

Air Cooled Chillers & Heat Pumps

Y-Pack C-PF

TCCEY-THCETY 233-2160



ÜNTES[®]
52
years

Y-Pack C-PF

TCCEY-THCETY 233-2160

- ❄️ Cooling capacity: 32,3-160,2 kW
- 🔥 Heating capacity: 37,7-175,6 kW

- High energy efficiency range
- “Plug-Fan” type centrifugal fans with EC motor (brushless)
- 3 capacity steps



TCCEY 2130

THCETY 2270



Water chillers and high efficiency packaged reversible heat pumps with air cooled and Plug-Fan type centrifugal fans with EC motors. Range with scroll hermetic compressors and R410A refrigerant.

Construction features

- Compressor: scroll type, rotary, hermetic complete with thermal protection and casing heater.
- 2 or 3 capacity steps depending on the models, to obtain excellent load modulation along with high energy efficiency at partial loads.
- Water side heat exchanger: with stainless steel plates, complete with closed cell polyurethane foam rubber insulation and water flow differential pressure switch.
- Air side heat exchanger: featuring finned coil with copper pipes and aluminium fins.
- Plug-Fan type centrifugal electric fans with EC motors, equipped with internal thermal protection arranged in single row with horizontal outlet. Horizontal outlet of the evaporation condensing air opposite side to finned coil or vertical outlet can be easily transformed on site.
- Proportional electronic device for continuous fan rotation speed regulation up to an outdoor air temperature of -15°C in chiller mode and up to an outdoor air temperature of 40°C in heat pump mode.
- Control: microprocessor electronic control with Adaptive Function Plus logic.
- Load-bearing structure and panelling made of painted and galvanised sheet steel (RAL 9018); galvanised sheet steel base

Versions

- T - High efficiency version (TCCEY-THCETY).

Models

- TCCEY: unit for cooling only.
- THCETY: reversible heat pump unit.

Factory fitted accessories

- PUMP with single or double electric pump, including an automatic actuation pump in standby, complete with expansion tank, safety valve and water side pressure gauge. The pumps are available in the low or high head versions.
- TANK&PUMP with integrated buffer tank and single or double electric pump, complete with expansion tank, air vent valves, safety valve and water pressure gauge.
- Desuperheater.
- 100% heat recovery unit
- Electronic expansion valve.
- Power factor correction capacitors (cosφ > 0.94).
- Soft starter.
- Compressor soundproofing.
- Cooling circuit high and low pressure gauges.
- Copper/copper or copper/pre-painted aluminium coils.
- Digital input for double set-point.
- 4-20 mA analogue signal for shifting set-point.
- Evaporator antifreeze heater, buffer tank, pumps and heat exchangers for heat recovery if applicable.
- Interfaces for serial communication with other devices.
- Anti-vibration mounts.

Separately supplied accessories

- Remote keypad with display.
- Clock board.
- Untes supervisors for unit monitoring and remote management.
- Untes sequencer for integrated management of multiple chillers.

TCETY MODEL		233	238	245	250	260	265	270
❶	Nominal cooling capacity	kW	32,3	38,5	43,9	51,0	58,9	69,9
❶	E.E.R.		2,61	2,77	2,70	2,73	2,67	2,83
❶	Absorbed power	kW	12,38	13,90	16,26	18,55	21,98	24,53
THCETY MODEL		233	238	245	250	260	265	270
❷	Nominal heating capacity	kW	37,7	42,1	48,1	56,2	62,5	79,4
❷	C.O.P.		3,00	3,00	3,01	2,96	2,97	3,23
❷	Absorbed power in winter mode	kW	12,57	14,03	15,98	18,80	20,90	24,36
❶	Nominal cooling capacity	kW	32,3	38,5	42,3	50,3	57,8	69,1
❸	Sound power	dB(A)	82	82	83	85	85	85
	Scroll/step compressor	no.	2/2	2/2	2/3	2/3	2/3	2/3
	Circuits	no.	1	1	1	1	1	1
	Fan nominal air flow	m³/h	13.000	13.000	13.000	26.000	26.000	26.000
	Fan maximum available static pressure	Pa	250	250	250	250	250	250
	Electrical supply	V-ph-Hz	400-3+N-50	400-3+N-50	400-3+N-50	400-3+N-50	400-3+N-50	400-3+N-50
DIMENSIONS		233	238	245	250	260	265	270
	L - Width	mm	2.650	2.650	2.650	2.650	2.650	3.650
	H - Height	mm	1.920	1.920	1.920	1.920	1.920	1.920
	P - Depth	mm	870	870	870	870	870	1.100

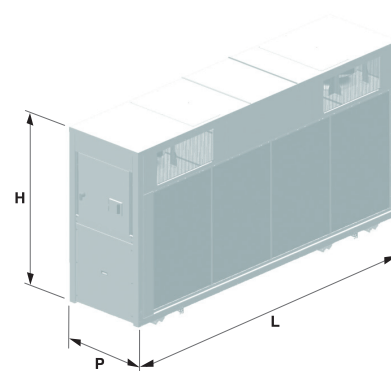
Data at the following conditions:

- ❶ Air: 35°C - Water: 12/7°C and ESP: 250 Pa.
- ❷ Air: 7°C D.B. - 6°C W.B. - Water: 40/45°C and ESP: 250 Pa.
- ❸ Total sound power level in dB(A) on the basis of measurements taken in accordance with RS S/C/005-2009 and UNI EN-ISO 9614.

Performance according to EN 14511:2013.

