

Copeland™ Scroll ZW Compressor for Heat Pump Water Heating



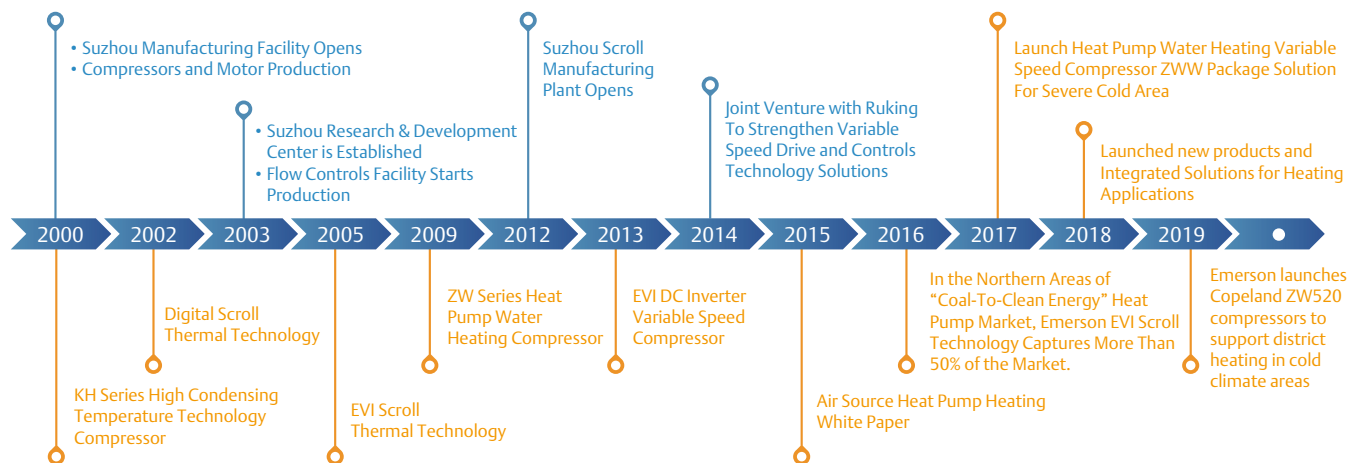
Product catalogue

COPELAND™


EMERSON™



Over 10 years of heat pump technology and expertise



Our Mission:

Ensuring Human Comfort and Health

Protecting Food Quality and Sustainability

Advancing Energy Efficiency and Environmental Conservation

Creating Sustainable Infrastructure

Table of contents

Nomenclature	06
Sanitary heating	07
Residential heating	37
District heating	45
Industrial heating	50
Variable speed series	57
Contact lists	60

Copeland™ Scroll ZW for heat pump water heating



Compared to electric heaters or coal-fired boilers, Copeland ZW heat pump compressors provide higher energy efficiency ratios for residential hot water and comfort heating. From sanitary heating, residential space heating, agricultural drying and other industrial heating applications, Emerson, with experience of producing over 100 million scroll compressors is world renowned for efficiency and reliability.

Copeland ZW heat pump compressors employ EVI technology to create a strong “core” for any heating system. EVI technology effectively expands the operating ranges for heat pumps with an ambient temperature range of -30°C and increasing energy efficiency by 22%. Hot water temperatures of up to 85°C are achievable for residential heating and even meets the industrial application requirements.

Copeland ZW heat pump compressors are uniquely designed with higher compression ratios and larger pressure difference, allowing for systems to operate under wider conditions compared to ordinary heat pump or air-conditioning compressors. Equipped with high-efficiency and high-power motors, ZW compressors meet the toughest challenges for heat pumps and water heaters even in the harshest ambient conditions. The flexibility of ZW compressors allows for installation in tandems to meet greater heating requirements.



Copeland ZW digital scroll compressors utilize axial compliance allows the fixed scroll to move vertically, by a very small amount, to ensure that the scrolls are always radially loaded with optimal force. This holds the two scrolls together, at all operating conditions, ensuring high efficiency. When the Copeland Digital Scroll is operating in normal “Loaded” mode the compressor behaves just like a standard scroll compressor providing 100% capacity. Within a certain period (such as 15 seconds) the output capacity is the sum of the average time of the loading and unloading state. By altering the loading and unloading time, it realizes the stepless adjustment of 10-100% of the compressor capacity to achieve precise temperature control.

In addition, ZW compressors can use environmentally friendlier zero ODP refrigerants and in combination with high efficiency technology solutions effectively reduce CO₂ emissions to minimize environmental impact.

Heated swimming pool



Hot water



Space heating



Food drying



District heating



Print drying



The advantages of Emerson Copeland™ Scroll ZW

Performance	Normal air conditioning scroll	Normal heating scroll	Copeland scroll ZW EVI
Heating capacity	Benchmark	Over benchmark 10%	Over benchmark 40%
Minimum ambient temperature	0°C	0°C	-30°C
HCOP	Benchmark	Over benchmark 5%	Over benchmark 20%
Maximum water temperature	45°C	55°C	65°C

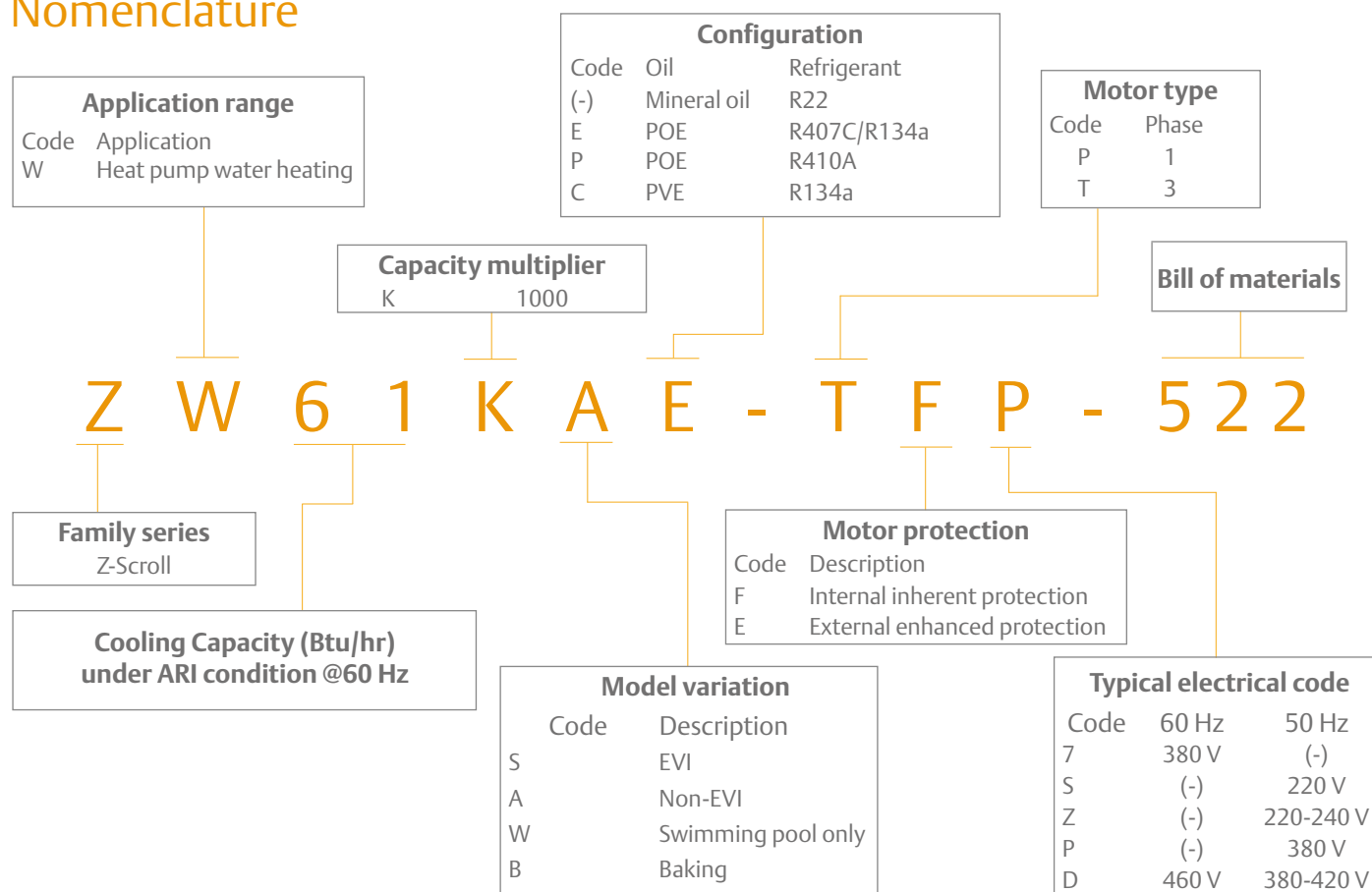
Bill of material (BOM)

Compressor model	BOM code	Suction/ Displacement brazing connection	EVI Brazing connection
ZW30KS(E)	582	✓	✓
ZW30KA(E)	582	✓	
ZW34KS(E)	582	✓	✓
ZW34KA(E)	582	✓	
ZW42KS(E)	522	✓	✓
ZW52KS(E)	522	✓	✓
ZW52KA(E)	522	✓	
ZW61KS(E)	522	✓	✓
ZW61KA(E)	522/52E	✓	
ZW61KBC	522	✓	
ZW68KS(E)	522	✓	✓
ZW72KA(E)	52E	✓	
ZW72KBC	522	✓	
ZW79KS(E)	522	✓	✓
ZW79KA(E)	522	✓	
ZW79KBC	522	✓	
ZW108KS(E)	522	✓	✓
ZW108KA(E)	522	✓	

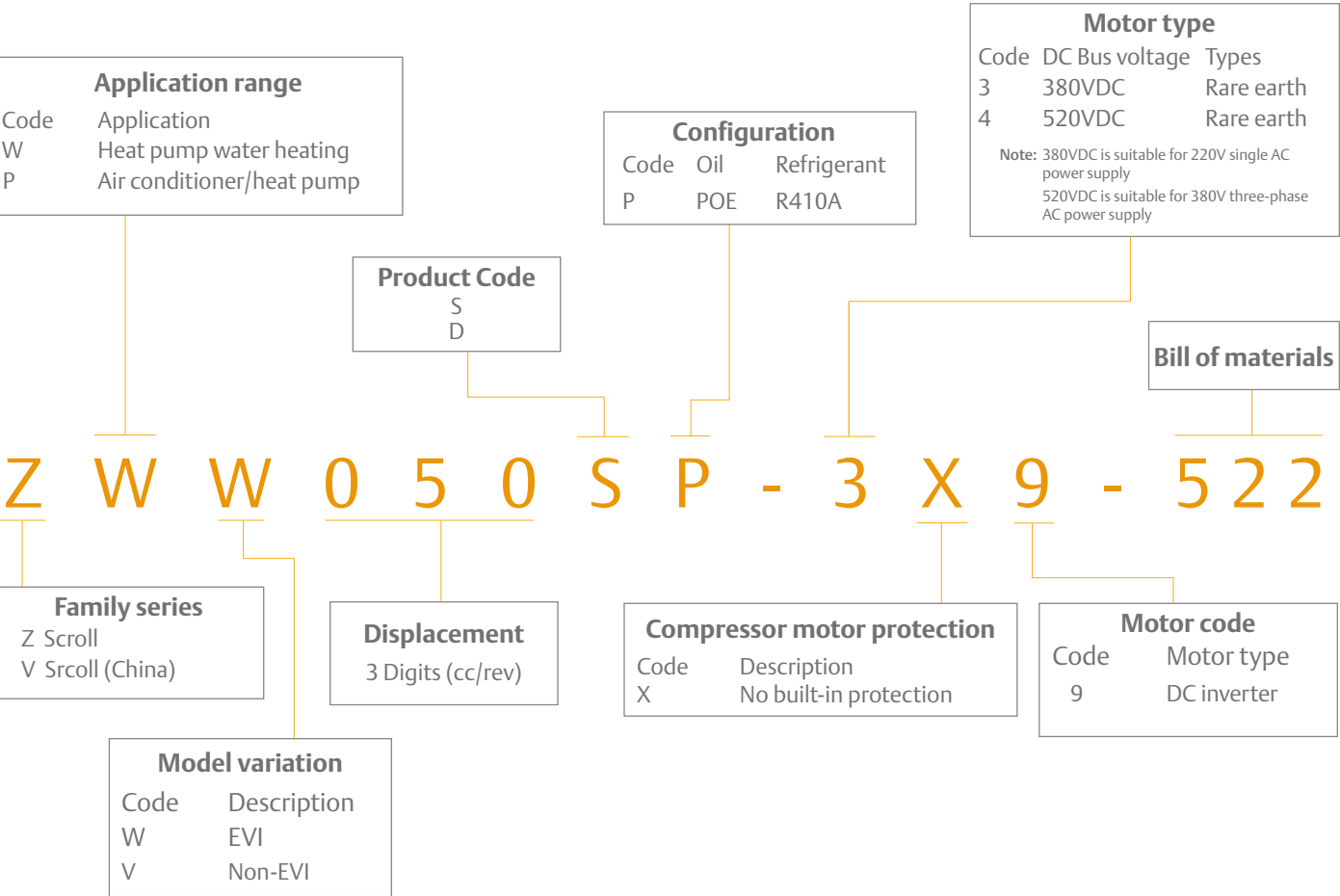
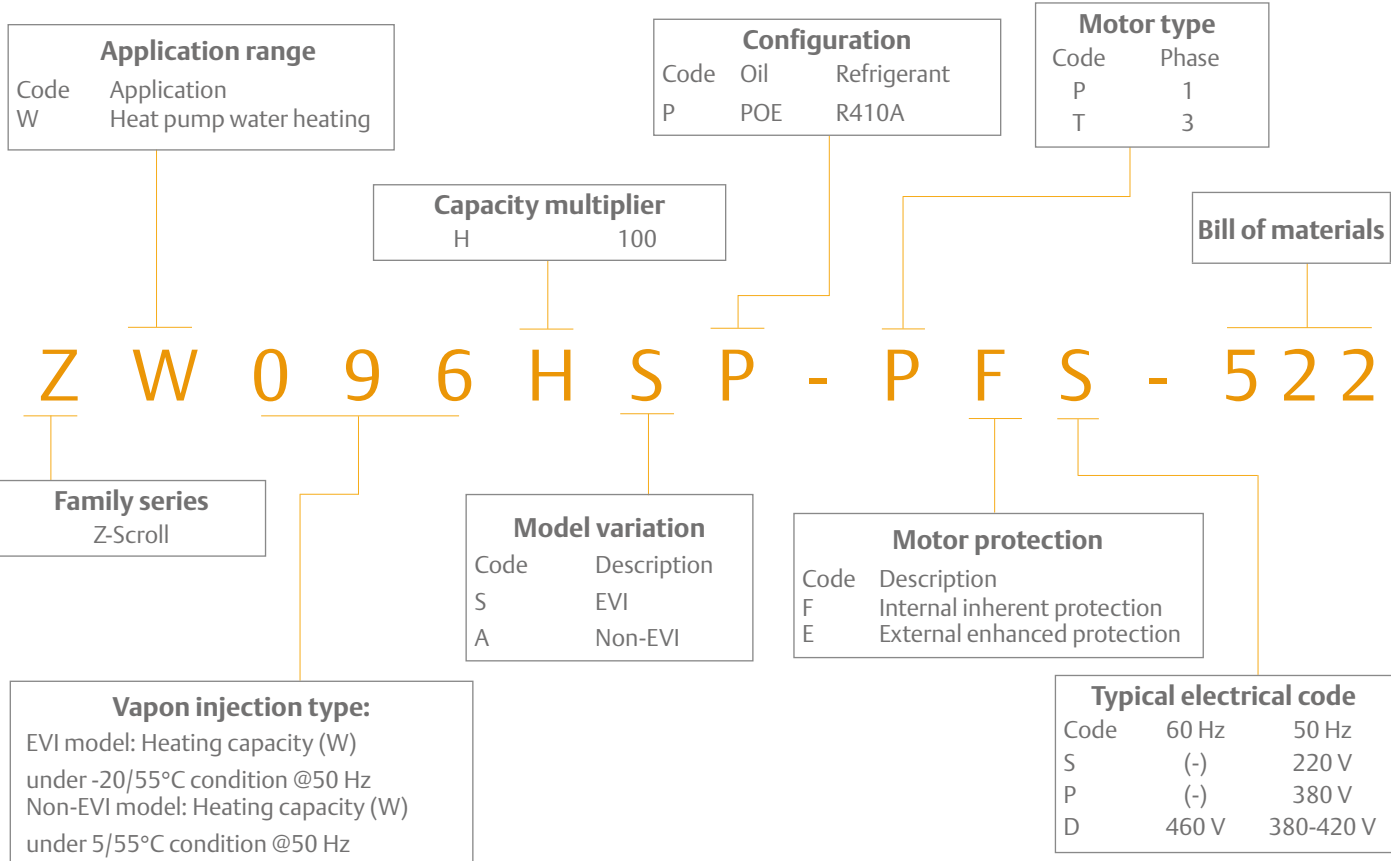
Compressor model	BOM code	Suction/ Displacement brazing connection	EVI Brazing connection
ZW124KS(E)	52E	✓	✓
ZW124KA(E)	52E	✓	
ZW125KS(E)	522	✓	✓
ZW125KA(E)	522	✓	
ZW125KBE	522	✓	
ZW150KS(E)	522	✓	✓
ZW150KA(E)	522	✓	
ZW150KBE	522	✓	
ZW330KBE	522	✓	
ZWD61KA(E)	532	✓	
ZWD72KA(E)	532	✓	
ZWD81KA(E)	532	✓	
ZW059HSP	582	✓	✓
ZW096HSP	522	✓	✓
ZW100HSP	52E	✓	✓
ZW102HSP	522	✓	✓
ZW126HSP	522	✓	✓
ZW165HAP	52E	✓	

Compressor model	BOM code	Suction/ Displacement brazing connection	EVI Brazing connection
ZW166HAP	522	✓	
ZW188HAP	522	✓	
ZW420HAP	522	✓	
ZW465HAP	522	✓	
ZW258HSP	522	✓	✓
ZW286HSP	522	✓	✓
ZW430HSP	522	✓	✓
ZW520HSP	522	✓	✓
ZW28KWP	58E	✓	
ZW31KWP	522	✓	
ZW42KWP	522/52E	✓	
ZW51KWP	522	✓	
ZW54KWP	52E	✓	
ZW72KWP	52E	✓	
ZW83KWP	522	✓	
VPW038DE	571	✓	✓
ZWW050SP	522	✓	✓
ZWW070SP	522	✓	✓

Nomenclature



Nomenclature





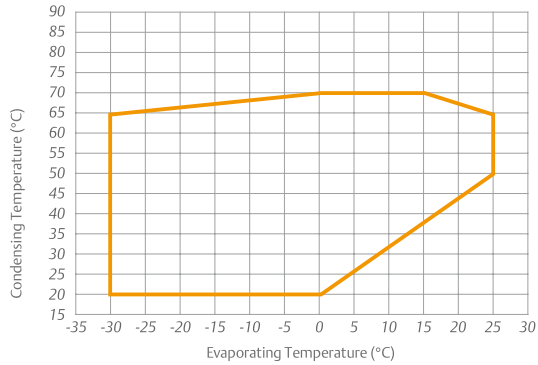
Compressor model

Refrigerant	Compressor model	Power supply	EVI	Rated heating capacity (kW)	Performance table	Specification
R22	ZW30KA-PFS-582	1Φ/220V/50Hz		9.0	P12	P30
	ZW30KS-PFS-582		√	10.1	P7	P29
	ZW34KA-PFS-582			10.1	P12	P30
	ZW34KS-PFS-582		√	11.6	P7	P29
	ZW52KA-PFS-522			15.8	P12	P30
	ZW34KA-TFP-582	3Φ/380 V/50 Hz		10.1	P13	P30
	ZW34KS-TFP-582		√	11.2	P8	P29
	ZW57KH-TFP-522			17.1	P15	P30
	ZW61KA-TFP-522			18.1	P13	P30
	ZW61KA-TFP-52E			18.1	P13	P30
	ZW61KH-TFP-522			18.2	P15	P30
	ZW61KS-TFP-522		√	20.3	P8	P29
	ZW72KA-TFP-52E			21.4	P13	P30
	ZW79KA-TFP-522			24.7	P13	P30
	ZW79KS-TFP-522		√	25.8	P8	P29
	ZW108KA-TFP-522			31.2	P13	P30
	ZW108KS-TFP-522		√	35.9	P8	P29
	ZW124KA-TFP-52E			37.2	P14	P30
	ZW124KS-TFP-52E		√	42.6	P9	P29
	ZW125KA-TFP-522			36.8	P14	P30
	ZW125KS-TFP-522		√	41.6	P9	P29
	ZW150KA-TFP-522			45.4	P14	P30
	ZW150KS-TFP-522		√	50.4	P9	P29
	ZW34KS-TF7-582	3Φ/380 V/60 Hz	√	13.5	P8	P29
	ZW61KA-TF7-542			21.9	P13	P30
	ZW108KS-TF7-522		√	43.1	P8	P29
R407C	ZW30KAE-PFS-582	1Φ/220 V/50 Hz		8.8	P16	P31
	ZW34KAE-PFS-582			9.3	P16	P31
	ZW52KAE-PFS-522			15.3	P16	P31
	ZW34KAE-TFP-582	3Φ/380 V/50 Hz		9.8	P17	P31
	ZW34KSE-TFP-582		√	10.8	P10	P29
	ZW61KAE-TFP-522			17.7	P17	P31
	ZW61KAE-TFP-52E			17.7	P17	P31
	ZW61KSE-TFP-522		√	19.6	P10	P29
	ZW72KAE-TFP-52E			20.9	P17	P31
	ZW79KAE-TFP-522			24.8	P17	P31
	ZW79KSE-TFP-522		√	26.1	P10	P29
	ZW108KAE-TFP-522			30.9	P17	P31
	ZW108KSE-TFP-522		√	35.6	P10	P29
	ZW124KAE-TFP-52E			36	P18	P31
	ZW124KSE-TFP-52E		√	41.8	P11	P29
	ZW125KAE-TFP-522			35.6	P18	P31
	ZW125KSE-TFP-522		√	40.9	P11	P29
	ZW150KAE-TFP-522			44.2	P18	P31
	ZW34KSE-TF7-582	3Φ/380 V/60 Hz	√	13	P10	P33
	ZW61KAE-TF7-542			21.2	P17	P33
	ZW61KSE-TF7-542		√	23.8	P10	P33
	ZW108KSE-TF7-522		√	42.8	P10	P33
R410A	ZW28KWP-PFZ-58E	1Φ/220-240 V/50 Hz		8.7	P19	P31
	ZW31KWP-PFZ-522			9.3	P19	P31
	ZW42KWP-PFZ-522			12.8	P19	P31
	ZW51KWP-PFZ-522			15.2	P20	P31
	ZW42KWP-TFD-52E			12.7	P21/P28	P31/P33
	ZW54KWP-TFD-52E	3Φ/380-420 V/50 Hz or 3Φ/460 V/60 Hz		16.1	P21/P28	P31/P33
	ZW72KWP-TFD-52E			21.4	P21/P28	P31/P33
	ZW83KWP-TFD-522			24.7	P22/P28	P31/P33
	ZW100HSP-TFP-52E	3Φ/380 V/50 Hz	√	18.9	P24	P32
	ZW102HSP-TFP-522			18.9	P24	P32
	ZW126HSP-TFP-522			24.3	P24	P32
	ZW165HAP-TFP-52E		√	16.6	P22	P32
	ZW166HAP-TFP-522			16.4	P22	P32
	ZW188HAP-TFP-522			18.4	P23	P32
	ZW420HAP-TFP-522			40.3	P23	P32
	ZW465HAP-TFP-522			46.2	P23	P32
	ZW430HSP-TE7-522	3Φ/380V/60 Hz	√	92.9	P27	P33
	ZW188HAP-TFM-522	3Φ/380-420V/50 Hz		18.4	P23	P32

