

CONTRA FLOW COAXIAL HEAT EXCHANGERS



THERMOKEY

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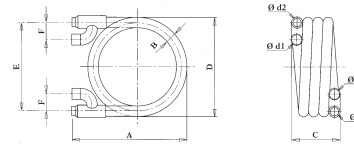
THE THERMOKEY RANGE

The steel/copper coaxial heat exchangers of Thermokey are designed for a number of applications. The most common ones are condenser and evaporator applications. Other available units are specially designed coaxial heat exchangers for air applications or units incorporated in a tank. The high efficiency of the coaxial units of Thermokey is guaranteed by the execution in co-current flow.

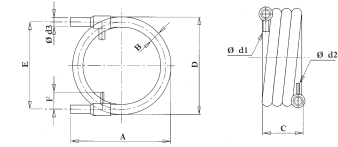
QUALITY ASSURANCE

All the coaxial heat exchangers are subject to a testing with a 30 bar pressure in water bath for both circuits. Each heat exchanger is pre-charged with nitrogen (1 bar) in order to avoid the formation of humidity and to maintain the tubes perfectly clean.

EVAPORATORS



CONDENSERS



TECHNICAL DATA

MODEL		Condensers	Evaporators
CODE		XC	XE
SHELL SIDE		HCFC & HFC	Water
INTERNAL TUBE SIDE		Water	HCFC & HFC
MAX	shell side	25 bar	10 bar
PRESSURE	internal tube side	10 bar	25 bar
MIN and MAX		-20 - +100 °C	
TEMP.	internal tube side	-20 - +100 °C	
CAPACITY RANGE		from 4 kW to 100 kW	

EVAPORATOR	XE 5	XE 7	XE 10	XE15	XE22	XE31	XE39	XE49	XE63	XE82
Qn [kW]	4,3	5,7	9,4	14	21	28,5	37,8	50	63,9	80
Mw [m³/h]	0,65	0,8	1,5	2,3	3,5	4,5	6	8	11	13
Δp _n [bar]	0,23	0,29	0,43	0,49	0,35	0,35	0,42	0,37	0,29	0,25
A	360	380	400	440	520	620	620	860	860	920
B	25	28	35	42	50	57	65	76,1	88,9	101,6
C	220	220	260	270	270	250	305	250	280	320
D	260	310	310	370	460	580	580	626	720	730
E	235	282	275	328	410	523	515	550	630	630
F	45	55	60	74	78	92	94	100	120	130
d1 OD	1/2"	3/4"	1"	1 1/4"	1 1/4"	1 1/2"	1 1/2"	2"	2 1/2"	2 1/2"
d2 ODS	12	12	16	16	22	28	28	28	28	28
d3 ODS	16	16	22	22	28	35	35	35	42	42
WEIGHT [kg]	7	10	15	20	28	36	48	62	86	112
CONDENSER	XC 5	XC 7	XC 12	XC 19	XC 24	XC 31	XC 42	XC 54	XC 63	XC 100
Qn [kW]	4,5	6,5	11,5	17,9	23	30	41	52	63	105
Mw [m³/h]	0,69	0,69	1,2	2,2	3,5	3,9	5,5	6,1	7,2	12,4
Δp _n [bar]	0,14	0,28	0,26	0,4	0,37	0,32	0,36	0,34	0,29	0,35
A	250	260	310	330	440	520	620	620	620	850
B	22	22	28	35	42	50	57	57	65	82,5
C	100	170	200	250	270	280	255	255	305	260
D	200	220	280	310	370	460	580	580	580	636
E	178	198	252	265	328	410	523	523	515	554
F	60	60	60	70	50	53	57	57	62	72
d1 OD	13,5	13,5	16,5	22,2	1 1/4"	1 1/2"	1 1/2"	1 1/2"	2"	2 1/2"
d2 ODS	12	16	16	16	22	22	28	28	28	35
d3 ODS	12	12	12	12	12	16	16	18	16	22
WEIGHT [kg]	2,5	4	8	15	21	30	37	40	53	75

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