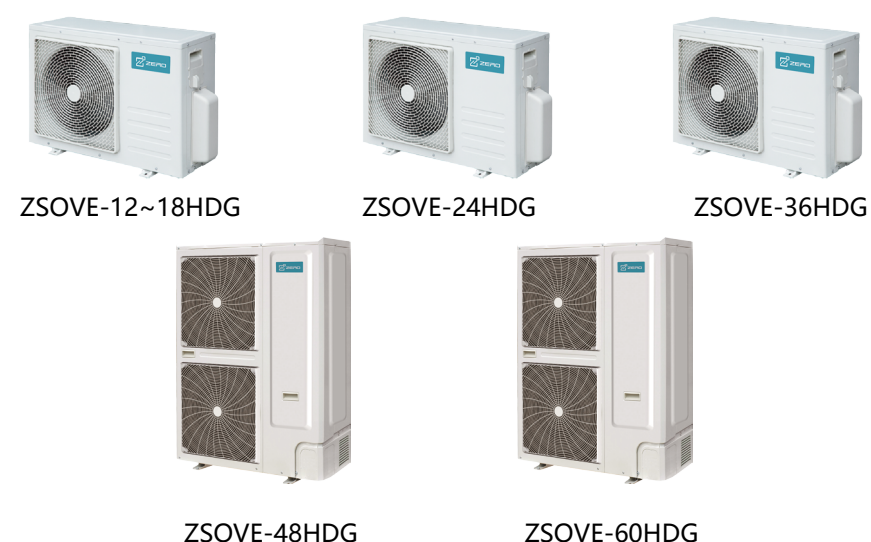


Side Discharge Light Commercial 60HZ Heat Pump, R410a INVERTER

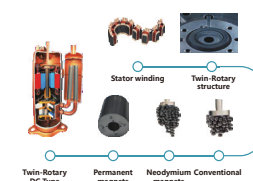
Heat Pump, R410a INVERTER

Capacity (Btu/h)	12000	18000	24000	36000	48000	60000	
TYPE							
SDCU							Wireless (Standard)
Floor ceiling							
Cassette							
Duct							Wired (Standard)
Air handler							

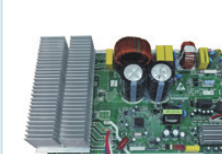
Heat Pump, R410a Outdoor Unit INVERTER



Features

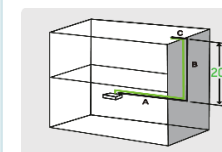


High efficiency twin rotary DC inverter compressor, system can operate in the best performance due to adjustable frequency.

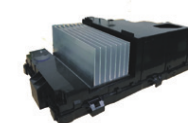


New integrated PCB has big contribution to AC fast reply and simple service. Fin type heat sink gives PCB a cool working condition(Single phase ODU).

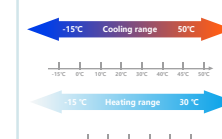
Multi-direction piping connection meets different requirement, convenient installation.



Long piping design, for 36K-60K Btu/h, the MAX pipe length is 65m, and height difference is 30m.



New electric control box material change from metal to plastic, not only reduce the weight, but also avoid the short circuit cause by the PCB touch the metal box (Single phase ODU).



Wide outdoor operation range, the cooling operation temperature is down to -15 degree.

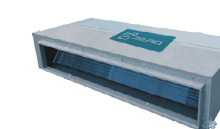
Heat Pump ,R410a Indoor unit, INVERTER



ZEVE-18~60HDG



ZCFVE-12~60HDG

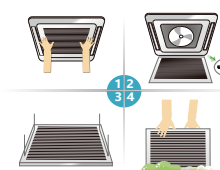


ZDVE-18~60HFG

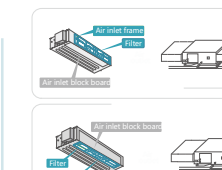


ZAVE-18~60HDG

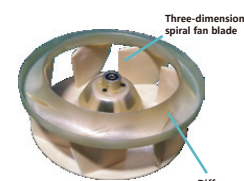
Features



Washable filter, convenient to install and maintain.