Operating envelopes

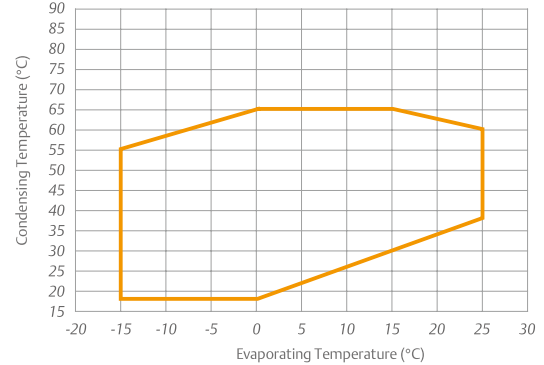
ZW30KS,ZW34KS(E)-TFP,ZW61KS(E),
ZW79KS(E),ZW124KS(E),ZW125KS(E),
ZW150KS

R22/R407C



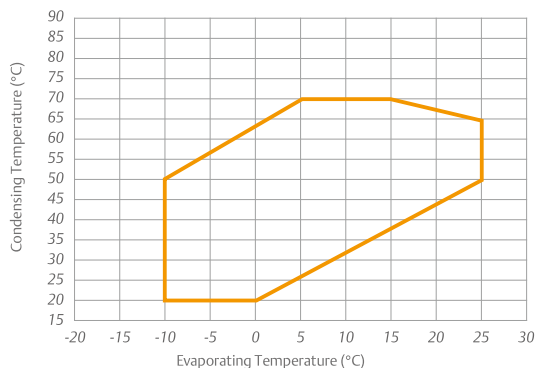
ZW165HAP, ZW166HAP, ZW188HAP,
ZW420HAP, ZW465HAP

R410A



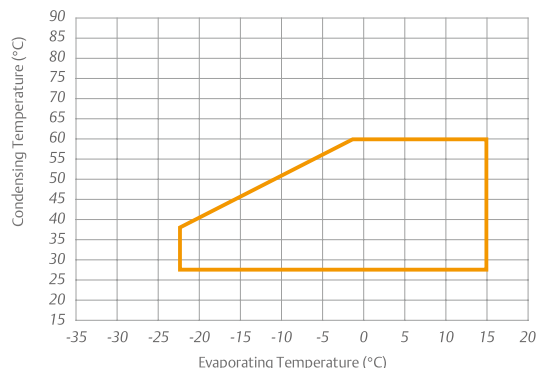
ZW30KA(E),ZW34KA(E),ZW52KA(E),
ZW61KA(E),ZW72KA(E),ZW79KA(E),
ZW108KA(E),ZW124KA(E),ZW125KA(E),
ZW150KA(E),ZW57KH,ZW61KH

R22/R407C



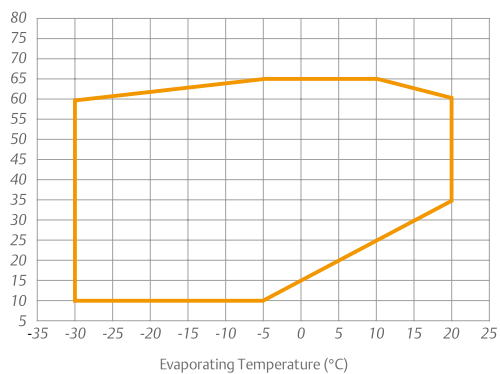
ZW28KWP,ZW31KWP,ZW42KWP,
ZW51KWP,ZW54KWP,ZW72KWP,
ZW83KWP

R410A



ZW100HSP, ZW102HSP, ZW126HSP,
ZW430HSP-TF7

R410A



ZW KS Heating capacity

R22 50 Hz

Q = Heating capacity (kW) P = Input power (kW) Single phase

220V

Model		Condensing temperature°C	Evaporating temperature°C									
			-30	-25	-20	-15	-10	-5	0	5	10	15
ZW30KS	Q	65	4.62	5.20	5.85	6.57	7.36	8.25	9.22	10.30	11.48	12.78
		55	4.28	4.85	5.49	6.22	7.04	7.96	8.99	10.12	11.38	12.68
		45	4.07	4.63	5.29	6.04	6.90	7.86	8.95	10.16	11.50	12.98
		35	3.89	4.47	5.14	5.93	6.83	7.65	9.01	10.30	11.73	
		25	3.66	4.25	4.96	5.79	6.74	7.83	9.07			
	P	65	2.86	2.94	3.00	3.06	3.10	3.14	3.15	3.16	3.14	3.11
		55	2.37	2.41	2.44	2.47	2.50	2.52	2.53	2.53	2.51	2.48
		45	1.99	2.00	2.01	2.03	2.04	2.05	2.05	2.05	2.04	2.02
		35	1.68	1.67	1.66	1.67	1.68	1.68	1.69	1.70	1.70	
		25	1.39	1.37	1.36	1.36	1.36	1.38	1.40			
ZW34KS	Q	65				7.44	8.34	9.33	10.43			
		55	4.77	5.52	6.31	7.16	8.09	9.12	10.27	11.57	13.02	
		45	4.56	5.29	6.08	6.94	7.89	8.95	10.14	11.49	13.00	
		35	4.48	5.18	5.96	6.81	7.77	8.85	10.07	11.46	13.02	
		25	4.56	5.23	5.98	6.82	7.78	8.87	10.11			
	P	65				3.74	3.83	3.87	3.86			
		55	2.43	2.64	2.78	2.88	2.93	2.96	2.97	2.96	2.96	
		45	2.00	2.10	2.16	2.19	2.21	2.21	2.22	2.24	2.28	
		35	1.80	1.79	1.76	1.72	1.69	1.67	1.67	1.70	1.77	
		25	1.88	1.75	1.61	1.50	1.40	1.35	1.33			

Note: Superheat 5K, Subcooling 8.3K

EVI Controls:

DLT<115°C, Economizer superheat 6K

DLT>115°C, Adjust the injection volume to control discharge temperature ≤115°C

ZW KS Heating capacity

R22 50 Hz

Q = Heating capacity (kW) P = Input power (kW) Three phase

380V

Model		Condensing temperature°C	Evaporating temperature°C									
			-30	-25	-20	-15	-10	-5	0	5	10	15
ZW34KS	Q	65	4.92	5.64	6.42	7.26	8.16	9.14	10.20	11.35	12.60	13.96
		55	4.70	5.39	6.15	6.97	7.88	8.88	9.98	11.18	12.50	13.94
		45	4.84	5.15	5.90	6.74	7.68	8.72	9.87	11.14	12.55	14.09
		35	4.25	4.92	5.68	6.55	7.53	8.63	9.86	11.23	12.73	
		25	3.98	4.67	5.47	6.39	7.43	8.61	9.94			
	P	65	3.44	3.50	3.56	3.60	3.63	3.65	3.66	3.66	3.65	3.62
		55	2.66	2.71	2.75	2.78	2.80	2.81	2.82	2.82	2.81	2.79
		45	2.04	2.08	2.10	2.13	2.14	2.15	2.16	2.17	2.16	2.16
		35	1.56	1.58	1.60	1.62	1.64	1.65	1.66	1.67	1.68	
		25	1.18	1.20	1.21	1.23	1.25	1.27	1.29			
ZW61KS	Q	65	9.95	10.86	11.91	13.13	14.54	16.17	18.04	20.18	22.61	25.35
		55	8.85	9.91	11.12	12.51	14.09	15.90	17.95	20.28	22.90	25.84
		45	8.15	9.34	10.68	12.20	13.92	15.87	18.08	20.56	23.34	26.45
		35	7.74	9.01	10.45	12.07	13.91	15.97	18.29	20.90	23.81	
		25	7.46	8.80	10.30	12.00	12.90	16.05	18.46			
	P	65	5.79	5.82	5.88	5.95	6.03	6.10	6.17	6.22	6.23	6.21
		55	4.47	4.50	4.56	4.64	4.73	4.82	4.89	4.95	4.98	4.98
		45	3.51	3.54	3.59	3.67	3.76	3.86	3.94	4.01	4.05	4.05
		35	2.80	2.82	2.87	2.95	3.04	3.13	3.22	3.29	3.33	
		25	2.24	2.26	2.30	2.37	2.45	2.54	2.62			
ZW79KS	Q	65	12.11	13.64	15.25	16.98	18.87	20.97	23.32	25.97	28.95	32.31
		55	10.23	12.06	13.95	15.94	18.08	20.41	22.97	25.81	28.97	32.49
		45	9.24	11.26	13.32	15.48	17.75	20.21	22.87	25.80	29.03	32.60
		35	8.77	10.88	13.01	15.21	17.53	20.00	22.66	25.57	28.76	
		25	8.47	10.56	12.66	14.80	17.04	19.42	21.98			
	P	65	7.51	7.41	7.38	7.42	7.51	7.64	7.81	7.99	8.18	8.37
		55	5.86	5.80	5.82	5.88	6.00	6.14	6.31	6.48	6.65	6.81
		45	4.62	4.61	4.66	4.76	4.89	5.05	5.21	5.38	5.53	5.66
		35	8.77	10.88	13.01	15.21	17.53	20.00	22.66	25.57	28.76	
		25	2.77	2.86	2.99	3.15	3.33	3.50	3.67			
ZW108KS	Q	65		15.86	18.87	21.99	25.26	28.67	32.22	35.92	39.76	43.76
		55		15.42	18.66	21.82	25.28	28.64	32.20	35.88	39.66	43.55
		45		15.83	19.20	22.65	26.15	29.72	33.36	37.07	40.85	44.71
		35		16.23	19.90	27.31	27.31	31.05	34.83	38.64	42.48	
		25		15.75	19.77	27.76	27.76	31.74	35.72			
	P	65		9.83	10.02	10.32	10.32	10.40	10.43	10.39	10.39	10.10
		55		7.81	7.97	8.21	8.21	8.28	8.31	8.29	8.21	8.06
		45		6.33	6.45	6.64	6.64	6.71	6.74	6.73	6.68	6.56
		35		5.19	5.27	5.42	5.42	5.48	5.52	5.52	5.49	
		25		4.20	4.24	4.35	4.35	4.40	4.45			

Note: Superheat 5K, Subcooling 8.3K

EVI Controls:

DLT<115°C, Economizer superheat 6K

DLT>115°C, Adjust the injection volume to control discharge temperature ≤115°C

ZW KS Heating capacity

R22 50 Hz

Q = Heating capacity (kW) P = Input power (kW) Three phase

380V

Model		Condensing temperature°C	Evaporating temperature°C									
			-30	-25	-20	-15	-10	-5	0	5	10	15
ZW124KS	Q	65	17.86	19.98	22.53	25.52	28.92	32.74	36.95	41.55	46.54	51.90
		55	17.20	19.58	22.38	25.57	29.15	33.11	37.45	42.15	47.20	52.59
		45	17.06	19.63	22.58	25.90	29.59	33.62	38.01	42.72	47.76	53.12
		35	15.64	18.32	21.35	24.73	28.44	32.48	36.83	41.49	46.44	
		25	15.13	17.85	20.89	22.25	26.91	29.87	32.12	36.64		
	P	65	11.10	11.49	11.83	12.13	12.39	12.62	12.82	13.01	13.18	13.36
		55	8.86	9.22	9.54	9.81	10.05	10.26	10.46	10.64	10.82	11.00
		45	7.38	7.69	7.96	8.19	8.40	8.59	8.76	8.93	9.09	9.27
		35	6.13	6.38	6.59	6.77	6.93	7.07	7.21	7.34	7.48	
		25	5.59	5.76	5.90	6.02	6.11	6.20	6.29	6.37		
ZW125KS	Q	65	18.02	19.96	22.4	25.31	28.67	32.45	36.63	41.18	46.07	51.27
		55	16.9	19.15	21.86	25.02	28.6	32.57	36.91	41.58	46.58	51.86
		45	16.35	18.73	21.56	24.8	28.44	32.43	36.77	41.42	46.35	51.55
		35	15.95	18.32	21.1	24.26	27.79	31.65	35.82	40.27	44.98	
		25	15.32	17.5	20.07	22.99	26.25	29.81	33.65	37.75		
	P	65	10.74	10.87	11.04	11.24	11.46	11.7	11.95	12.21	12.46	12.71
		55	7.89	8.23	8.58	8.93	9.27	9.6	9.91	10.19	10.45	10.66
		45	6.14	6.6	7.03	7.44	7.81	8.14	8.42	8.65	8.81	8.91
		35	5.12	5.61	6.04	6.42	6.73	6.97	7.13	7.21	7.20	
		25	4.47	4.9	5.24	5.5	5.66	5.72	5.67	5.51		
ZW150KS	Q	65	19.42	23.37	27.31	31.35	35.59	40.11	45.00	50.38	56.32	62.93
		55	20.21	23.80	27.47	31.32	35.45	39.93	44.88	50.38	56.53	63.42
		45	20.04	23.41	26.94	30.73	34.87	39.45	44.58	50.33	56.82	64.13
		35	19.47	22.75	26.27	30.12	34.41	39.22	44.64	50.79	57.74	
		25	19.03	22.35	25.99	30.04	34.60	39.76	45.62	52.28		
	P	65	11.54	12.20	12.81	13.36	13.87	14.35	14.80	15.23	15.65	16.05
		55	9.62	10.15	10.64	11.09	11.53	11.94	12.34	12.74	13.14	13.55
		45	8.10	8.52	8.93	9.31	9.69	10.07	10.45	10.84	11.25	11.68
		35	6.81	7.15	7.49	7.83	8.18	8.54	8.92	9.33	9.78	
		25	5.56	5.85	6.15	6.47	6.81	7.18	7.59	8.04		

Note: Superheat 5K, Subcooling 8.3K

EVI Controls:

DLT<115°C, Economizer superheat 6K

DLT>115°C, Adjust the injection volume to control discharge temperature ≤115°C

ZW KSE Heating capacity

R407C 50 Hz

Q = Heating capacity (kW) P = Input power (kW) Three phase

380V

Model		Condensing temperature°C	Evaporating temperature°C									
			-30	-25	-20	-15	-10	-5	0	5	10	15
ZW34KSE	Q	65	5.14	5.56	6.11	6.79	7.59	8.51	9.55	10.71	11.97	13.34
		55	4.39	4.89	5.54	6.32	7.25	8.31	9.49	10.81	12.25	13.83
		45	3.90	4.46	5.17	6.04	7.06	8.23	9.54	10.99	12.58	14.31
		35	3.64	4.23	4.98	5.91	6.99	8.24	9.65	11.21	12.92	
		25	3.58	4.16	4.93	5.88	7.01	8.31	9.79			
	P	65	3.40	3.48	3.53	3.58	3.61	3.63	3.65	3.67	3.70	3.72
		55	2.52	2.60	2.65	2.70	2.73	2.75	2.78	2.80	2.88	2.86
		45	1.93	1.99	2.05	2.08	2.11	2.13	2.15	2.17	2.19	2.22
		35	1.53	1.58	1.62	1.65	1.67	1.68	1.69	1.70	1.71	
		25	1.24	1.28	1.29	1.31	1.31	1.31	1.30			
ZW61KSE	Q	65	9.05	9.90	10.93	12.14	13.56	15.20	17.07	19.20	21.59	24.27
		55	7.70	8.79	10.05	11.51	13.17	15.05	17.17	19.55	22.19	25.11
		45	6.87	8.14	9.58	11.20	13.04	15.10	17.39	19.94	22.76	25.86
		35	6.50	7.87	9.41	11.14	13.08	15.24	17.64	20.29	23.21	
		25	6.50	7.90	9.47	11.24	13.21	15.41	17.84			
	P	65	5.66	5.56	5.54	5.60	5.71	5.84	5.99	6.13	6.25	6.24
		55	4.24	4.19	4.23	4.31	4.44	4.58	4.73	4.85	4.95	4.98
		45	3.26	3.26	3.32	3.42	3.55	3.69	3.80	3.89	3.93	3.90
		35	2.59	2.60	2.67	2.77	2.88	2.99	3.07	3.02	3.08	
		25	2.08	2.10	2.16	2.23	2.31	2.37	2.39			
ZW79KSE	Q	65	11.53	13.02	14.64	16.43	18.41	20.63	23.10	25.86	28.94	32.38
		55	9.32	11.20	13.20	15.36	17.69	20.23	23.01	26.05	29.39	33.06
		45	8.15	10.27	12.51	14.88	17.41	20.11	23.03	26.19	29.62	33.36
		35	7.72	9.94	12.26	14.70	17.26	19.97	22.87	25.99	29.35	
		25	7.73	9.92	12.18	14.52	16.95	19.51	22.23			
	P	65	7.66	7.39	7.27	7.30	7.43	7.64	7.92	8.24	8.58	8.91
		55	5.80	5.65	5.63	5.72	5.88	6.11	6.37	6.64	6.89	7.11
		45	4.49	4.44	4.49	4.63	4.81	5.03	5.25	5.46	5.61	5.70
		35	8.48	10.50	12.65	14.94	17.38	19.94	22.60	25.25	27.80	
		25	2.68	2.78	2.93	3.11	3.28	3.42	3.51			
ZW108KSE	Q	65		16.37	18.58	21.24	24.33	27.81	31.69	35.94	40.54	45.48
		55		15.37	17.88	20.76	23.99	27.56	31.45	35.64	40.12	44.86
		45		13.82	16.70	19.87	23.33	27.05	31.03	35.24	39.67	44.29
		35		12.69	15.99	19.53	23.29	27.25	31.38	35.68	40.13	
		25		16.73	16.73	20.71	24.84	29.10	33.46			
	P	65		11.36	11.36	11.08	10.87	10.73	10.66	10.66	10.72	10.86
		55		8.10	8.10	8.15	8.20	8.25	8.29	8.34	8.38	8.42
		45		6.34	6.34	6.64	6.87	7.02	7.11	7.12	7.06	6.93
		35		5.35	5.35	5.83	6.16	6.34	6.39	6.29	6.05	
		25		4.43	5.00	5.00	5.35	5.49	5.42			

Note: Superheat 5K, Subcooling 8.3K

EVI Controls:

DLT<115°C, Economizer superheat 6K

DLT>115°C, Adjust the injection volume to control discharge temperature ≤115°C

ZW KSE Heating capacity

R407C 50 Hz

Q = Heating capacity (kW) P = Input power (kW) Three phase

380V

Model		Condensing temperature°C	Evaporating temperature°C									
			-30	-25	-20	-15	-10	-5	0	5	10	15
ZW124KSE	Q	65	16.57	18.44	20.99	24.17	27.91	32.14	36.81	41.85	47.19	52.78
		55	15.39	17.49	20.27	23.66	27.59	32.00	36.84	42.02	47.49	53.19
		45	14.49	16.77	19.70	23.22	27.28	31.80	36.72	41.98	47.51	53.26
		35	13.99	16.36	19.37	22.96	27.07	31.62	36.56	41.83	47.35	
		25	13.97	16.37	19.39	22.97	27.06	31.57	36.46	41.66		
	P	65	10.06	10.66	11.17	11.62	12.01	12.36	12.68	12.99	13.30	13.63
		55	7.87	8.40	8.86	9.24	9.56	9.84	10.09	10.33	10.57	10.82
		45	6.56	7.04	7.44	7.76	8.03	8.24	8.43	8.60	8.76	8.94
		35	5.48	5.91	6.26	6.53	6.74	6.89	7.02	7.12	7.22	
		25	4.95	5.34	5.64	5.86	6.02	6.12	6.19	6.23		
ZW125KSE	Q	65	16.76	18.89	21.46	24.47	27.9	31.78	36.09	40.84	46.03	51.66
		55	15.98	18.25	20.95	24.09	27.65	31.64	36.07	40.93	46.22	51.96
		45	14.84	17.25	20.08	23.34	27.02	31.14	35.68	40.65	46.05	51.89
		35	13.80	16.35	19.31	22.70	26.51	30.74	35.39	40.47	45.98	
		25	13.34	16.02	19.12	22.63	26.56	30.91	35.68	40.87		
	P	65	9.93	10.34	10.74	11.12	11.48	11.82	12.14	12.43	12.69	12.91
		55	7.96	8.30	8.64	8.96	9.26	9.54	9.80	10.04	10.25	10.43
		45	6.52	6.80	7.07	7.33	7.58	7.81	8.01	8.20	8.36	8.50
		35	5.37	5.59	5.8	6.00	6.18	6.36	6.52	6.65	6.77	
		25	4.25	4.41	4.55	4.7	4.83	4.95	5.06	5.15		

Note: Superheat 5K, Subcooling 8.3K

EVI Controls:

DLT<115°C, Economizer superheat 6K

DLT>115°C, Adjust the injection volume to control discharge temperature ≤115°C

ZW KA Heating capacity

R22 50 Hz

Q = Heating capacity (kW) P = Input power (kW) Single phase

220V

Model		Condensing temperature°C	Evaporating temperature°C					
			-10	-5	0	5	10	15
ZW30KA	Q	65				8.76	9.98	11.42
		55		6.49	7.76	9.03	10.37	11.87
		45	5.77	6.9	8.06	9.33	10.77	12.48
		35	6.05	7.1	8.29	9.68	11.37	
		25	6.16	7.28	8.63			
	P	65				2.83	2.92	2.97
		55		2.07	2.23	2.31	2.36	2.38
		45	1.67	1.78	1.84	1.88	1.92	1.99
		35	1.42	1.46	1.49	1.55	1.66	
		25	1.13	1.16	1.23			
ZW34KA	Q	65				9.36	10.81	12.42
		55		7.37	8.71	10.08	11.56	13.22
		45	6.64	7.95	9.26	10.64	12.16	13.91
		35	7.08	8.35	9.65	11.06	12.65	
		25	7.34	8.59	9.91			
	P	65				3.14	3.17	3.21
		55		2.64	2.64	2.64	2.66	2.68
		45	2.22	2.2	2.2	2.21	2.22	2.24
		35	1.8	1.81	1.82	1.85	1.89	
		25	1.43	1.48	1.53			
ZW52KA	Q	65				15.41	17.64	20.08
		55		11.87	13.59	15.77	18.28	21.00
		45	10.41	11.79	13.77	16.21	18.98	21.96
		35	10.50	12.12	14.33	17.00	20.00	
		25	11.28	13.11	15.53			
	P	65				5.06	5.04	5.02
		55		4.18	4.24	4.23	4.19	4.16
		45	3.44	3.58	3.62	3.58	3.52	3.47
		35	2.94	3.05	3.06	3.00	2.90	
		25	2.39	2.46	2.43			

