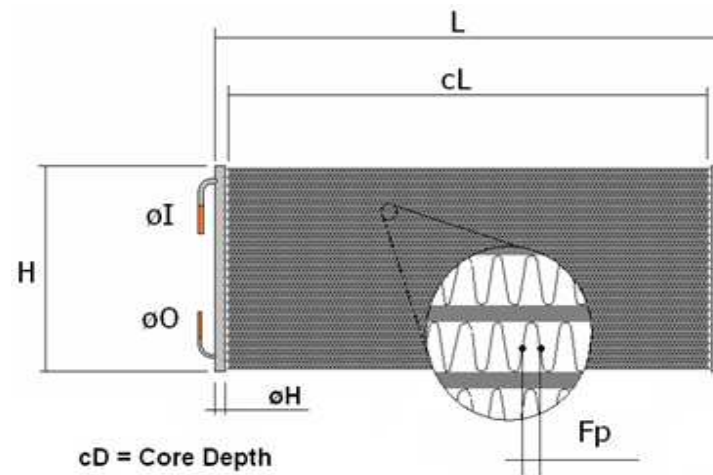


Micro Channel Heat Exchanger



Danfoss Standard Range MCHE		D100-SC	D110-SC	D120-SC	D130-SC	D140-SC	D150-SC	D160-SC	D170-SC	D180-SC	D190-SC
MCHE Design		2G16	2G16	2G16	2G16	2G16	2G25	2G16	2G25	2G25	2G25
Cross Reference List											
Danfoss Code for Ordering - Multi Pack		021U0087	021U0088	021U0089	021U0090	021U0091	021U0098	021U0099	021U0092	021U0097	021U0093
Number of MCHE in a Box		48	48	32	32	15	24	15	12	12	12
Danfoss Code for Ordering - Single Pack		021U0080	021U0081	021U0082	021U0083	021U0084	021U0095	021U0096	021U0085	021U0094	021U0086
Number of MCHE in a Box		1	1	1	1	1	1	1	1	1	1
Danfoss Customer Drawing Number		X0-DF0111	X0-DF0121	X0-DF0131	X0-DF0141	X0-DF0151	X0-DF0081	X0-DF0161	X0-DF0091	X0-DF0071	X0-DF0101
Danfoss 3D Drawing Number (STP-File)		Z0-DF0111.stp	Z0-DF0121.stp	Z0-DF0131.stp	Z0-DF0141.stp						
Application											
A/C - Residential R410A	[kW]	1,1-1,8	1,5-2,5	2,4-3,9		8,0-12,7	8,2-12,8	11,4-17,5	13,0-20,0	19,8-30,7	27,0-41,7
A/C - Residential R134a	[kW]	1,0-1,6	1,4-2,2	2,1-3,4		7,2-11,2	7,3-11,2		11,5-17,5	17,8-27,0	24,0-36,3
A/C - Commercial R410A	[kW]	1,7-2,7	2,3-3,7	3,7-5,8		12,1-19,1	12,7-19,7		20,1-30,8	30,6-47,5	41,8-64,2
A/C - Commercial R134a	[kW]	1,4-2,3	2,1-3,2	3,1-5,0		10,6-16,4	11,1-16,8			27,0-40,8	36,0-54,0
Condensing Units R134a	[kW]	1,4-(2,6)	2,0-3,7	3,1-(5,6)	4,6-8,2	10,6-(18,5)	11,1-(19,1)			27,0-(46,8)	36,0-(62,0)
Condensing Units R404A	[kW]	1,6-(3,0)	2,2-4,1	3,5-(6,3)	4,9-9,0	11,5-(20,8)	12,0-(21,6)			29,5-(52,5)	39,9-(69,9)
Cold Rooms R404A	[kW]	1,2-2,9	1,7-4,1	2,7-6,3	3,9-9,0	9,1-20,8	9,3-21,6				
Air Driers R134a	[kW]	1,4-(2,9)	2,0-4,0	3,1-6,2	4,6-9,1	10,6-(20,3)	11,1-(21,1)				
Air Driers R404A	[kW]	1,6-(3,3)	2,2-4,5	3,5-(6,9)	4,9-10,1	11,5-(23,0)	12,0-(24,1)				
Cabinet Cooling R404A	[kW]	1,6-(3,0)	2,2-4,1	3,5-(6,3)	4,9-9,0						

