

BOCK® Condensing Units 50 Hz

With fans of the latest generation: *the next level of energy efficiency.*



Displacement
range up to

67 m³/h

and HP up to 22

BOCK®

bock.danfoss.com

Embracing every challenge

BOCK® Condensing Units

Global warming continues to intensify, causing already hot countries to experience even higher temperatures. In Central Europe, summer temperatures of 43°C are becoming increasingly common. This is where the advantages of BOCK condensing units become apparent. While others rely on adiabatic cooling and additional water spraying on heat exchangers, our units excel in these conditions.

The BOCK® condenser-fan unit is engineered to perform in cold climates, but it truly stands out in extremely hot and demanding regions.

Our philosophy of “one for all” has guided our design and manufacturing of air-cooled units for decades. With our condensing units, we aim to uphold this principle by surpassing the efficiency standards set in Europe, all while maintaining exceptional cooling performance.



We have successfully met our objectives by:

- Ensuring no compromises in robustness and durability
- Using the most efficient AC fans available on the market for heat exchanger cooling
- Leveraging these efficient AC fans to maintain an unbeatable price/performance ratio
- Relying on our two-, and four-cylinder semi-hermetic BOCK® compressors

As a result, you, our customer, continue to receive **One Solution for All** your need.

1

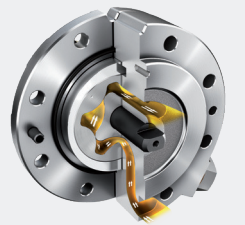
Efficient condensers

Condenser in reliable fin-tube design

One condenser for low and high ambient temperatures

2

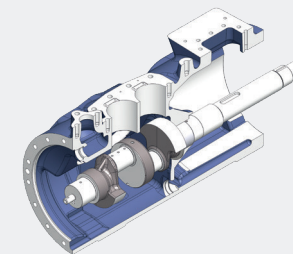
Reliable and safe oil supply



3

Optimized drive gear

More resistant to lack of lubrication

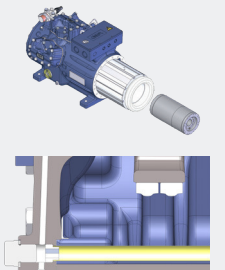


4

Service friendly design

Easily to be replaced
build-in motor due to slide fit (not press fit)

Easily removable
oil strainer



5

Fan blades with grooves on the rear
Increase in mechanical stability
Higher power density



Optimum flow through impeller with improved geometry

Three-dimensional improvement of the blade shape and optimization of the impeller

Optimum flow through the fan due to immersed inlet ring and larger outlet opening

Increased efficiency due to pressure-boosting diffuser

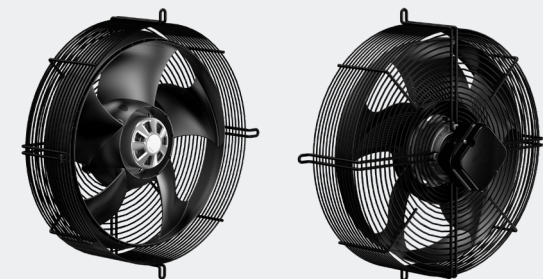
Diffuser ring integrated directly in the impeller, where it assumes the function of a diffuser

Largest possible outflow angle

Increased efficiency of the fan:
Reduction of outlet losses due to pressure-increasing effect of the diffuser

Noise reduction

High efficient fans



6

Pressure switch, KP17WB

For easy commissioning and safety of the working envelop

SHG range

Air-cooled single stage condensing units

114

B

16194

5 digits = Legacy part number

C = Bare condensing unit with:
Oil Sump Heater and Dual HP/
BP pressure switch

114 = 230V 1 phase 50Hz (Delta)
/ 400V 3 phases 50 Hz (Star)