Note: Superheat 5K, Subcooling 8.3K

ZW KA Heating capacity

R22 50 Hz

Q = Heating capacity (kW) P = Input power (kW) Three phase

380V

Model		Condensing temperature°C	Evaporating temperature°C					
			-10	-5	0	5	10	15
ZW34KA	Q	65				9.77	11.06	12.58
		55		7.75	8.81	10.10	11.59	13.28
		50	6.82	7.77	8.94	10.31	11.87	13.62
		45	8.79	7.84	9.10	10.55	12.14	13.91
		35	6.89	8.09	9.44	10.94	12.58	
		25	1.10	8.35	9.72			
	P	65				3.22	3.43	3.28
		55		2.52	2.54	2.59	2.64	2.68
		50	2.23	2.26	2.30	2.35	2.40	2.45
		45	2.00	2.04	2.09	2.14	2.19	2.23
		35	1.65	1.69	1.38	1.78	1.81	
		25	1.34	1.37	1.39			
ZW61KA	Q	65				17.53	19.86	22.61
		55		13.90	15.83	18.14	20.84	23.88
		50	12.22	13.95	16.06	18.53	21.35	24.49
		45	12.18	14.09	13.35	19.02	21.84	25.03
		35	12.38	14.54	16.98	19.69	22.64	
		25	12.76	15.01	17.48			
	P	65				5.66	5.75	5.81
		55		4.39	4.50	4.60	4.68	4.74
		50	3.85	3.97	4.07	4.16	4.24	4.30
		45	3.50	3.59	3.69	3.77	3.85	3.92
		35	2.88	2.95	3.02	3.10	3.19	
		25	2.33	2.38	2.45			
ZW72KA	Q	65				20.82	23.68	26.82
		55		16.09	18.63	21.43	24.60	28.24
		45	14.10	16.51	19.25	22.24	26.18	30.57
		35	14.42	17.10	20.32	24.15	28.72	
		25	14.95	18.17	22.11			
	P	65				6.63	6.61	6.62
		55		5.23	5.22	5.23	5.25	5.30
		45	4.12	4.14	4.16	4.19	4.23	4.30
		35	3.28	3.31	3.33	3.36	3.39	
		25	2.58	2.58	2.58			
ZW79KA	Q	65				23.92	26.45	29.3
		55		19.91	22.13	24.66	27.52	30.76
		45	18.14	20.29	22.76	25.59	28.81	32.46
		35	18.50	20.87	23.62	26.78	30.38	
		25	19.10	21.72	24.77			
	P	65				7.65	7.64	7.64
		55		6.15	6.17	6.20	6.24	6.28
		45	5.02	5.06	5.11	5.18	5.26	5.36
		35	4.20	4.26	4.34	4.44	4.57	
		25	3.53	3.60	3.72			
ZW108KA	Q	65				30.82	35.05	39.82
		55		24.20	27.81	31.91	36.56	41.80
		50	21.14	24.46	28.24	32.52	37.36	42.83
		45	21.32	24.77	28.69	33.15	38.20	43.89
		35	21.74	25.44	29.66	34.47	39.90	
		25	22.21	26.15	30.66			
	P	65				9.59	9.57	9.58
		55		7.58	7.58	7.60	7.65	7.74
		50	6.72	6.74	6.77	6.82	6.90	7.02
		45	5.99	6.03	6.08	6.14	6.25	6.40
		35	4.80	4.86	4.93	5.03	5.17	
		25	3.82	3.88	3.96			

Note: Superheat 5K, Subcooling 8.3K

ZW KA Heating capacity

R22 50 Hz

Q = Heating capacity (kW) P = Input power (kW) Three phase

380V

Model		Condensing temperature°C	Evaporating temperature°C					
			-10	-5	0	5	10	15
ZW124KA	Q	65				36.43	41.59	46.96
		55		28.14	32.29	37.18	42.70	48.75
		45	25.31	28.86	33.58	39.36	44.11	50.74
		35	25.92	29.57	34.73	39.30	45.17	
		25	27.95	30.59	35.08	40.30		
	P	65				11.27	11.50	11.75
		55		9.05	9.31	9.54	9.78	10.05
		45	7.38	7.70	7.96	8.21	8.46	8.74
		35	6.22	6.54	6.81	7.06	7.82	
		25	5.03	5.35	5.83	6.29		
ZW125KA	Q	65				35.24	40.20	45.75
		55		27.77	32.05	36.83	42.18	48.16
		45	24.74	28.80	33.34	38.42	44.09	50.41
		35	25.57	29.80	34.53	39.83	45.74	
		25	26.25	30.57	35.41	40.84		
	P	65				10.67	10.97	11.27
		55		8.43	8.75	9.03	9.31	9.63
		45	6.85	7.15	7.42	7.69	8.01	8.39
		35	5.82	6.08	6.35	6.66	7.06	
		25	4.95	5.22	5.54	5.95		
ZW150KA	Q	65				43.35	49.53	56.44
		55		34.41	39.63	45.45	51.94	59.19
		45	30.43	35.39	40.90	47.05	53.90	61.52
		35	31.17	36.44	42.30	48.81	56.06	
		25	32.61	38.23	44.47	51.40		
	P	65				13.26	13.71	14.25
		55		10.64	10.99	11.35	11.77	12.33
		45	8.71	9.08	9.41	9.79	10.25	10.88
		35	7.40	7.78	8.17	8.61	9.18	
		25	6.32	6.79	7.28	7.86		

Note: Superheat 5K, Subcooling 8.3K

ZW KH Heating capacity

R22 50 Hz

Q = Heating capacity (kW) P = Input power (kW) Three phase

380V

Model		Condensing temperature°C	Evaporating temperature°C					
			-10	-5	0	5	10	15
ZW57KH	Q	65				16.53	18.76	21.29
		55		12.97	14.92	17.11	19.59	22.40
		45	11.39	13.28	15.40	17.80	20.51	23.59
		35	11.68	13.70	15.98	18.57	21.50	
		25	12.07	14.20	16.63			
	P	65				5.3	5.31	5.34
		55		4.19	4.21	4.23	4.26	4.31
		45	3.33	3.36	3.39	3.42	3.47	3.54
		35	2.69	2.72	2.75	2.8	2.86	
		25	2.17	2.2	2.23			
ZW61KH	Q	65				17.65	20.07	22.81
		55		13.73	15.84	18.23	20.92	23.93
		45	12.03	14.07	16.38	18.98	21.87	25.09
		35	12.36	14.54	16.99	19.73	22.77	
		25	12.72	14.98	17.51			
	P	65				5.65	5.65	5.70
		55		4.48	4.47	4.48	4.53	4.62
		45	3.56	3.56	3.58	3.62	3.70	3.81
		35	2.87	2.89	2.92	2.97	3.05	
		25	2.34	2.36	2.38			

Note: Superheat 5K, Subcooling 8.3K

ZW KAE Heating capacity

R407C 50 Hz

Q = Heating capacity (kW) P = Input power (kW) Single phase

220V

Model		Condensing temperature°C	Evaporating temperature°C					
			-10	-5	0	5	10	15
ZW30KAE	Q	65				8.37	9.69	11.06
		55		6.31	7.53	8.74	10.03	11.46
		45	5.60	6.69	7.80	9.00	10.39	12.02
		35	5.85	6.86	7.99	9.33	10.94	
		25	5.94	7.01	8.30			
	P	65				2.84	2.95	3.00
		55		2.10	2.25	2.34	2.38	2.40
		45	1.69	1.80	1.86	1.89	1.93	2.01
		35	1.44	1.47	1.51	1.56	1.67	
		25	1.14	1.17	1.25			
ZW34KAE	Q	65				8.41	9.87	11.48
		55		6.99	8.03	9.25	10.69	12.38
		45	7.22	7.86	8.74	9.90	11.37	13.19
		35	8.00	8.44	9.21	10.36	11.92	
		25	8.42	8.71	9.44			
	P	65				3.10	3.15	3.18
		55		2.58	2.60	2.61	2.61	2.60
		45	2.28	2.25	2.21	2.17	2.15	2.13
		35	1.99	1.91	1.84	1.79	1.77	
		25	1.67	1.57	1.50			
ZW52KAE	Q	65				14.76	17.01	19.60
		55		11.31	13.12	15.30	17.85	20.76
		45	9.83	11.44	13.46	15.89	18.73	21.96
		35	10.03	11.82	14.05	16.73	19.84	
		25	10.67	12.63	15.07			
	P	65				5.18	5.19	5.18
		55		4.14	4.19	4.20	4.20	4.19
		45	3.35	3.41	3.43	3.44	3.44	3.45
		35	2.78	2.81	2.83	2.84	2.87	
		25	2.27	2.30	2.33			

Note: Superheat 5K, Subcooling 8.3K

ZW KAE Heating capacity

R407C 50 Hz

Q = Heating capacity (kW) P = Input power (kW) Three phase

380V

Model		Condensing temperature°C	Evaporating temperature°C					
			-10	-5	0	5	10	15
ZW34KAE	Q	65				9.50	10.73	12.19
		55		7.54	8.55	9.78	11.21	12.82
		45	6.58	7.60	8.80	10.17	11.71	13.40
		35	6.66	7.81	9.10	10.54	12.10	
		25	6.84	8.04	9.35			
	P	65				3.22	3.27	3.30
		55		2.50	2.56	2.61	2.65	2.69
		45	1.99	2.04	2.09	2.14	2.18	2.22
		35	1.63	1.67	1.72	1.76	1.81	
		25	1.32	1.35	1.39			
ZW61KAE	Q	65				17.10	19.34	21.98
		55		13.56	15.41	17.64	20.22	23.15
		45	11.86	13.70	15.87	18.36	21.14	24.21
		35	12.02	14.09	16.44	19.04	21.88	
		25	12.36	14.52	16.90			
	P	65				5.72	5.81	5.87
		55		4.43	4.55	4.65	4.72	4.79
		45	3.53	3.63	3.72	3.81	3.88	3.96
		35	2.91	2.98	3.05	3.13	3.23	
		25	2.35	2.41	2.48			
ZW72KAE	Q	65				19.86	22.83	26.27
		55		15.48	17.99	20.92	24.29	28.12
		45	13.53	15.99	18.83	22.07	25.76	29.90
		35	13.96	16.67	19.75	23.23	27.14	
		25	14.57	17.43	20.67			
	P	65				6.91	6.86	6.82
		55		5.46	5.41	5.37	5.35	5.35
		45	4.28	4.23	4.21	4.20	4.22	4.26
		35	3.32	3.30	3.31	3.35	3.42	
		25	2.58	2.60	2.66			
ZW79KAE	Q	65				21.69	24.98	28.61
		55		17.08	19.90	23.07	26.63	30.65
		45	15.07	17.74	20.82	24.35	28.38	32.98
		35	15.62	18.63	22.15	26.24	30.94	
		25	16.91	20.46	24.62			
	P	65				7.65	7.67	7.71
		55		5.98	6.01	6.06	6.13	6.24
		45	4.79	4.82	4.87	4.95	5.05	5.21
		35	3.89	3.92	3.97	4.05	4.18	
		25	2.99	3.00	3.03			
ZW108KAE	Q	65				29.59	33.89	38.91
		55		23.16	26.74	30.88	35.71	41.40
		45	20.44	23.84	27.77	32.39	37.84	44.28
		35	20.97	24.67	29.03	34.23	40.39	
		25	21.68	25.76	30.66			
	P	65				9.59	9.58	9.60
		55		7.58	7.58	7.60	7.64	7.73
		45	6.01	6.03	6.06	6.11	6.20	6.35
		35	4.85	4.88	4.92	5.00	5.14	
		25	3.97	4.00	4.06			

Note: Superheat 5K, Subcooling 8.3K

ZW KAE Heating capacity

R407C 50 Hz

Q = Heating capacity (kW) P = Input power (kW) Three phase

380V

Model		Condensing temperature°C	Evaporating temperature°C					
			-10	-5	0	5	10	15
ZW124KAE	Q	65				34.26	39.55	45.45
		55		26.37	30.96	36.12	41.93	48.46
		45	23.21	27.45	32.30	37.84	44.14	51.28
		35	24.39	28.75	33.84	39.73	46.49	
		25	26.13	30.59	35.89			
	P	65				11.50	11.73	11.93
		55		8.89	9.12	9.37	9.64	9.94
		45	7.16	7.27	7.45	7.70	8.03	8.45
		35	6.07	6.09	6.22	6.48	6.88	
		25	5.37	5.30	5.40			
ZW125KAE	Q	65				33.46	38.73	44.75
		55		26.00	30.43	35.56	41.42	48.04
		45	23.10	27.26	32.09	37.62	43.87	50.88
		35	24.15	28.51	33.54	39.27	45.73	
		25	25.05	29.42	34.46			
	P	65				10.58	11.06	11.46
		55		8.16	8.59	8.97	9.32	9.65
		45	6.74	7.00	7.26	7.53	7.83	8.19
		35	5.74	5.86	6.03	6.29	6.66	
		25	4.72	4.78	4.97	5.31		
ZW150KAE	Q	65				41.80	47.93	54.55
		55		31.70	37.42	43.77	50.74	58.31
		45	28.09	33.14	38.95	45.51	52.81	60.82
		35	31.09	35.61	41.00	47.26	54.36	
		25	35.84	39.32	43.79			
	P	65				13.20	13.77	14.33
		55		10.12	10.62	11.13	11.65	12.18
		45	8.20	8.63	9.08	9.55	10.05	10.58
		35	6.74	7.13	7.55	8.02	8.53	
		25	4.79	5.16	5.60			

Note: Superheat 5K, Subcooling 8.3K

ZW KWP Heating capacity

R410A 50 Hz

Q = Heating capacity (kW) P = Input power (kW) Single phase

220-240V

Model		Condensing temperature°C	Evaporating temperature°C								
			-23	-20	-15	-10	-5	0	5	10	15
ZW28KWP	Q	60						7.59	8.46	9.47	10.63
		55					6.91	7.73	8.68	9.77	11.03
		50				6.19	6.94	7.82	8.84	10.01	11.36
		45			5.46	6.14	6.95	7.89	8.97	10.22	11.66
		40		4.79	5.40	6.12	6.96	7.96	9.11	10.44	11.96
		35	4.43	4.75	5.38	6.13	7.02	8.07	9.28	10.68	12.29
		30	4.47	4.80	5.44	6.22	7.15	8.25	9.52	11.00	12.68
		27	4.54	4.87	5.53	6.33	7.28	8.40	9.71	11.23	12.96
	P	60						2.70	2.66	2.62	2.57
		55					2.46	2.42	2.38	2.34	2.28
		50				2.22	2.19	2.15	2.11	2.06	2.00
		45			1.99	1.96	1.93	1.89	1.85	1.80	1.73
		40		1.77	1.74	1.72	1.68	1.65	1.60	1.55	1.49
		35	1.56	1.55	1.52	1.50	1.47	1.43	1.38	1.33	1.26
		30	1.37	1.36	1.34	1.31	1.28	1.24	1.20	1.14	1.07
		27	1.27	1.26	1.24	1.22	1.19	1.15	1.10	1.04	0.97
ZW31KWP	Q	60						7.87	9.03	10.30	11.68
		55					6.98	8.09	9.31	10.64	12.10
		50				6.10	7.14	8.30	9.57	10.97	12.51
		45			5.26	6.23	7.30	8.50	9.83	11.30	12.92
		40		4.49	5.37	6.36	7.47	8.71	10.10	11.64	13.35
		35	4.13	4.61	5.49	6.50	7.65	8.94	10.39	12.00	13.79
		30	4.26	4.74	5.63	6.67	7.85	9.19	10.70	12.39	14.26
		27	4.35	4.83	5.73	6.78	7.98	9.35	10.90	12.63	14.56
	P	60						3.11	3.02	2.95	2.90
		55					2.76	2.68	2.61	2.56	2.54
		50				2.45	2.39	2.33	2.28	2.25	2.23
		45			2.17	2.13	2.08	2.04	2.00	1.98	1.98
		40		1.92	1.89	1.87	1.83	1.80	1.77	1.75	1.75
		35	1.67	1.68	1.67	1.65	1.62	1.59	1.57	1.55	1.55
		30	1.47	1.48	1.48	1.46	1.44	1.41	1.38	1.36	1.35
		27	1.37	1.38	1.38	1.36	1.34	1.31	1.27	1.25	1.23
ZW42KWP	Q	60						10.89	12.42	14.20	16.26
		55					9.70	11.12	12.79	14.72	16.91
		50				8.51	9.84	11.39	13.18	15.23	17.54
		45			7.37	8.59	10.01	11.67	13.56	15.71	18.13
		40		6.30	7.40	8.70	10.21	11.95	13.93	16.17	18.68
		35	5.70	6.31	7.47	8.84	10.42	12.23	14.28	16.58	19.16
		30	5.73	6.37	7.58	9.00	10.63	12.49	14.59	16.94	19.57
		27	5.78	6.43	7.66	9.10	10.75	12.63	14.75	17.13	19.77
	P	60						4.15	4.08	4.02	4.00
		55					3.69	3.61	3.55	3.51	3.49
		50				3.29	3.23	3.17	3.12	3.09	3.08
		45			2.94	2.90	2.86	2.81	2.76	2.73	2.73
		40		2.61	2.60	2.58	2.54	2.49	2.46	2.43	2.43
		35	2.30	2.31	2.32	2.29	2.26	2.22	2.18	2.16	2.15
		30	2.03	2.05	2.05	2.04	2.00	1.96	1.93	1.90	1.89
		27	1.87	1.89	1.90	1.88	1.85	1.81	1.77	1.74	1.72

Note: Superheat 5K, Subcooling 8.3K

Model		Condensing temperature°C	Evaporating temperature°C								
			-23	-20	-15	-10	-5	0	5	10	15
ZW51KWP	Q	60						12.60	14.80	16.90	17.80
		55					11.50	12.85	15.20	17.40	18.40
		50				10.15	11.75	13.15	15.60	18.00	19.10
		45			8.80	10.30	11.95	13.50	16.10	18.60	19.70
		40		7.55	8.90	10.45	12.20	13.80	16.50	19.20	20.40
		35	6.90	7.65	9.05	10.65	12.50	14.15	17.00	19.80	21.00
		30	6.95	7.70	9.15	10.75	12.65	14.35	17.30	20.20	21.40
		27	7.05	7.80	9.30	10.95	12.95	14.70	17.80	20.80	22.10
	P	60						4.75	4.67	4.61	4.59
		55					4.23	4.18	4.12	4.08	4.07
		50				3.78	3.73	3.70	3.65	3.63	3.62
		45			3.37	3.34	3.30	3.28	3.25	3.23	3.23
		40		3.00	2.99	2.96	2.94	2.92	2.90	2.89	2.89
		35	2.67	2.67	2.66	2.64	2.62	2.60	2.58	2.58	2.58
		30	2.49	2.49	2.48	2.47	2.45	2.43	2.41	2.41	2.40
		27	2.23	2.23	2.22	2.21	2.19	2.17	2.15	2.13	2.13

Note: Superheat 5K, Subcooling 8.3K

ZW KWP Heating capacity

R410A 50 Hz

Q = Heating capacity (kW) P = Input power (kW) Three phase

380-420V

Model		Condensing temperature°C	Evaporating temperature°C								
			-23	-20	-15	-10	-5	0	5	10	15
ZW42KWP	Q	60						11.01	12.55	14.25	16.13
		55					9.76	11.23	12.83	14.62	16.63
		50				8.53	9.90	11.41	13.09	15.00	17.17
		45			7.33	8.61	10.01	11.59	13.38	15.43	17.77
		40		6.20	7.38	8.67	10.14	11.80	13.72	15.93	18.48
		35	5.58	6.23	7.42	8.76	10.30	12.08	14.15	16.55	19.32
		30	5.62	6.27	7.49	8.90	10.54	12.46	14.71	17.32	20.33
		27	5.65	6.31	7.56	9.02	10.74	12.75	15.11	17.86	21.03
	P	60						4.16	4.04	3.94	3.83
		55					3.71	3.61	3.52	3.43	3.34
		50				3.32	3.23	3.15	3.07	3.00	2.93
		45			2.97	2.89	2.82	2.76	2.69	2.63	2.57
		40		2.67	2.59	2.53	2.47	2.42	2.37	2.32	2.26
		35	2.37	2.33	2.27	2.22	2.18	2.13	2.09	2.04	1.99
		30	2.07	2.04	1.99	1.95	1.92	1.88	1.85	1.80	1.75
		27	1.91	1.88	1.85	1.81	1.78	1.75	1.71	1.67	1.61
ZW54KWP	Q	60						13.88	15.92	18.28	21.00
		55					12.25	14.16	16.36	18.90	21.81
		50				10.67	12.45	14.50	16.85	19.54	22.62
		45			9.16	10.81	12.70	14.86	17.34	20.18	23.41
		40		7.74	9.26	11.00	12.97	15.24	17.83	20.79	24.16
		35	6.97	7.83	9.40	11.19	13.24	15.59	18.28	21.34	24.83
		30	7.07	7.94	9.54	11.38	13.48	15.90	18.66	21.82	25.41
		27	7.13	8.01	9.62	11.47	13.60	16.05	18.85	22.05	25.70
	P	60						5.17	5.09	5.02	4.97
		55					4.58	4.51	4.45	4.40	4.37
		50				4.05	3.99	3.94	3.90	3.87	3.85
		45			3.57	3.53	3.49	3.45	3.42	3.40	3.40
		40		3.13	3.11	3.09	3.06	3.03	3.01	2.99	2.99
		35	2.74	2.74	2.73	2.71	2.68	2.66	2.64	2.62	2.61
		30	2.40	2.40	2.39	2.37	2.35	2.32	2.30	2.28	2.26
		27	2.22	2.22	2.21	2.19	2.17	2.14	2.10	2.08	2.05
ZW72KWP	Q	60						18.37	20.86	23.69	26.93
		55					16.46	18.78	21.43	24.45	27.89
		50				14.61	16.75	19.21	22.03	25.23	28.86
		45			12.84	14.81	17.08	19.68	22.65	26.02	29.85
		40		11.17	12.97	15.05	17.43	20.16	23.28	26.83	30.85
		35	10.26	11.26	13.14	15.30	17.79	20.65	23.92	27.64	31.84
		30	10.34	11.37	13.32	15.57	18.17	21.15	24.57	28.44	32.82
		27	10.40	11.45	13.43	15.74	18.40	21.45	24.95	28.92	33.41
	P	60						6.48	6.48	6.48	6.46
		55					5.73	5.75	5.75	5.75	5.74
		50				5.08	5.09	5.10	5.11	5.11	5.11
		45			4.50	4.52	4.53	4.54	4.55	4.55	4.56
		40		4.00	4.01	4.02	4.03	4.04	4.06	4.07	4.09
		35	3.56	3.57	3.57	3.58	3.59	3.61	3.63	3.65	3.68
		30	3.18	3.18	3.18	3.19	3.21	3.23	3.26	3.29	3.34
		27	2.96	2.96	2.97	2.97	2.99	3.02	3.05	3.10	3.15

