

- Ripple Fin[®] tubing
- Floating coil block suspension
- Eurovent certified
- Capacities according ENV 327 for R22



Aircooled Condensers

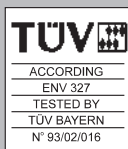
HTC

New condenser generation with better performance

Capacities 9 - 930 kW



HELPMAN



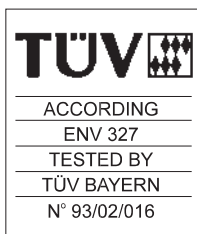
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EUROVENT
certification programme

Air cooled condensers

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Tested by TÜV

HTC aircooled condensers are tested by TÜV Bayern according to ENV 327 European standard.

This extensive testing procedure comprises :

- capacities under standardised conditions
- air flow data
- fan motor electrical data
- safety aspects
- sound levels according to DIN 45635

The TÜV registration number for HTC air cooled condensers is 93/02/016.

Type indication

Example : **HTC 076 . 124 - 930**

- HTC** : Aircooled condenser with Cu/Al coil block
- 076** : Condenser type
There are 4 basic types with different fan diameters
- 1••** : Number of separated coils
- 2•** : Number of fans per coil
- 4** : Number of tube rows in air direction
- 930** : Fan speed

Air cooled condensers

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General

The HTC aircooled condenser range includes 4 basic types covering a total of 107 models with 1 to 12 fans and duties from 9 to 930 kW at 15 K temperature difference.

Design

Coil block	: Copper Ripple Fin® tubing with aluminium fins.
Tube diameter	: ½"
Tube thickness	: 0.65 mm/0.4 mm (min.)
Tube pitch	: 50 x 50 mm triangle
Fin spacing	: 2.25 mm

Other fin spacings up to 4 mm available on request.

Coil blocks are pressure tested at 28 bar dry air.

Casing and framework are of pregalvanised sheet steel (Sendzimir) with an epoxy coating on both sides. Colour scheme: light-grey RAL 7035, mounting feet models 076, 080 and 100, dark-grey RAL 7016. Other colours are available at an extra price. All condensers are provided with removable header panels.

Condenser models 076, 080 and 100

Floating construction of the condenser coil block. On request the condensers can be fitted with inspection hatches (extra price).

Air direction

Condensers type HTC can be supplied for horizontal or vertical air flow.

Condenser models 050 :

Standard horizontal air flow, vertical air flow with special refrigerant circuiting. All models are fitted with mounting profiles.

Condenser models 076, 080 and 100 :

Standard vertical air flow. On request also available for horizontal air flow.

When ordering without air flow indication, the standard execution will be supplied.

Corrosion protection

The standard condensers have a high corrosion resistance through selected materials, surface treatment and construction. For application in aggressive surroundings (coastal and industrial areas) following designs are available at an extra charge:

- fins of seawater resistant aluminium alloy (57S/5052)
- fins of prepainted aluminium
- finned coils chromated after assembling
- copper fins (delivery time on request)

Application as liquid cooler (Dry - Cooler)

The condenser can also be used as liquid cooler, for instance cooling down of cooling water in watercooled plants.

Technical information on request, see brochure nr. 53.08 (Dry Coolers HTD).

Air cooled condensers

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Capacities HTC ●●● . 1●●

Type	Capacity kW		Airflow m ³ /h		dB(A)	Capacity kW		Airflow m ³ /h		dB(A)	Cap.	Air	dB(A)	Cap.	Air	dB(A)	
HTC	H	L	H	L	H/L	H	L	H	L	H/L							
Motor 370 W, 1420 rpm					180 W, 910 rpm					120 W, 690 rpm			25 W, 470 rpm				
050 . 112 - ...	15.7		6640		55	13.5		5030		44	12.0	4100	40	8.9	2530	31	
050 . 113 - ...	20.1		6400		55	16.9		4860		44	15.5	3950	40	10.7	2380	31	
050 . 114 - ...	23.0		6200		55	19.0		4660		44	15.8	3620	40	11.1	2160	31	
050 . 122 - ...	31.7		13300		58	27.2		10100		47	24.1	8200	43	17.8	5050	34	
050 . 123 - ...	42.8		12800		58	35.9		9730		47	31.2	7900	43	21.5	4770	34	
050 . 124 - ...	46.3		12400		58	38.2		9310		47	33.7	7240	43	22.1	4320	34	
050 . 132 - ...	44.5		19900		60	43.4		15100		49	38.5	12300	45	28.1	7580	36	
050 . 133 - ...	64.5		19200		60	54.0		14600		49	46.9	11900	45	33.3	7150	36	
050 . 134 - ...	73.5		18600		60	60.1		14000		49	49.6	10900	45	33.8	6480	36	
050 . 143 - ...	86.3		25600		61	72.2		19500		50	64.0	15800	46	44.3	9540	37	
050 . 144 - ...	92.8		24800		61	82.0		18600		50	67.8	14500	46	44.3	8640	37	
Motor 750 W, 930 rpm					750/150 W, 935/425 rpm					370 W, 690 rpm			120 W, 325 rpm				
076 . 112 - ...	35.4		14700		53	35.4	21.9	14700	7280	53/39	29.2	10400	46	20.1	6340	33	
076 . 113 - ...	45.8		13900		53	45.8	27.2	13900	7110	53/39	36.7	9790	46	22.9	5630	33	
076 . 114 - ...	50.1		13100		53	50.1	30.7	13100	6950	53/39	41.3	9290	46	23.3	4950	33	
076 . 122 - ...	71.2 *		29300		56	71.2 *	46.6	29300	14600	56/42	58.6 *	20700	49	42.4	12700	36	
076 . 123 - ...	92.1		27700		56	92.1	56.7	27700	14200	56/42	73.4	19600	49	47.3	11300	36	
076 . 124 - ...	106.4		26200		56	106.4	61.7	26200	13900	56/42	83.1	18600	49	46.3	9910	36	
076 . 132 - ...	110.6		44000		58	110.6	68.0	44000	21900	58/44	90.7	31100	51	61.8	19000	38	
076 . 133 - ...	138.6		41600		58	138.6	84.7	41600	21300	58/44	114.9	29400	51	70.5	16900	38	
076 . 134 - ...	154.9		39400		58	154.9	93.3	39400	20900	58/44	121.4	27900	51	70.0	14900	38	
076 . 142 - ...	135.8		58600		59	135.8	93.8	58600	29100	59/45	124.9	41500	52	85.3	25400	39	
076 . 143 - ...	191.3		55400		59	191.3	111.9	55400	28400	59/45	151.9	39200	52	95.4	22500	39	
076 . 144 - ...	213.6		52500		59	213.6	122.1	52500	27800	59/45	166.3	37200	52	93.9	19800	39	
076 . 152 - ...	178.7		73300		60	178.7	119.0	73300	36400	60/46	146.6	51800	53	108.4	31700	40	
076 . 153 - ...	237.9 *		69300		60	237.9 *	142.6	69300	35600	60/46	193.2	49000	53	119.1	28100	40	
076 . 154 - ...	270.9		65600		60	270.9	155.3	65600	34800	60/46	211.3	46400	53	116.3	24800	40	
076 . 162 - ...	221.9		87900		61	221.9	136.2	87900	43700	61/47	181.6	62200	54	123.8	38000	41	
076 . 163 - ...	289.7 *		83200		61	289.7 *	172.2	83200	42700	61/47	221.1	58700	54	143.7	33800	41	
076 . 164 - ...	310.5		78700		61	310.5	186.8	78700	41700	61/47	243.0	55700	54	140.6	29700	41	
Motor 1400/810 W, 870/620 rpm					720/440 W, 680/500 rpm												
080 . 112 - ...	41.9	38.2	18700	13800	57/48	39.3	34.7	14600	13000	50/41							
080 . 113 - ...	57.0	46.3	17600	12700	57/48	48.0	41.4	13400	12000	50/41							
080 . 114 - ...	64.5	52.0	16700	11900	57/48	53.9	45.8	12500	11200	50/41							
080 . 122 - ...	91.1	76.9	37400	27700	60/51	79.4	69.7	29200	26000	53/44							
080 . 123 - ...	114.8	92.9	35300	25500	60/51	96.2	83.3	26800	24000	53/44							
080 . 124 - ...	133.4	104.4	33500	23800	60/51	108.5	92.4	25000	22400	53/44							
080 . 132 - ...	137.3	115.8	56100	41500	62/53	119.4	104.9	43700	39000	55/46							
080 . 133 - ...	172.3	139.6	52900	38200	62/53	150.5	129.7	40200	36000	55/46							
080 . 134 - ...	194.4	158.4	50200	35700	62/53	164.3	139.6	37500	33600	55/46							
080 . 142 - ...	168.5	143.0	74900	55300	63/54	164.5	144.8	58300	52000	56/47							
080 . 143 - ...	230.1	192.7	70500	51000	63/54	199.6	172.3	53700	47900	56/47							
080 . 144 - ...	268.2	210.0	67000	47600	63/54	217.7	184.7	50000	44700	56/47							
080 . 152 - ...	221.8	187.3	93600	69200	64/55	193.0	169.9	72900	65000	57/48							
080 . 153 - ...	296.2 *	240.1 *	88200	63700	64/55	248.3 *	213.9 *	67100	59900	57/48							
080 . 154 - ...	333.6 *	266.4	83700	59500	64/55	276.0	234.1	62600	55900	57/48							
Motor 1950/1350 W, 670/520 rpm					380/190 W, 300/180 rpm												
100 . 112 - ...	56.7	47.9	27400	19900	55/47	36.4	27.2	12400	7300	36/27							
100 . 113 - ...	71.9	59.0	25100	18100	55/47	43.7	29.7	10800	6270	36/27							
100 . 114 - ...	86.1	70.5	23300	16200	55/47	49.0	32.2	9660	5750	36/27							
100 . 122 - ...	114.1	96.2	54700	39900	58/50	77.1	55.6	24800	14600	39/30							
100 . 123 - ...	144.1	124.9	50100	36200	58/50	87.9	59.5	21500	12500	39/30							
100 . 124 - ...	182.0	142.2	46500	32300	58/50	97.7	64.7	19300	11500	39/30							
100 . 132 - ...	160.0	153.4	82100	59800	60/52	116.1	83.8	37200	21900	41/32							
100 . 133 - ...	229.6	188.1	75200	54300	60/52	134.8	89.8	32300	18800	41/32							
100 . 134 - ...	274.2	213.2	69800	48500	60/52	144.8	96.9	29000	17300	41/32							
100 . 142 - ...	228.9	192.9	109500	79700	61/53	158.0	111.8	49600	29200	42/33							
100 . 143 - ...	307.1 *	250.6 *	100200	72400	61/53	179.8	120.4	43000	25100	42/33							
100 . 144 - ...	366.4 *	291.0	93100	64700	61/53	196.2	128.0	38600	23000	42/33							
100 . 152 - ...	298.2	250.8	136900	99600	62/54	189.2	140.9	62000	36500	43/34							
100 . 153 - ...	375.9	306.6	125300	90500	62/54	215.6	150.5	53800	31300	43/34							
100 . 154 - ...	466.2 *	363.1 *	116300	80800	62/54	247.8	161.1	48300	28800	43/34							