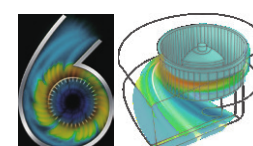
Air return method is optional by actual installation, from rear or from bottom.



Streamlined design and 3D spiral fan blade, reduces air resistance and operation noise



Auto-swing function, built-in two louver motor, vertical and horizontal air-flow adjustment.



Adopting aviation centrifugal fan blade with special air tunnel design, as well as fan motor anti-vibration measure, benefit to increase air flow and decrease the noise.



DC motor is standard, operating stably, lower energy consumption and high efficiency.

Heat Pump , R410a Inverter Outdoor unit(SDCU)

Model			ZSOVE-12HDG	ZSOVE-18HDG	ZSOVE-24HDG	ZSOVE-36HDG	ZSOVE-48HDG	ZSOVE-60HDG
Outdoor power supply		V/Ph/Hz	208~230V/1/60	208~230V/1/60	208~230V/1/60	208~230/1/60	208~230/1/60	208~230/1/60 208~230/3/60
Cooling	Capacity	KW	3.5	5.3	7	10.5	14	16
	Power input	W	1.15	1.8	2.45	3.4	4.5	6.5
	Current input	A	5	8	10.5	15	18	12.5
Heating	Capacity	KW	3.5	5.3	7	10.5	14	16
	Power input	W	0.88	1.65	2.05	2.8	4	5.5
	Current input	A	4	7.5	8.5	12.5	17.5	12
Max. input consumption		kW	1.2	1.9	2.5	3.5	4.6	6.7
Max. current		A	5.2	8.5	11	15.5	18.5	13
Compressor	Model		KNB092FEEMC	KNB102FEEMC	SNB140FULMC	SNB200FGMMC	ATM240D57UMT	MNB40FEQMC
	Type		DC/Rotary	DC/Rotary	DC/Twin-rotary	DC/Twin-rotary	DC/Twin-rotary	DC/Twin-rotary
	Frequency range	rps	10-120	10-120	10-120	10-120	10-120	10-120
	Refrigerant oil	ml	270	270	350	400	670	1100
Outdoor motor fan	Model		YDK-35-6P3-2	YDK-35-6P3-2	YDK-60-6P3-5	YDK-105-6P2	YDK-105-6P2	YDK-85-6P2-1
	Power output	W	35	35	60	105	105	85
	Speed	r/min	920	920	850	820	820	780
	Insulation class		B	B	B	B	B	B
Outdoor coil	Number of rows		1	2	2	2	2	2
	Tube pitch(a)xrow pitch(b)	mm	21×19.4	21×19.4	21×19.65	25×21.65	25×21.65	22×19.05
	Fin spacing	mm	1.6	1.6	1.6	1.6	1.6	1.6
	Fin type		Hydrophilic	Hydrophilic	Hydrophilic	Hydrophilic	Hydrophilic	Hydrophilic
	Tube outside dia. and type	mm	7	7	9.52	9.52	9.52	7.94
			Inner grooved	Inner grooved	Inner grooved	Inner grooved	Inner grooved	Inner grooved
	Coil length x height x width	mm	757×504×19.4	757×504×38.8	876×550×43.5	810×750×44	810×750×44	610*1280*38.1
	Number of circuits		2	3	3	4	4	7
Outdoor air flow(High speed)		m3/h	2200	2200	3200	4500	4500	5500
Outdoor noise level		dB(A)	≤ 51	≤ 53	≤ 54	≤ 58	≤ 58	≤ 58
Outdoor unit	Dimension(W*H*D)	mm	843×304×540	843×304×540	890×352×609	970×370×770	970×370×770	911×400×1330
	Packing(W*H*D)	mm	920×335×585	920×335×585	990×410×660	1100×470×880	1100×470×880	964×402×1445
	Net/Gross weight	kg	28.2/25.9	31.8/29.5	39.4/36.1	74/69	74/69	106.5/98.5
Refrigerant type/quantity		g	R410A/920	R410A/1150	R410A/1600	R410A/2500	R410A/3000	R410A/3600
Throttle part			Capillary	Capillary	Capillary	Capillary	Capillary	EXV
Design pressure		MPa	4.2/1.6	4.2/1.6	4.2/1.6	4.2/1.6	4.2/1.6	4.2/1.6
Max pressure		MPa	4.2	4.2	4.2	4.2	4.2	4.2
Refrigerant piping	Liquid side/Gas side	mm	Φ6.35/Φ12.7	Φ6.35/Φ12.7	Φ6.35/Φ12.7	Φ9.52/Φ15.88	Φ9.52/Φ15.88	Φ9.52/Φ15.88
	Max. pipe length	m	25	25	25	30	50	50
	Max. high drop	m	10	15	15	20	25	25
Ambient temp	cooling	° C	-15~50	-15~50	-15~50	-15~50	-15~50	-15~50
	heating	° C	-15 ~ 30	-15 ~ 30	-15 ~ 30	-15 ~ 30	-15 ~ 30	-15 ~ 30

