



کراس رفرنس
کمپرسورهای اسکرال
دنفوس / کوپلند



جدول معادل سازی (گراس رفرنس) کمپرسورهای اسکرال
دنفوس و کوپلند



R22

Te=5°C

Superheat=10K

COPELAND (ZR/ZP)

Model	Qe kW	Pin KW	COP	C (A)	Dis. (m3/h)	Suc Line	dis Line	Oil (L)
ZR22K3E-TFD	5.04	1.58	3.2	2.97	5.3	3/4	1/2	1
ZR28K3E-TFD	6.59	1.96	3.37	3.6	6.8	3/4	1/2	1.12
ZR34K3E-TFD	7.85	2.31	3.39	4.26	8	3/4	1/2	1.24
ZR40K3E-TFD	9.24	2.73	3.39	4.94	9.4	3/4	1/2	1.1
ZR48K3E-TFD	11.2	3.42	3.28	6.19	11.4	7/8	1/2	1.36
ZR61KCE-TFD	13.7	4.01	3.41	7.75	14.4	7/8	1/2	1.66
ZR72KCE-TFD	16.65	4.78	3.49	8.5	17.1	7/8	1/2	1.77
ZR81KCE-TFD	18.85	5.3	3.56	10.21	18.8	7/8	3/4	1.77
ZR94KCE-TFD	22	6.12	3.6	11.57	22.1	11/8	7/8	2.65
ZR108KCE-TFD	25	6.82	3.66	12.7	24.9	13/8	7/8	3.38
ZR125KCE-TFD	29.4	8.12	3.62	14.63	29.1	13/8	7/8	3.38
ZR144KCE-TFD	33.5	9.14	3.66	16.19	33.2	13/8	7/8	3.25
ZR160KCE-TFD	36.2	10.25	3.54	18.62	36.4	13/8	7/8	3.25
ZR190KCE-TFD	43	12.4	3.47	23.93	43.3	13/8	7/8	3.38
ZR250KCE-TWD	56.3	16.15	3.49	27.41	56.6	15/8	13/8	4.67
ZR310KCE-TWD	70	20.1	3.48	35.24	71.4	15/8	13/8	6.8
ZR380KCE-TWD	86.8	24.5	3.55	42.32	87.5	15/8	13/8	6.3

Tc=50°C

Subcooling=5K

DANFOSS (SM/SY/SH/SZ)

Model	Qe kW	Pin KW	COP	C (A)	Dis. (m3/h)	Suc Line	dis Line	Oil (L)
SM084-4	19.19	5.561	3.45	10.2	19.9	11/8	3/4	3.25
SM090-4	20.57	5.986	3.44	11.53	21	11/8	3/4	3.25
SM100-4	21.86	6.364	3.43	11.99	22.1	11/8	3/4	3.25
SM110-4	24.52	7.14	3.43	13.45	25.1	13/8	7/8	3.25
SM112-4	26.08	7.244	3.6	14.49	26.4	13/8	7/8	3.3
SM120-4	28.48	8.161	3.49	15.37	29	13/8	7/8	3.25
SM124-4	29.39	8.013	3.67	15.43	29.5	13/8	7/8	3.3
SM147-4	34.03	9.214	3.69	17.08	33.7	13/8	7/8	3.3
SM148-4	34.06	9.835	3.46	17.8	34.6	13/8	7/8	3.6
SM161-4	36.84	10.55	3.49	19.1	37.7	13/8	7/8	3.6
SM175-4	39.65	11.38	3.48	20.8	40.5			
SM/SY185-4	42.95	12.44	3.45	22.72	43.5	15/8	11/8	6.2
SY240-4	57.81	16.63	3.48	28.84	60.5	15/8	11/8	8
SY300-4	73.94	20.84	3.55	36.61	76.1	15/8	11/8	8
SY380-4	89.24	25.03	3.56	41.9	92.4	2 1/8	13/8	8.4



R410A

Te=5°C Superheat=10K

COPELAND (ZR/ZP)