Note: Superheat 5K, Subcooling 8.3K

ZW KWP Heating capacity

R410A 50 Hz

Q = Heating capacity (kW) P = Input power (kW) Three phase

380-420V

Model		Condensing temperature°C	Evaporating temperature°C								
			-23	-20	-15	-10	-5	0	5	10	15
ZW83KWP	Q	60						21.13	24.10	27.55	31.55
		55					18.82	21.56	24.72	28.38	32.59
		50				16.63	19.15	22.05	25.40	29.25	33.66
		45			14.55	16.88	19.54	22.60	26.11	30.13	34.72
		40		12.57	14.73	17.18	19.97	23.17	26.83	31.01	35.77
		35	11.49	12.72	14.97	17.52	20.42	23.74	27.53	31.86	36.78
		30	11.64	12.91	15.24	17.87	20.87	24.30	28.21	32.66	37.72
		27	11.75	13.04	15.41	18.08	21.13	24.62	28.59	33.11	38.24
	P	60						7.35	7.33	7.33	7.35
		55					6.50	6.50	6.50	6.52	6.56
		50				5.74	5.75	5.76	5.78	5.82	5.88
		45			5.06	5.07	5.09	5.11	5.15	5.20	5.28
		40		4.44	4.47	4.49	4.51	4.55	4.59	4.66	4.76
		35	3.90	3.92	3.95	3.97	4.01	4.05	4.11	4.19	4.30
		30	3.43	3.45	3.48	3.52	3.55	3.60	3.67	3.77	3.89
		27	3.18	3.20	3.23	3.26	3.30	3.36	3.43	3.53	3.67

Note: Superheat 5K, Subcooling 8.3K

ZW HAP Heating capacity

R410A 50 Hz

Q = Heating capacity (kW) P = Input power (kW) Three phase

380V

Model		Condensing temperature°C	Evaporating temperature°C								
			-15	-10	-5	0	5	10	15	20	25
ZW165HAP	Q	65				13.91	15.86	18.00	20.37		
		60			12.44	14.26	16.26	18.49	20.99	23.79	26.95
		55	9.47	11.03	12.73	14.60	16.67	19.01	21.64	24.61	27.96
		50	9.71	11.28	13.00	14.93	17.10	19.55	22.33	25.48	29.04
		45	9.92	11.50	13.27	15.27	17.54	20.13	23.08	26.42	30.20
		40	10.10	11.71	13.53	15.62	18.01	20.75	23.87	27.42	31.44
		35	10.25	11.90	13.80	15.99	18.52	21.41	24.73	28.50	
		30	10.38	12.09	14.08	16.39	19.06	22.13	25.65		
	P	65				5.44	5.49	5.53	5.58		
		60			4.84	4.89	4.93	4.97	5.00	5.04	5.07
		55	4.25	4.31	4.36	4.40	4.44	4.47	4.50	4.53	4.55
		50	3.83	3.88	3.93	3.97	4.00	4.03	4.05	4.08	4.10
		45	3.45	3.50	3.54	3.58	3.61	3.63	3.66	3.68	3.71
		40	3.10	3.15	3.19	3.23	3.26	3.28	3.31	3.33	3.36
		35	2.77	2.82	2.87	2.91	2.94	2.97	3.00	3.03	
		30	2.46	2.52	2.57	2.61	2.65	2.68	2.71		
ZW166HAP	Q	65					15.82	17.85			
		60				14.29	16.24	18.43	20.94	23.84	27.23
		55			12.71	14.59	16.66	19.00	21.69	24.80	28.43
		50	9.36	11.12	12.94	14.90	17.08	19.56	22.41	25.72	29.57
		45	9.56	11.33	13.19	15.21	17.49	20.09	23.10	26.59	30.64
		40	9.79	11.56	13.44	15.52	17.87	20.59	23.73	27.39	31.64
		35	10.04	11.79	13.68	15.80	18.22	21.03	24.30	28.12	32.55
		30	10.30	12.01	13.90	16.05	18.53	21.42	24.80	28.76	33.36
	P	65					5.50	5.53			
		60				4.84	4.90	4.91	4.89	4.85	4.83
		55			4.24	4.32	4.36	4.35	4.34	4.32	4.34
		50	3.52	3.70	3.81	3.86	3.87	3.87	3.86	3.88	3.94
		45	3.22	3.35	3.41	3.44	3.44	3.45	3.47	3.53	3.65
		40	2.94	3.02	3.05	3.06	3.07	3.10	3.16	3.27	3.45
		35	2.67	2.71	2.73	2.74	2.76	2.81	2.92	3.09	3.36
		30	2.42	2.44	2.45	2.46	2.51	2.60	2.76	3.01	3.36

Note: Superheat 5K, Subcooling 8.3K

ZW HAP Heating capacity

R410A 50 Hz

Q = Heating capacity (kW) P = Input power (kW) Three phase

380V

Model		Condensing temperature°C	Evaporating temperature°C								
			-15	-10	-5	0	5	10	15	20	25
ZW18HAP	Q	65				15.32	17.36	19.70	22.36		
		60			13.74	15.66	17.85	20.35	23.19	26.38	29.97
		55	10.68	12.24	14.03	16.08	18.42	21.07	24.07	27.44	31.22
		50	10.81	12.47	14.38	16.55	19.03	21.83	24.99	28.53	32.48
		45	10.99	12.75	14.77	17.06	19.67	22.61	25.92	29.62	33.74
		40	11.21	13.06	15.17	17.58	20.31	23.38	26.83	30.69	34.97
		35	11.42	13.35	15.56	18.06	20.90	24.09	27.68	15.34	17.49
		30	11.63	13.64	15.94	18.54	21.49	24.81	28.52		
	P	65				6.07	6.17	6.24	6.27		
		60			5.34	5.43	5.50	5.55	5.56	5.52	5.42
		55	4.67	4.72	4.78	4.84	4.90	4.93	4.93	4.89	4.79
		50	4.21	4.24	4.28	4.32	4.36	4.39	4.38	4.34	4.25
		45	3.79	3.80	3.83	3.87	3.90	3.92	3.92	3.88	3.80
		40	3.41	3.41	3.43	3.47	3.50	3.53	3.54	3.51	3.44
		35	3.09	3.08	3.11	3.15	3.19	3.24	3.26	1.75	1.72
		30	2.76	2.76	2.78	2.83	2.89	2.94	2.99		
ZW420HAP	Q	65				32.67	37.56	42.88	48.77		
		60			29.52	34.08	39.01	44.44	50.50	57.32	65.05
		55	22.24	26.35	30.64	35.23	40.26	45.87	52.17	59.31	67.42
		50	23.15	27.22	31.53	36.22	41.42	47.26	53.88	61.40	69.96
		45	23.81	27.89	32.29	37.14	42.57	48.71	55.70	63.67	72.75
		40	24.29	28.46	33.01	38.09	43.81	50.33	57.76	66.23	75.90
		35	24.70	29.01	33.79	39.15	45.24	52.19	60.12	69.18	
		30	25.13	29.66	34.71	40.44	46.95	54.40	62.90		
	P	65				12.05	12.37	12.64	12.87		
		60			10.82	11.12	11.37	11.58	11.75	11.88	11.97
		55	9.39	9.71	9.99	10.23	10.42	10.58	10.70	10.78	10.83
		50	8.70	8.97	9.19	9.38	9.53	9.65	9.73	9.78	9.80
		45	8.04	8.26	8.44	8.59	8.71	8.80	8.85	8.88	8.89
		40	7.40	7.59	7.74	7.87	7.97	8.04	8.08	8.10	8.10
		35	6.81	6.98	7.11	7.22	7.31	7.38	7.42	7.44	
		30	6.27	6.43	6.56	6.67	6.76	6.82	6.88		
ZW465HAP	Q	65				38.19	43.83	50.05	56.88		
		60			33.73	38.99	44.88	51.40	58.56	66.36	74.80
		55	25.58	29.75	34.58	40.06	46.21	53.02	60.52	68.69	77.54
		50	26.27	30.59	35.61	41.32	47.73	54.85	62.68	71.23	80.49
		45	27.07	31.55	36.76	42.70	49.38	56.81	64.98	73.91	83.60
		40	27.90	32.54	37.95	44.14	51.09	58.83	67.36	76.67	86.78
		35	28.71	33.52	39.13	45.56	52.79	60.85	69.73	79.44	
		30	29.41	34.39	40.22	46.89	54.41	62.79	72.03		
	P	65				13.81	14.12	14.37	14.58		
		60			12.32	12.63	12.89	13.10	13.29	13.45	13.61
		55	10.59	10.95	11.25	11.50	11.72	11.90	12.07	12.23	12.40
		50	9.72	10.00	10.24	10.45	10.63	10.79	10.95	11.12	11.31
		45	8.90	9.12	9.30	9.47	9.62	9.78	9.94	10.13	10.34
		40	8.14	8.30	8.45	8.58	8.72	8.87	9.05	9.26	9.51
		35	7.46	7.58	7.69	7.80	7.93	8.09	8.29	8.53	
		30	6.87	6.95	7.03	7.13	7.27	7.44	7.66		

Note: Superheat 5K, Subcooling 8.3K

ZW HSP Heating capacity

R410A 50 Hz

Q = Heating capacity (kW) P = Input power (kW) Three phase

380V

Model		Condensing temperature°C	Evaporating temperature°C										
			-30	-25	-20	-15	-10	-5	0	5	10	15	20
ZW100HSP	Q	65						14.43	16.01	17.78	19.75		
		60	9.27	9.27	10.26	11.41	12.71	14.17	15.82	17.65	19.68	21.92	27.06
		50	8.42	8.42	9.52	10.77	12.17	13.74	15.49	17.43	19.56	21.90	27.24
		40	7.83	7.83	9.00	10.32	11.79	13.43	15.25	17.25	19.45	21.85	27.31
		30	7.50	7.50	8.70	10.05	11.55	13.22	15.07	17.09	19.32	21.75	
	P	65						6.22	6.29	6.34	6.40		
		60	5.14	5.23	5.32	5.39	5.46	5.51	5.57	5.62	5.66	5.71	5.76
		50	4.06	4.14	4.20	4.26	4.31	4.35	4.38	4.42	4.45	4.48	4.51
		40	3.23	3.29	3.35	3.39	3.43	3.46	3.48	3.51	3.53	3.55	3.58
		30	2.59	2.65	2.69	2.73	2.76	2.79	2.81	2.83	2.85	2.87	
ZW102HSP	Q	65						15.63	17.15	18.88	20.80		
		60	10.40	10.93	11.71	12.73	13.97	15.42	17.07	18.91	20.92	23.09	25.40
		50	8.88	9.73	10.81	12.08	13.55	15.20	17.01	18.97	21.07	23.29	25.63
		40	8.01	9.07	10.32	11.73	13.31	15.02	16.87	18.83	20.90	23.06	25.29
		30	7.57	8.72	10.02	11.45	13.01	14.67	16.43	18.27	20.19	22.16	
	P	65						6.03	5.92	5.90	5.98		
		60	6.75	6.25	5.86	5.57	5.38	5.28	5.27	5.35	5.50	5.73	6.02
		50	4.68	4.42	4.24	4.14	4.12	4.18	4.31	4.50	4.75	5.05	5.40
		40	3.37	3.25	3.20	3.21	3.29	3.41	3.59	3.81	4.07	4.36	4.68
		30	2.57	2.52	2.51	2.55	2.63	2.74	2.89	3.05	3.24	3.44	
ZW126HSP	Q	65						19.66	21.80	24.15	26.74		
		60	11.12	12.45	13.93	15.58	17.40	19.43	21.67	24.15	26.89	29.90	33.20
		50	10.35	11.73	13.29	15.05	17.02	19.23	21.69	24.43	27.45	30.78	34.44
		40	9.72	11.15	12.79	14.66	16.78	19.18	21.86	24.85	28.16	31.81	35.83
		30	8.98	10.45	12.17	14.15	16.43	19.01	21.91	25.15	28.75	32.73	
	P	65						7.51	7.59	7.66	7.72		
		60	6.17	6.30	6.42	6.54	6.64	6.74	6.84	6.92	6.98	7.04	7.07
		50	4.94	5.07	5.19	5.31	5.43	5.54	5.64	5.73	5.81	5.88	5.94
		40	3.99	4.11	4.23	4.34	4.45	4.56	4.66	4.76	4.85	4.93	4.99
		30	3.10	3.20	3.30	3.39	3.49	3.59	3.68	3.77	3.85	3.92	

Note: Superheat 5K, Subcooling 8.3K

EVI Controls:

DLT<115°C, Economizer superheat 6K

DLT>115°C, Adjust the injection volume to control discharge temperature ≤115°C

ZW KS Heating capacity

R22 60 Hz

Q = Heating capacity (kW) P = Input power (kW) Three phase

380V

Model		Condensing temperature°C	Evaporating temperature°C									
			-30	-25	-20	-15	-10	-5	0	5	10	15
ZW34KS	Q	65	7.36	7.42	7.88	8.68	9.74	11.01	12.41	13.88	15.34	16.72
		55	6.22	6.46	7.08	8.01	9.18	10.52	11.97	13.46	14.92	16.28
		45	5.72	6.12	6.86	7.89	9.14	10.53	12.00	13.48	14.91	16.22
		35	5.39	5.9	6.74	7.84	9.13	10.54	12.00	13.45	14.82	
		25	4.72	5.33	6.23	7.37	8.67	10.07	11.49			
	P	65	3.93	3.82	3.78	3.81	3.89	4.00	4.12	4.24	4.35	4.42
		55	3.23	3.13	3.09	3.11	3.16	3.23	3.30	3.37	3.40	3.39
		45	2.63	2.54	2.52	2.53	2.57	2.61	2.65	2.66	2.64	2.55
		35	2.09	2.04	2.04	2.06	2.09	2.13	2.14	2.12	2.04	
		25	1.61	1.60	1.63	1.68	1.72	1.75	1.75			
ZW108KS	Q	65		20.94	23.88	27.10	30.60	34.42	38.54	43.00	47.81	54.04
		55		18.34	22.05	25.91	29.93	34.14	38.54	43.14	47.96	54.06
		45		19.40	23.62	27.86	32.15	36.49	40.91	45.40	49.98	55.63
		35		21.03	25.50	29.87	34.16	38.39	42.55	46.67	50.77	
		25		20.12	24.58	28.83	32.87	36.71	40.38			
	P	65		10.76	11.44	11.96	12.31	12.52	12.59	12.54	12.38	12.05
		55		9.06	9.51	9.83	10.03	10.13	10.12	10.03	9.86	9.58
		45		7.70	7.97	8.14	8.22	8.24	8.20	8.11	7.98	7.80
		35		6.48	6.59	6.65	6.67	6.66	6.62	6.58	6.53	
		25		5.17	5.19	5.18	5.18	5.17	5.18			

Note: Superheat 5K, Subcooling 8.3K

EVI Controls:

DLT<115°C, Economizer superheat 6K

DLT>115°C, Adjust the injection volume to control discharge temperature ≤115°C

ZW KSE Heating capacity

R407C 60 Hz

Q = Heating capacity (kW) P = Input power (kW) Three phase

380V

Model		Condensing temperature°C	Evaporating temperature°C									
			-30	-25	-20	-15	-10	-5	0	5	10	15
ZW34KSE	Q	65	7.29	7.28	7.51	8.12	9.05	10.24	11.61	13.12	14.70	16.27
		55	5.69	5.83	6.37	7.26	8.43	9.83	11.39	13.04	14.73	16.38
		45	4.80	5.20	5.97	7.06	8.40	9.92	11.58	13.29	15.01	16.66
		35	4.37	4.94	5.86	7.07	8.49	10.06	11.73	13.43	15.09	
		25	3.93	4.61	5.60	6.83	8.25	9.80	11.40			
	P	65	3.96	3.80	3.72	3.71	3.74	3.81	3.89	3.98	4.05	4.10
		55	3.12	3.03	3.01	3.04	3.10	3.18	3.27	3.34	3.38	3.38
		45	2.44	2.41	2.42	2.47	2.54	2.61	2.66	2.69	2.68	2.61
		35	2.02	2.01	2.04	2.08	2.12	2.16	2.16	2.13	2.04	
		25	1.84	1.83	1.84	1.85	1.85	1.86	1.81			
ZW61KSE	Q	65	11.03	12.07	13.32	14.80	16.52	18.52	20.81	23.40	26.32	29.59
		55	9.38	10.71	12.26	14.03	16.05	18.35	20.93	23.83	27.05	30.61
		45	8.38	9.92	11.67	13.66	15.89	18.40	21.20	24.30	27.74	31.52
		35	7.93	9.59	11.47	13.58	15.94	18.58	21.50	24.73	28.30	
		25	7.93	9.63	11.55	13.70	16.10	18.78	21.74			
	P	65	6.91	6.79	6.78	6.84	6.97	7.14	7.32	7.50	7.64	7.73
		55	5.19	5.13	5.17	5.28	5.43	5.61	5.78	5.94	6.04	6.08
		45	3.99	3.99	4.06	4.18	4.34	4.50	4.65	4.76	4.81	4.78
		35	3.17	3.19	3.28	3.40	3.53	3.66	3.76	3.80	3.77	
		25	2.55	2.58	2.65	2.74	2.84	2.91	2.93			
ZW108KSE	Q	65		19.96	23.13	26.23	29.44	32.94	36.90	41.52	46.96	53.40
		55		17.75	21.32	28.89	28.64	32.75	37.41	42.78	49.05	56.41
		45		18.34	21.86	25.46	29.31	33.59	38.49	44.18	50.84	58.65
		35		19.32	22.35	25.53	29.04	33.05	37.74	43.31	49.91	
		25		18.30	20.40	22.71	25.43	28.72	32.78			
	P	65		12.27	12.35	12.41	12.47	12.53	12.60	12.69	12.79	12.93
		55		9.61	9.70	9.79	9.88	9.97	10.07	10.19	10.33	10.50
		45		7.86	7.90	7.94	7.98	8.03	8.10	8.18	8.29	8.44
		35		6.62	6.55	6.47	6.40	6.34	6.29	6.27	6.28	
		25		5.50	5.24	4.97	4.72	4.48	4.26			

Note: Superheat 5K, Subcooling 8.3K

EVI Controls:

DLT<115°C, Economizer superheat 6K

DLT>115°C, Adjust the injection volume to control discharge temperature ≤115°C

ZW KA Heating capacity

R22 60 Hz

Q = Heating capacity (kW) P = Input power (kW) Three phase

380V

Model		Condensing temperature°C	Evaporating temperature°C				
			-10	-5	0	5	10
ZW61KA	Q	65				20.70	23.86
		55		16.09	18.92	21.86	25.06
		45	14.40	16.98	19.71	22.74	26.18
		35	14.96	17.48	20.33	23.64	27.53
		25	15.25	17.93	21.11		
	P	65				6.96	7.11
		55		5.28	5.55	5.69	5.75
		45	4.22	4.40	4.52	4.61	4.69
		35	3.51	3.57	3.66	3.79	4.02
		25	2.83	2.89	3.04		

Note: Superheat 5K, Subcooling 8.3K

ZW KAE Heating capacity

R407C 60 Hz

Q = Heating capacity (kW) P = Input power (kW) Three phase

380V

Model		Condensing temperature°C	Evaporating temperature°C				
			-10	-5	0	5	10
ZW61KAE	Q	65				20.55	23.24
		55		16.30	18.52	21.20	24.30
		45	14.24	16.44	19.05	22.04	25.39
		35	14.42	16.92	19.74	22.88	26.30
		25	14.91	17.53	20.40		
	P	65				6.88	6.99
		55		5.33	5.47	5.58	5.67
		45	4.22	4.34	4.45	4.55	4.65
		35	3.47	3.56	3.65	3.76	3.89
		25	2.89	2.97	3.08		

Note: Superheat 11K, Subcooling 8.3K

ZW KWP Heating capacity

R410A 60 Hz

Q = Heating capacity (kW) P = Input power (kW) Three phase

460V

Model		Condensing temperature°C	Evaporating temperature°C								
			-23	-20	-15	-10	-5	0	5	10	15
ZW42KWP	Q	60						13.27	15.14	17.19	19.44
		55					11.77	13.54	15.49	17.65	20.07
		50				10.29	11.96	13.79	15.84	18.14	20.73
		45			8.88	10.43	12.13	14.05	16.21	18.67	21.46
		40		7.58	8.98	10.54	12.31	14.33	16.63	19.26	22.27
		35	6.90	7.66	9.06	10.67	12.51	14.65	17.11	19.94	23.18
		30	6.97	7.72	9.15	10.81	12.76	15.03	17.67	20.71	24.21
		27	7.00	7.76	9.21	10.92	12.93	15.30	18.05	21.24	24.90
	P	60						4.90	4.77	4.65	4.52
		55					4.39	4.28	4.17	4.07	3.96
		50				3.94	3.83	3.74	3.65	3.57	3.48
		45			3.53	3.44	3.36	3.29	3.21	3.14	3.07
		40		3.18	3.09	3.02	2.96	2.90	2.84	2.78	2.72
		35	2.84	2.79	2.72	2.66	2.61	2.57	2.52	2.48	2.42
		30	2.49	2.45	2.40	2.35	2.32	2.28	2.25	2.21	2.16
		27	2.31	2.27	2.23	2.19	2.16	2.13	2.10	2.07	2.03
ZW54KWP	Q	60						16.95	19.28	21.93	24.94
		55					15.17	17.33	19.78	22.58	25.79
		50				13.43	15.44	17.70	20.29	23.25	26.67
		45			11.76	13.61	15.70	18.08	20.82	23.97	27.61
		40		10.17	11.88	13.80	15.98	18.49	21.40	24.76	28.64
		35	9.30	10.26	12.02	14.01	16.30	18.97	22.06	25.64	29.78
		30	9.40	10.38	12.19	14.27	16.70	19.52	22.82	26.64	31.06
		27	9.47	10.46	12.31	14.46	16.98	19.91	23.33	27.31	31.90
	P	60						5.93	5.84	5.77	5.73
		55					5.29	5.21	5.15	5.10	5.08
		50				4.72	4.65	4.60	4.55	4.53	4.52
		45			4.20	4.15	4.11	4.07	4.04	4.02	4.02
		40		3.73	3.71	3.68	3.64	3.62	3.60	3.58	3.58
		35	3.03	3.30	3.29	3.27	3.25	3.22	3.20	3.18	3.17
		30	2.66	2.94	2.93	2.92	2.89	2.87	2.84	2.81	2.79
		27	2.46	2.74	2.74	2.72	2.70	2.67	2.63	2.60	2.56
ZW72KWP	Q	60						22.67	25.64	29.03	32.92
		55					20.38	23.15	26.30	29.91	34.04
		50				18.14	20.72	23.64	26.98	30.81	35.20
		45			15.99	18.38	21.08	24.15	27.68	31.74	36.39
		40		13.95	16.16	18.64	21.46	24.69	28.41	32.70	37.61
		35	12.83	14.08	16.34	18.91	21.86	25.26	29.18	33.69	38.87
		30	12.96	14.23	16.55	19.22	22.30	25.86	29.98	34.73	40.18
		27	13.05	14.33	16.69	19.42	22.57	26.24	30.48	35.37	40.99
	P	60						7.62	7.64	7.66	7.66
		55					6.78	6.82	6.84	6.86	6.87
		50				6.04	6.08	6.11	6.13	6.16	6.18
		45			5.37	5.42	5.46	5.48	5.51	5.54	5.58
		40		4.76	4.82	4.86	4.89	4.92	4.95	5.00	5.06
		35	4.24	4.28	4.32	4.36	4.38	4.41	4.46	4.52	4.61
		30	3.81	3.83	3.87	3.89	3.92	3.96	4.02	4.10	4.22
		27	3.56	3.58	3.61	3.63	3.66	3.71	3.78	3.88	4.02