Heat Pump , R410a Inverter Indoor unit(Floor ceiling)

Model			ZEVE-18HDG	ZEVE-24HDG	ZEVE-36HDG	ZEVE-48HDG	ZEVE-60HDG
Indoor power supply		V/Ph/Hz	208~230V/1/60	208~230V/1/60	208~230/1/60	208~230/1/60	208~230/1/60
Cooling	Capacity	KW	5.3	7	10.5	14	16
	Power input	W	1.8	2.45	3.4	4.5	6.5
	Current input	A	8	10.5	15	18	12.5
Heating	Capacity	KW	5.3	7	10.5	14	16
	Power input	W	1.65	2.05	2.8	4	5.5
	Rated current	A	7.5	8.5	12.5	17.5	12
Max. power input		W	1900	2500	3500	4600	6700
Max. current input		A	8.5	11	15.5	18.5	13
Indoor fan motor	Model		YSK110-20LD-6P2	YSK110-30LD-6P2	YSK110-180LD-4P2	YSK110-85LD-4P2	YSK110-85LD-4P2
	Power output	W	20	30	125	85	85
	Capacitor	μF	1.8	2.5	5	5	5
	Speed	r/min	600/500/430	800/650/550	1330/1230/1130	1560/1430/1300	1560/1430/1300
Indoor coil	Insulation class		B	B	B	B	B
	Number of rows		2	2	3	4	4
	Tube pitch(a)xrow pitch(b)	mm	21×13.37	21×13.37	25*21.65	22*19.05	22*19.05
	Fin spacing	mm	1.4	1.4	1.7	1.7	1.7
	Fin type		Hydrophilic	Hydrophilic	Hydrophilic	Hydrophilic	Hydrophilic
	Tube outside dia. and type	mm	Φ7	Φ7	9.52	7.94	7.94
			Inner grooved	Inner grooved	Inner grooved	Inner grooved	Inner grooved
	Coil length x height x width	mm	982×252×26.74	982×252×26.74	982/250/65	1382/242/76.2	1382/242/76.2
Number of circuits			2	2	5	4	4
Indoor air flow(High speed)		m3/h	700	900	1300	2000	2000
Indoor noise level		dB(A)	≤ 58	≤ 60	≤ 60	≤ 65	≤ 65
Indoor unit	Dimension(W*H*D)	Body(mm)	1245×680×247	1245×680×247	1245×680×247	1670×680×247	1670×680×247
	Packing(W*H*D)	Body(mm)	1325×770×325	1325×770×325	1325×770×325	1750×770×325	1750×770×325
	Net/Gross weight	Body(Kg)	40/34	40/34	42/36	55.5/49	55.5/49
Max pressure		MPa	4.2	4.2	4.2	4.2	4.2
Refrigerant type			R410A	R410A	R410A	R410A	R410A
Refrigerant piping Liquid side/Gas side			Φ6.35/Φ12.7	Φ6.35/Φ12.7	Φ9.52/Φ15.88	Φ9.52/Φ15.88	Φ9.52/Φ15.88
Drainage pipe		mm	DN25	DN25	DN25	DN25	DN25
Standard controller			Standard with wireless remote controller				
Operation temp		° C	16 ~ 32	16 ~ 32	16 ~ 32	16 ~ 32	16 ~ 32