Model	Qe kW	Pin KW	COP	C (A)	Dis. (m3/h)	Suc Line	dis Line	Oil (L)
ZP24K5E-TFD	5.39	1.82	2.97	3.32	4	3/4	1/2	0.7
ZP29K5E-TFD	6.44	2.18	2.95	3.88	4.8	3/4	1/2	0.7
ZP31K5E-TFD	6.94	2.32	2.98	4.04	5.1	3/4	1/2	0.7
ZP36K5E-TFD	8.13	2.64	3.08	4.71	6	7/8	1/2	1.2
ZP42K5E-TFD	9.48	3.03	3.13	5.16	6.9	7/8	1/2	1.2
ZP54K5E-TFD	12.2	3.82	3.19	6.02	8.9	7/8	1/2	1.2
ZP61K5E-TFD	14.25	4.43	3.21	7.47	9.9	7/8	1/2	1.2
ZP72KCE-TFD	16.25	5.09	3.19	8.91	11.7	7/8	1/2	1.7
ZP83KCE-TFD	18.85	5.78	3.26	10.86	13.4	7/8	1/2	1.8
ZP91KCE-TFD	20.5	6.16	3.33	10.99	14.7	1 1/4	1 1/4	1.8
ZP104KCE-TFD	24.2	7.1	3.41	13.62	16.8	1 1/8	7/8	2.5
ZP122KCE-TFD	28.3	8.3	3.41	15.98	19.5	1 1/8	7/8	2.5
ZP137KCE-TFD	30.9	9.21	3.36	16.02	22.1	1 1/8	7/8	2.8
ZP143KCE-TFD	33.8	9.76	3.46	18.42	23.1	1 1/8	7/8	2.8
ZP154KCE-TFD	35.3	10.5	3.37	18.14	24.9	1 3/8	7/8	3.3
ZP182KCE-TFD	41.6	12.25	3.4	24.49	29.1	1 3/8	7/8	3.3
ZP232KZE-TED	54	15.25	3.53	26.9	36.6	1 5/8	1 1/8	4.4
ZP292KZE-TED	67.6	19.35	3.49	33.77	45.7	1 5/8	1 1/8	4.4
ZP385KCE-TWD	87.8	25.6	3.43	43.99	60.8	1 5/8	1 3/8	6.3
ZP385KPE-TWD	88.5	25.8	3.43	42.88	60.8	1 5/8	1 3/8	6.3
ZP485KCE-TWD	112	32.5	3.45	55.34	77.5	1 5/8	1 3/8	6.3
ZP485KPE-TWD	112	33	3.4	54.72	77.5	2 1/8	1 3/8	6.3

Tc=50°C Subcooling=5K

DANFOSS (SM/SY/SH/SZ)

Model	Qe kW	COP	Pin KW	C (A)	Dis. (m3/h)	Suc Line	dis Line	Oil (L)
SH090-4	21.15	3.23	6.547	12.09	15.4	1 1/8	7/8	3
SH105-4	25.42	3.29	7.733	14.89	18	1 3/8	7/8	3.3
SH120-4	28.42	3.3	8.618	15.89	20.3	1 3/8	7/8	3.3
SH140-4	32.9	3.42	9.635	17.76	23.1	1 3/8	7/8	3.3
SH161-4	36.92	3.35	11.02	19.18	26.4	1 3/8	7/8	3.3
SH180-4	42.19	3.35	12.61	22	29.6	1 3/8	7/8	3.6
SH184-4	42.41	3.38	12.54	23	29.6	1 3/8	7/8	6.1
SH240-4	56.73	3.37	16.82	28.69	39.6	1 5/8	1 1/8	6.1
SH295-4	69.44	3.39	20.48	35.54	48.1	1 5/8	1 1/8	6.1
SH380-4	85.75	3.33	25.71	44.93	60	1 5/8	1 1/8	6.1