H = High fan speed

L = Low fan speed

★ For these condenser models the connections are located at both ends (liquid header is replaced). The other condenser models have both connections (inlet and outlet) at one end.

Air cooled condensers

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Technical Data HTC ●●● . 1●●

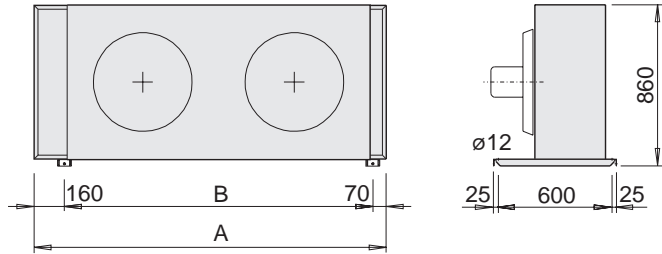
Type HTC	Refrigerant connections mm ODS		Internal volume dm ³	Surface m ²	Weight kg fin execution		Dimensions mm			
	in	out			aluminium	copper	A	B	CD	
050 . 112 - ...	1 x 22	1 x 22	5	47	43	54				
050 . 113 - ...	1 x 22	1 x 22	7	70	52	70	1060	830		
050 . 114 - ...	1 x 22	1 x 22	9	93	61	85				
050 . 122 - ...	1 x 22	1 x 22	8	93	84	108				
050 . 123 - ...	1 x 28	1 x 28	12	140	101	137	1860	1630		
050 . 124 - ...	1 x 28	1 x 28	16	187	118	166				
050 . 132 - ...	1 x 28	1 x 28	11	140	125	161				
050 . 133 - ...	1 x 35	1 x 35	16	210	150	204	2660	2430		
050 . 134 - ...	1 x 35	1 x 35	22	280	176	247				
050 . 143 - ...	1 x 35	1 x 35	24	280	203	275				
050 . 144 - ...	1 x 42	1 x 42	31	373	237	333	3460	3230		
076 . 112 - ...	1 x 28	1 x 28	9	102	128	154				
076 . 113 - ...	1 x 28	1 x 28	13	153	146	186	2000	1340		1 x 1400
076 . 114 - ...	1 x 28	1 x 28	17	204	165	218				
076 . 122 - ...	1 x 35	1 x 35	16	204	253	305				
076 . 123 - ...	1 x 42	1 x 42	24	306	290	368	3400	2740		2 x 1400
076 . 124 - ...	1 x 42	1 x 42	31	408	326	431				
076 . 132 - ...	1 x 42	1 x 42	25	306	381	459				
076 . 133 - ...	1 x 54	1 x 54	36	459	436	554	4800	4140		3 x 1400
076 . 134 - ...	1 x 54	1 x 54	49	612	492	649				
076 . 142 - ...	1 x 54	1 x 54	32	408	506	611				
076 . 143 - ...	1 x 54	1 x 54	48	612	580	737	6200	5540	2740	4 x 1400
076 . 144 - ...	1 x 67	1 x 67	63	817	653	862				
076 . 152 - ...	1 x 54	1 x 54	39	510	632	763				
076 . 153 - ...	1 x 67	1 x 67	58	766	723	919	7600	6940	4140	5 x 1400
076 . 154 - ...	1 x 67	1 x 67	77	1021	814	1075				
076 . 162 - ...	1 x 67	1 x 67	46	612	757	914				
076 . 163 - ...	1 x 67	1 x 67	69	919	866	1101	9000	8340	4140	6 x 1400
076 . 164 - ...	1 x 67	1 x 67	91	1225	974	1289				
080 . 112 - ...	1 x 28	1 x 28	10	122	230	262				
080 . 113 - ...	1 x 35	1 x 35	16	184	253	300	2000	1340		1 x 1400
080 . 114 - ...	1 x 35	1 x 35	21	245	275	338				
080 . 122 - ...	1 x 42	1 x 42	19	245	458	520				
080 . 123 - ...	1 x 42	1 x 42	28	367	501	596	3400	2740		2 x 1400
080 . 124 - ...	1 x 54	1 x 54	38	490	545	671				
080 . 132 - ...	1 x 54	1 x 54	30	367	688	782				
080 . 133 - ...	1 x 54	1 x 54	44	551	755	896	4800	4140		3 x 1400
080 . 134 - ...	1 x 54	1 x 54	59	735	821	1010				
080 . 142 - ...	1 x 54	1 x 54	38	490	916	1041				
080 . 143 - ...	1 x 67	1 x 67	57	735	1003	1192	6200	5540	2740	4 x 1400
080 . 144 - ...	1 x 67	1 x 67	76	980	1091	1343				
080 . 152 - ...	1 x 67	1 x 67	46	612	1143	1300				
080 . 153 - ...	1 x 67	1 x 67	70	919	1252	1488	7600	6940	4140	5 x 1400
080 . 154 - ...	1 x 80	1 x 80	93	1226	1361	1675				
100 . 112 - ...	1 x 35	1 x 35	13	152	251	290				
100 . 113 - ...	1 x 35	1 x 35	19	228	279	338	2350	1690		1 x 1750
100 . 114 - ...	1 x 42	1 x 42	25	304	307	385				
100 . 122 - ...	1 x 42	1 x 42	25	304	502	580				
100 . 123 - ...	1 x 54	1 x 54	38	457	558	676	4100	3440		2 x 1750
100 . 124 - ...	1 x 54	1 x 54	51	607	614	771				
100 . 132 - ...	1 x 54	1 x 54	36	455	750	868				
100 . 133 - ...	1 x 67	1 x 67	54	685	832	1009	5850	5190		3 x 1750
100 . 134 - ...	1 x 67	1 x 67	72	911	915	1151				
100 . 142 - ...	1 x 67	1 x 67	46	607	998	1155				
100 . 143 - ...	1 x 67	1 x 67	70	913	1107	1343	7600	6940	3440	4 x 1750
100 . 144 - ...	1 x 80	1 x 80	93	1214	1216	1530				
100 . 152 - ...	1 x 67	1 x 67	57	759	1246	1443				
100 . 153 - ...	1 x 80	1 x 80	86	1142	1382	1677	9350	8690	5190 *	5 x 1750
100 . 154 - ...	1 x 80	1 x 80	114	1518	1518	1910				