Heat Pump , R410a Inverter Indoor unit(Cassette)

Model			ZCFVE-12HDG	ZCFVE-18HDG	ZCFVE-24HDG	ZCFVE-36HDG	ZCFVE-48HDG	ZCFVE-60HDG
Indoor power supply			208~230V/1/60	208~230V/1/60	208~230V/1/60	208~230/1/60	208~230/1/60	208~230/1/60
Cooling	Capacity	KW	3.5	5.3	7	10.5	14	16
	Input	W	1.15	1.8	2.45	3.4	4.5	6.5
	Rated current	A	5	8	10.5	15	18	12.5
Heating	Capacity	KW	3.5	5.3	7	10.5	14	16
	Input	W	0.88	1.65	2.05	2.8	4	5.5
	Rated current	A	4	7.5	8.5	12.5	17.5	12
Max. power input		kW	1200	1900	2500	3500	4600	6700
Max. current input			5.2	8.5	11	15.5	18.5	13
Indoor fan motor	Model		YDK-16Q-6P3	YDK-45Q-6P2	YDK-45Q-6P3	YDK-75T-6C	YDK-75T-6C	YDK-75T-6C
	Power output	W	16	45	45	75	110	110
	Capacitor	μF	1.5	2.5	3	4	5	5
	Speed	r/min	740/640/540/440	850/730/580	850/790/600	760/680/580	850/750/650	850/750/650
	Insulation class		B	B	B	B	B	B
Indoor coil	Number of rows		2	1	2	2	3	3
	Tube pitch(a)xrow pitch(b)	mm	21×13.37	21×13.37	21×13.37	21*13.4	21*13.4	21*13.4
	Fin spacing	mm	1.4	1.45	1.45	1.45	1.6	1.6
	Fin type		Hydrophilic	Hydrophilic	Hydrophilic	Hydrophilic	Hydrophilic	Hydrophilic
	Tube outside dia. and type	mm	Φ7	Φ7	Φ7	Φ7	Φ7	Φ7
			Inner grooved	Inner grooved	Inner grooved	Inner grooved	Inner grooved	Inner grooved
	Coil length x height x width	mm	1317×210×26.74	1991.8×168×13.37	2000×168×26.74	2000*252*26.74	2000*252*40.1	2000*252*40.1
			4	3	4	12	6	6
Indoor air flow(High speed)		m3/h	560	1250	1250	1600	1900	1900
Indoor noise level		dB(A)	≤ 52	≤ 58	≤ 63	≤ 63	≤ 65	≤ 65
Indoor unit	Dimension(W*H*D)	Body (mm)	580×260×580	840×230×840	840×230×840	840×285×840	840×285×840	840×285×840
		Panel (mm)	650×30×650	950×50×950	950×50×950	950×50×950	950×50×950	950×50×950
	Packing(W*H*D)	Body (mm)	745×375×675	920×265×920	920×265×920	920×310×920	920×310×920	920×310×920
		Panel (mm)	750×95×750	1030×105×1030	1030×105×1030	1030×105×1030	1030×105×1030	1030×105×1030
	Net/Gross weight	Body (kg)	16.5/21.5	25/30	25/30	27/32	29.5/35	29.5/35
		Panel (kg)	2.7/4.0	5.4/8.0	5.4/8.0	5.4/8.0	5.4/8.0	5.4/8.0
Max pressure		MPa	4.2	4.2	4.2	4.2	4.2	4.2
Refrigerant type			R410A	R410A	R410A	R410A	R410A	R410A
Refrigerant piping Liquid side/Gas side		mm	Φ6.35/Φ12.7	Φ6.35/Φ12.7	Φ6.35/Φ12.7	Φ9.52/Φ15.88	Φ9.52/Φ15.88	Φ9.52/Φ15.88
Drainage pipe		mm	DN25	DN25	DN25	DN25	DN25	DN25
Standard controller			Standard with wireless remote controller					
Operation temp		° C	16-32	16 ~ 32	16-32	16 ~ 32	16 ~ 32	16 ~ 32