R134a

Te=5°C Superheat=10K								
COPELAND (ZR/ZP)								
Model	Qe kW	Pin KW	COP	C (A)	Dis. (m3/h)	Suc Line	dis Line	Oil (L)
ZR22K3E-TFD	3.36	1.11	3.03	2.25	5.30	3/4	1/2	1
ZR28K3E-TFD	4.41	1.42	3.1	2.96	6.80	3/4	1/2	1.12
ZR34K3E-TFD	5.17	1.66	3.11	3.51	8.00	3/4	1/2	1.24
ZR40K3E-TFD	6.02	1.89	3.18	3.85	9.40	3/4	1/2	1.1
ZR48K3E-TFD	7.23	2.28	3.17	4.55	11.40	7/8	1/2	1.36
ZR61KCE-TFD	9.34	2.71	3.44	5.64	14.40	7/8	1/2	1.66
ZR72KCE-TFD	11.05	3.24	3.41	6.33	17.10	7/8	1/2	1.77
ZR81KCE-TFD	12.4	3.62	3.42	8.19	18.80	7/8	3/4	1.77
ZR94KCE-TFD	14.2	4.23	3.36	9.75	22.10	11/8	7/8	2.65
ZR108KCE-TFD	16.55	4.7	3.52	9.88	24.90	13/8	7/8	3.38
ZR125KCE-TFD	19.25	5.43	3.54	11.6	29.10	13/8	7/8	3.38
ZR144KCE-TFD	22.2	6.31	3.51	11.94	33.20	13/8	7/8	3.25
ZR160KCE-TFD	24	6.96	3.45	15.26	36.40	13/8	7/8	3.25
ZR190KCE-TFD	28.7	8.59	3.34	21.39	43.30	13/8	7/8	3.38
ZR250KCE-TWD	36.7	11.15	3.29	22.86	56.60	15/8	13/8	4.67
ZR310KCE-TWD	45.7	13.7	3.33	27.67	71.40	15/8	13/8	6.8
ZR380KCE-TWD	56.8	16.65	3.41	30.67	87.50	15/8	13/8	6.3

Tc=50°C Subcooling=5K								
DANFOSS (SM/SY/SH/SZ)								
Model	Qe kW	Pin KW	COP	C (A)	Dis. (m3/h)	Suc Line	dis Line	Oil (L)
ZS084-4	12.73	3.826	3.33	8.302	19.9	11/8	3/4	3.25
ZS090-4	13.59	4.079	3.33	8.974	21	11/8	3/4	3.25
ZS100-4	14.54	4.362	3.33	9.724	22.1	11/8	3/4	3.25
ZS110-4	16.43	4.904	3.35	10.98	25.1	13/8	7/8	3.25
ZS120-4	18.92	5.618	3.37	12.63	29	13/8	7/8	3.25
ZS147-4	21.98	6.127	3.59	14.01	33.7	13/8	7/8	3.25
ZS148-4	22.7	6.958	3.26	14.81	34.6	13/8	7/8	3.6
ZS161-4	24.26	7.299	3.32	14.99	37.7	13/8	7/8	3.6
ZS175-4	26.67	7.904	3.37	16.42	40.5	15/8	11/8	6.2
ZS185-4	28.38	8.409	3.38	17.47	43.5	15/8	11/8	6.2
ZS240-4	37.62	11.6	3.24	22.3	60.5	15/8	11/8	8
ZS300-4	46.92	14.43	3.25	28.4	76.1	15/8	11/8	8
ZS380-4	58.94	17.26	3.42	30.9	92.4	2 1/8	13/8	8.4

Abbreviations: **Qe**:cooling capacity, **Pin**: Power input, **C**: Current, **Dis**: Displacement Conditions: Te=5°C, Tc=50°C, Superheat=10K, Subcooling=5K, Eco: No

Note: Comparison is primarily based on **Cooling Capacity** , and then the other parameters--cooling capacity, power input, and horsepower--were checked afterwards. We welcome any technical comments on this.





Thanks for your attention

سپاس از توجه شما



حالا شما بگید

طرفدار کمپرسورهای اسکرال کدوم برند هستید؟