* execution with copper fins: 8 feet at distances 3440, 1810, 3440 mm

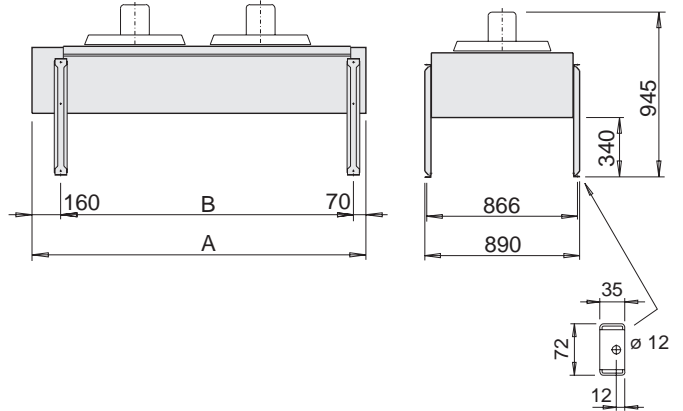
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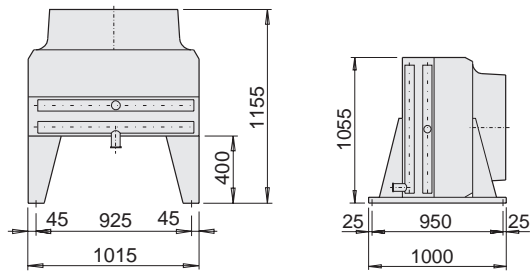
HTC 050 . 1•• Horizontal Air Direction



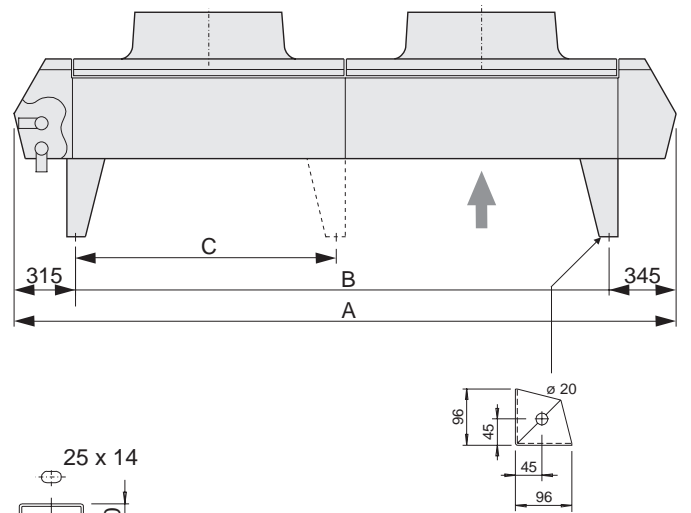
HTC 050 . 1•• Vertical Air Direction



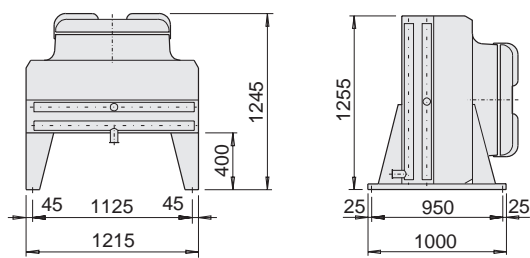
HTC 076 . 1••



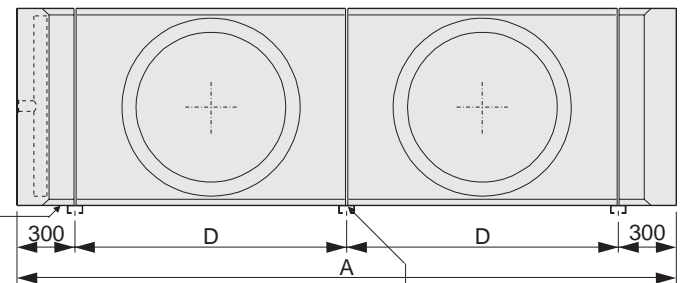
HTC 076 / 080 / 100 . 1•• Vertical Air Direction



