °C



Hot water temperature up to +50 °C



Easy installation (monoblock)



Touch screen control panel



The Air ONE series inverter compressor air heat pumps are designed for heating, hot water production and air conditioning in residential and commercial buildings.

## AIR SOURCE HEAT PUMPS

**Air ONE EH Series**

Independence  
and comfort



Weather compensation



Inverter compressor EVI



Ozone-safe freon R32



Operating range from -30 to +43 °C



Hot water temperature up to +50 °C



Easy installation (monoblock)



Touch screen control panel



Two heating circuits (heated floor, radiators)



External heat source control



Built-in circulation pump and pneumatic tank



Connecting up to 8 units in a cascade



Air ONE EH series inverter compressor air heat pumps with built-in circulation pump, pneumatic tank and advanced automation system capabilities. They are designed for heating, hot water production and air conditioning in residential and commercial buildings.

## Model range and specifications:

Model	UoM	Air ONE 8	Air ONE 13 (230V)	Air ONE 13 (380V)	Air ONE 18 (230V)	Air ONE 18 (380V)	Air ONE 23	Air ONE 28	Air ONE 35
House area	m <sup>2</sup>	up to 100	up to 180	up to 180	up to 180	up to 180 m <sup>2</sup>	up to 400 m <sup>2</sup>	up to 450 m <sup>2</sup>	up to 500 m <sup>2</sup>
Nominal thermal power (A7/W35)	kW	1.57–8.4	4.40–13.00	4.40–13.00	5.9–18.2	5.9–18.2	7.5–23.0	10.2–28.0	12.8–35.0
COP (A7/W35)		4.49–4.91	4.30–4.90	4.30–4.90	4.43–4.92	4.43–4.92	4.40–4.90	4.40–4.92	4.38–4.90
Nominal voltage	V	230	400	230		400			
Number of phases		1	3	1		3			
Source operating range	°C	from -30 to +43			from -30 to +43				
Overall dimensions	mm	970 × 475 × 835	1,100 × 475 × 985	1,050 × 480 × 1,330	1,050 × 480 × 1,330	1,160 × 500 × 1,580			
Version		Monoblock			Monoblock				

## Model range and specifications:

Model	UoM	Thermex Air ONE 8 EH	Thermex Air ONE 12 EH/230V	Thermex Air ONE 12 EH/380V	Thermex Air ONE 18 EH	Thermex Air ONE 22 EH
House area	m <sup>2</sup>	up to 100	up to 180	up to 180	up to 300	up to 370
Nominal thermal power (A7/W35)	kW	3.2–8.0	4.8–12.0	4.8–12.0	7.3–18.0	8.8–22.0
COP (A7/W35)		4.26–5.23	4.17–5.18	4.17–5.18	4.35–5.36	4.27–5.28
Built-in heating element output	kW	3			3	
Nominal voltage	V	230			400	
Number of phases		1			3	
Source operating range	°C	from -30 to +43			from -30 to +43	
Overall dimensions	mm	1,150 × 460 × 820	1,150 × 460 × 960	1,150 × 460 × 960	1,260 × 460 × 1,060	
Version		Monoblock			Monoblock	

## AIR SOURCE HEAT PUMPS

**Air ONE PRO Series**

Ready  
for the challenge



Weather compensation



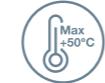
Inverter compressor EVI



Ozone-safe freon R410A



Operating range from -25 to +43 °C



Hot water temperature up to +50 °C



Easy installation (monoblock)



High-capacity Air ONE PRO series inverter compressor air heat pumps series. They are designed for heating and air conditioning in commercial buildings.

**Model range and specifications:**

Model	UoM	Air ONE PRO 42	Air ONE PRO 72	Air ONE PRO 88	Air ONE PRO 176	Air ONE PRO 335
Building area	m <sup>2</sup>	720	880	1,440	1,760	3,350
Nominal thermal power (A7/W35)	kW	72	88	144	176	335
COP (A7/W35)		4.00	4.19	4.15	4.15	4.17
Nominal cooling capacity (A35/W7)	kW	36.2	64.0	75.0	150.0	275.0
Nominal voltage	V			400		
Number of phases				3		
Source operating range	°C			from -25 to +43		
	L, mm	1,020	2,080	2,080	2,400	2,400
Overall dimensions	W, mm	980	1,000	1,000	1,300	2,200
	H, mm	1,870	1,900	1,900	2,350	2,350
Version				Monoblock		

