

Scroll Water-Cooled Condensing Units



- High Efficiency Scroll Compressors
- Co Axial Condenser
- Compact Design

Scroll Water-Cooled Condensing Units - 50Hz

Capacity, KW

Unit Model	Cond. Temp. °C	R404a										R134a							
		Evaporating Temperature °C																	
		-35	-30	-25	-20	-15	-10	-5	0	5	7	-20	-15	-10	-5	0	5	7	10
FPWD-C20Z-TFD	30		1.90	2.40	3.00	3.80	4.60	5.50	6.60	7.80	8.40	1.50	2.09	2.62	3.28	4.02	4.85	5.20	5.77
	40		1.50	2.00	2.50	3.20	3.90	4.70	5.70	6.80	7.20	1.40	1.87	2.37	2.97	3.67	4.45	4.80	5.31
	50			1.20	2.00	2.50	3.20	3.90	4.70	5.60	6.00		1.50	2.12	2.69	3.31	4.05	4.35	4.84
FPWD-C25Z-TFD	30		2.40	3.00	3.70	4.60	5.50	6.60	7.90	9.40	10.10	1.80	2.41	3.04	3.77	4.63	5.59	6.00	6.64
	40		2.10	2.60	3.30	4.00	4.80	5.80	6.90	8.20	8.80	1.60	2.15	2.73	3.44	4.22	5.12	5.50	6.11
	50			1.90	2.70	3.40	4.10	4.90	5.90	7.00	7.50		1.80	2.44	3.09	3.83	4.68	5.00	5.57
FPWD-C30Z-TFD	30		2.90	3.60	4.50	5.50	6.70	8.00	9.60	11.40	12.10	2.20	3.04	3.82	4.77	5.83	7.04	7.60	8.40
	40		2.50	3.20	3.90	4.80	5.90	7.00	8.40	9.90	10.70	2.00	2.73	3.44	4.33	5.33	6.46	6.96	7.72
	50			2.30	3.30	4.10	4.90	5.90	7.10	8.40	9.00		2.20	3.08	3.90	4.82	5.89	6.35	7.03
FPWD-C35Z-TFD	30		3.40	4.30	5.30	6.40	7.70	9.30	11.10	13.20	14.10	2.60	3.50	4.41	5.49	6.74	8.13	8.78	9.69
	40		3.00	3.70	4.60	5.60	6.80	8.10	9.70	11.60	12.40	2.30	3.14	3.98	5.00	6.15	7.46	8.05	8.91
	50			2.60	3.80	4.70	5.70	6.90	8.30	9.80	10.60		2.60	3.55	4.50	5.58	6.79	7.35	8.13
FPWD-C40Z-TFD	30	2.60	4.00	5.00	6.20	7.60	9.20	11.00	13.10	15.50	16.60	3.00	4.14	5.18	6.61	7.91	9.55	10.30	11.37
	40	2.30	3.40	4.30	5.40	6.60	8.00	9.60	11.50	13.60	14.60	2.70	3.68	4.67	5.86	7.22	8.75	9.45	10.44
	50			3.10	4.40	5.50	6.70	8.10	9.80	11.70	12.50		3.00	4.19	5.29	6.56	7.98	8.64	9.54
FPWD-C50Z-TFD	30	3.20	5.00	6.20	7.70	9.40	11.40	13.70	16.30	19.30	20.50	3.60	5.09	6.38	7.96	9.73	11.75	12.68	14.00
	40	2.90	4.30	5.40	6.70	8.20	9.90	11.90	14.30	16.90	18.00	3.20	4.53	5.75	7.22	8.89	10.77	11.63	12.85
	50			3.90	5.60	6.90	8.40	10.10	12.10	14.40	15.40		3.70	5.16	6.53	8.06	9.82	10.60	11.76
FPWD-C60Z-TFD	30	3.80	5.80	7.30	9.10	11.10	13.50	16.20	19.30	22.70	24.30	4.60	6.16	7.71	9.57	11.70	14.12	15.20	16.79
	40	3.40	5.10	6.30	7.90	9.60	11.70	14.00	16.80	19.80	21.20	4.00	5.45	6.88	8.62	10.57	12.80	13.79	15.29
	50			4.60	6.60	8.10	9.80	11.90	14.20	16.10	18.10		4.40	6.06	7.60	9.44	11.47	12.40	13.75