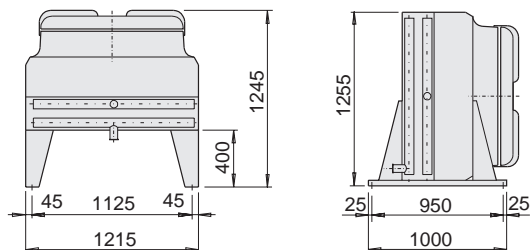
HTC 080 . 1••



HTC 076 / 080 / 100 . 1•• Horizontal Air Direction



HTC 100 . 1••



Supports for every module

Air cooled condensers

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Capacities HTC 2**

Type	Capacity kW		Airflow m ³ /h		dB(A)	Capacity kW		Airflow m ³ /h		dB(A)	Cap.	Air	dB(A)	Cap.	Air	dB(A)
HTC	H	L	H	L	H/L	H	L	H	L	H/L						
Motor 750 W, 930 rpm																
750/150 W, 935/425 rpm																
370 W, 690 rpm																
120 W, 325 rpm																
076 . 212 - ...	70.8		29300		56	70.8	43.9	29300	14600	56/42	58.3	20700	49	40.2	12700	36
076 . 213 - ...	91.5		27700		56	91.5	54.4	27700	14200	56/42	73.3	19600	49	46.6	11300	36
076 . 214 - ...	100.3		26200		56	100.3	61.4	26200	13900	56/42	82.5	18600	49	46.7	9910	36
076 . 222 - ...	142.4 *		58600		59	142.4 *	93.2	58600	29100	59/45	117.1 *	41500	52	84.8	25400	39
076 . 223 - ...	184.2		55400		59	184.2	113.3	55400	28400	59/45	146.9	39200	52	94.6	22500	39
076 . 224 - ...	212.7		52500		59	212.7	123.4	52500	27800	59/45	166.1	37200	52	92.7	19800	39
076 . 232 - ...	221.1		87900		61	221.1	136.0	87900	43700	61/47	181.3	62200	54	127.4	38000	41
076 . 233 - ...	277.2		83200		61	277.2	169.4	83200	42700	61/47	229.7	58700	54	143.3	33800	41
076 . 234 - ...	309.8		78700		61	309.8	186.6	78700	41700	61/47	242.7	55700	54	141.6	29700	41
076 . 242 - ...	271.6		117200		62	271.6	187.6	117200	58300	62/48	249.9	82900	55	173.1	50700	42
076 . 243 - ...	382.5		110900		62	382.5	223.9	110900	56900	62/48	303.8	78300	55	190.9	45000	42
076 . 244 - ...	427.3		104900		62	427.3	244.2	104900	55600	62/48	332.6	74300	55	187.9	39600	42
076 . 252 - ...	357.5		146500		63	357.5	237.9	146500	72800	63/49	293.1	103700	56	216.8	63400	43
076 . 253 - ...	475.7 *		138600		63	475.7 *	285.3	138600	71100	63/49	386.5	97900	56	239.6	56300	43
076 . 254 - ...	541.8		131200		63	541.8	310.6	131200	69500	63/49	422.5	92900	56	234.4	49500	43
076 . 262 - ...	443.8		175800		64	443.8	272.4	175800	87400	64/50	363.1	124400	57	247.5	76100	44
076 . 263 - ...	579.4 *		166300		64	579.4 *	344.5	166300	85300	64/50	442.3	117500	57	282.7	67500	44
076 . 264 - ...	621.0		157400		64	621.0	373.6	157400	83500	64/50	486.1	111500	57	281.2	59400	44
Motor 1400/810 W, 870/620 rpm																
720/440 W, 680/500 rpm																
080 . 212 - ...	83.8	76.4	37400	27700	60/51	78.6	69.3	29200	26000	53/44						
080 . 213 - ...	113.9	92.6	35300	25500	60/51	95.9	82.8	26800	24000	53/44						
080 . 214 - ...	129.0	103.9	33500	23800	60/51	107.9	91.5	25000	22400	53/44						
080 . 222 - ...	182.2	153.8	74900	55300	63/54	158.7	139.5	58300	52000	56/47						
080 . 223 - ...	229.5	185.7	70500	51000	63/54	192.5	166.5	53700	47900	56/47						
080 . 224 - ...	266.7	208.8	67000	47600	63/54	217.0	184.7	50000	44700	56/47						
080 . 232 - ...	274.6	231.5	112300	83000	65/56	238.9	209.7	87500	78000	58/49						
080 . 233 - ...	344.6	279.2	105800	76400	65/56	301.0	259.5	80500	71900	58/49						
080 . 234 - ...	388.8	316.7	100500	71400	65/56	328.7	279.2	75100	67100	58/49						
080 . 242 - ...	337.0	285.9	149700	110700	66/57	329.0	289.6	116600	104100	59/50						
080 . 243 - ...	460.3	385.5	141100	101900	66/57	399.1	344.6	107300	95900	59/50						
080 . 244 - ...	536.5	420.0	133900	95200	66/57	435.4	369.3	100100	89500	59/50						
080 . 252 - ...	443.7	374.7	187100	138400	67/58	386.0	339.7	145800	130100	60/51						
080 . 253 - ...	592.4 *	480.2 *	176400	127400	67/58	496.6 *	427.7 *	134200	119900	60/51						
080 . 254 - ...	667.3 *	532.7	167400	119000	67/58	552.0	468.2	125100	111800	60/51						
Motor 1950/1350 W, 670/520 rpm																
380/190 W, 300/180 rpm																
100 . 212 - ...	113.5	95.8	54700	39900	58/50	72.9	54.3	24800	14600	39/30						
100 . 213 - ...	143.7	118.1	50100	36200	58/50	87.4	59.5	21500	12500	39/30						
100 . 214 - ...	172.1	141.1	46500	32300	58/50	98.0	64.5	19300	11500	39/30						
100 . 222 - ...	228.2	192.5	109500	79700	61/53	154.2	111.1	49600	29200	42/33						
100 . 223 - ...	288.3	249.8	100200	72400	61/53	175.8	119.0	43000	25100	42/33						
100 . 224 - ...	364.0	284.3	93100	64700	61/53	195.3	129.3	38600	23000	42/33						
100 . 232 - ...	320.0	306.7	164200	119600	63/55	232.1	167.7	74400	43800	44/35						
100 . 233 - ...	459.2	376.2	150400	108600	63/55	269.7	179.7	64500	37600	44/35						
100 . 234 - ...	548.4	426.3	139600	97000	63/55	289.5	193.8	57900	34500	44/35						
100 . 242 - ...	457.8	385.8	219000	159400	64/56	315.9	223.7	99200	58400	45/36						
100 . 243 - ...	614.2 *	501.2 *	200500	144800	64/56	359.5	240.9	86000	50100	45/36						
100 . 244 - ...	732.8 *	582.1	186100	129300	64/56	392.5	256.1	77200	46000	45/36						
100 . 252 - ...	596.4	501.7	273700	199300	65/57	378.5	281.8	124000	73000	46/37						
100 . 253 - ...	751.9	613.2	250600	181000	65/57	431.1	301.1	107500	62700	46/37						
100 . 254 - ...	932.5 *	726.3 *	232700	161600	65/57	495.5	322.1	96600	57500	46/37						

H = High fan speed

L = Low fan speed

★ For these condenser models the connections are located at both ends (liquid haeder is replaced). The other condenser models have both connections (inlet and outlet) at one end.

Air cooled condensers

HTC

Technical Data HTC ●● . 2●●

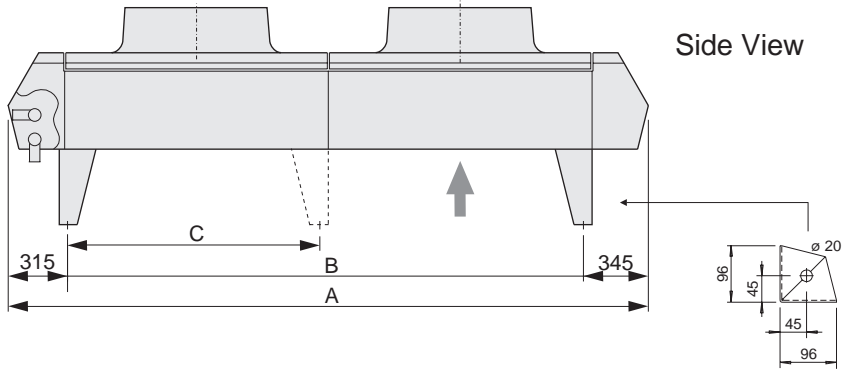
Type	Refrigerant connections mm ODS		Internal volume dm ³	Surface m ²	Weight kg		Dimensions mm			
	in	out			fin execution aluminium	copper	A	B	CD	
076 . 212 - ...	2 x 28	2 x 28	17	204	255	308				
076 . 213 - ...	2 x 28	2 x 28	26	306	293	371	2000	1340		1 x 1400
076 . 214 - ...	2 x 28	2 x 28	35	408	330	435				
076 . 222 - ...	2 x 35	2 x 35	31	408	506	611				
076 . 223 - ...	2 x 42	2 x 42	47	612	579	736	3400	2740		2 x 1400
076 . 224 - ...	2 x 42	2 x 42	63	817	652	862				
076 . 232 - ...	2 x 42	2 x 42	49	612	762	919				
076 . 233 - ...	2 x 54	2 x 54	74	919	873	1108	4800	4140		3 x 1400
076 . 234 - ...	2 x 54	2 x 54	99	1225	984	1298				
076 . 242 - ...	2 x 54	2 x 54	63	817	1013	1222				
076 . 243 - ...	2 x 54	2 x 54	95	1225	1159	1473	6200	5540	2740	4 x 1400
076 . 244 - ...	2 x 67	2 x 67	127	1633	1305	1724				
076 . 252 - ...	2 x 54	2 x 54	77	1021	1264	1525				
076 . 253 - ...	2 x 67	2 x 67	116	1531	1445	1838	7600	6940	4140	5 x 1400
076 . 254 - ...	2 x 67	2 x 67	155	2042	1627	2151				
076 . 262 - ...	2 x 67	2 x 67	91	1225	1514	1829				
076 . 263 - ...	2 x 67	2 x 67	137	1837	1732	2203	9000	8340	4140	6 x 1400
076 . 264 - ...	2 x 67	2 x 67	183	2450	1949	2577				
080 . 212 - ...	2 x 28	2 x 28	21	245	460	523				
080 . 213 - ...	2 x 35	2 x 35	31	367	505	600	2000	1340		1 x 1400
080 . 214 - ...	2 x 35	2 x 35	42	490	551	676				
080 . 222 - ...	2 x 42	2 x 42	38	490	915	1041				
080 . 223 - ...	2 x 42	2 x 42	57	735	1003	1191	3400	2740		2 x 1400
080 . 224 - ...	2 x 54	2 x 54	76	980	1091	1342				
080 . 232 - ...	2 x 54	2 x 54	59	735	1376	1565				
080 . 233 - ...	2 x 54	2 x 54	89	1102	1509	1792	4800	4140		3 x 1400
080 . 234 - ...	2 x 54	2 x 54	118	1470	1642	2019				
080 . 242 - ...	2 x 54	2 x 54	76	980	1831	2083				
080 . 243 - ...	2 x 67	2 x 67	114	1470	2007	2384	6200	5540	2740	4 x 1400
080 . 244 - ...	2 x 67	2 x 67	152	1960	2182	2685				
080 . 252 - ...	2 x 67	2 x 67	93	1225	2286	2600				
080 . 253 - ...	2 x 67	2 x 67	139	1837	2504	3976	7600	6940	4140	5 x 1400
080 . 254 - ...	2 x 80	2 x 80	186	2450	2722	3351				
100 . 212 - ...	2 x 35	2 x 35	25	304	502	580				
100 . 213 - ...	2 x 35	2 x 35	38	457	557	675	2350	1690		1 x 1750
100 . 214 - ...	2 x 42	2 x 42	50	607	613	770				
100 . 222 - ...	2 x 42	2 x 42	51	607	1004	1161				
100 . 223 - ...	2 x 54	2 x 54	76	913	1115	1351	4100	3440		2 x 1750
100 . 224 - ...	2 x 54	2 x 54	101	1214	1227	1542				
100 . 232 - ...	2 x 54	2 x 54	72	911	1500	1736				
100 . 233 - ...	2 x 67	2 x 67	108	1370	1665	2018	5850	5190		3 x 1750
100 . 234 - ...	2 x 67	2 x 67	144	1822	1830	2301				
100 . 242 - ...	2 x 67	2 x 67	93	1214	1996	2310				
100 . 243 - ...	2 x 67	2 x 67	139	1827	2214	2686	7600	6940	3440	4 x 1750
100 . 244 - ...	2 x 80	2 x 80	186	2429	2432	3061				
100 . 252 - ...	2 x 67	2 x 67	114	1518	2493	2885				
100 . 253 - ...	2 x 80	2 x 80	171	2284	2764	3353	9350	8690	5190 *	5 x 1750
100 . 254 - ...	2 x 80	2 x 80	228	3036	3035	3821				