SEASONAL ENERGY PERFORMANCE		233	238	245	250	260	265	270	
TCETY MODEL SEASONAL PERFORMANCE IN COOLING MODE									
❶	P _{designc} (EN 14825)	kW	32,3	38,5	43,9	51,0	58,8	63,7	69,9
❶	SEER (EN 14825)		4,41	4,39	4,36	4,40	4,41	4,41	4,42
❷	η _{s,c}	%	173	172	172	173	173	173	174
THCETY MODEL SEASONAL PERFORMANCE IN HEATING MODE									
❸	P _{designh} (EN 14825)	kW	31	35	42	48	53	60	66
❸	SCOP (EN 14825)		3,52	3,27	3,86	3,52	3,46	3,57	3,70
❹	η _s	%	138	128	151	138	135	140	145
❹	Energy class		A+	A+	A++	A+	A+	A+	A+

- ❶ Low temperature application (7°C)
- ❷ Seasonal energy efficiency: low temperature cooling (EU Regulation 2016/2281)
- ❸ In Average climatic conditions, low temperature application (35°C)
- ❹ Seasonal energy efficiency: low temperature heating in Average climate (EU Regulations No.811/213 and No.813/2013)



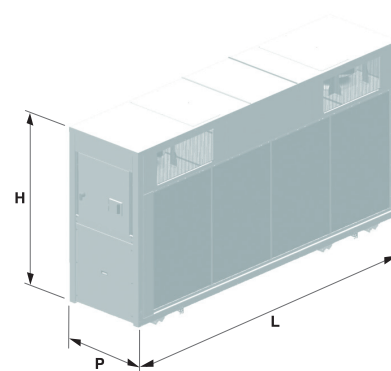
TCETY MODEL		280	290	2100	2115	2130	2145	2160
❶	Nominal cooling capacity	kW	79,1	87,5	100,6	113,9	125,3	160,2
❶	E.E.R.		2,90	2,81	2,71	2,93	2,89	2,86
❶	Absorbed power	kW	27,28	31,03	36,72	38,87	43,36	55,43
THCETY MODEL		280	290	2100	2115	2130	2145	2160
❷	Nominal heating capacity	kW	86,3	96,4	111,5	122,5	139,6	175,6
❷	C.O.P.		3,36	3,20	3,16	3,21	3,33	3,20
❷	Absorbed power in winter mode	kW	25,53	30,13	34,95	37,69	41,92	54,20
❶	Nominal cooling capacity	kW	77,4	84,9	98,9	110,6	123,4	159,3
❸	Sound power	dB(A)	85	86	88	88	89	89
	Scroll/step compressor	no.	2/2	2/3	2/3	2/2	2/3	2/2
	Circuits	no.	1	1	1	1	1	1
	Fan nominal air flow	m³/h	26.000	27.000	39.000	39.000	52.000	52.000
	Fan maximum available static pressure	Pa	250	250	250	250	250	250
	Electrical supply	V-ph-Hz	400-3+N-50	400-3+N-50	400-3+N-50	400-3+N-50	400-3+N-50	400-3+N-50
DIMENSIONS		280	290	2100	2115	2130	2145	2160
	L - Width	mm	3.650	3.650	3.650	4.450	4.450	4.450
	H - Height	mm	1.920	1.920	1.920	2.320	2.320	2.320
	P - Depth	mm	1.100	1.100	1.100	1.100	1.100	1.100

Data at the following conditions:

- ❶ Air: 35°C - Water: 12/7°C and ESP: 250 Pa.
 - ❷ Air: 7°C D.B. - 6°C W.B. - Water: 40/45°C and ESP: 250 Pa.
 - ❸ Total sound power level in dB(A) on the basis of measurements taken in accordance with RS S/C/005-2009 and UNI EN-ISO 9614.
- Performance according to EN 14511:2013.

SEASONAL ENERGY PERFORMANCE		280	290	2100	2115	2130	2145	2160
TCETY MODEL SEASONAL PERFORMANCE IN COOLING MODE								
❶	P _{designc} (EN 14825)	kW	79,1	87,5	100,6	113,9	125,3	160,1
❶	SEER (EN 14825)		4,40	4,38	4,37	4,41	4,35	4,34
❷	η _{s,c}	%	173	172	172	173	171	171
THCETY MODEL SEASONAL PERFORMANCE IN HEATING MODE								
❸	P _{designh} (EN 14825)	kW	71	80	93	102	117	147
❸	SCOP (EN 14825)		4,12	3,66	3,58	3,67	4,05	3,93
❹	η _s	%	162	143	140	144	159	154
❹	Energy class		-	-	-	-	-	-

- ❶ Low temperature application (7°C)
- ❷ Seasonal energy efficiency: low temperature cooling (EU Regulation 2016/2281)
- ❸ In Average climatic conditions, low temperature application (35°C)
- ❹ Seasonal energy efficiency: low temperature heating in Average climate (EU Regulations No.811/213 and No.813/2013)



ÜNTEŞ®

52
years

Export Sales Office

Address: 53. Cadde 1450. Sokak Ulusoy
Plaza No: 9/50 Cukurambar, Ankara, Turkey
Email: export@untes.com.tr
T+90 (312) 287 91 00 F+90 (312) 284 91 00

Manufacturing Plant-1

Air Handling & Ventilations Systems,
Fan Coil Systems
Packaged Air Conditioning Systems
Address: Istanbul Yolu 37.km
Kahramankazan, Ankara, Turkey

Manufacturing Plant-2

Water Chiller and Heat Pumps
Address: Istanbul Yolu 24.km Saraykoy, Ankara

www.untes.com



untesklima