Cooling capacity performance data

Performance data R513A cooling capacity Q [kW]										
Model	Code	Tamb [°C]							EcoDesign	
			-20 °C	-15 °C	-10 °C	-5 °C	0 °C	5 °C	COP	SEPR
SHGX12P/60-4 SL	114C14579	27	1.2	1.56	1.97	2.46	3.02	3.65	1.65	
		32	1.09	1.42	1.81	2.27	2.79	3.38		
		37	0.978	1.29	1.66	2.08	2.57	3.12		
		42	0.873	1.16	1.5	1.89	2.35	2.86		
SHGX12P/75-4 SL	114C14581	27	1.45	1.89	2.41	3.02	3.71	4.48	1.62	
		32	1.32	1.74	2.23	2.8	3.45	4.19		
		37	1.2	1.59	2.05	2.59	3.2	3.89		
		42	1.07	1.43	1.86	2.36	2.94	3.58		
SHGX12P/90-4 SL	114C14583	27	1.73	2.22	2.81	3.5	4.29	5.2	1.67	
		32	1.59	2.05	2.6	3.25	4	4.85		
		37	1.45	1.88	2.4	3	3.7	4.5		
		42	1.3	1.71	2.19	2.75	3.4	4.14		
SHGX12P/110-4 SL	114C14585	27	2.03	2.61	3.29	4.08	4.96	5.95	1.89	
		32	1.84	2.39	3.02	3.76	4.58	5.51		
		37	1.66	2.17	2.76	3.44	4.21	5.08		
		42	1.48	1.95	2.5	3.13	3.85	4.66		
SHGX22e/125-4 SL	114C16041	27	2.25	2.96	3.8	4.75	5.81	6.97	1.92	
		32	2.04	2.71	3.5	4.39	5.4	6.5		
		37	1.83	2.46	3.2	4.04	4.98	6.02		
		42	1.63	2.21	2.89	3.68	4.56	5.53		
SHGX22e/160-4 SL	114C16042	27	2.83	3.69	4.68	5.79	7.03	8.39	1.99	
		32	2.57	3.37	4.29	5.34	6.52	7.81		
		37	2.3	3.04	3.91	4.9	6	7.23		
		42	2.04	2.73	3.53	4.46	5.49	6.64		
SHGX22e/190-4 SL	114C16043	27	3.74	4.82	6.07	7.48	9.05	10.8	2.97	
		32	3.44	4.45	5.62	6.95	8.43	10.1		
		37	3.14	4.08	5.17	6.42	7.81	9.35		
		42	2.84	3.71	4.73	5.89	7.2	8.64		
SHGX34e/215-4 L	114C16106	27	3.8	5.02	6.42	8.01	9.78	11.8		
		32	3.42	4.55	5.87	7.36	9.03	10.9		
		37	3.04	4.08	5.31	6.71	8.28	10		
		42	2.66	3.62	4.75	6.06	7.52	9.15		
SHGX34e/215-4 SL	114C16110	27	3.82	5.03	6.43	8.01	9.77	11.7		2.95
		32	3.43	4.56	5.87	7.36	9.02	10.9		
		37	3.05	4.09	5.31	6.71	8.27	10		
		42	2.67	3.63	4.76	6.06	7.52	9.15		