* execution with copper fins: 8 feet at distances 3440, 1810, 3440 mm

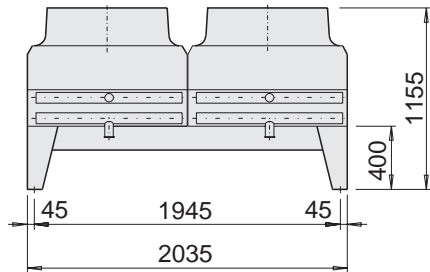
Air cooled condensers

HTC

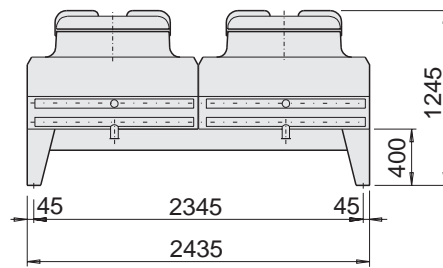
HTC 076 / 080 / 100 . 2••
Vertical Air Direction



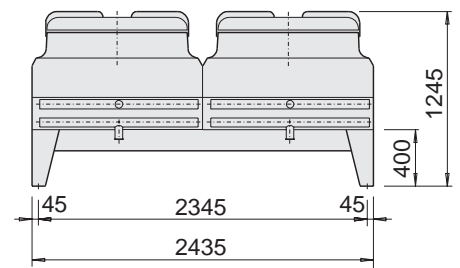
HTC 076 . 2••



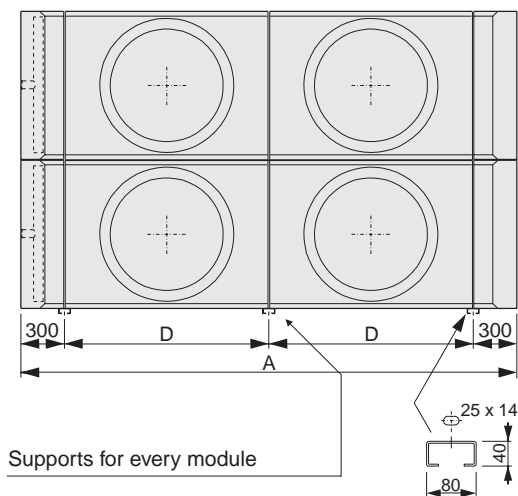
HTC 080 . 2••



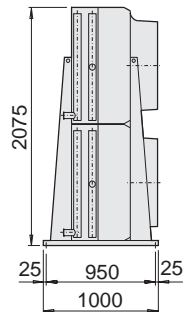
HTC 100 . 2••



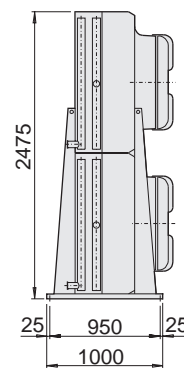
HTC 076 / 080 / 100 . 2••
Horizontal Air Direction



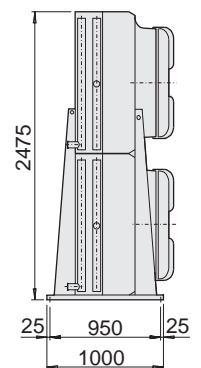
HTC 076.2••



HTC 080. 2••



HTC 100. 2••



Air cooled condensers

HTC

Fan types

All fan types have corrosion resistant fan blades and fan guards.

HTC Type 050

Fans ø 508 mm, complete with protection guards and anti vibration mountings.

The guards are galvanized and epoxy coated.

Mounting bolts and nuts are stainless steel.

Standard execution with fan motors type 050.910.

Terminal boxes are provided with cable inlet PG-13,5.

HTC Type 076

Fans ø 762 mm mounted on a motor support.

Fan guards are integrated in the fan plate.

Standard execution with fan motors type 076.930.

Motors are wired to one or more common terminal boxes.

The terminal boxes are located on the endplate at the liquid header end of the coil.

HTC Type 080

Fans ø 800 mm, fan motors integrated with guards and mounted to fan discharge hood.

HTC Type 100

Similar in construction to type 080, fan diameter however 1000 mm.

All fan motors of HTC models **080** and **100** are equipped with an overload protector built in the windings. Via terminals in the terminal box this internal protector **must** be used in the control current circuit. The electrical control should be arranged in such a way that continuous on/off switching of the motors ('tripping') is prevented.

When the condensers are out of use for longer periods, the motors have to be switched on for at least 2 hours every month.

HTC All Models

For application at ambient temperatures above 40 °C : special motors on request.