Capacities are at 20°C return gas temperature and 5K liquid sub cooling **10K superheat**

Water Flow Rate, l / s

Unit Model	R404a										R134a							
	Evaporating Temperature °C																	
	-35	-30	-25	-20	-15	-10	-5	0	5	7	-20	-15	-10	-5	0	5	7	10
FPWD-C20Z-TFD		0.13	0.15	0.17	0.20	0.23	0.26	0.30	0.34	0.36	0.10	0.11	0.13	0.15	0.19	0.22	0.24	0.26
FPWD-C25Z-TFD		0.16	0.19	0.21	0.24	0.27	0.31	0.36	0.41	0.43	0.11	0.12	0.15	0.17	0.21	0.25	0.27	0.30
FPWD-C30Z-TFD		0.20	0.22	0.25	0.29	0.33	0.38	0.43	0.49	0.52	0.13	0.15	0.18	0.22	0.26	0.32	0.34	0.37
FPWD-C35Z-TFD		0.23	0.26	0.30	0.34	0.38	0.44	0.50	0.58	0.61	0.15	0.17	0.21	0.25	0.30	0.37	0.39	0.43
FPWD-C40Z-TFD	0.22	0.26	0.30	0.34	0.39	0.45	0.52	0.59	0.67	0.71	0.18	0.19	0.24	0.30	0.36	0.43	0.46	0.51
FPWD-C50Z-TFD	0.27	0.33	0.37	0.43	0.49	0.56	0.64	0.73	0.84	0.89	0.22	0.24	0.29	0.36	0.44	0.53	0.56	0.62
FPWD-C60Z-TFD	0.31	0.38	0.44	0.50	0.57	0.66	0.75	0.86	0.97	1.03	0.26	0.29	0.35	0.43	0.52	0.62	0.67	0.73

Pressure Drop, psi

Unit Model	R404a										R134a							
	Evaporating Temperature °C																	
	-35	-30	-25	-20	-15	-10	-5	0	5	7	-20	-15	-10	-5	0	5	7	10
FPWD-C20Z-TFD		1.00	1.20	1.30	1.70	2.20	2.90	3.60	4.30	5.80	0.50	0.80	1.20	1.50	2.10	2.80	3.20	3.70
FPWD-C25Z-TFD		1.30	1.60	2.00	2.70	3.60	4.50	5.90	7.10	8.10	0.70	1.00	1.40	1.90	2.50	3.30	3.70	4.40
FPWD-C30Z-TFD		1.60	2.10	2.70	3.70	4.70	6.10	7.80	9.50	10.90	1.00	1.40	2.00	2.60	3.60	4.90	5.70	6.40
FPWD-C35Z-TFD		2.40	2.90	3.50	4.60	6.00	7.90	10.10	12.30	14.00	1.20	1.70	2.40	3.40	4.50	6.10	6.90	8.10
FPWD-C40Z-TFD	2.50	3.00	3.60	4.30	5.80	7.40	9.80	12.40	15.40	17.50	1.50	2.20	3.10	4.30	5.90	7.90	9.00	10.50
FPWD-C50Z-TFD	2.90	3.90	5.00	6.30	8.40	10.20	14.00	18.00	22.20	25.20	2.20	3.20	4.80	6.20	8.40	11.00	12.50	14.80
FPWD-C60Z-TFD	1.90	2.10	2.50	3.00	3.90	5.20	7.20	10.00	14.00	16.10	1.40	1.80	2.30	2.90	3.90	5.40	6.20	7.60

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The company reserves the right to make specification changes without notice.