Performance data R513A cooling capacity Q [kW]										
Model	Code	Tamb [°C]							EcoDesign	
			-20 °C	-15 °C	-10 °C	-5 °C	0 °C	5 °C	COP	SEPR
SHGX34e/255-4 SL	114C16111	27	4.43	5.85	7.49	9.33	11.4	13.6	3.03	
		32	4.01	5.35	6.89	8.62	10.6	12.6		
		37	3.61	4.85	6.29	7.91	9.7	11.7		
		42	3.22	4.36	5.7	7.2	8.87	10.7		
SHGX34e/315-4 SL	114C16112	27	5.57	7.25	9.21	11.5	14	16.7		2.64
		32	5.08	6.65	8.47	10.6	12.9	15.5		
		37	4.59	6.04	7.75	9.69	11.9	14.3		
		42	4.1	5.45	7.02	8.83	10.9	13.2		
SHGX34e/380-4 SL	114C16113	27	7.16	9.19	11.6	14.2	17.2	20.4		2.85
		32	6.57	8.47	10.7	13.2	16	19		
		37	5.98	7.75	9.8	12.2	14.8	17.6		
		42	5.39	7.03	8.94	11.1	13.6	16.2		
SHGX34e/315-4 L	114C16108	27	5.46	7.07	8.93	11.1	13.4	15.9		2.89
		32	4.97	6.47	8.2	10.2	12.4	14.7		
		37	4.48	5.87	7.49	9.31	11.4	13.6		
		42	4	5.28	6.77	8.46	10.4	12.4		
SHGX34e/380-4 L	114C16109	27	6.92	8.87	11.2	13.7	16.4	19.4		2.62
		32	6.35	8.17	10.3	12.6	15.2	18		
		37	5.77	7.46	9.4	11.6	14.1	16.7		
		42	5.19	6.76	8.56	10.6	12.9	15.3		
SHGX44e/475-4 SL	114C16198	27	9.43	12.1	15.2	18.7	22.7	27.1		2.73
		32	8.65	11.2	14.1	17.4	21.1	25.3		
		37	7.88	10.2	12.9	16	19.6	23.5		
		42	7.12	9.28	11.8	14.7	18	21.8		
SHGX44e/565-4 SL	114C16199	27	11.4	14.5	18.2	22.3	27	32.3		2.89
		32	10.5	13.4	16.8	20.8	25.2	30.2		
		37	9.54	12.3	15.5	19.2	23.4	28.1		
		42	8.65	11.3	14.2	17.7	21.6	25.9		
SHGX44e/665-4 SL	114C16200	27	12.9	16.5	20.6	25.3	30.6	36.4		2.96
		32	11.8	15.2	19	23.4	28.4	34		
		37	10.7	13.9	17.5	21.6	26.3	31.5		
		42	9.64	12.6	16	19.8	24.2	29.1		
SHGX44e/770-4 SL	114C16201	27	15.2	19.4	24.1	29.6	35.7	42.5		3.15
		32	14	17.9	22.4	27.5	33.3	39.7		
		37	12.8	16.4	20.6	25.4	30.8	36.9		
		42	11.6	15	18.9	23.4	28.4	34.1		

Conditions: 10K Superheat and 0K subcooling

SHG range

Air-cooled single stage condensing units

114

B

16194

5 digits = Legacy part number

C = Bare condensing unit with:
Oil Sump Heater and Dual HP/
BP pressure switch

114 = 230V 1 phase 50Hz (Delta)
/ 400V 3 phases 50 Hz (Star)