Fan motors

Motor type	Number of poles	rpm	Capacity		Motor voltage Volt	Thermal overload relay settings (A) *
			nomi- nal Watt	absor- bed Watt		
HTC type 050 (enclosed design, IP-55)						
050 . 910	6	910	180	350	220/380/50/3	1.49 / 0.86
050 . 690	8	690	120	250	220/380/50/3	1.16 / 0.67
050 . 470	12	470	25	100	220/380/50/3	0.55 / 0.32
050 . 1420	4	1420	370	600	220-240/380-415/50/3	2.42 / 1.40
050 . VAR	6	var.	180	350	220/50/1	2.36 **
HTC type 076 (enclosed design, IP-55)						
076 . 930	6	930	750	1170	220-240/380-415/50/3	5.0 / 2.9
076 . 690	8	690	370	560	220-240/380-415/50/3	2.6 / 1.5
076 . 325	16	325	120	250	220-240/380-415/50/3	2.0 / 1.2
076 . 425 YI	6	935	750	1420	380-415/50/3	3.1
	YII	12	425	150	380-415/50/3	1.1
076 . 930 M	6	930	750	1170	220-240/50/1	8.0
076 . VAR	6	var.	750	1000	220-240/50/1	8.4 **
076 . 840	8	840	660	770	220-254/380-440/60/3	4.8 / 2.8
HTC type 080 (enclosed design, IP-54)						
080 . 870 Δ	-	870		1400	380/50/3	3.2
	Y	620		810	380/50/3	1.9
080 . 680 Δ	-	680		720	380/50/3	2.2
	Y	500		440	380/50/3	1.1
HTC type 100 (enclosed design, IP-54)						
100 . 670 Δ	-	670		1950	380/50/3	4.6
	Y	520		1350	380/50/3	3.0
100 . 300 Δ	-	300		380	380/50/3	1.10
	Y	180		190	380/50/3	0.61

* The settings can be applied to a minimum ambient temperature of -10 °C

** Value at highest speed.

Air cooled condensers

HTC

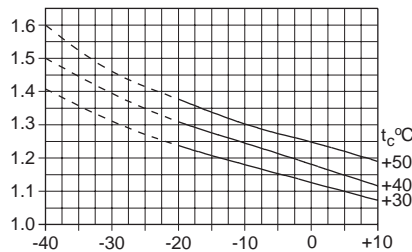
Factors for calculation of the condenser capacity

The condenser capacity is the compressor capacity multiplied with the factor from the diagram. The diagrams are valid for R 22 and R 134 a. At evaporating temperatures below -20 °C the condenser capacity has to be calculated from the compressor capacity at -20 °C, or a starting control should be used to protect the compressors from high starting loads.

OPEN compressors

SEMI-HERMETIC compressors
(motor air/water cooled)

Factor

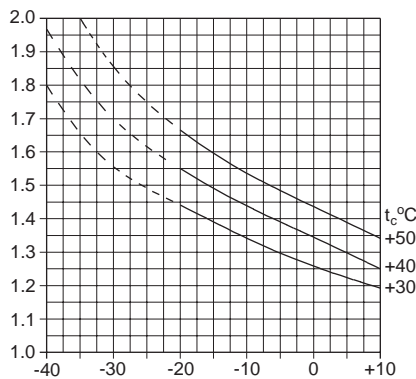


Evaporating temperature °C

SEMI-HERMETIC compressors
(motor suctiongas cooled)

HERMETIC compressors

Factor



Evaporating temperature °C

Capacity

The basic capacity ratings (pages 4 and 7) are for R22 at a t_d^* of 15 K and ambient temperatures up to 25 °C.

* t_d = difference between condensing- and ambient temperature.

Capacities are directly proportional with other temperature differences between 10 and 20 K.

The refrigerant circuiting is optimised to the selected fan speed. When selecting a condenser model with two fan speeds a 'first choice' fan speed has to be given to which the refrigerant circuiting will be designed. The condenser capacity for the 'second choice' fan speed can be up to 10 % below the stated capacity.

Correction factors

		Factor
Refrigerant R 134a		0.95
Ambient temperature :	25 °C	1.00
	35 °C	0.96
	40 °C	0.94
(special motor)	50 °C	0.91
Altitude above sea level :	0 m	1.00
	500 m	0.97
	1000 m	0.93
	1500 m	0.90
	2000 m	0.86
	2500 m	0.83
Application of motors suitable for 60 Hz with n = 840 rpm		0.95

Example : **HTC 2 . 124 - 840**

What is the condenser capacity at an ambient temperature of 40 °C, refrigerant R22, altitude at sea level and equipped with motors for 60 Hz ?

Nominal capacity at 15 K tv : 106.4 kW

Correction factors :

$t = 40$ °C : 0.94
 altitude sea level : 1.00
 60 Hz motors : 0.95

Corrected capacity :

$0.94 \times 1.00 \times 0.95 \times 106.4 = 95.0$ kW

Capacity control

For multifan models capacity can be controlled by cycling one or more fans. Capacity control on all models is also possible by using 2-speed or speed regulated single phase motors (in combination with an electronic speed control device).

The fan compartments are separated by baffle plates.

Multi circuiting

Condensers can be supplied (at extra cost) with multi circuiting.

Air cooled condensers

HTC

Soundlevels dB(A)

The soundlevels in the tables on pages 4 and 7 are the results of tests according to DIN 45635. The values are measured in the horizontal plane at a distance of 10 m. More information on request.

The table below gives sound level corrections at various distances.

Distance m	Correction dB(A)
1	+ 20
2	+ 14
3	+ 10
4	+ 8
5	+ 6
10	0
20	- 6
50	- 14
100	- 20

Location

Air movement

Condensers should be positioned to achieve the following criteria :

- Adequate space (min. 1.0 metre) must be left for free entry to the coil inlet face.
- No restrictions to the air discharge.
- No possibility of direct air recirculation (short circuiting of air).

Installation and maintenance

For more information on installation and maintenance of air cooled condensers model HTC we refer to our brochure nr. 88.02 ("Installation and Maintenance Instructions for Aircooled Condensers").

This brochure is issued with every condenser.

Extended feet

Extended feet can be supplied as optional extra for condenser models 076, 080 and 100. These feet are supplied separately. The standard feet height gives 400 mm free space under the condenser. Extended feet are available for heights of 600 mm.

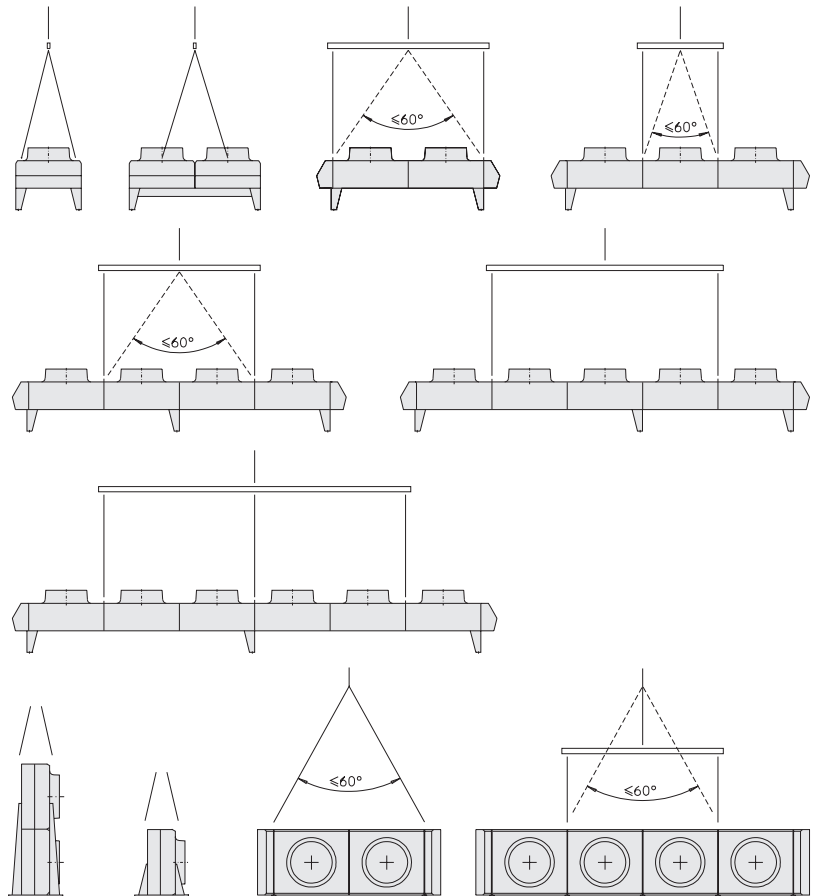
Transport

All models are provided with lifting lugs. To avoid damage during hoisting, a hoisting beam should be used, by which the given angles are to be considered. Beware of shocks during transport and handling (sudden lifting).

Mounting

Refrigerant pipework connections are to be soldered free of tension.

When connecting more than one condenser in parallel the pressure drop on the refrigerant side has to be considered.



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Inlay HTC Condensers

Capacities HTC-090 and HTC-091

Condensers with fans \varnothing 900 mm.

For other technical data see brochure 53.06.