Heat Pump , R410a Inverter Indoor unit(Duct)

Model			ZDVE-18HFG	ZDVE-24HFG	ZDVE-36HFG	ZDVE-48HFG	ZDVE-60HFG
Indoor power supply		V/Ph/Hz	208~230V/1/60	208~230V/1/60	208~230V/1/60	208~230V/1/60	208~230V/1/60
Cooling	Capacity	KW	5.3	7	10.5	14	16
	Power input	W	1.8	2.45	3.4	4.5	6.5
	Current input	A	8	10.5	15	18	12.5
Heating	Capacity	KW	5.3	7	10.5	14	16
	Input	W	1.65	2.05	2.8	4	5.5
	Rated current	A	7.5	8.5	12.5	17.5	12
	COP	W/W	1900	2500	3500	4600	6700
Max. power input		W	8.5	11	15.5	18.5	13
Max. current input		A	YSK100-56F-4P2	YSK100-70F-4P2	YSK120-150F-4P2H105-1	YSK120-150F-4P2H105-1/YDK110-75F-4P2H105L-1	YSK120-150F-4P2H105-1/YDK110-75F-4P2H105L-1
Indoor fan motor	Model		DR-310-68F-8	DR-310-68F-8	DR-310-150F-8+DR-310-75F-8	DR-310-240F-8	DR-310-240F-8
	Power output	W	56	60	150	150/75	150/75
	Capacitor	μF	3	3.5	5	6uF/3uF	6uF/3uF
	Speed	r/min	1300/980/800/700	1360/1280/1050/900	1100/1000/750/630	1360-1290-1200-1100/1380-1300-1200-1130	1360-1290-1200-1100/1380-1300-1200-1130
	Insulation class		B	B	B	B	B
Indoor coil	Number of rows		2	3+3	3	3	3
	Tube pitch(a)xrow pitch(b)	mm	21×13.37	21×13.37	22*19.05	22*19.05	22*19.05
	Fin spacing	mm	1.4	1.4	1.7	1.7	1.7
	Fin type		Hydrophilic	Hydrophilic	Hydrophilic	Hydrophilic	Hydrophilic
	Tube outside dia. and type	mm	Φ7	Φ7	7.94	7.94	7.94
			Inner grooved	Inner grooved	Inner grooved	Inner grooved	Inner grooved
	Coil length x height x width	mm	715×146×26.74	915×146×38.1	900/308/38.1	1136/308/57.15	1136/308/57.15
	Number of circuits		2	6	3	6	6
Filter		750	800	1150	2000	2000	
Indoor air flow(High speed)		m3/h	0-30	0-30	50-70	50-70	100
Static Pressure		Pa	≤ 58	≤ 63	≤ 63	≤ 65	≤ 65
Indoor noise level		dB(A)	1010×210×467	1214×210×467	1170×260×643	1425×260×643	1425×260×643
Indoor unit	Dimension(W*H*D)	Body(mm)	1310×240×510	1310×240×510	1255×325×720	1490×325×720	1490×325×720
	Packing(W*H*D)	Body(mm)	24/21	28/25	37/33	51/45	51/45
	Net/Gross weight	Body(Kg)	4.2	4.2	4.2	4.2	4.2
	Dimension for Plenum Air Outlet	mm×mm	R410A	R410A	R410A	R410A	R410A
	Dimension for Plenum Air Inlet	mm×mm	Φ6.35/Φ12.7	Φ6.35/Φ12.7	Φ9.52/Φ15.88	Φ9.52/Φ15.88	Φ9.52/Φ15.88
Max pressure		MPa	DN25	DN25	DN25	DN25	DN25
Refrigerant type			R32	R32	R32	R32	R32
Refrigerant piping Liquid side/Gas side		mm	Φ6.35/Φ12.7	Φ9.52/Φ15.88	Φ9.52/Φ15.88	Φ9.52/Φ15.88	Φ9.52/Φ15.88
Drainage pipe		mm	DN25	DN25	DN25	DN25	DN25
Standard controller			Standard with wired remote controller				
Operation temp		° C	16 ~ 32	16 ~ 32	16 ~ 32	16 ~ 32	16 ~ 32