Cooling capacity performance data

Performance data R449A cooling capacity Q [kW]													
Model	Code	Tamb [°C]	Evaporating Temperature [°C]									EcoDesign	
			-35 °C	-30 °C	-25 °C	-20 °C	-15 °C	-10 °C	-5 °C	0 °C	5 °C	COP	SEPR
SHGX12P/60-4 SL	114C14579	27	0.755	1.05	1.39	1.81	2.3	2.89	3.57	4.34	5.23	1.7	
		32	0.682	0.946	1.27	1.66	2.13	2.67	3.31	4.05	4.9		
		37	0.608	0.852	1.15	1.52	1.95	2.46	3.07	3.77	4.57		
		42	0.533	0.758	1.04	1.37	1.77	2.26	2.82	3.49	4.25		
SHGX12P/75-4 SL	114C14581	27	0.959	1.31	1.74	2.25	2.85	3.55	4.36	5.29	6.35		
		32	0.869	1.2	1.59	2.07	2.63	3.29	4.06	4.94	5.94		
		37	0.778	1.08	1.45	1.89	2.41	3.03	3.75	4.59	5.55		
		42	0.686	0.964	1.3	1.71	2.2	2.78	3.46	4.25	5.15		
SHGX12P/90-4 SL	114C14583	27	1.16	1.57	2.07	2.66	3.35	4.16	5.09	6.16	7.36	1.77	
		32	1.05	1.44	1.9	2.44	3.09	3.86	4.74	5.74	6.89		
		37	0.941	1.3	1.73	2.24	2.84	3.55	4.38	5.34	6.42		
		42	0.832	1.16	1.56	2.03	2.59	3.25	4.03	4.93	5.96		
SHGX12P/110-4 SL	114C14585	27	1.36	1.84	2.41	3.08	3.87	4.79	5.84	7.03	8.37		
		32	1.24	1.68	2.21	2.83	3.57	4.43	5.42	6.55	7.82		
		37	1.11	1.52	2.01	2.59	3.28	4.08	5.01	6.07	7.28		
		42	0.981	1.36	1.81	2.35	2.99	3.73	4.6	5.6	6.74		
SHGX22e/125-4 SL	114C16041	27	1.57	2.15	2.84	3.66	4.6	5.69	6.94	8.34	9.89	2.66	
		32	1.4	1.95	2.6	3.35	4.24	5.25	6.42	7.73	9.19		
		37	1.23	1.75	2.35	3.05	3.87	4.82	5.9	7.13	8.51		
		42	1.06	1.55	2.11	2.76	3.52	4.4	5.4	6.55	7.84		
SHGX22e/160-4 SL	114C16042	27	2.21	2.91	3.71	4.65	5.72	6.94	8.32	9.85	11.6	2.68	
		32	1.98	2.65	3.41	4.29	5.29	6.43	7.73	9.17	10.8		
		37	1.73	2.38	3.11	3.93	4.87	5.94	7.15	8.5	10.1		
		42	1.47	2.1	2.79	3.57	4.45	5.45	6.58	7.86			
SHGX22e/190-4 SL	114C16043	27	2.86	3.74	4.76	5.96	7.36	8.97	10.9	12.9	15.3	3.04	
		32	2.59	3.43	4.4	5.53	6.83	8.34	10.1	12.1	14.3		
		37	2.29	3.11	4.03	5.09	6.31	7.72	9.34	11.2	13.3		
		42	1.98	2.77	3.66	4.66	5.8	7.11	8.62	10.4	12.3		
SHGX34e/215-4 L	114C16106	27	2.19	3.16	4.34	5.73	7.36	9.22	11.4	13.7		3.13	
		32	1.88	2.77	3.86	5.15	6.67	8.41	10.4	12.7			
		37	1.6	2.41	3.4	4.59	6	7.62	9.47				
		42	1.38	2.09	2.98	4.07	5.36	6.85	8.57				
SHGX34e/215-4 SL	114C16110	27	2.21	3.19	4.37	5.77	7.41	9.31	11.5	13.9	16.6	3.15	
		32	1.89	2.79	3.89	5.19	6.72	8.49	10.6	12.8	15.4		
		37	1.61	2.43	3.43	4.63	6.05	7.69	9.58	11.8	14.1		
		42	1.38	2.11	3.01	4.1	5.4	6.92	8.67	10.7	13		