Air cooled condensers

HTC

Capacities HTC 090 . ●●●

Type HTC	Capacity kW		Airflow m ³ /h		dB(A) H/L	Capacity kW		Airflow m ³ /h		dB(A) H/L	Capacity kW		Airflow m ³ /h		dB(A) H/L
	H	L	H	L		H	L	H	L		H	L	H	L	
	Motor 3300/1900 W, 850/610 rpm					1750/1200 W, 680/520 rpm					1650/1000 W, 860/660 rpm				
090 . 112 - ...	56.4	48.7	30700	22700	56/49	49.5	45.3	23400	17200	51/45	47.6	44.8	21700	16900	53/47
090 . 113 - ...	75.3	66.6	28500	21100	56/49	67.1	56.2	21400	15900	51/45	65.9	55.5	20700	15500	53/47
090 . 114 - ...	85.1	76.1	26600	19800	56/49	75.8	62.7	19800	14800	51/45	75.8	61.5	19800	14400	53/47
090 . 122 - ...	113.4	105.8	61500	45400	59/52	107.6	91.5	46900	34400	54/48	103.3	90.5	43300	33700	56/50
090 . 123 - ...	159.2	134.6	57000	42200	59/52	135.6	113.5	42800	31800	54/48	133.0	111.6	41400	31000	56/50
090 . 124 - ...	184.0	153.0	53300	39600	59/52	152.5	129.0	39500	29600	54/48	152.5	126.6	39500	28900	56/50
090 . 132 - ...	175.9	159.6	92200	68000	61/54	162.2	137.8	70300	51600	56/50	155.8	136.2	65000	50600	58/52
090 . 133 - ...	240.1	202.4	85400	63300	61/54	204.0	170.3	64100	47800	56/50	200.0	167.8	62100	46600	58/52
090 . 134 - ...	277.3	229.6	79900	59500	61/54	229.5	196.1	59300	44400	56/50	229.5	192.1	59300	43300	58/52
090 . 142 - ...	248.0	213.3	122900	90700	62/55	217.0	184.0	93800	68800	57/51	208.2	181.8	86600	67400	59/53
090 . 143 - ...	320.8	270.5	113900	84500	62/55	272.6	234.9	85500	63700	57/51	267.3	231.0	82800	62100	59/53
090 . 144 - ...	370.6	316.3	106500	79300	62/55	316.0	259.6	79000	59200	57/51	316.0	255.3	79000	57700	59/53
090 . 152 - ...	301.0	258.4	153700	113400	63/56	263.0	236.3	117200	86000	58/52	252.3	233.7	108300	84300	60/54
090 . 153 - ...	389.0	347.7	142400	105600	63/56	350.0	292.7	106900	79600	58/52	343.8	287.9	103500	77600	60/54
090 . 154 - ...	475.9	393.9	133200	99100	63/56	393.5	322.7	98800	74000	58/52	393.5	316.9	98800	72100	60/54

	Motor 3300/1900 W, 850/610 rpm					1750/1200 W, 680/520 rpm					1650/1000 W, 860/660 rpm				
090 . 212 - ...	112.8	97.4	61400	45400	60/53	99.0	90.6	46800	34400	55/49	95.2	89.6	43400	33800	57/51
090 . 213 - ...	150.6	133.2	57000	42200	60/53	134.2	112.4	42800	31800	55/49	131.8	111.0	41400	31000	57/51
090 . 214 - ...	170.2	152.2	53200	39600	60/53	151.6	125.4	39600	29600	55/49	151.6	123.0	39600	28800	57/51
090 . 222 - ...	226.8	211.6	123000	90800	63/56	215.2	183.0	93800	68800	58/52	206.6	181.0	86600	67400	60/54
090 . 223 - ...	318.4	269.2	114000	84400	63/56	271.2	227.0	85600	63600	58/52	266.0	223.2	82800	62000	60/54
090 . 224 - ...	368.0	306.0	106600	79200	63/56	305.0	258.0	79000	59200	58/52	305.0	253.2	79000	57800	60/54
090 . 232 - ...	351.8	319.2	184400	136000	65/58	324.4	275.6	140600	103200	60/54	311.6	272.4	130000	101200	62/56
090 . 233 - ...	480.2	404.8	170800	126600	65/58	408.0	340.6	128200	95600	60/54	400.0	335.6	124200	93200	62/56
090 . 234 - ...	554.6	459.2	159800	119000	65/58	459.0	392.2	118600	88800	60/54	459.0	384.2	118600	86600	62/56
090 . 242 - ...	496.0	426.6	245800	181400	66/59	434.0	368.0	187600	137600	61/55	416.4	363.6	173200	134800	63/57
090 . 243 - ...	641.6	541.0	227800	169000	66/59	545.2	469.8	171000	127400	61/55	534.6	462.0	165600	124200	63/57
090 . 244 - ...	741.2	632.6	213000	158600	66/59	632.0	519.2	158000	118400	61/55	632.0	510.6	158000	115400	63/57
090 . 252 - ...	602.0	516.8	307400	226800	67/60	526.0	472.6	234400	172000	62/56	504.6	467.4	216600	168600	64/58
090 . 253 - ...	778.0	695.4	284800	211200	67/60	700.0	585.4	213800	159200	62/56	687.6	575.8	207000	155200	64/58
090 . 254 - ...	951.4	787.8	266400	198200	67/60	787.0	645.4	197600	148000	62/56	787.0	633.8	197600	144200	64/58

Fan motors

Motor type	Number of poles	rpm	Capacity		Motor voltage Volt	Thermal overload relay settings (A) *
			nomi- nal Watt	absor- bed Watt		
HTC type 090 (enclosed design, IP54)						
090 . 850	Δ	-	850	3300	380/50/3	6.93
	Y	-	610	1900	380/50/3	3.85
090 . 680	Δ	-	680	1750	380/50/3	3.96
	Y	-	520	1200	380/50/3	2.53
090 . 860	Δ	-	860	1650	380/50/3	3.85
	Y	-	660	1000	380/50/3	1.98

* The settings can be applied to a minimum ambient temperature of -10 °C

For dimensions see brochure 53.06,
air cooled condensers HTC 080.

Air cooled condensers

HTC

Capacities HTC 091 . ●●●

Type HTC	Capacity kW		Airflow m ³ /h		dB(A) H/L	Capacity kW		Airflow m ³ /h		dB(A) H/L	Capacity kW		Airflow m ³ /h		dB(A) H/L
	H	L	H	L		H	L	H	L		H	L	H	L	
	Motor 3300/1900 W, 850/610 rpm					1750/1200 W, 680/520 rpm					1650/1000 W, 860/660 rpm				
091 . 112 - ...	67.7	58.0	32200	23700	56/49	59.5	50.1	24900	18100	51/45	56.0	49.4	22300	17700	53/47
091 . 113 - ...	89.4	74.8	30300	22400	56/49	77.9	64.9	23800	17000	51/45	73.1	63.9	21500	16600	53/47
091 . 114 - ...	101.4	83.4	28700	21200	56/49	84.3	71.9	21600	16000	51/45	86.3	70.8	20800	15600	53/47
091 . 122 - ...	136.5	116.6	64300	47400	59/52	119.7	100.5	49800	36300	54/48	112.6	99.1	44500	35400	56/50
091 . 123 - ...	176.6	147.6	60600	44700	59/52	153.5	131.0	47700	33900	54/48	152.1	128.9	43000	33100	56/50
091 . 124 - ...	203.3	176.3	57400	42500	59/52	177.9	145.0	43100	32100	54/48	174.1	141.9	41600	31300	56/50
091 . 132 - ...	209.8	179.1	96500	71100	61/54	183.8	159.9	74700	54400	56/50	173.0	157.7	66800	53100	58/52
091 . 133 - ...	271.1	234.8	90800	67100	61/54	244.2	196.8	71500	50900	56/50	228.9	193.6	64400	49700	58/52
091 . 134 - ...	323.0	265.7	86100	63700	61/54	268.2	217.5	64700	48100	56/50	261.3	213.4	62400	46900	58/52
091 . 142 - ...	274.1	233.7	128600	94800	62/55	240.1	213.9	99600	72600	57/51	239.4	210.9	89000	70800	59/53
091 . 143 - ...	353.8	314.0	121100	89500	62/55	326.1	262.9	95400	67900	57/51	306.1	258.6	85900	66200	59/53
091 . 144 - ...	432.1	353.7	114700	85000	62/55	358.3	296.3	86300	64100	57/51	349.1	290.9	83200	62600	59/53
091 . 152 - ...	356.6	304.2	160800	118500	63/56	312.3	261.9	124500	90700	58/52	293.7	258.0	111300	88500	60/54
091 . 153 - ...	460.3	384.2	151400	111800	63/56	399.5	322.4	119200	84900	58/52	374.4	328.9	107400	82800	60/54
091 . 154 - ...	528.4	433.6	143400	106200	63/56	438.7	370.1	107800	80200	58/52	444.0	362.7	104000	78200	60/54