Note: Superheat 5K, Subcooling 8.3K

ZW KWP Heating capacity

R410A 60 Hz

Q = Heating capacity (kW) P = Input power (kW) Three phase

460V

Model		Condensing temperature°C	Evaporating temperature°C								
			-23	-20	-15	-10	-5	0	5	10	15
ZW83KWP	Q	60						26.00	29.39	33.32	37.87
		55					23.41	26.52	30.13	34.30	39.09
		50				20.94	23.81	27.12	30.93	35.31	40.33
		45			18.60	21.25	24.28	27.77	31.76	36.34	41.57
		40		16.38	18.84	21.62	24.80	28.44	32.60	37.36	42.79
		35	15.16	16.57	19.13	22.03	25.34	29.11	33.43	38.35	43.95
		30	15.36	16.81	19.46	22.45	25.87	29.77	34.22	39.28	45.04
		27	15.49	16.96	19.66	22.71	26.18	30.14	34.66	39.81	45.65
	P	60						8.68	8.67	8.67	8.69
		55					7.76	7.75	7.76	7.78	7.82
		50				6.92	6.93	6.94	6.96	7.00	7.07
		45			6.17	6.19	6.21	6.23	6.27	6.33	6.42
		40		5.50	5.52	5.55	5.58	5.61	5.66	5.74	5.85
		35	4.90	4.92	4.95	4.98	5.02	5.06	5.13	5.22	5.34
		30	4.39	4.41	4.45	4.48	4.52	4.58	4.65	4.76	4.89
		27	4.11	4.13	4.17	4.20	4.25	4.31	4.39	4.50	4.64

Note: Superheat 5K, Subcooling 8.3K

ZW HSP Heating capacity

R410A 60 Hz

Q = Heating capacity (kW) P = Input power (kW) Three phase

380V

Model		Condensing temperature°C	Evaporating temperature°C											
			-35	-30	-25	-20	-15	-10	-5	0	5	10	15	20
ZW430HSP	Q	65							72.50	80.06	88.71	98.67		
		55		41.10	46.77	52.55	58.66	65.31	72.72	81.10	90.68	101.67	114.29	122.35
		45	33.07	38.92	44.87	51.15	57.97	65.55	74.11	83.86	95.02	107.80	122.43	139.11
		35	32.90	38.43	44.30	50.70	57.87	66.00	75.33	86.07	98.44	112.64	128.90	147.44
		25	33.07	37.93	43.33	49.48	56.61	64.94	74.66	86.02	99.21	114.46	131.98	
	P	65							27.71	27.75	27.76	27.79		
		55		22.99	23.71	24.23	24.59	24.82	24.97	25.06	25.13	25.23	25.38	24.66
		45	17.76	18.64	19.30	19.79	20.14	20.38	20.56	20.72	20.88	21.09	21.37	21.78
		35	14.66	15.40	15.96	16.37	16.66	16.87	17.04	17.21	17.40	17.67	18.04	18.56
		25	12.05	12.61	13.01	13.28	13.47	13.59	13.70	13.83	14.01	14.29	14.70	

Note: Superheat 5K, Subcooling 8.3K

Specifications 50 Hz

ZW KS

R22

ZW Series		ZW30KS	ZW34KS	ZW34KS	ZW61KS	ZW79KS	ZW108KS	ZW124KS	ZW125KS	ZW150KS
Nominal power	HP	2.5	3	3	5	7	9	10	10	13
Motor type		PFS			TFP					
Displacement	m³/hr	7.1	8.0	8.0	14.4	18.8	24.9	29.2	29.1	35.3
Refrigerant		R22								
Heating capacity	kW	10.1	11.6	11.2	20.3	25.8	35.9	42.62	41.6	50.4
Input power	kW	2.5	3.0	2.8	5.0	6.5	8.3	10.59	10.2	12.7
Current	A	11.5	13.7	5.0	8.5	11.9	16.1	21.42	18.6	24.8
Mass flow	g/s	43.5	47.8	48.2	88.2	110.6	154.0	174.8	173.5	210.4
Locked rotor amps	A	58.4	72.5	31.6	59.0	90.5	133.0	155	133.0	157
Rated load current	A	13.6	13.9	6.4	10.1	12.1	19.3	20.4	20.1	25.6
Max continuous current	A	19.0	19.4	8.9	14.2	17.0	27.0	28.6	28.1	35.8
Max operating current	A	17.2	17.7	7.0	11.8	13.6	20.5	26.8	27.2	31.5
Oil charge	Initial	L	0.74	0.74	0.74	1.57	1.89	3.25	3.25	3.37
	Replacement refill	L	0.62	0.62	0.62	1.45	1.77	3.14	3.14	3.25
Net weight	kg	22	22	22	30	41	60	62	60	65

Conditions: ET 5 °C, CT 55 °C, Superheat 5K Subcooling 8.3K

ZW KSE

R407C

ZW Series		ZW34KSE	ZW61KSE	ZW79KSE	ZW108KSE	ZW124KSE	ZW125KSE
Nominal power	HP	3	5	7	9	10	10
Motor type		TFP					
Displacement	m³/hr	8.0	14.4	18.8	24.9	29.2	29.1
Refrigerant		R407C					
Heating capacity	kW	10.8	19.6	26.1	35.6	41.76	40.9
Input power	kW	2.8	4.9	6.6	8.3	10.41	10.0
Current	A	5.0	8.4	12.3	16.6	21.17	18.5
Mass flow	g/s	43.8	81.6	121.4	146.8	167.9	166.3
Locked rotor amps	A	31.6	59.0	90.5	133.0	155	133.0
Rated load current	A	6.6	10.2	14.6	20.6	21.3	21.0
Max continuous current	A	9.3	14.3	20.5	28.8	29.8	29.4
Max operating current	A	7.1	12.6	14.6	21.0	28.13	25.2
Oil charge	Initial	L	0.74	1.57	1.77	3.25	3.25
	Replacement refill	L	0.62	1.45	1.66	3.14	3.14
Net weight	kg	22	30	39	60	62	60

Conditions: ET 5 °C, CT 55 °C, Superheat 5K Subcooling 8.3K

ZW KA

R22

ZW Series		ZW34KA	ZW61KA	ZW72KA	ZW79KA	ZW108KA	ZW124KA	ZW125KA	ZW150KA
Nominal power	HP	3	5	6	7	9	10	10	13
Motor type		TFP							
Displacement	m³/hr	8.0	14.4	17.1	18.8	24.9	29.2	29.1	35.3
Refrigerant		R22							
Heating capacity	kW	10.1	18.1	21.4	24.7	31.2	37.21	36.8	45.41
Input power	kW	2.6	4.6	5.2	6.2	7.6	9.55	9.0	11.3
Current	A	4.5	8.2	9.1	11.5	13.7	20.2	17.1	23
Mass flow	g/s	48.0	87.1	103.0	118.4	154.0	176.2	177.0	218
Locked rotor amps	A	31.6	59.0	67.0	100.0	100.0	155	133.0	157
Rated load current	A	6.4	10.1	10.0	12.1	17.3	20.8	20.1	25.7
Max continuous current	A	8.9	14.2	14.0	17.0	24.2	29.1	28.2	36
Max operating current	A	7.0	11.8	12.1	16.0	16.8	24.18	27.2	28.5
Oil charge	Initial	L	0.74	1.57	1.77	1.89	3.25	3.25	3.37
	Replacement refill	L	0.62	1.45	1.66	1.77	3.14	3.14	3.25
Net weight	kg	22	30	39	41	60	62	60	65

Conditions: ET 5 °C, CT 55 °C, Superheat 5K Subcooling 8.3K

ZW KA

R22

ZW Series		ZW30KA	ZW34KA	ZW52KA
Nominal power	HP	2.5	3	4.5
Motor type		PFS		
Displacement	m³/hr	7.1	8.0	12.2
Refrigerant		R22		
Heating capacity	kW	9.0	10.1	15.8
Input power	kW	2.3	2.6	4.2
Current	A	10.7	12.2	22.9
Mass flow	g/s	43.0	46.0	74.0
Locked rotor amps	A	58.4	72.5	136.0
Rated load current	A	13.6	12.6	26.4
Max continuous current	A	19.0	17.7	36.9
Max operating current	A	17.2	16.7	28.2
Oil charge	Initial	L	0.74	1.57
	Replacement refill	L	0.62	1.45
Net weight	kg	22	22	30

Conditions: ET 5 °C, CT 55 °C, Superheat 5K Subcooling 8.3K

ZW KH

R22

ZW Series		ZW57KH	ZW61KH
Nominal power	HP	5	5
Motor type		TFP	
Displacement	m³/hr	13.4	14.4
Refrigerant		R22	
Heating capacity	kW	17.1	18.2
Input power	kW	4.2	4.5
Current	A	7.4	7.9
Mass flow	g/s	81.9	87.4
Locked rotor amps	A	64.0	67.0
Rated load current	A	9.0	10.1
Max continuous current	A	12.6	14.2
Max operating current	A	9.6	10.5
Oil charge	Initial	L	1.95
	Replacement refill	L	1.83
Net weight	kg	39	40

Conditions: ET 5 °C, CT 55 °C, Superheat 5K Subcooling 8.3K

Specifications 50 Hz

ZW KAE

R407C

ZW Series		ZW30KAE	ZW34KAE	ZW52KAE	ZW34KAE	ZW61KAE	ZW72KAE	ZW79KAE	ZW108KAE	ZW124KAE	ZW125KAE	ZW150KAE
Nominal power	HP	2.5	3	4.5	3	5	6	7	9	10	10	13
Motor type		PFS			TFP							
Displacement	m³/hr	7.1	8.0	12.2	8.0	14.4	17.1	18.8	24.9	29.1	29.1	35.3
Refrigerant		R407C										
Heating capacity	kW	8.74	9.25	15.3	9.78	17.64	20.92	23.07	30.88	36.12	35.56	43.77
Input power	kW	2.34	2.61	4.2	2.61	4.65	5.37	6.06	7.60	9.37	8.97	11.13
Current	A	10.77	12.02	22.6	4.5	8.08	9.47	11.31	13.8	20.06	17.17	22.59
Mass flow	g/s	41.47	41.7	70.0	45.79	82.41	97.27	116.24	147.47	171.94	167.63	207.25
Locked rotor amps	A	58.4	72.5	136.0	31.6	59	67	100	100	154.6	133	157
Rated load current	A	15.3	13.1	27.1	6.6	10.2	10	12.1	17.3	21.3	21.3	26.4
Max continuous current	A	17.7	17	38.0	7.1	12.6	12.1	15	16.8	26.3	25.2	28.5
Max operating current	A	21.4	18.3	29.3	9.3	14.3	14	17	24.2	29.8	29.8	37
Oil charge	Initial	L	0.739	0.739	1.57	0.739	1.567	1.774	1.893	3.253	3.253	3.371
	Replacement refill	L	0.562	0.621	1.45	0.621	1.449	1.656	1.774	3.135	3.135	3.253
Net weight	kg	22.23	22.23	30	22.23	29.94	38.56	40.82	59.87	59.87	59.87	64.86

Conditions: ET 5 °C, CT 55 °C, Superheat 5K Subcooling 8.3K

ZW KWP

R410A

ZW Series		ZW28KWP	ZW31KWP	ZW42KWP	ZW51KWP	ZW42KWP	ZW54KWP	ZW72KWP	ZW83KWP
Nominal power	HP	2.5	3	3.5	4.5	3.5	4.5	6	7
Motor type		PFZ				TFD			
Displacement	m³/hr	4.6	5.1	6.9	8.4	6.9	8.9	11.7	13.4
Refrigerant		R410A							
Heating capacity	kW	8.68	9.31	12.79	15.2	12.83	16.36	21.43	24.72
Input power	kW	2.38	2.61	3.55	4.1	3.52	4.45	5.75	6.50
Current	A	11.05	12.1	16.98	20.2	5.95	7.57	9.91	11.8
Mass flow	g/s	55.56	59.58	66.9	97.3	66.9	75.04	137.19	158.32
Locked rotor amps	A	53	67	128	126.0	43	51.5	75	101
Rated load current	A	11.4	15	21.7	22.5	6.8	8.6	12.5	13.6
Max continuous current	A	13.7	17.1	26	31.5	8	10.3	16	15
Max operating current	A	16	21	30.4	28.0	9.5	12.1	17.5	19
Oil charge	Initial	L	0.769	0.739	1.242	1.24	1.242	1.242	1.774
	Replacement refill	L	0.651	0.621	1.124	1.12	1.124	1.124	1.656
Net weight	kg	19.96	22.77	33.07	34	30.39	33.02	39.92	39.46

Conditions: ET 5 °C, CT 55 °C, Superheat 5K Subcooling 8.3K

ZW HSP

R410A

ZW Series			ZW100HSP	ZW102HSP	ZW126HSP
Nominal power	HP		4.5	4.5	6
Motor type			TFP		
Displacement	m ³ /hr		8.9	8.9	11
Refrigerant			R410A		
Heating capacity	kW		19.6	18.9	24.3
Input power	kW		5.0	4.9	6.3
Current	A		9.5	8.2	11.8
Mass flow	g/s		80.8	76.0	99.1
Locked rotor amps	A		73	70.0	91
Rated load current	A		8.7	9.0	14.3
Max continuous current	A		12.2	12.6	20
Max operating current	A		11.2	11.0	13.7
Oil charge	Initial	L	1.24	1.56	1.89
	Replacement refill	L	1.12	1.44	1.77
Net weight	kg		33	33	40

Conditions: ET 5 °C, CT 55 °C, Superheat 5K Subcooling 8.3K

ZW HAP

R410A

ZW Series			ZW165HAP	ZW166HAP	ZW188HAP	ZW420HAP	ZW465HAP
Nominal power	HP		4.5	4.5	5	10	12
Motor type			TFP				
Displacement	m ³ /hr		8.9	8.9	10.1	21.6	24.9
Refrigerant			R410A				
Heating capacity	kW		16.7	16.66	18.4	40.3	46.2
Input power	kW		4.4	4.36	4.9	10.4	11.7
Current	A		8	7.73	8.7	23.4	23.7
Mass flow	g/s		77.9	78.65	89.6	199.1	230.2
Locked rotor amps	A		57	62	74	156	157
Rated load current	A		8.8	8.1	10.6	24.9	27.7
Max continuous current	A		12.3	9.7	14.8	34.8	38.8
Max operating current	A		9.5	11.3	11.9	29.4	33
Oil charge	Initial	L	1.24	1.242	1.69	3.37	3.37
	Replacement refill	L	1.12	1.124	1.57	3.25	3.25
Net weight	kg		32	34.75	40	65	65

Conditions: ET 5 °C, CT 55 °C, Superheat 5K Subcooling 8.3K

Specifications 60 Hz

ZW KS(E) ZW KA(E)

R22/R407C

ZW Series			ZW34KS	ZW34KSE	ZW61KSE	ZW108KS	ZW108KSE	ZW61KA	ZW61KAE
Nominal power	HP		3	3	5	9	9	5	5
Motor type			TF7						
Displacement	m ³ /hr		9.7	9.7	17.3	20.6	30.0	30.0	17.3
Refrigerant			R22	R407C	R407C	R22	R407C	R22	R407C
Heating capacity	kW		13.5	13.0	23.8	20.4	43.1	42.8	21.2
Input power	kW		3.4	3.3	5.9	4.8	10.0	10.2	5.6
Current	A		6.0	6.0	10.1	8.8	18.5	18.7	8.1
Mass flow	g/s		58.0	53.0	100.0	92.6	185.0	180.0	99.0
Locked rotor amps	A		50.0	50.0	65.6	94.3	147.0	147.0	65.6
Rated load current	A		6.4	6.6	12.4	12.5	23.2	24.3	12.4
Max continuous current	A		8.9	9.3	17.3	17.5	32.5	34.0	17.3
Max operating current	A		7.0	7.1	14.4	12.7	24.5	24.9	14.4
Oil charge	Initial	L	0.74	0.74	1.57	1.89	3.25	3.25	1.57
	Replacement refill	L	0.62	0.62	1.45	1.77	3.14	3.14	1.45
Net weight			kg	22	22	30	40	62	30

Conditions: ET 5 °C, CT 55 °C, Superheat 5K Subcooling 8.3K

ZW HSP ZW KWP

R410A

ZW Series			ZW430HSP	ZW42KWP	ZW54KWP	ZW72KWP	ZW83KWP
Nominal power	HP		20	3.5	4.5	6	7
Motor type			TE7	TFD			
Displacement	m ³ /hr		44.15	8.4	10.7	14.1	16.2
Refrigerant			R410A				
Heating capacity	kW		81.51	15.5	19.8	26.3	30.1
Input power	kW		21.12	4.2	5.2	6.8	7.8
Current	A		33.2	5.6	7.3	9.8	11.8
Mass flow	g/s		396.2	71.6	93.2	168.4	193.0
Locked rotor amps	A		255.5	41.0	52.0	75.0	100.0
Rated load current	A		44.29	6.9	8.6	12.5	13.6
Max continuous current	A		62.0	9.7	12.1	17.5	19.0
Max operating current	A		42.2	8.0	10.3	16.0	15.0
Oil charge	Initial	L	4.44	1.24	1.24	1.77	1.77
	Replacement refill	L	4.2	1.12	1.12	1.66	1.66
Net weight			kg	91.6	33	33	40

Conditions: ET 5 °C, CT 55 °C, Superheat 5K Subcooling 8.3K

Residential heating



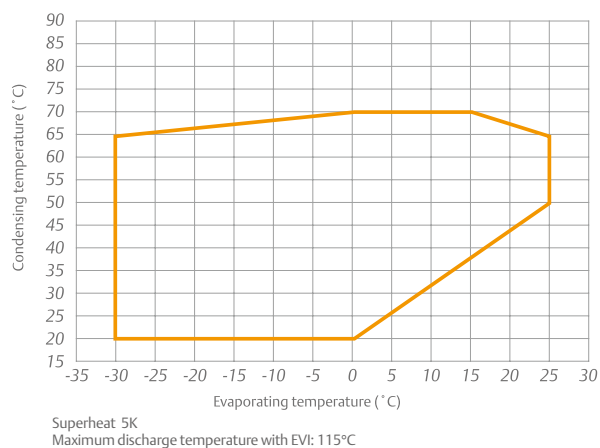
Compressor model

Refrigerant	Compressor model	Power supply	EVI	Rated heating capacity (kW)	Performance table	Specification
R22	ZW30KS-PFS-582	1Φ/220 V/50 Hz	√	10.1	P33	P37
	ZW34KS-PFS-582		√	11.6	P33	P37
	ZW42KS-PFS-522		√	14.7	P33	P37
	ZW52KA-PFS-522			15.8	P35	P37
	ZW52KS-PFS-522		√	17.8	P33	P37
	ZW68KS-PFS-522		√	23.4	P33	P37
R407C	ZW30KSE-PFS-582		√	9.8	P34	P37
	ZW34KSE-PFS-582		√	11.8	P34	P37
	ZW42KSE-PFS-522		√	14.3	P34	P37
	ZW52KAE-PFS-522			15.3	P35	P37
	ZW52KSE-PFS-522		√	17.3	P34	P37
	ZW68KSE-PFS-522		√	22.9	P34	P37
R410A	ZW059HSP-PFS-582		√	11.1	P36	P39
	ZW096HSP-PFS-522		√	18.3	P36	P39
	ZW126HSP-PFS-522		√	23.5	P36	P39

Operating envelopes

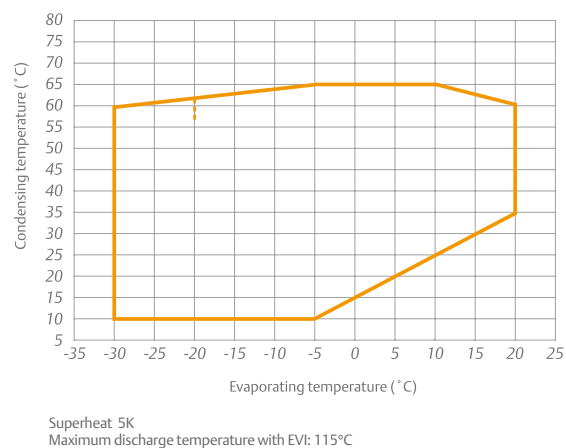
ZW30KS(E), ZW42KS(E)
ZW52KS(E), ZW68KS(E)

R22/R407C



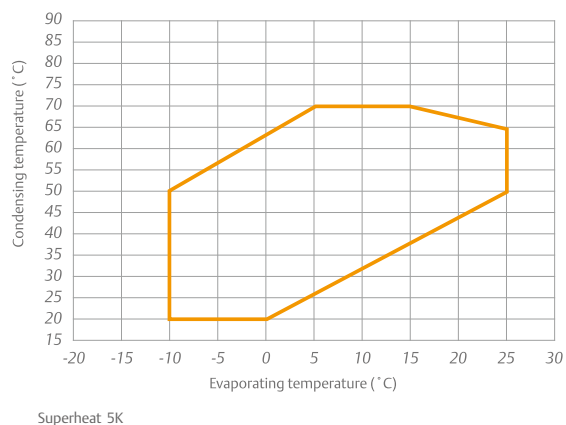
ZW059HSP, ZW096HSP, ZW126HSP

R410A



ZW52KA(E)