## GEOTHERMAL HEAT PUMPS

**COMPACT Series**

Stylish design,  
safe heating



Components from leading international brands



Heating, hot water production, air conditioning, pool heating



Built-in circulation pumps, heating elements, prewiring



Automatic weather compensation



Controlling up to 2 heating circuits



Controlling the second heat source



5 built-in heating plant protections



2 built-in power quality protectors

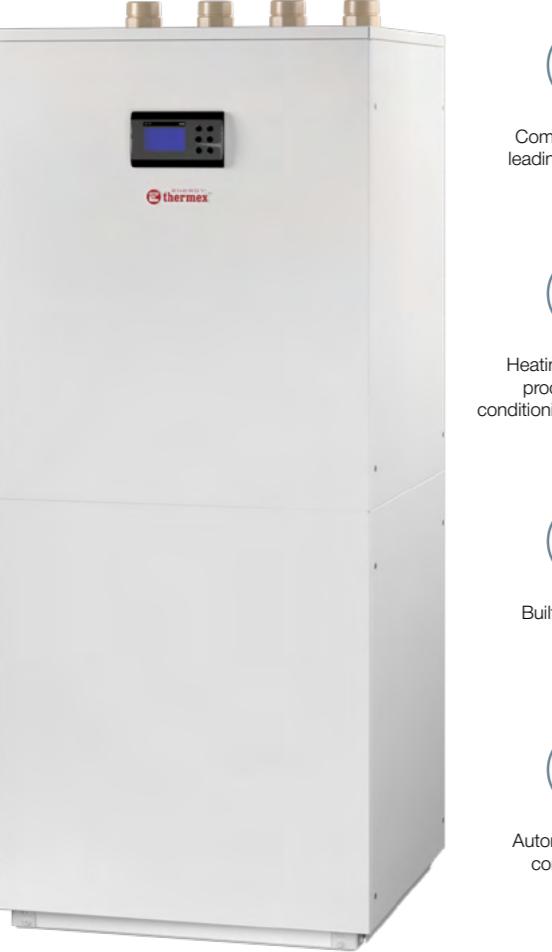


COMPACT series geothermal heat pumps with scroll compressor, enlarged heat exchanger surface, built-in heating element, circulation pumps and complete prewiring are an effective and convenient solution for extensive microclimate creation in houses with an area of up to 400 m<sup>2</sup>.

**Model range and specifications:**

Model	UoM	COMPACT 6	COMPACT 8	COMPACT 10	COMPACT 12	COMPACT 14	COMPACT 18
Thermal power (B0W35)	kW	5.8	7.8	9.7	11.8	13.8	17.6
Power consumption (B0W35)	kW	1.3	1.8	2.2	2.6	3.0	3.9
COP (coefficient of performance) (B0W35)		4.5	4.5	4.4	4.6	4.6	4.4
Built-in heating element output	kW	2.0	2.0	3.0	3.0	3.0	3.0
Total thermal power (B0W35)	kW	7.8	9.8	12.7	14.8	16.8	20.6
Max. coolant temperature	°C			62			
Heat source operating range	°C				from -5 to +15		
Coolant type					R407C		
Nominal voltage/phases					380 V/3 phases (single-phase version available)		
Nominal current	A	2.4	3.7	4.1	4.9	5.3	7.1
Maximum current (including heating element)	A	6.3	9.4	11.2	12.4	13.2	16.0
Nominal coolant flow rate in the geothermal circuit	m <sup>3</sup> /h	1.4	1.9	2.3	2.8	3.2	4.2
Built-in geothermal circuit circulation pump free head	kPa	33	41	42	85	80	53
Nominal coolant flow rate in the heating system	m <sup>3</sup> /h	1.0	1.4	1.7	2.1	2.4	3.1
Built-in main circuit circulation pump free head	kPa	55	43	35	29	21	27
Nominal coolant flow rate in the heating system	m <sup>3</sup> /h	1.0	1.4	1.7	2.1	2.4	3.1
Maximum operating pressure in the geothermal and main circuit	bar			3			
Overall dimensions (L × W × H)	mm			600×600×850			
Net weight	kg	125	125	130	130	135	140

GEOTHERMAL HEAT PUMPS  
**PRO Series**



**Reliable investment  
in independence**



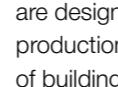
Components from  
leading international  
brands



Controlling  
up to 2 heating circuits



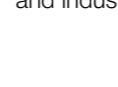
Heating, hot water  
production, air  
conditioning, pool heating



Controlling the  
second heat source



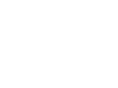
Built-in prewiring



5 built-in heating  
plant protections



Automatic weather  
compensation



2 built-in power quality  
protectors

PRO series dual-compressor  
geothermal heat pumps with  
a heating capacity of up to 56 kW  
are designed for heating, hot water  
production and air conditioning  
of buildings with an area of up to  
1,400 m<sup>2</sup>. The ability to cascade up  
to 16 heat pumps makes the PRO  
an excellent energy-saving solution  
for large residential, commercial  
and industrial buildings.

**Model range and specifications:**

Model	UoM	PRO 16	PRO 20	PRO 24	PRO 28	PRO 35
Thermal power (B0W35)	kW	15.6	19.4	23.6	27.6	35.2
Power consumption (B0W35)	kW	3.6	4.4	5.2	6.0	7.8
COP (coefficient of performance) (at B0W35)		4.5	4.4	4.6	4.6	4.4
Max. coolant temperature	°C			62		
Heat source operating range	°C			from -5 to +15		
Coolant type				R407C		
Nominal voltage/phases				380 V /3 phases		
Nominal current	A	7.4	8.2	9.8	10.6	14.2
Maximum current	A	11.0	13.0	15.4	17.0	22.6
Nominal coolant flow rate in the geothermal circuit	m <sup>3</sup> /h	3.3	7.5	9.3	13.1	16.5
Evaporator flow resistance at nominal flow rate	kPa	27.0	38.7	20.1	26.8	42.6
Nominal coolant flow rate in the main circuit	m <sup>3</sup> /h	2.8	3.3	4.1	4.8	6.1
Condenser flow resistance at nominal flow rate	kPa	3.9	5.6	3.5	4.6	7.3
Maximum operating pressure in the geothermal and main circuit	bar			3		
Overall dimensions (L × W × H)	mm			615×600×1,500		



Pictures and technical data may have differences from actual devices on sale.  
Thermex Energy keep the right to change the specifications without notice.

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