Performance data R449A cooling capacity Q [kW]													
Model	Code	Tamb [°C]	Evaporating Temperature [°C]									EcoDesign	
			-35 °C	-30 °C	-25 °C	-20 °C	-15 °C	-10 °C	-5 °C	0 °C	5 °C	COP	SEPR
SHGX34e/255-4 SL	114C16111	27	2.72	3.92	5.35	7.01	8.9	11.1	13.4	15.9	18.7		3.08
		32	2.41	3.53	4.86	6.39	8.14	10.1	12.3	14.7	17.2		
		37	2.12	3.16	4.38	5.78	7.38	9.18	11.2	13.4	15.7		
		42	1.86	2.81	3.91	5.19	6.64	8.26	10.1	12.1	14.2		
SHGX34e/315-4 SL	114C16112	27	3.52	4.94	6.62	8.59	10.9	13.5	16.5	19.8	23.4		2.78
		32	3.09	4.44	6.01	7.84	9.96	12.4	15.2	18.3	21.7		
		37	2.68	3.95	5.42	7.11	9.07	11.4	13.9	16.8	20		
		42	2.3	3.5	4.85	6.41	8.21	10.3	12.7	15.3	18.3		
SHGX34e/380-4 SL	114C16113	27	4.7	6.47	8.51	10.9	13.7	16.8	20.3	24.1	28.4		2.91
		32	4.17	5.85	7.78	9.99	12.6	15.5	18.7	22.4	26.4		
		37	3.66	5.25	7.06	9.12	11.5	14.2	17.2	20.6	24.3		
		42	3.18	4.69	6.37	8.28	10.5	13	15.7	18.9	22.4		
SHGX34e/315-4 L	114C16108	27	3.44	4.82	6.44	8.31	10.5	12.9	15.6	18.6			2.95
		32	3.02	4.32	5.83	7.58	9.57	11.9	14.4				
		37	2.63	3.85	5.25	6.86	8.7	10.8	13.1				
		42	2.26	3.4	4.7	6.18	7.87	9.77					
SHGX34e/380-4 L	114C16109	27	4.54	6.22	8.18	10.5	13	15.8	19	22.4		2.7	
		32	4.02	5.62	7.45	9.54	12	14.6	17.5				
		37	3.52	5.04	6.75	8.69	10.9	13.4	16.1				
		42	3.06	4.49	6.08	7.87	9.88	12.2					
SHGX44e/475-4 SL	114C16198	27	6.26	8.51	11.2	14.4	18	22.3	27	32.4	38.3		2.89
		32	5.62	7.74	10.3	13.2	16.7	20.6	25.1	30.2	35.8		
		37	4.95	6.95	9.29	12.1	15.3	19	23.2	27.9	33.2		
		42	4.25	6.12	8.3	10.9	13.9	17.3	21.2	25.6	30.6		
SHGX44e/565-4 SL	114C16199	27	7.66	10.4	13.6	17.3	21.6	26.6	32.2	38.5	45.5		3
		32	6.91	9.44	12.5	16	20	24.7	30	35.9	42.5		
		37	6.13	8.51	11.3	14.6	18.4	22.7	27.7	33.3	39.5		
		42	5.31	7.54	10.2	13.2	16.7	20.8	25.4	30.6	36.5		
SHGX44e/665-4 SL	114C16200	27	8.51	11.6	15.2	19.5	24.3	29.9	36.1	43.1	50.7		2.94
		32	7.62	10.5	13.9	17.9	22.4	27.6	33.5	40	47.2		
		37	6.69	9.39	12.6	16.3	20.5	25.3	30.8	37	43.8		
		42	5.71	8.25	11.2	14.6	18.6	23.1	28.2	33.9	40.3		
SHGX44e/770-4 SL	114C16201	27	10.3	13.9	18.1	23.1	28.8	35.3	42.6	50.7	59.6		3.11
		32	9.3	12.7	16.7	21.3	26.7	32.7	39.6	47.2	55.6		
		37	8.26	11.5	15.2	19.5	24.5	30.2	36.6	43.8	51.7		
		42	7.18	10.2	13.7	17.7	22.3	27.6	33.6	40.3	47.8		

Conditions: 10K Superheat and 0K subcooling



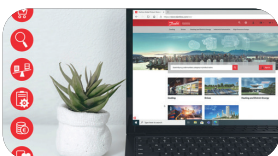
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Select

Go to vap.bock.de, download VAP – compressor selection tool, and select the appropriate compressors or condensing units.



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Learn about the Danfoss BOCK® portfolio and get product training via learning.danfoss.com



Get product support

Get product support from our certified Service Partners via refcare.danfoss.com



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