R22/R407C



ZW KS Heating capacity

R22 50 Hz

Q = Heating capacity (kW) P = Input power (kW) Single phase

220V

Model		Condensing temperature°C	Evaporating temperature°C									
			-30	-25	-20	-15	-10	-5	0	5	10	15
ZW30KS	Q	65	4.62	5.20	5.85	6.57	7.36	8.25	9.22	10.30	11.48	12.78
		55	4.28	4.85	5.49	6.22	7.04	7.96	8.99	10.12	11.38	12.68
		45	4.07	4.63	5.29	6.04	6.90	7.86	8.95	10.16	11.50	12.98
		35	3.89	4.47	5.14	5.93	6.83	7.65	9.01	10.30	11.73	
		25	3.66	4.25	4.96	5.79	6.74	7.83	9.07			
	P	65	2.86	2.94	3.00	3.06	3.10	3.14	3.15	3.16	3.14	3.11
		55	2.37	2.41	2.44	2.47	2.50	2.52	2.53	2.53	2.51	2.48
		45	1.99	2.00	2.01	2.03	2.04	2.05	2.05	2.05	2.04	2.02
		35	1.68	1.67	1.66	1.67	1.68	1.68	1.69	1.70	1.70	
		25	1.39	1.37	1.36	1.36	1.36	1.38	1.40			
ZW34KS	Q	65				7.44	8.34	9.33	10.43			
		55	4.77	5.52	6.31	7.16	8.09	9.12	10.27	11.57	13.02	
		45	4.56	5.29	6.08	6.94	7.89	8.95	10.14	11.49	13.00	
		35	4.48	5.18	5.96	6.81	7.77	8.85	10.07	11.46	13.02	
		25	4.56	5.23	5.98	6.82	7.78	8.87	10.11			
	P	65				3.74	3.83	3.87	3.86			
		55	2.43	2.64	2.78	2.88	2.93	2.96	2.97	2.96	2.96	
		45	2.00	2.10	2.16	2.19	2.21	2.21	2.22	2.24	2.28	
		35	1.80	1.79	1.76	1.72	1.69	1.67	1.67	1.70	1.77	
		25	1.88	1.75	1.61	1.50	1.40	1.35	1.33			
ZW42KS	Q	65	6.56	7.47	8.42	9.44	10.55	11.78	13.15	14.69	16.43	18.39
		55	6.12	7.07	8.08	9.15	10.32	11.62	13.06	14.68	16.49	18.54
		45	5.59	6.62	7.69	8.85	10.11	11.49	13.03	14.75	16.67	18.82
		35	4.85	5.97	7.15	8.41	9.78	11.28	12.94	14.78	16.83	
		25	3.77	5.01	6.32	7.71	9.21	10.85	12.65			
	P	65	4.70	4.61	4.55	4.51	4.50	4.50	4.51	4.52	4.53	4.54
		55	3.48	3.49	3.52	3.56	3.60	3.65	3.68	3.71	3.72	3.71
		45	2.71	2.80	2.89	2.98	3.06	3.13	3.17	3.19	3.18	3.13
		35	2.09	2.24	2.38	2.50	2.60	2.67	2.70	2.69	2.63	
		25	1.37	1.56	1.72	1.85	1.95	1.99	1.99			
ZW52KS	Q	65	7.93	9.03	10.18	11.41	12.75	14.24	15.90	17.77	19.87	22.24
		55	7.40	8.55	9.76	11.06	12.48	14.05	15.80	17.76	19.95	22.42
		45	6.76	8.00	9.30	10.70	12.22	13.90	15.76	17.84	20.17	22.77
		35	5.86	7.22	8.64	10.17	11.82	13.64	15.65	17.88	20.36	
		25	4.56	6.06	7.64	9.32	11.14	13.12	15.31			
	P	65	5.69	5.67	5.64	5.61	5.58	5.55	5.52	5.49	5.47	5.46
		55	4.26	4.34	4.41	4.46	4.49	4.50	4.50	4.49	4.47	4.44
		45	3.28	3.45	3.59	3.70	3.77	3.81	3.82	3.81	3.77	3.70
		35	2.48	2.73	2.92	3.06	3.16	3.21	3.22	3.18	3.10	
		25	1.60	1.90	2.12	2.29	2.39	2.43	2.41			
ZW68KS	Q	65	8.98	10.64	12.42	14.32	16.35	18.52	20.83	23.29	25.90	28.66
		55	8.65	10.32	12.13	14.08	16.19	18.44	20.86	23.43	26.18	29.11
		45	8.27	9.95	11.79	13.79	15.96	18.29	20.80	23.50	26.38	29.46
		35	7.98	9.67	11.53	13.57	15.79	18.20	20.81	23.62	26.63	
		25	7.91	9.59	11.47	13.55	15.82	18.31	21.00			
	P	65	6.20	6.70	7.05	7.27	7.39	7.41	7.37	7.28	7.16	7.04
		55	4.87	5.27	5.55	5.72	5.81	5.84	5.82	5.78	5.74	5.71
		45	3.89	4.20	4.41	4.54	4.62	4.66	4.68	4.70	4.74	4.83
		35	3.19	3.43	3.58	3.69	3.76	3.82	3.88	3.98	4.12	
		25	2.73	2.90	3.01	3.10	3.18	3.27	3.39			

Note: Superheat 5K, Subcooling 8.3K

EVI Controls:

DLT<115°C, Economizer superheat 6K

DLT>115°C, Adjust the injection volume to control discharge temperature ≤115°C

ZW KSE Heating capacity

R407C 50 Hz

Q = Heating capacity (kW) P = Input power (kW) Single phase

220V

Model		Condensing temperature°C	Evaporating temperature°C									
			-30	-25	-20	-15	-10	-5	0	5	10	15
ZW30KSE	Q	65	4.32	4.95	5.58	6.24	6.96	7.77	8.70	9.77	11.06	12.54
		55	3.91	4.56	5.23	5.93	6.71	7.60	8.62	9.80	11.18	12.79
		45	3.62	4.29	4.98	5.73	6.56	7.51	8.61	9.89	11.83	13.11
		35	3.42	4.10	4.81	5.60	6.48	7.50	8.67	10.04	11.63	
		25	3.28	3.97	4.70	5.52	6.44	7.52	8.76			
	P	65	2.85	2.97	3.05	3.11	3.15	3.17	3.18	3.19	3.19	3.20
		55	2.35	2.42	2.47	2.50	2.51	2.52	2.52	2.51	2.51	2.52
		45	1.93	1.97	2.00	2.01	2.01	2.00	1.99	1.99	1.99	2.01
		35	1.59	1.61	1.62	1.62	1.61	1.60	1.60	1.60	1.61	
		25	1.32	1.33	1.33	1.32	1.31	1.31	1.31			
ZW34KSE	Q	65				7.06	7.85	8.73	9.73			
		55	5.17	5.90	6.66	7.47	8.37	9.37	10.49	11.76	13.20	
		45	4.79	5.57	6.39	7.28	8.25	9.34	10.57	11.95	13.52	
		35	4.31	5.11	5.97	6.91	7.94	9.10	10.41	11.89	13.56	
		25	4.16	4.97	5.84	6.81	7.88	9.09	10.46			
	P	65				3.37	3.36	3.35	3.35			
		55	2.96	3.02	3.05	3.06	3.07	3.07	3.07	3.07	3.08	
		45	2.34	2.41	2.45	2.48	2.50	2.50	2.51	2.51	2.53	
		35	1.57	1.66	1.72	1.76	1.78	1.80	1.81	1.81	1.83	
		25	0.81	0.91	0.99	1.04	1.07	1.09	1.10			
ZW42KSE	Q	65	6.58	7.35	8.18	9.09	10.12	11.29	12.63	14.18	15.96	18.01
		55	5.33	6.37	7.44	8.58	9.80	11.15	12.66	14.34	16.24	18.38
		45	4.72	5.95	7.19	8.47	9.81	11.26	12.84	14.58	16.51	18.66
		35	4.42	5.76	7.08	8.42	9.80	11.27	12.84	14.55	16.44	
		25	4.08	5.44	6.76	8.08	9.43	10.83	12.31			
	P	65	4.7	4.67	4.65	4.64	4.63	4.63	4.62	4.62	4.61	4.59
		55	3.65	3.64	3.63	3.63	3.64	3.65	3.66	3.66	3.66	3.65
		45	2.92	2.91	2.91	2.92	2.93	2.94	2.95	2.96	2.97	2.96
		35	2.40	2.39	2.38	2.39	2.39	2.40	2.41	2.41	2.41	
		25	1.98	1.96	1.94	1.93	1.93	1.92	1.91			
ZW52KSE	Q	65	7.96	8.89	9.89	10.99	12.23	13.65	15.27	17.15	19.30	21.78
		55	6.44	7.70	9.00	10.37	11.86	13.49	15.31	17.34	19.64	22.22
		45	5.71	7.20	8.69	10.24	11.87	13.62	15.53	17.63	19.97	22.57
		35	5.35	6.96	8.56	10.18	11.86	13.63	15.53	17.60	19.88	
		25	4.94	6.58	8.18	9.77	11.40	13.09	14.89			
	P	65	5.69	5.65	5.63	5.61	5.61	5.60	5.60	5.59	5.58	5.55
		55	4.42	4.40	4.39	4.40	4.41	4.42	4.43	4.44	4.43	4.42
		45	3.54	3.52	3.52	3.53	3.55	3.56	3.58	3.59	3.59	3.58
		35	2.91	2.89	2.88	2.89	2.90	2.91	2.92	2.92	2.92	
		25	2.40	2.37	2.35	2.34	2.33	2.33	2.32			
ZW68KSE	Q	65	9.00	10.47	12.06	13.79	15.68	17.74	20.00	22.47	25.16	28.07
		55	7.53	9.29	11.18	13.20	15.37	17.70	20.21	22.90	25.77	28.85
		45	6.99	8.95	11.01	13.19	15.49	17.93	20.50	23.23	26.13	29.21
		35	7.28	9.32	11.41	13.58	15.83	18.19	20.66	23.26	26.01	
		25	8.56	10.41	12.28	14.20	16.19	18.27	20.44			
	P	65	6.19	6.78	7.20	7.47	7.60	7.62	7.56	7.43	7.28	7.11
		55	5.11	5.49	5.72	5.84	5.87	5.84	5.78	5.71	5.65	5.63
		45	4.20	4.37	4.44	4.45	4.42	4.38	4.36	4.36	4.43	4.57
		35	3.66	3.64	3.58	3.52	3.46	3.44	3.47	3.57	3.77	
		25	3.95	3.63	3.39	3.23	3.14	3.15	3.26			

Note: Superheat 5K, Subcooling 8.3K

EVI Controls:

DLT<115°C, Economizer superheat 6K

DLT>115°C, Adjust the injection volume to control discharge temperature ≤115°C

ZW KA Heating capacity

R22 50 Hz

Q = Heating capacity (kW) P = Input power (kW) Single phase

220V

Model		Condensing temperature°C	Evaporating temperature°C					
			-10	-5	0	5	10	15
ZW52KA	Q	65				15.41	17.64	20.08
		55		11.87	13.59	15.77	18.28	21.00
		45	10.41	11.79	13.77	16.21	18.98	21.96
		35	10.50	12.12	14.33	17.00	20.00	
		25	11.28	13.11	15.53			
	P	65				5.06	5.04	5.02
		55		4.18	4.24	4.23	4.19	4.16
		45	3.44	3.58	3.62	3.58	3.52	3.47
		35	2.94	3.05	3.06	3.00	2.90	
		25	2.39	2.46	2.43			

Note: Superheat 5K, Subcooling 8.3K

ZW KAE Heating capacity

R407C 50 Hz

Q = Heating capacity (kW) P = Input power (kW) Single phase

220V

Model		Condensing temperature°C	Evaporating temperature°C					
			-10	-5	0	5	10	15
ZW52KAE	Q	65				14.76	17.01	19.60
		55		11.31	13.12	15.30	17.85	20.76
		45	9.83	11.44	13.46	15.89	18.73	21.96
		35	10.03	11.82	14.05	16.73	19.84	
		25	10.67	12.63	15.07			
	P	65				5.18	5.19	5.18
		55		4.14	4.19	4.20	4.20	4.19
		45	3.35	3.41	3.43	3.44	3.44	3.45
		35	2.78	2.81	2.83	2.84	2.87	
		25	2.27	2.30	2.33			

Note: Superheat 5K, Subcooling 8.3K

ZW HSP Heating capacity

R410A 50 Hz

Q = Heating capacity (kW) P = Input power (kW) Single phase

220V

Model		Condensing temperature°C	Evaporating temperature°C										
			-30	-25	-20	-15	-10	-5	0	5	10	15	20
ZW059HSP	Q	65						5.35	5.94	7.06	8.77		
		55	7.29	6.78	6.43	6.31	6.48	7.01	7.97	9.42	11.43	14.06	17.39
		45	5.53	5.86	6.30	6.90	7.73	8.86	10.35	12.28	14.70	17.69	21.31
		35	3.92	4.84	5.81	6.87	8.11	9.58	11.35	13.50	16.08	19.16	22.81
		25	3.46	4.72	5.96	7.23	8.62	10.17	11.97	14.08	16.56	19.48	
	P	65						3.99	3.96	3.96	3.97		
		55	3.83	3.74	3.66	3.59	3.53	3.48	3.45	3.44	3.44	3.47	3.51
		45	2.90	2.85	2.81	2.77	2.73	2.69	2.66	2.63	2.61	2.61	2.61
		35	2.21	2.21	2.20	2.19	2.17	2.14	2.11	2.08	2.04	2.01	1.98
		25	1.70	1.75	1.78	1.80	1.80	1.79	1.76	1.72	1.67	1.61	
ZW096HSP	Q	65						15.30	16.83	18.51	20.34		
		55	9.06	10.01	11.06	12.24	13.56	15.01	16.60	18.35	20.27	22.34	24.60
		45	8.25	9.26	10.39	11.66	13.06	14.62	16.33	18.20	20.24	22.47	24.87
		35	7.70	8.75	9.93	11.25	12.73	14.37	16.17	18.14	20.30	22.64	25.18
		25	7.27	8.34	9.55	10.91	12.44	14.13	16.00	18.05	20.29	22.73	
	P	65						6.39	6.41	6.40	6.37		
		55	5.32	5.41	5.50	5.57	5.63	5.67	5.68	5.67	5.63	5.55	5.44
		45	4.21	4.30	4.37	4.43	4.47	4.50	4.50	4.48	4.42	4.33	4.20
		35	3.41	3.48	3.53	3.58	3.61	3.62	3.60	3.56	3.49	3.39	3.25
		25	2.80	2.85	2.89	2.92	2.93	2.92	2.88	2.82	2.73	2.61	
ZW126HSP	Q	65						19.18	21.17	23.39	25.87		
		55	11.41	12.62	13.96	15.45	17.12	18.99	21.09	23.42	26.02	28.90	32.09
		45	10.45	11.78	13.25	14.89	16.71	18.75	21.02	23.53	26.33	29.41	32.82
		35	9.82	11.21	12.76	14.49	16.41	18.56	20.94	23.59	26.52	29.76	33.32
		25	9.37	10.78	12.35	14.11	16.08	18.28	20.72	23.45	26.46	29.79	
	P	65						7.98	8.00	7.98	7.94		
		55	6.51	6.69	6.84	6.95	7.03	7.08	7.09	7.07	7.02	6.95	6.84
		45	5.21	5.34	5.44	5.52	5.57	5.59	5.60	5.57	5.53	5.47	5.39
		35	4.20	4.28	4.35	4.40	4.44	4.45	4.45	4.44	4.41	4.38	4.33
		25	3.39	3.44	3.49	3.52	3.55	3.56	3.57	3.58	3.58	3.57	

Note: Superheat 5K, Subcooling 8.3K

EVI Controls:

DLT<115°C, Economizer superheat 6K

DLT>115°C, Adjust the injection volume to control discharge temperature ≤115°C

Specifications 50 Hz

ZW KS ZW KA

R22

ZW Series			ZW30KS	ZW34KS	ZW42KS	ZW52KS	ZW68KS	ZW52KA
Nominal power	HP		2.5	3	3.5	4.5	6	4.5
Motor type			PFS					
Displacement	m³/hr		7.1	8.0	10.0	12.2	16.2	12.2
Refrigerant			R22					
Heating capacity	kW		10.1	11.6	14.7	17.8	23.4	15.8
Input power	kW		2.5	3.0	3.7	4.5	5.8	4.2
Current	A		11.5	13.7	21.5	24.3	28.9	22.9
Mass flow	g/s		43.5	47.8	60.1	14.6	97.8	74.0
Locked rotor amps	A		58.4	72.5	136.0	136.0	175.0	136.0
Rated load current	A		13.6	13.9	24.3	25.0	33.2	26.4
Max continuous current	A		19.0	19.4	34.0	35.0	46.5	36.9
Max operating current	A		17.2	17.7	28.0	30.8	43.0	28.2
Oil charge	Initial	L	0.74	0.74	1.57	1.57	1.89	1.57
	Replacement refill	L	0.62	0.62	1.45	1.45	1.77	1.45
Net weight	kg		22	22	30	30	44	30

Conditions: ET 5 °C, CT 55 °C, Superheat 5K Subcooling 8.3K

ZW KSE ZW KAE

R407C

ZW Series			ZW30KSE	ZW34KSE	ZW42KSE	ZW52KSE	ZW68KSE	ZW52KAE
Nominal power	HP		2.5	3	3.5	4.5	6	4.5
Motor type			PFS					
Displacement	m³/hr		7.1	8.0	10.0	12.2	16.2	12.2
Refrigerant			R407C					
Heating capacity	kW		9.8	11.8	14.3	17.3	22.9	15.5
Input power	kW		2.5	3.1	3.7	4.4	5.7	4.2
Current	A		11.5	14.1	21.1	23.8	28.3	22.6
Mass flow	g/s		41.0	54.8	57.5	71.3	93.5	70.0
Locked rotor amps	A		58.4	72.5	136.0	136.0	175.0	136.0
Rated load current	A		15.3	14.1	29.1	25.0	33.2	27.1
Max continuous current	A		21.4	19.8	40.8	35.0	46.5	38.0
Max operating current	A		17.7	18.3	28.0	32.0	43.0	29.3
Oil charge	Initial	L	0.74	0.74	1.57	1.57	1.89	1.57
	Replacement refill	L	0.62	0.62	1.45	1.45	1.77	1.45
Net weight	kg		22	22	30	30	44	30

Conditions: ET 5 °C, CT 55 °C, Superheat 5K Subcooling 8.3K

ZW Series			ZW059HSP	ZW096HSP	ZW126HSP
Nominal power	HP		3	5	6
Motor type			PFS		
Displacement	m³/hr		5.1	8.3	11.0
Refrigerant			R407C		
Heating capacity	kW		11.1	18.3	23.5
Input power	kW		3.00	4.92	6.26
Current	A		14.1	25.5	32.0
Mass flow	g/s		42.8	71.2	93.6
Locked rotor amps	A		72.5	140.0	175.0
Rated load current	A		17.1	28.6	34.3
Max continuous current	A		24.0	40.1	48.0
Max operating current	A		18	32	40
Oil charge	Initial	L	0.74	1.57	1.89
	Replacement refill	L	0.62	1.45	1.77
Net weight	kg		22	35	44

Conditions: ET 5 °C, CT 55 °C, Superheat 5K Subcooling 8.3K

District heating



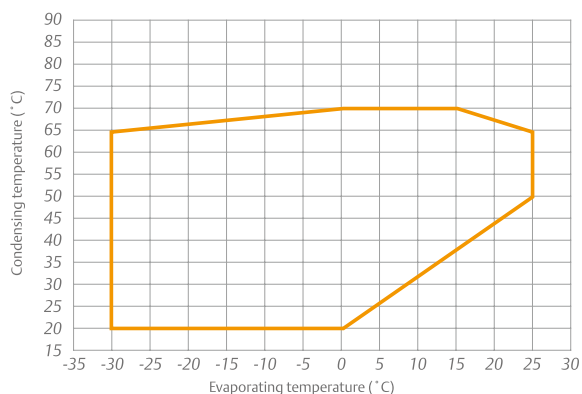
Compressor model

Refrigerant	Compressor model	Power supply	EVI	Rated heating capacity (kW)	Performance table	Specification
R22	ZW61KS-TFP-522	3Φ/380 V/50 Hz	✓	20.3	P42	P46
	ZW79KS-TFP-522		✓	25.8	P42	P46
	ZW108KS-TFP-522		✓	35.9	P42	P46
	ZW124KS-TFP-52E		✓	42.6	P43	P46
	ZW125KS-TFP-522		✓	41.6	P43	P46
	ZW150KS-TFP-522		✓	50.4	P43	P46
R407C	ZW150KSE-TFP-522		✓	49.8	P44	P46
R410A	ZW258HSP-TFP-522		✓	47.0	P45	P46
	ZW286HSP-TFP-522		✓	48.8	P45	P46
	ZW430HSP-TEP-522		✓	79.4	P45	P46
	ZW520HSP-TEP-522		✓	95.4	P45	P46

Operating envelopes

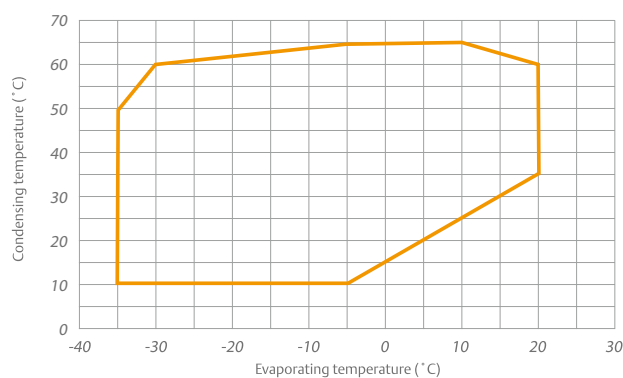
ZW61KS, ZW79KS, ZW124KS, ZW125KS, ZW150KS(E)

R22/R407C



ZW258HSP, ZW286HSP, ZW430HSP, ZW520HSP

R410A



ZW KS Heating capacity

R22 50 Hz

Q = Heating capacity (kW) P = Input power (kW) Three phase

380V

Model		Condensing temperature°C	Evaporating temperature°C									
			-30	-25	-20	-15	-10	-5	0	5	10	15
ZW61KS	Q	65	9.95	10.86	11.91	13.13	14.54	16.17	18.04	20.18	22.61	25.35
		55	8.85	9.91	11.12	12.51	14.09	15.90	17.95	20.28	22.90	25.84
		45	8.15	9.34	10.68	12.20	13.92	15.87	18.08	20.56	23.34	26.45
		35	7.74	9.01	10.45	12.07	13.91	15.97	18.29	20.90	23.81	
		25	7.46	8.80	10.30	12.00	12.90	16.05	18.46			
	P	65	5.79	5.82	5.88	5.95	6.03	6.10	6.17	6.22	6.23	6.21
		55	4.47	4.50	4.56	4.64	4.73	4.82	4.89	4.95	4.98	4.98
		45	3.51	3.54	3.59	3.67	3.76	3.86	3.94	4.01	4.05	4.05
		35	2.80	2.82	2.87	2.95	3.04	3.13	3.22	3.29	3.33	
		25	2.24	2.26	2.30	2.37	2.45	2.54	2.62			
ZW79KS	Q	65	12.11	13.64	15.25	16.98	18.87	20.97	23.32	25.97	28.95	32.31
		55	10.23	12.06	13.95	15.94	18.08	20.41	22.97	25.81	28.97	32.49
		45	9.24	11.26	13.32	15.48	17.75	20.21	22.87	25.80	29.03	32.60
		35	8.77	10.88	13.01	15.21	17.53	20.00	22.66	25.57	28.76	
		25	8.47	10.56	12.66	14.80	17.04	19.42	21.98			
	P	65	7.51	7.41	7.38	7.42	7.51	7.64	7.81	7.99	8.18	8.37
		55	5.86	5.80	5.82	5.88	6.00	6.14	6.31	6.48	6.65	6.81
		45	4.62	4.61	4.66	4.76	4.89	5.05	5.21	5.38	5.53	5.66
		35	8.77	10.88	13.01	15.21	17.53	20.00	22.66	25.57	28.76	
		25	2.77	2.86	2.99	3.15	3.33	3.50	3.67			
ZW108KS	Q	65		15.86	18.87	21.99	25.26	28.67	32.22	35.92	39.76	43.76
		55		15.42	18.66	21.82	25.28	28.64	32.20	35.88	39.66	43.55
		45		15.83	19.20	22.65	26.15	29.72	33.36	37.07	40.85	44.71
		35		16.23	19.90	27.31	27.31	31.05	34.83	38.64	42.48	
		25		15.75	19.77	27.76	27.76	31.74	35.72			
	P	65		9.83	10.02	10.32	10.32	10.40	10.43	10.39	10.39	10.10
		55		7.81	7.97	8.21	8.21	8.28	8.31	8.29	8.21	8.06
		45		6.33	6.45	6.64	6.64	6.71	6.74	6.73	6.68	6.56
		35		5.19	5.27	5.42	5.42	5.48	5.52	5.52	5.49	
		25		4.20	4.24	4.35	4.35	4.40	4.45			