Micro channel tube	[Code]	A01	A01	A01	A01	A01	A31	A01	A31	A31	A31
Fin	[Code]	B01	B01	B01	B01	B01	B31	B01	B31	B31	B31
Header	[Code]	J01	J01	J01	J01	J01	J31	J01	J31	J31	J31
U-bar top/bottom	[mm]	16 x 10	16 x 10	16 x 10	16 x 10	16 x 10	25,4 x 10	16 x 10	25,4 x 10	25,4 x 10	25,4 x 10
Core length: (cL)	[mm]	280	335	410	500	750	1000	1250	1250	1000	1200
Tube pitch: (center-to-center)	[mm]	9,4	9,4	9,4	9,4	9,4	9,4	9,4	9,4	9,4	9,4
No. of Tubes	[No.]	29	34	43	52	79	52	65	65	126	142
Inlet ID	[mm]	6,15	6,15	8,2	9,7	9,7	12,9	12,9	16,1	22,4	22,4
Outlet ID	[mm]	6,15	6,15	6,15	8,2	9,7	12,9	12,9	12,9	22,4	22,4
Inlet/outlet - Straight as shown above						X	X	X	X	X	X
Inlet/outlet - 90 degree straight/Left manifold		X	X	X	X						
PED/CEE (max. Working pressure 45 bar)		N/A	N/A	N/A	N/A	N/A	Cat I	N/A	Cat I	Cat I	Cat I
Output: (Parallel Flow)											
Total Core Length: (L)	[mm]	330	385	460	550	800	1074	1300	1324	1074	1274
Total Core Height: (H)	[mm]	301	348	432	517	771	517	639	639	1213	1363
Total Core Depth: (øH)	[mm]	20	20	20	20	20	32	20	32	32	32
Core Depth Core: (cD)	[mm]	16	16	16	16	16	25,4	16	25,4	25,4	25,4
Total Core Weight:	[kg]	0,8	1,0	1,5	2,1	4,4	6,4	5,9	9,6	14,7	19,5
Core Face Area	[m2]	0,0792	0,1105	0,1699	0,2495	0,5646	0,4991	0,7766	0,7766	1,1947	1,6141
Total External Surface Area (Core)	[m2]	2,193	3,059	4,704	6,906	15,622	21,878	21,488	34,039	52,349	70,725
Total Internal Surface Area (Core)	[m2]	0,367	0,514	0,796	1,174	2,675	3,783	3,668	5,911	9,166	12,396
Total Internal Volume (incl. manifolds)	[cm3]	181	226	310	409	767	1176	870	1667	2850	3555
Balance External/Internal Surfaces	[n]	5,98	5,95	5,91	5,88	5,84	5,78	5,86	5,76	5,71	5,71
Open volume in core	[dm3]	1,01	1,41	2,17	3,18	7,21	10,11	9,91	15,74	24,23	32,74

Application	Cooling	Capacity	Cooling	Capacity	Air speed	Delta temp	
	100%	Cond.	80%	Cond.			
A/C	4 - 80	5 - 100	4 - 80	5 - 100	1,5 - 2,5	10 - 15	R410A - R134a
Cond. Units	5 - 40	8 - 65	5 - 40	8 - 65	2,5 - 3	10 - 15	R404A - R134a
Air Driers	1 - 50	2 - 90	1-4	2 - 8	2,5 - 3,5	10 - 15	R404A - R134a
Cold Rooms	1 - 15	2 - 25	1-6	2 - 10	2 - 3	10 - 15	R404A
Cabinet Cooling	0,5 - 5	1 - 10	0,5-3,5	1 - 6	2,5 - 3,0	10 - 15	R404A