	Motor 3300/1900 W, 850/610 rpm					1750/1200 W, 680/520 rpm					1650/1000 W, 860/660 rpm				
091 . 212 - ...	135.4	116.0	64400	47400	60/53	119.0	100.2	49800	36200	55/49	112.0	98.8	44600	35400	57/51
091 . 213 - ...	178.8	149.6	60600	44800	60/53	155.8	129.8	47600	34000	55/49	146.2	127.8	43000	33200	57/51
091 . 214 - ...	202.8	166.8	57400	42400	60/53	168.6	143.8	43200	32000	55/49	172.6	141.6	41600	31200	57/51
091 . 222 - ...	273.0	233.2	128600	94800	63/56	239.4	201.0	99600	72600	58/52	225.2	198.2	89000	70800	60/54
091 . 223 - ...	353.2	295.2	121200	89400	63/56	307.0	262.0	95400	67800	58/52	304.2	257.8	86000	66200	60/54
091 . 224 - ...	406.6	352.6	114800	85000	63/56	355.8	290.0	86200	64200	58/52	348.2	283.8	83200	62600	60/54
091 . 232 - ...	419.6	358.2	193000	142200	65/58	367.6	319.8	149400	108800	60/54	346.0	315.4	133600	106200	62/56
091 . 233 - ...	542.2	469.6	181600	134200	65/58	488.4	393.6	143000	101800	60/54	457.8	387.2	128800	99400	62/56
091 . 234 - ...	646.0	531.4	172200	127400	65/58	536.4	435.0	129400	96200	60/54	522.6	426.8	124800	93800	62/56
091 . 242 - ...	548.2	467.4	257200	189600	66/59	480.2	427.8	199200	145200	61/55	478.8	421.8	178000	141600	63/57
091 . 243 - ...	707.6	628.0	242200	179000	66/59	652.2	525.8	190800	135800	61/55	612.2	517.2	171800	132400	63/57
091 . 244 - ...	864.2	707.4	229400	170000	66/59	716.6	592.6	172600	128200	61/55	698.2	581.8	166400	125200	63/57
091 . 252 - ...	713.2	608.4	321600	237000	67/60	624.6	523.8	249000	181400	62/56	587.4	516.0	222600	177000	64/58
091 . 253 - ...	920.6	768.4	302800	223600	67/60	799.0	644.8	238400	169800	62/56	748.8	657.8	214800	165600	64/58
091 . 254 - ...	1056.8	867.2	286800	212400	67/60	877.4	740.2	215600	160400	62/56	888.0	725.4	208000	156400	64/58

Fan motors

Motor type	Number of poles	rpm	Capacity		Motor voltage	Thermal overload relay settings (A) *
			nomi- nal Watt	absor- bed Watt		
HTC type 091 (enclosed design, IP54)						
091 . 850 Δ	-	850		3300	380/50/3	6.93
	Y	610		1900	380/50/3	3.85
091 . 680 Δ	-	680		1750	380/50/3	3.66
	Y	520		1200	380/50/3	2.53
091 . 860 Δ	-	860		1650	380/50/3	3.85
	Y	660		1000	380/50/3	1.98

* The settings can be applied to a minimum ambient temperature of -10 °C

For dimensions see brochure 53.06,
air cooled condensers HTC 100.

Air cooled condensers

HTC

Capacities HTC 100

with Sichel fan ø 1000 mm

Type HTC	Capacity kW		Airflow m ³ /h		dB(A) H/L	Capacity kW		Airflow m ³ /h		dB(A) H/L
	H	L	H	L		H	L	H	L	
Motor 860/500 W, 420/310 rpm						760/330 W, 380/250 rpm				
100 . 112 - ...	46.8	39.6	19000	13500	42/34	43.3	33.8	17000	10800	39/29
100 . 113 - ...	59.6	45.6	16700	11700	42/34	53.8	36.8	14500	9000	39/29
100 . 114 - ...	63.9		14300		42	56.7		13000		39
100 . 122 - ...	99.2	75.7	38000	27000	45/37	91.8	68.0	34000	21600	42/32
100 . 123 - ...	123.0	91.7	33400	23400	45/37	108.0	75.7	29000	18000	42/32
100 . 124 - ...	130.7		28600		45	116.2		26000		42
100 . 132 - ...	149.5	120.1	57000	40500	47/39	138.2	101.9	51000	32400	44/34
100 . 133 - ...	180.6	137.9	50100	35100	47/39	162.5	113.7	43500	27000	44/34
100 . 134 - ...	191.9		42900		47	170.0		39000		44
100 . 142 - ...	188.0	151.6	76000	54000	48/40	173.7	139.2	68000	43200	45/35
100 . 143 - ...	241.2	184.0	66800	46800	48/40	221.6	150.9	58000	36000	45/35
100 . 144 - ...	261.9		57200		48	232.0		52000		45
100 . 152 - ...	252.1	196.3	95000	67500	49/41	225.8	166.9	85000	54000	46/36
100 . 153 - ...	306.9	233.9	83500	58500	49/41	276.1	191.0	72500	45000	46/36
100 . 154 - ...	326.8		71500		49	293.3		65000		46

Motor 860/500 W, 420/310 rpm						760/330 W, 380/250 rpm				
100 . 212 - ...	93.6	79.2	38000	27000	45/37	86.6	67.6	34000	21600	42/32
100 . 213 - ...	119.2	91.2	33400	23400	45/37	107.6	73.6	29000	18000	42/32
100 . 214 - ...	127.8		28600		45	113.4		26000		42
100 . 222 - ...	198.4	151.4	76000	54000	48/40	183.6	136.0	68000	43200	45/35
100 . 223 - ...	240.0	183.4	66800	46800	48/40	216.0	151.4	58000	36000	45/35
100 . 224 - ...	261.4		57200		48	232.4		52000		45
100 . 232 - ...	299.0	240.1	114000	81000	50/42	276.4	203.8	102000	64800	47/37
100 . 233 - ...	361.2	275.8	100200	70200	50/42	325.0	227.4	87000	54000	47/37
100 . 234 - ...	383.8		85800		50	340.0		78000		47
100 . 242 - ...	376.0	303.2	152000	108000	51/43	347.4	278.4	136000	86400	48/38
100 . 243 - ...	482.4	368.0	133600	93600	51/43	443.2	301.8	116000	72000	48/38
100 . 244 - ...	523.8		114400		51	464.0		104000		48
100 . 252 - ...	504.2	392.6	190000	135000	52/44	451.6	333.8	170000	108000	49/39
100 . 253 - ...	613.8	467.8	167000	117000	52/44	552.2	382.0	145000	90000	49/39
100 . 254 - ...	653.6		143000		52	586.6		130000		49

Fan motors

Motor type	Number of poles	rpm	Capacity		Motor voltage Volt	Thermal
			nomi- nal Watt	absor- bed Watt		overload relay settings (A) *
HTC type 100 (enclosed design, IP54)						
100 . 420 Δ	-	420		860	380/50/3	2.2
Y	-	310		500	380/50/3	1.07
100 . 380 Δ	-	380		670	380/50/3	1.54
Y	-	250		330	380/50/3	0.74

* The settings can be applied to a minimum ambient temperature of -10 °C

For dimensions see brochure 53.06, air cooled condensers HTC 100.