Heat Pump , R410a Inverter Indoor unit(Air handler)

Model			ZAVE-18HDG	ZAVE-24HDG	ZAVE-36HDG	ZAVE-48HDG	ZAVE-60HDG
SEER			16	16	16	16	16
Indoor power supply	V/Ph/Hz		220~240/1/60	220~240/1/60	220~240/1/60	220~240/1/60	220~240/1/60
Cooling Capacity	W		5300	7000	10500	14000	16000
Heating Capacity	W		5300	7000	10500	14000	16000
Indoor fan motor	Model		YDK130-6X	YDK130-6X	YDK130-6X	YDK-350F-6P3	YDK-350F-6P3
	Power output	W	240	240	240	350	350
	Capacitor	μF	6	6	6	15	15
	Speed	r/min	910/780	910/780	910/780	930/880	930/880
	Insulation class		B	B	B	B	B
Indoor coil	Number of rows		2	2	2	3	3
	Tube pitch(a)xrow pitch(b)	mm	21×13.37	21×13.37	21×13.37	21×13.37	21×13.37
	Fin spacing	mm	1.5	1.5	1.5	1.5	1.5
	Fin type		Hydrophilic	Hydrophilic	Hydrophilic	Hydrophilic	Hydrophilic
	Tube outside dia. and type	mm	Φ7	Φ7	Φ7	Φ7	7
			Inner grooved	Inner grooved	Inner grooved	Inner grooved	Inner grooved
	Coil length x height x width	mm	336X26.74X413 (X2)	336X26.74X413 (X2)	336X26.74X413 (X2)	378X40.11X443 (X2)	378X40.11X443 (X2)
Number of circuits			4	4	4	6	6
Indoor air flow(High speed)	m3/h		1500	1500	1500	1500	2000
Static Pressure	Pa		0-30	0-30	0-30	0-30	50-70
Indoor noise level	dB(A)		≤ 58	≤ 58	≤ 58	≤ 58	≤ 65
Indoor unit	Dimension(W*H*D)	Body(mm)	460×774×520	460×774×520	460×774×520	500×970×550	500×970×550
	Packing(W*H*D)	Body(mm)	520×834×565	520×834×565	520×834×565	560×1030×595	560×1030×595
	Net/Gross weight	Body(Kg)	37/39	37/39	37/39	45/48	45/48
Max pressure		MPa	4.2	4.2	4.2	4.2	4.2
Refrigerant type			R410A	R410A	R410A	R410A	R410A
Refrigerant piping Liquid side/Gas side	mm		Φ6.35/Φ12.7	Φ6.35/Φ12.7	Φ9.52/Φ15.88	Φ9.52/Φ15.88	Φ9.52/Φ15.88
Drainage pipe	mm		DN25	DN25	DN25	DN25	DN25
Standard controller			Standard with wired remote controller				
Operation temp	° C		16 ~ 32	16 ~ 32	16 ~ 32	16 ~ 32	16 ~ 32