Note: Superheat 5K, Subcooling 8.3K

EVI Controls:

DLT<115°C, Economizer superheat 6K

DLT>115°C, Adjust the injection volume to control discharge temperature ≤115°C

ZW KS Heating capacity

R22 50 Hz

Q = Heating capacity (kW) P = Input power (kW) Three phase

380V

Model		Condensing temperature°C	Evaporating temperature°C									
			-30	-25	-20	-15	-10	-5	0	5	10	15
ZW124KS	Q	65	17.86	19.98	22.53	25.52	28.92	32.74	36.95	41.55	46.54	51.90
		55	17.20	19.58	22.38	25.57	29.15	33.11	37.45	42.15	47.20	52.59
		45	17.06	19.63	22.58	25.90	29.59	33.62	38.01	42.72	47.76	53.12
		35	15.64	18.32	21.35	24.73	28.44	32.48	36.83	41.49	46.44	
		25	15.13	17.85	20.89	22.25	26.91	29.87	32.12	36.64		
	P	65	11.10	11.49	11.83	12.13	12.39	12.62	12.82	13.01	13.18	13.36
		55	8.86	9.22	9.54	9.81	10.05	10.26	10.46	10.64	10.82	11.00
		45	7.38	7.69	7.96	8.19	8.40	8.59	8.76	8.93	9.09	9.27
		35	6.13	6.38	6.59	6.77	6.93	7.07	7.21	7.34	7.48	
		25	5.59	5.76	5.90	6.02	6.11	6.20	6.29	6.37		
ZW125KS	Q	65	18.02	19.96	22.40	25.31	28.67	32.45	36.63	41.18	46.07	51.27
		55	16.90	19.15	21.86	25.02	28.60	32.57	36.91	41.58	46.58	51.86
		45	16.35	18.73	21.56	24.80	28.44	32.43	36.77	41.42	46.35	51.55
		35	15.95	18.32	21.10	24.26	27.79	31.65	35.82	40.27	44.98	
		25	15.32	17.50	20.07	22.99	26.25	29.81	33.65	37.75		
	P	65	10.74	10.87	11.04	11.24	11.46	11.7	11.95	12.21	12.46	12.71
		55	7.89	8.23	8.58	8.93	9.27	9.60	9.91	10.19	10.45	10.66
		45	6.14	6.60	7.03	7.44	7.81	8.14	8.42	8.65	8.81	8.91
		35	5.12	5.61	6.04	6.42	6.73	6.97	7.13	7.21	7.20	
		25	4.47	4.90	5.24	5.50	5.66	5.72	5.67	5.51		
ZW150KS	Q	65	19.42	23.37	27.31	31.35	35.59	40.11	45.00	50.38	56.32	62.93
		55	20.21	23.80	27.47	31.32	35.45	39.93	44.88	50.38	56.53	63.42
		45	20.04	23.41	26.94	30.73	34.87	39.45	44.58	50.33	56.82	64.13
		35	19.47	22.75	26.27	30.12	34.41	39.22	44.64	50.79	57.74	
		25	19.03	22.35	25.99	30.04	34.6	39.76	45.62	52.28		
	P	65	11.54	12.2	12.81	13.36	13.87	14.35	14.8	15.23	15.65	16.05
		55	9.62	10.15	10.64	11.09	11.53	11.94	12.34	12.74	13.14	13.55
		45	8.10	8.52	8.93	9.31	9.69	10.07	10.45	10.84	11.25	11.68
		35	6.81	7.15	7.49	7.83	8.18	8.54	8.92	9.33	9.78	
		25	5.56	5.85	6.15	6.47	6.81	7.18	7.59	8.04		

Note: Superheat 5K, Subcooling 8.3K

EVI Controls:

DLT<115°C, Economizer superheat 6K

DLT>115°C, Adjust the injection volume to control discharge temperature ≤115°C

ZW KSE Heating capacity

R407C 50 Hz

Q = Heating capacity (kW) P = Input power (kW) Three phase

380V

Model		Condensing temperature°C	Evaporating temperature°C									
			-30	-25	-20	-15	-10	-5	0	5	10	15
ZW150KSE	Q	65	16.31	20.07	24.08	28.39	33.02	38.03	43.46	49.35	55.75	62.69
		55	17.89	21.20	24.86	28.89	33.36	38.28	43.73	49.72	56.31	63.54
		45	17.90	20.94	24.42	28.37	32.84	37.87	43.51	49.78	56.75	64.45
		35	17.14	20.09	23.58	27.63	32.28	37.60	43.60	50.35	57.88	
		25	16.40	19.46	23.13	27.45	32.48	38.26	44.82	52.21		
	P	65	11.01	11.72	12.39	13.01	13.61	14.16	14.69	15.19	15.67	16.13
		55	9.04	9.64	10.21	10.74	11.24	11.72	12.17	12.60	13.02	13.42
		45	7.64	8.14	8.61	9.05	9.47	9.88	10.26	10.64	11.01	11.37
		35	6.46	6.86	7.25	7.62	7.97	8.31	8.64	8.97	9.30	
		25	5.17	5.49	5.80	6.10	6.40	6.68	6.97	7.26		

Note: Superheat 5K, Subcooling 8.3K

EVI Controls:

DLT<115°C, Economizer superheat 6K

DLT>115°C, Adjust the injection volume to control discharge temperature ≤115°C

ZW HSP Heating capacity

R410A 50 Hz

Q = Heating capacity (kW) P = Input power (kW) Three phase

380V

Model	Condensing temperature°C	Evaporating temperature°C											
		-35	-30	-25	-20	-15	-10	-5	0	5	10	15	20
ZW258HSP	Q	65						38.20	42.21	46.76	51.93		
		60		22.07	24.64	27.41	30.45	33.84	37.65	41.95	46.82	52.32	58.54
		50	17.21	19.86	22.68	25.74	29.12	32.89	37.12	41.89	47.26	53.31	57.24
		40	16.25	18.94	21.85	25.05	28.60	32.59	37.08	42.14	47.85	54.29	56.44
		30	16.42	19.00	21.83	25.00	28.56	32.60	37.18	42.38	48.27	56.92	60.41
	P	65						15.08	15.20	15.35	15.44		
		60		14.79	13.75	13.16	12.91	12.92	13.10	13.34	13.57	13.68	13.78
		50	12.02	11.65	11.05	10.96	10.62	10.40	10.88	11.30	11.59	11.76	11.91
		40	9.87	9.50	9.46	9.34	9.15	8.56	8.91	9.27	9.58	9.77	9.94
		30	7.99	7.78	7.67	7.48	7.21	7.08	7.59	7.94	8.25	8.62	8.96
ZW286HSP	Q	65						40.55	43.37	46.76	51.07		
		60		23.30	28.25	32.15	35.35	38.19	41.00	44.13	47.93	52.72	13.78
		50	16.17	22.26	27.11	31.08	34.49	37.70	41.05	44.87	49.51	55.31	11.91
		40	15.08	20.98	25.80	29.89	33.59	37.24	41.18	45.75	51.30	58.17	9.94
		30	15.15	20.92	25.77	30.04	34.08	38.23	42.83	48.22	54.74	62.74	8.96
	P	65						15.76	15.96	16.16	16.40		
		60		12.55	13.03	13.39	13.67	13.88	14.05	14.21	14.38	14.59	14.85
		50	9.55	10.11	10.53	10.85	11.07	11.23	11.35	11.46	11.57	11.73	11.94
		40	7.76	8.28	8.67	8.95	9.13	9.26	9.35	9.42	9.50	9.62	9.80
		30	6.23	6.74	7.11	7.37	7.54	7.65	7.72	7.78	7.84	7.95	8.11
ZW430HSP	Q	65						62.07	68.98	76.93	86.13		
		60		34.67	39.68	44.76	50.10	55.92	62.43	69.82	78.32	88.13	99.45
		50	27.45	32.69	37.90	43.28	49.05	55.42	62.59	70.76	80.15	90.97	103.42
		40	26.87	31.92	37.06	42.49	48.42	55.07	62.63	71.31	81.33	92.89	106.20
		30	28.53	33.12	37.92	43.13	48.95	55.61	63.29	72.22	82.60	94.63	108.53
	P	65						24.40	24.40	24.40	24.44		
		60		20.30	20.84	21.19	21.41	21.53	21.59	21.62	21.67	21.78	21.98
		50	15.29	15.95	16.41	16.73	16.92	17.04	17.11	17.19	17.31	17.50	17.80
		40	12.58	13.10	13.44	13.64	13.76	13.81	13.85	13.91	14.03	14.25	14.60
		30	11.02	11.33	11.49	11.54	11.51	11.45	11.39	11.38	11.45	11.63	11.98
ZW520HSP	Q	65						72.09	80.54	90.35	101.75		
		60		41.65	47.07	52.75	58.90	65.78	73.60	82.60	93.00	105.05	118.97
		50	34.87	40.64	46.54	52.80	59.64	67.31	76.03	86.04	97.56	110.82	126.06
		40	32.63	38.66	44.93	51.66	59.09	67.44	76.95	87.84	100.36	114.73	131.18
		30	28.63	34.82	41.34	48.43	56.32	65.25	75.43	87.11	100.52	115.88	133.43
	P	65						29.92	29.90	29.95	30.11		
		60		25.97	26.10	26.15	26.15	26.12	26.11	26.13	26.23	26.43	26.76
		50	19.82	20.17	20.41	20.56	20.66	20.73	20.82	20.94	21.13	21.42	21.85
		40	15.55	16.02	16.37	16.64	16.85	17.04	17.24	17.47	17.77	18.17	18.70
		30	11.24	11.84	12.32	12.72	13.06	13.37	13.69	14.05	14.47	14.99	15.64

Note: Superheat 5K, Subcooling 8.3K

EVI Controls:

DLT<115°C, Economizer superheat 6K

DLT>115°C, Adjust the injection volume to control discharge temperature ≤115°C

Specifications 50 Hz

ZW KS

R22

ZW Series		ZW61KS	ZW79KS	ZW108KS	ZW124KS	ZW125KS	ZW150KS
Nominal power	HP	5	7	9	10	10	13
Motor type		TFP					
Displacement	m³/hr	14.4	18.8	24.9	29.2	29.1	35.3
Refrigerant		R22					
Heating capacity	kW	20.3	25.8	35.9	42.6	41.6	50.4
Input power	kW	5.0	6.5	8.3	10.6	10.2	12.7
Current	A	8.5	11.9	16.1	21.4	18.6	24.8
Mass flow	g/s	88.2	110.6	154	174.1	173.5	210.4
Locked rotor amps	A	59.0	90.5	133.0	155.0	133.0	157.0
Rated load current	A	10.1	12.1	19.3	20.4	20.1	25.6
Max continuous current	A	14.2	17.0	27.0	28.6	28.1	35.8
Max operating current	A	11.8	13.6	20.5	26.8	27.2	31.5
Oil charge	Initial	L	1.57	1.89	3.25	3.25	3.37
	Replacement refill	L	1.45	1.77	3.14	3.14	3.25
Net weight	kg	30	41	60	62	60	65

Conditions: ET 5 °C, CT 55 °C
Superheat 5K, Subcooling 8.3K

ZW KSE

R407C

ZW HSP

R410A

ZW Series		ZW150KSE
Nominal power	HP	13
Motor type		TFP
Displacement	m³/hr	35.3
Refrigerant		R407C
Heating capacity	kW	49.8
Input power	kW	12.6
Current	A	24.5
Mass flow	g/s	204
Locked rotor amps	A	157
Rated load current	A	26.6
Max continuous current	A	37.3
Max operating current	A	31.4
Oil charge	Initial	L 3.37
	Replacement refill	L 3.25
Net weight	kg	65

Conditions: ET 5 °C, CT 55 °C
Superheat 5K, Subcooling 8.3K

ZW Series		ZW258HSP	ZW286HSP	ZW430HSP	ZW520HSP
Nominal power	HP	11	13	20	25
Motor type		TFP		TEP	
Displacement	m³/hr	21.6	24.9	36.6	45.7
Refrigerant		R410A			
Heating capacity	kW	47	48.8	79.4	95.4
Input power	kW	12.2	12.9	19.3	23.4
Current	A	25.2	26.4	33.9	41.7
Mass flow	g/s	184.8	227	329.8	402.0
Locked rotor amps	A	156.4	157	256.0	279.0
Rated load current	A	24.9	27.7	40.5	48.4
Max continuous current	A	34.8	38.8	54.0	64.5
Max operating current	A	29.4	33	41.3	51.6
Oil charge	Initial	L 3.37	3.37	4.44	4.44
	Replacement refill	L 3.25	3.25	4.2	4.2
Net weight	kg	65	65	94	95

Conditions: ET 5 °C, CT 55 °C
Superheat 5K, Subcooling 8.3K

Industrial heating



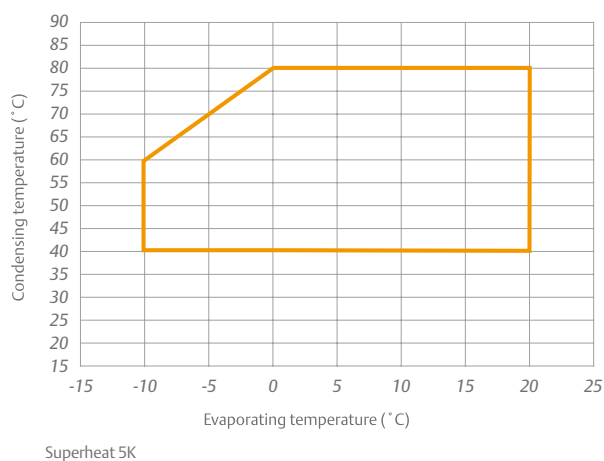
Compressor model

Refrigerant	Compressor model	Power supply	EVI	Rated heating capacity (kW)	Performance table	Specification
R134a	ZWD61KAE-TFD-532	3Φ/380-420 V/50 Hz, 3Φ/460 V/60 Hz		12.2	P49	P53
	ZWD72KAE-TFD-532			14.7	P49	P53
	ZWD81KAE-TFD-532			16.1	P49	P53
	ZW61KBC-TFP-522	3Φ/380 V/50 Hz		13.0	P50	P53
	ZW72KBC-TFP-522			15.5	P50	P53
	ZW79KBC-TFP-522			16.6	P50	P53
	ZW125KBE-TFP-522			29.1	P51	P53
	ZW150KBE-TFP-522			35.3	P51	P53
	ZW330KBE-TFP-522			64.4	P51	P53
	ZW79KAE-TFP-522			16.1	P48	P53
	ZW79KSE-TFP-522		√	17.4	P48	P53
	ZW72KSE-TF7-522	3Φ/380 V/60 Hz	√	20.4	P52	P54
	ZW61KBC-TFM-522	3Φ/380-420V/50 Hz		13.0	P50	P53
	ZW72KBC-TFM-522			15.5	P50	P53
	ZW79KAE-TFM-522			16.1	P48	P53
	ZW125KBE-TFM-522			29.1	P51	P53
	ZW150KBE-TFM-522			35.3	P51	P53

Operating envelopes

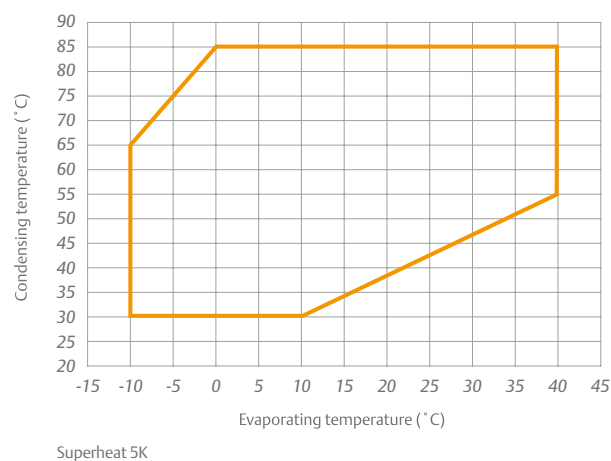
ZW79KAE, ZW79KSE, ZWD61KAE,
ZWD72KAE, ZWD81KAE

R134a



ZW61KBC, ZW72KBC, ZW79KBC,
ZW125KBE, ZW150KBE, ZW330KBE

R134a



ZW KSE Heating capacity

R134a 50 Hz

Q = Heating capacity (kW) P = Input power (kW) Three phase

380V

Model		Condensing temperature°C	Evaporating temperature°C						
			-10	-5	0	5	10	15	20
ZW79KSE	Q	80			15.17	16.78	18.65	20.83	23.35
		75			15.06	16.80	18.83	21.18	23.89
		70		13.41	15.02	16.89	19.07	21.59	24.49
		65		13.32	15.03	17.03	19.36	22.05	25.14
		60	11.72	13.27	15.09	17.22	19.69	22.54	25.82
		55	11.62	13.26	15.18	17.42	20.04	23.05	26.51
		50	11.54	13.25	15.27	17.64	20.39	23.57	27.20
		45	11.46	13.25	15.37	17.85	20.74	24.07	27.88
		40	11.38	13.24	15.45	18.04	21.06	24.55	28.53
	P	80			6.39	6.53	6.70	6.88	7.07
		75			5.81	5.97	6.15	6.33	6.51
		70		5.18	5.33	5.50	5.67	5.84	5.99
		65		4.77	4.93	5.08	5.23	5.38	5.50
		60	4.27	4.41	4.56	4.69	4.81	4.91	4.98
		55	3.96	4.08	4.19	4.29	4.37	4.41	4.43
		50	3.65	3.74	3.81	3.86	3.87	3.85	3.79
		45	3.31	3.35	3.37	3.36	3.30	3.20	3.05
		40	2.91	2.90	2.85	2.76	2.62	2.43	2.17

Note: Superheat 5K, Subcooling 8.3K

ZW KAE Heating capacity

R134a 50 Hz

Q = Heating capacity (kW) P = Input power (kW) Three phase

380V

Model		Condensing temperature°C	Evaporating temperature°C						
			-10	-5	0	5	10	15	20
ZW79KAE	Q	80			12.58	14.40	16.52	18.97	21.75
		75			12.72	14.67	16.95	19.55	22.50
		70		11.12	12.91	14.99	17.40	20.15	23.25
		65		11.24	13.14	15.35	17.88	20.77	24.01
		60	9.72	11.41	13.41	15.72	18.38	21.39	24.76
		55	9.84	11.61	13.70	16.11	18.88	22.00	25.50
		50	9.99	11.83	14.00	16.51	19.37	22.60	26.21
		45	10.16	12.07	14.31	16.90	19.84	23.17	26.89
		40	10.35	12.31	14.62	17.27	20.29	23.70	27.51
	P	80			5.83	6.03	6.24	6.45	6.65
		75			5.33	5.54	5.75	5.96	6.15
		70		4.69	4.88	5.09	5.31	5.51	5.68
		65		4.28	4.48	4.69	4.89	5.08	5.23
		60	3.75	3.92	4.12	4.32	4.51	4.68	4.81
		55	3.44	3.61	3.80	3.98	4.16	4.30	4.39
		50	3.17	3.34	3.51	3.68	3.82	3.93	3.99
		45	2.95	3.10	3.25	3.40	3.51	3.59	3.60
		40	2.77	2.90	3.03	3.14	3.22	3.25	3.22

Note: Superheat 5K, Subcooling 8.3K

ZWD KAE Heating capacity

Q = Heating capacity (kW) P = Input power (kW) Three phase

R134a 50 Hz

380-420V

Model		Condensing temperature°C	Evaporating temperature°C						
			-10	-5	0	5	10	15	20
ZWD61KAE	Q	80			9.41	10.92	12.59	14.45	16.54
		75			9.64	11.17	12.89	14.83	17.01
		70		8.43	9.84	11.43	13.22	15.24	17.53
		65		8.59	10.05	11.69	13.56	15.68	18.09
		60	7.42	8.74	10.25	11.97	13.93	16.16	18.71
		55	7.52	8.89	10.46	12.27	14.34	16.70	19.39
		50	7.61	9.04	10.69	12.60	14.79	17.29	20.14
		45	7.70	9.20	10.95	12.97	15.29	17.95	20.98
		40	7.79	9.38	11.24	13.39	15.86	18.69	21.90
	P	80			4.56	4.70	4.84	4.96	5.05
		75			4.12	4.25	4.38	4.48	4.55
		70		3.61	3.74	3.87	3.98	4.07	4.11
		65		3.29	3.41	3.53	3.63	3.71	3.74
		60	2.89	3.00	3.13	3.24	3.34	3.40	3.42
		55	2.63	2.75	2.88	2.99	3.09	3.14	3.15
		50	2.40	2.53	2.66	2.78	2.87	2.92	2.92
		45	2.19	2.33	2.47	2.59	2.68	2.73	2.72
		40	1.99	2.14	2.29	2.42	2.51	2.56	2.55
ZWD72KAE	Q	80			11.94	13.71	15.71	18.01	20.65
		75			12.07	13.81	15.95	18.26	21.08
		70		10.33	12.15	13.98	16.06	18.46	21.24
		65		10.69	12.34	14.23	16.40	18.92	21.85
		60	9.38	11.02	12.51	14.48	16.76	19.41	22.50
		55	9.37	10.91	12.68	14.74	17.14	19.95	23.21
		50	9.41	11.01	12.86	15.03	17.57	20.54	23.99
		45	9.46	11.12	13.07	15.36	18.05	21.20	24.86
		40	9.51	11.26	13.31	15.74	18.60	21.94	25.83
	P	80			5.55	5.57	5.59	5.60	5.62
		75			5.26	5.28	5.30	5.32	5.35
		70		5.01	5.02	5.03	5.04	5.05	5.07
		65		4.53	4.54	4.54	4.55	4.56	4.59
		60	4.17	4.31	4.10	4.11	4.12	4.14	4.18
		55	3.69	3.70	3.71	3.72	3.74	3.77	3.83
		50	3.32	3.33	3.34	3.36	3.40	3.45	3.54
		45	2.97	2.99	3.01	3.04	3.10	3.18	3.29
		40	2.63	2.66	2.70	2.75	2.83	2.94	3.08
ZWD81KAE	Q	80			12.58	14.40	16.52	18.97	21.75
		75			12.71	14.67	16.95	19.55	22.50
		70		11.12	12.90	14.99	17.40	20.15	23.25
		65		11.24	13.14	15.35	17.88	20.77	24.01
		60	9.72	11.41	13.41	15.72	18.38	21.39	24.76
		55	9.84	11.61	13.70	16.11	18.88	22.00	25.50
		50	9.99	11.83	14.00	16.51	19.37	22.60	26.21
		45	10.16	12.07	14.31	16.90	19.84	23.17	26.89
		40	10.35	12.31	14.62	17.27	20.29	23.70	27.51
	P	80			5.83	6.03	6.24	6.45	6.65
		75			5.33	5.54	5.75	5.96	6.15
		70		4.69	4.88	5.09	5.31	5.51	5.68
		65		4.28	4.48	4.69	4.89	5.08	5.23
		60	3.75	3.92	4.12	4.32	4.51	4.68	4.81
		55	3.44	3.61	3.79	3.98	4.15	4.30	4.39
		50	3.17	3.33	3.51	3.68	3.82	3.93	3.99
		45	2.95	3.10	3.25	3.40	3.51	3.59	3.60
		40	2.77	2.90	3.03	3.14	3.22	3.25	3.22

Note: Superheat 5K, Subcooling 8.3K

ZW KBC Heating capacity

Q = Heating capacity (kW) P = Input power (kW) Three phase

R134a 50 Hz

380V

Model	Condensing temperature°C	Evaporating temperature°C										
		-10	-5	0	5	10	15	20	25	30	35	40
ZW61KBC	Q	85		9.66	10.78	12.17	13.83	15.79	18.06	20.67	23.64	26.98
		80		9.63	10.91	12.45	14.27	16.38	18.80	21.56	24.66	28.14
		75		9.68	11.10	12.78	14.73	16.98	19.53	22.41	25.65	29.25
		70		8.46	9.78	11.34	13.14	15.21	17.57	20.23	23.23	26.57
		60	7.29	8.61	10.13	11.88	13.87	16.13	18.67	21.51	24.68	28.18
		50	7.44	8.90	10.55	12.43	14.54	16.92	19.57	22.52	25.78	
		40	7.68	9.21	10.93	12.86	15.03	17.45	20.15			
	P	85		5.44	5.41	5.40	5.43	5.53	5.71	6.01	6.45	7.05
		80		4.85	4.86	4.88	4.93	5.03	5.23	5.53	5.96	6.56
		75		4.34	4.37	4.41	4.48	4.60	4.80	5.10	5.53	6.11
		70		3.80	3.89	3.95	4.01	4.09	4.22	4.42	4.73	5.15
		60	2.83	3.04	3.19	3.30	3.39	3.50	3.64	3.85	4.14	4.54
		50	2.28	2.55	2.75	2.89	3.01	3.14	3.28	3.48	3.76	
		40	2.01	2.33	2.56	2.74	2.88	3.01	3.15			
ZW72KBC	Q	85		11.65	13.09	14.77	16.74	19.02	21.67	24.70	28.17	32.11
		80		11.57	13.14	14.97	17.10	19.57	22.40	25.65	29.34	33.52
		75		11.59	13.29	15.26	17.55	20.18	23.20	26.65	30.55	34.96
		70		10.12	11.69	13.51	15.62	18.05	20.85	24.05	27.69	31.80
		60	8.81	10.32	12.07	14.11	16.46	19.17	22.28	25.81	29.82	34.32
		50	9.04	10.68	12.59	14.82	17.39	20.35	23.73	27.57	31.90	
		40	9.33	11.07	13.11	15.50	18.26	21.43	25.06			
	P	85		6.46	6.56	6.67	6.80	6.95	7.13	7.33	7.56	7.83
		80		5.72	5.81	5.93	6.06	6.20	6.38	6.57	6.80	7.06
		75		5.08	5.18	5.29	5.42	5.57	5.74	5.93	6.15	6.41
		70		4.44	4.54	4.64	4.76	4.89	5.04	5.20	5.40	5.61
		60	3.49	3.60	3.71	3.82	3.94	4.08	4.23	4.39	4.58	4.79
		50	2.88	3.00	3.13	3.25	3.38	3.53	3.68	3.85	4.04	
		40	2.43	2.57	2.71	2.85	2.99	3.15	3.31			
ZW79KBC	Q	85		11.68	13.62	15.73	18.06	20.67	23.63	27.00	30.83	35.19
		80		11.99	13.97	16.15	18.59	21.35	24.49	28.08	32.17	36.82
		75		12.34	14.37	16.64	19.21	22.13	25.47	29.29	33.66	38.62
		70		10.83	12.72	14.82	17.19	19.90	23.00	26.56	30.63	35.29
		60	9.69	11.47	13.47	15.76	18.39	21.43	24.94	28.98	33.61	38.89
		50	10.05	11.93	14.11	16.65	19.61	23.04	27.02	31.61	36.85	
		40	10.02	12.07	14.49	17.34	20.69	24.59	29.10			
	P	85		6.14	6.38	6.62	6.87	7.11	7.36	7.62	7.88	8.15
		80		5.71	5.93	6.16	6.39	6.61	6.84	7.07	7.31	7.55
		75		5.31	5.52	5.73	5.93	6.14	6.35	6.56	6.78	7.00
		70		4.73	4.93	5.13	5.32	5.51	5.70	5.89	6.09	6.28
		60	3.90	4.09	4.27	4.44	4.60	4.76	4.92	5.08	5.23	5.39
		50	3.38	3.54	3.70	3.85	3.99	4.13	4.26	4.38	4.51	
		40	2.94	3.10	3.24	3.37	3.49	3.60	3.71			

Note: Superheat 5K, Subcooling 10K

ZW KBE Heating capacity

R134a 50 Hz

Q = Heating capacity (kW) P = Input power (kW) Three phase

380V

Model	Condensing temperature°C	Evaporating temperature°C										
		-10	-5	0	5	10	15	20	25	30	35	40
ZW125KBE	Q	85		18.18	21.20	24.48	28.10	32.17	36.78	42.01	47.98	54.76
		80		18.66	21.74	25.13	28.93	33.22	38.11	43.69	50.06	57.30
		75		19.21	22.37	25.90	29.89	34.44	39.64	45.59	52.38	60.11
		70		16.85	19.79	23.06	26.76	30.97	35.80	41.34	47.68	54.92
		60	15.08	17.85	20.97	24.53	28.62	33.36	38.82	45.10	52.30	60.52
		50	15.64	18.57	21.96	25.91	30.51	35.86	42.06	49.19	57.35	
		40	15.59	18.78	22.55	26.99	32.20	38.27	45.29			
	P	85		9.11	9.47	9.83	10.19	10.56	10.93	11.31	11.69	12.09
		80		8.47	8.81	9.14	9.48	9.81	10.15	10.50	10.85	11.21
		75		7.88	8.19	8.50	8.81	9.12	9.43	9.74	10.06	10.39
		70		7.02	7.32	7.61	7.90	8.18	8.47	8.75	9.04	9.33
		60	5.79	6.07	6.33	6.59	6.83	7.07	7.30	7.54	7.77	8.00
		50	5.01	5.26	5.50	5.72	5.93	6.13	6.32	6.51	6.69	
		40	4.37	4.60	4.81	5.00	5.18	5.35	5.51			
ZW150KBE	Q	85		22.13	25.81	29.80	34.21	39.16	44.77	51.14	58.41	66.67
		80		22.72	26.47	30.59	35.22	40.44	46.40	53.19	60.94	69.76
		75		23.38	27.23	31.53	36.39	41.93	48.26	55.50	63.77	73.17
		70		20.51	24.09	28.08	32.57	37.70	43.58	50.32	58.04	66.85
		60	18.36	21.73	25.52	29.86	34.85	40.61	47.26	54.91	63.67	73.67
		50	19.04	22.60	26.73	31.54	37.14	43.66	51.20	59.88	69.82	
		40	18.98	22.86	27.45	32.85	39.19	46.58	55.14			
	P	85		11.28	11.73	12.17	12.62	13.07	13.53	14.00	14.48	14.97
		80		10.49	10.91	11.32	11.74	12.15	12.57	13.00	13.44	13.89
		75		9.75	10.14	10.53	10.91	11.29	11.67	12.06	12.46	12.87
		70		8.70	9.07	9.43	9.78	10.13	10.48	10.83	11.19	11.55
		60	7.17	7.51	7.84	8.15	8.46	8.75	9.04	9.33	9.62	9.91
		50	6.21	6.52	6.80	7.08	7.34	7.59	7.82	8.06	8.29	
		40	5.41	5.69	5.95	6.19	6.41	6.62	6.82			
ZW330KBE	Q	85		48.83	56.43	64.88	74.44	85.36	97.92	112.37	128.97	147.98
		80		50.12	58.05	66.95	77.08	88.71	102.08	117.48	135.15	155.35
		75		51.34	59.62	68.99	79.71	92.05	106.26	122.62	141.37	162.78
		70		44.85	52.53	61.16	71.02	82.34	95.41	110.48	127.81	147.66
		60	39.43	46.68	54.88	64.28	75.14	87.73	102.31	119.13	138.46	160.55
		50	41.00	48.59	57.37	67.59	79.53	93.44	109.58	128.22	149.61	
		40	42.77	50.76	60.18	71.30	84.37	99.66	117.44			
	P	85		23.32	24.57	25.88	27.22	28.57	29.87	31.11	32.24	33.23
		80		21.71	22.88	24.12	25.41	26.70	27.97	29.18	30.30	31.30
		75		20.19	21.28	22.46	23.69	24.95	26.19	27.39	28.50	29.50
		70		17.86	18.75	19.78	20.90	22.09	23.32	24.52	25.72	26.84
		60	14.87	15.43	16.18	17.09	18.12	19.25	20.42	21.62	22.81	23.95
		50	12.97	13.40	14.04	14.86	15.83	16.91	18.06	19.27	20.48	
		40	11.50	11.81	12.37	13.13	14.05	15.12	16.28			

Note: Superheat 5K, Subcooling 10K

ZW KSE Heating capacity

R134a 60 Hz

Q = Heating capacity (kW) P = Input power (kW) Three phase

380V

Model		Condensing temperature°C	Evaporating temperature°C					
			-10	-5	0	5	10	15
ZW72KSE	Q	75			17.92	20.21	22.62	25.07
		70			17.82	20.23	22.78	25.40
		65		15.52	17.76	20.28	22.96	25.73
		60	13.46	15.40	17.72	20.34	23.15	26.05
		55	13.31	15.30	17.69	20.39	23.31	26.36
		50	13.17	15.20	17.65	20.43	23.46	26.63
		40	12.87	14.94	17.49	20.41	23.62	27.01
		30	12.45	14.53	17.14	20.16	23.51	
	P	75			6.76	7.01	7.22	7.40
		70			6.15	6.37	6.57	6.74
		65		5.37	5.59	5.79	5.97	6.15
		60	4.69	4.88	5.07	5.25	5.43	5.61
		55	4.28	4.43	4.59	4.76	4.94	5.13
		50	3.89	4.01	4.16	4.32	4.50	4.71
		40	3.19	3.27	3.39	3.55	3.76	4.02
		30	2.56	2.62	2.74	2.93	3.19	

Note: Superheat 5K, Subcooling 8.3K

EVI Controls:

DLT<115°C, Economizer superheat 6K

DLT>115°C, Adjust the injection volume to control discharge temperature ≤115°C

Specifications 50 Hz

ZW(D) KSE KAE

R134a

ZW Series		ZW79KSE	ZW79KAE	ZWD61KAE	ZWD72KAE	ZWD81KAE
Nominal power	HP	7	7	5	6	7
Motor type		TFP		TFD		
Displacement	m³/hr	18.8	18.8	14.4	17.1	18.8
Refrigerant		R134a				
Heating capacity	kW	17.4	16.1	12.27	14.7	16.1
Input power	kW	4.3	4.0	2.99	3.7	4.0
Current	A	10.8	8.8	5.91	9.0	8.8
Mass flow	g/s	83.7	83.5	63.88	75.8	83.5
Locked rotor amps	A	90.5	100	64	70.0	100.0
Rated load current	A	14.6	12.1	10	10.0	12.1
Max continuous current	A	20.5	17.0	11	14.0	17.0
Max operating current	A	14.6	15.0	14	12.5	12.1
Oil charge	Initial	L	1.89	1.89	1.89	1.89
	Replacement refill	L	1.77	1.77	1.77	1.77
Net weight	kg	41	41	38.1	40	41

Conditions: ET 5 °C, CT 55 °C, Superheat 5K, Subcooling 8.3K

ZW Series		ZW61KBC	ZW72KBC	ZW79KBC	ZW125KBE	ZW150KBE	ZW330KBE
Nominal power	HP	5	6	7	10	12	25
Motor type		TFP					
Displacement	m ³ /hr	14.4	17.1	18.8	29.1	35.4	77.3
Refrigerant		R134a					
Heating capacity	kW	12.8	15.5	16.6	25.9	31.5	68.9
Input power	kW	4.4	5.3	5.7	8.5	10.5	22.5
Current	A	7.6	9.2	11.8	17.4	21.2	39.3
Mass flow	g/s	73.4	87.3	98	149.7	184.7	407.8
Locked rotor amps	A	58	74	100	133	157	310
Rated load current	A	11.5	11.9	12.7	21.3	24.3	50.1
Max continuous current	A	16.1	16.6	17.8	29.8	34	70.1
Max operating current	A	12.8	12.5	15.3	22.2	30	56.4
Oil charge	Initial	L	1.89	1.89	1.89	3.25	6.30
	Replacement refill	L	1.77	1.77	1.77	3.25	6.00
Net weight	kg	38	40	41	60	65	179

Conditions: ET 10 °C, CT 75 °C, Superheat 5K, Subcooling 10K

Specifications 60 Hz

ZW KS(E)

ZW Series			ZW72KSE		
Nominal power		HP	6		
Motor type			TF7		
Displacement		m³/hr	20.6		
Refrigerant			R134a		
Heating capacity		kW	20.4		
Input power		kW	4.8		
Current		A	8.8		
Mass flow		g/s	92.6		
Locked rotor amps		A	94.3		
Rated load current		A	12.5		
Max continuous current		A	17.5		
Max operating current		A	12.7		
Oil charge	Initial	L	1.89		
	Replacement refill	L	1.77		
Net weight		kg	40		

Conditions: ET 5 °C, CT 55 °C
Superheat 5K, Subcooling 8.3K

Variable speed series

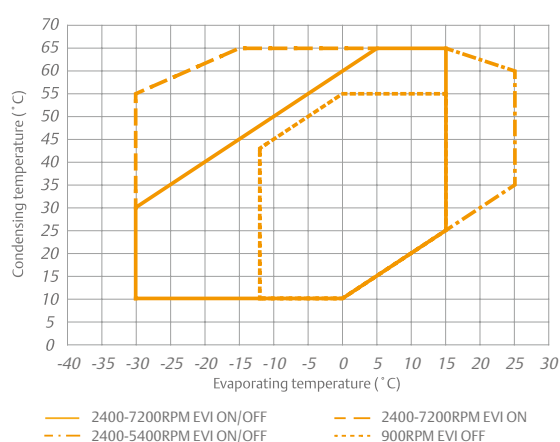
Compressor model

Refrigerant	Compressor model	Power supply	EVI	Rated heating capacity (kW)	Performance table	Specification
R410A	ZWW050SP-3X9-522	1Φ/220 V/50 Hz	√	30.0	-	P56
	VPW038DE-3X9-571		√	20.0	-	P56
	ZWW050SP-4X9-522	3Φ/380 V/50 Hz	√	30.0	-	P56
	VPW038DE-4X9-571		√	20.0	-	P56
	ZWW070SP-4X9-522		√	40.0	-	P56

Operating envelopes

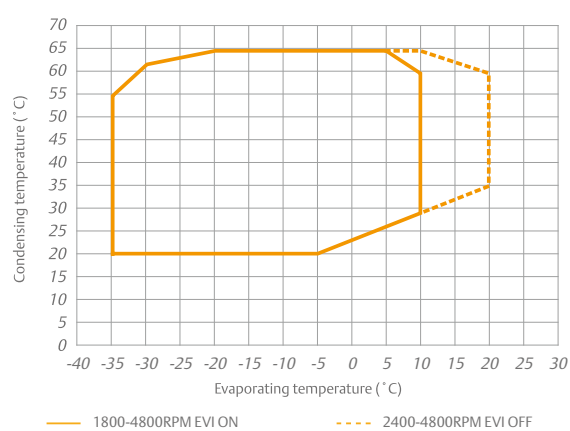
VPW038DE

R410A



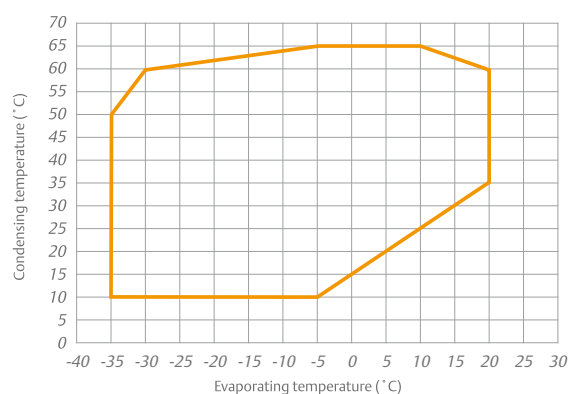
ZWW050SP

R410A



ZWW070SP*

R410A



* Preliminary parameters

Variable speed series		VPW038DE	ZWW050SP	VPW038DE	ZWW050SP	ZWW070*
Nominal power	HP	5	6	5	6	12
Motor type		3X9		4X9		
Inverter input rating	V	220		380		
Displacement	cc/Rev	38.3	47.7	38.3	47.7	70.0
Refrigerants		R410A				
EVI		√				
Speed range	RPM	900-7,200	1,800-4,800	900-7,200	1,800-4,800	1,200-7,200
Heating capacity @75 Hz	kW	14.4	21.3	14.4	21.3	32.7
Input power @75 Hz	kW	4.38	6.23	4.38	6.23	8.3
Current @75 Hz	A	14	13	14	13	20
COP @75 Hz	kW/ kW	3.3	3.4	3.3	3.4	3.9
Noise @75 Hz	dBA	75	77	75	77	77
Rated frequency	Hz	75				
Oil charge	ml	1,183	1,597	1,183	1,597	1,597
Net weight	kg	21	27	21	27	33

Conditions: ET -7° C, CT 50 ° C, Superheat 5K, Subcooling 8.3K
 * Preliminary parameter

General information

Technical data are correct at the time of printing. Updates may occur, and should you need confirmation of a specific value, please contact Emerson clearly stating the information required.

Emerson cannot be held responsible for errors in capacities, dimensions, etc., stated herein. Products, specifications and data in this literature are subject to change without notice.

The information given herein is based on data and tests which Emerson believes to be reliable and which are in accordance with today's technical knowledge. It is intended for use by persons having the appropriate technical knowledge and skill, at their own discretion and risk. Our products are designed and adapted for fixed locations. For mobile applications, failures may occur.

The suitability for this has to be assured from the plant manufacturer, which may include making appropriate tests.

Note:

The components listed in this catalogue are not released for use with caustic, poisonous or flammable substances. Emerson cannot be held responsible for any damage caused by using these substances.

About Emerson

Emerson (NYSE: EMR), headquartered in St. Louis, Missouri (USA), is a global technology and engineering company providing innovative solutions for customers in industrial, commercial, and residential markets. Our Emerson Automation Solutions business helps process, hybrid, and discrete manufacturers maximize production, protect personnel and the environment while optimizing their energy and operating costs. Our Emerson Commercial and Residential Solutions business helps ensure human comfort and health, protect food quality and safety, advance energy efficiency, and create sustainable infrastructure. For more information visit [Emerson.com](https://www.emerson.com).

Contact lists

Asia Pacific Headquarters

Suite 2503-10A, 25/F, Exchange Tower,
33 Wang Chiu Road, Kowloon Bay,
Kowloon, Hong Kong
Tel: (852) 2866 3108
Fax: (852) 2520 6227

Australia

356 Chisholm Road
Auburn NSW 2144, Australia
Tel: (612) 9795 2800
Fax: (612) 9738 1699

China - Beijing

Room 1203-1205,
North Wing Junefield Plaza Central Tower, No. 10
Xuan Wu Men Wai Street,
XiCheng District, Beijing, PRC
Tel: (8610) 5095 2188

China - Guangzhou

Guangzhou Office
Unit 2202B, 22/F, Leatop Plaza,
32 Zhujiang East Road, Tianhe Dist.,
Guangzhou 510623, PRC
Tel: (8620) 8595 5188

China - Shanghai

Shanghai Sales Office
7/F, Emerson Building, 1582 Gumei
Rd, Shanghai, PRC
Tel: (8621) 3338 7333

India - Mumbai

601-602, 6/F Delphi B-Wing,
Central Avenue, Hiranandani Business Park,
Powai, Mumbai 400076, India
Tel: (9122) 6786 0793
Fax: (9122) 6662 0500

India - Pune

Plot No. 23, Rajiv Gandhi Infotech Park,
Phase - II, Hinjewadi,
Pune 411 057, Maharashtra, India
Tel: (9120) 4200 2000
Fax: (9120) 4200 2099

Indonesia

23/F North Tower, Sampoerna Strategic Square--
Jl. Jend. Sudirman Kav. 45-46,
12930, Jakarta Indonesia
Tel: (6221) 2509 1400
(6221) 5793 1000
Fax: (6221) 5793 0883

Japan

No. 3-9-5 Shin-Yokohama,
Shin-yokohama Tosho Building, Kohoku-ku
Yokohama 222-0033 Japan
Tel: (8145) 475 6371
Fax: (8145) 475 3565

Malaysia

No. 1, Block A
Jalan SS13/5 Subang Jaya
Selangor 47500, Malaysia
Tel: (603) 5624 2888

Middle East & Africa

PO Box 26382
Jebel Ali Free Zone - South
Dubai, UAE
Tel: (9714) 811 8100
Fax: (9714) 886 5465

Philippines

10/F SM Cyber West Avenue, EDSA cor.
West Avenue, Barangay Bungad,
Diliman, Quezon City 1105, Philippines
Tel: (632) 689 7200 ext. 4395

Saudi Arabia

PO Box 34332
3620 Building 7874
Unit 1, 67th street 2nd Industrial City
Dammam, Saudi Arabia
Toll Free: 800 844 3426
Tel: (966) 3814 7560
Fax: (966) 3814 7570

South Korea

14/F, NIA Building,
Cheonggyecheon-ro,
Jung-gu 04520, Seoul Korea
Tel: (822) 3483 1500
Fax: (822) 592 7883

Taiwan

3/F, No. 122 Lane 235,
Pao Chiau Rd., XinDianv Dist.,
New Taipei City 23145, Taiwan (R.O.C.)
Tel: (8862) 8912 1360
Fax: (8862) 8912 1890

Thailand

34/F, Interlink Tower,
1558/133, Bangna Trad,
Bangkok 10260, Thailand
Tel: (662) 716 4700
Fax: (662) 751 4241

United Arab Emirates

PO Box 26382
Jebel Ali Free Zone
Dubai UAE
Toll Free: 800 441 3428
Tel: (971) 4811 8100
Fax: (971) 4886 5465

Vietnam

6/F, Melinh Point Tower,
2 Ngo Due Ke, District 1,
Ho Chi Minh City, Vietnam
Tel: (84) 908 009 189

Scan to visit:



Emerson Asia

Emerson.com

Asia 02 02 Issued 10/2020 Emerson is a trademark of Emerson Electric Co. or one of its affiliated companies.
©2020 Emerson Electric Co. All rights reserved.



@EmersonComResAP

EMERSON. CONSIDER IT SOLVED.™