



REFRIGERATION UNIT SMART PACKAGED UNIT



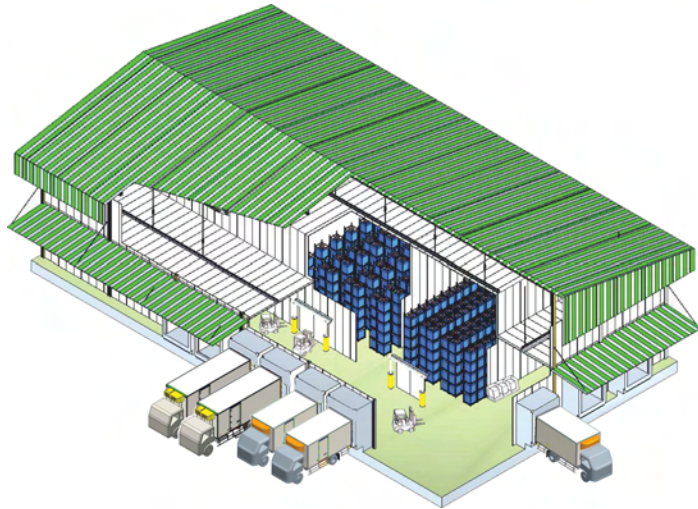
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Refrigeration is a process of removing heat from a low-temperature reservoir and transferring it to a high-temperature reservoir. The work of heat transfer is traditionally driven by mechanical means, but can also be driven by heat, magnetism, electricity, laser, or other means. Refrigeration has many applications, including, but not limited to: household refrigerators, industrial freezers, cryogenics, and air conditioning. Heat pumps may use the heat output of the refrigeration process, and also may be designed to be reversible, but are otherwise similar to air conditioning units.



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Fuzzy-Control with Electronic Expansion Valve (EXV)

- Double EXV control system(one for unit, the other for low temp EVI) with pressure sensor for whole circle, greatly improving cooling capacity
- Control superheat immediately with accurate evaporating temperature and fuzzy control; Use unit cooler under the most suitable situation and adjust automatically even with heavy load charge
- MOP (maximum operation pressure) control function
- When superheat is too low, the opening of EXV will reduce quickly and automatically to protect compressor (liquid slugging prevention)
- If ambient temperature is too low, there is immediate reaction with EXV, so refrigeration system can run with high efficiency



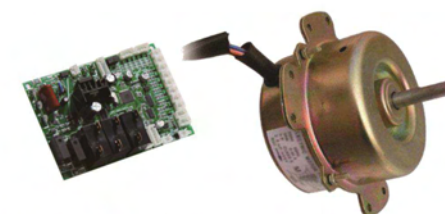
Intelligent Hot-Gas Defrost-on-Demand

- **Less Energy Consumption during Defrosting**
Autonomously enter and exit defrosting procedures, defrost-on-demand
Defrost time 70% less at least (only 3-5 Min. each time of defrost)
Defrost energy consumption 80% less at least
Hot-Gas defrost, high efficiency, 100% defrost
Even under the high humidity situation, also can defrost completely
- **Return Target Temperature Immediately after Defrosting**
Automatically record the unit data before defrosting, quickly turn back to the target temperature of cold room
- **Stable Cold Room Temperature**
Slightly raise the temperature of cold room during defrosting
Normally with traditional unit, raise 8-10 degree; With SPU, raise 3-5 degree only
- **Ensure Oil Return**
When running with long time, regularly and automatically defrost to ensure oil return



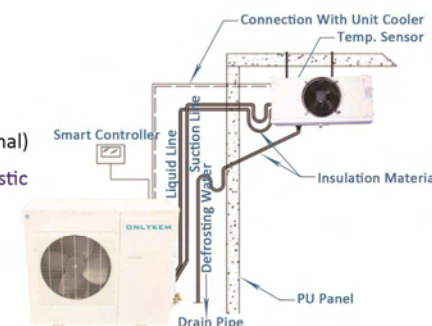
Intelligent Condenser Fan Speed Control

- Control condenser fan speed according to condensing temperature
- Applicable to a wider range of ambient temperature
- More stable operation of unit system
- Ensure unit operation with high efficiency under different working conditions



Easy Installation, Optimized Testing & Commission

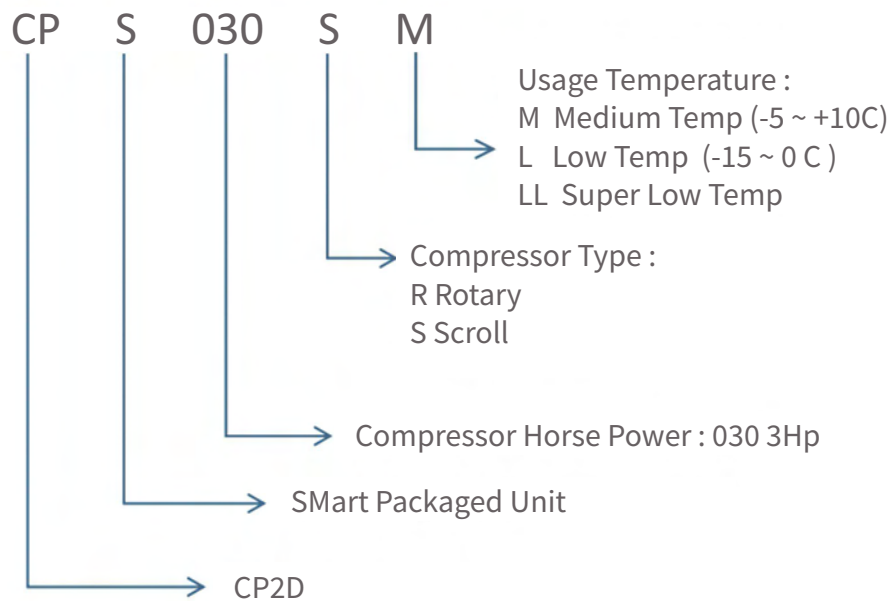
- **Standard Installation**
Easy installation, error-proof
- **Accurate Debugging, Smart Startup**
Startup self-diagnostic function
Intelligent debugging to ensure optimal operation
Remote monitoring and maintenance module (optional)
- **Automatic Maintenance Reminder and Self-Diagnostic**
Provide possible causes of the fault and suggest troubleshooting methods
- **Complete Configuration**
All-in design, including of all necessary components and protections
R404A pre-charged



Fully Packaged with Unit Coolers

- Large air volume, 100% heat-exchange capacity
- All models with same fin space of 4.5mm
- Hot gas defrosting design, only drain pan heater is needed
- High efficiency and reliability
- Easy installation and complete accessories
- Inner wave copper pipe





Controller Screen



Button Instruction:

Press Shortly: after press, release button immediately

Press for Long Time: keep your pressing, at least 3 seconds

- Up or value +1, (**Up Key** below)
- Down or value -1, (**Down Key** below)
- Enter setting menu or confirm (**Sett.Key** below)
- Unit power on or power off, setting menu as Back Key, (**On/Off Key** below)

Operation Instruction:

Power On: Press shortly On/Off key

Power Off: Press for long time On/Off key

Parameter Setting: Press for long time **Sett.Key** --- Setting Menu ---

Press **Up Key** or **Down Key**, select right operation --- **Sett.Key** to confirm, **On/Off Key** to go back.

COM1: Shining shows normal; Dark or always lighting shows error.

COM2: Reserved communication indicating light (remote comm. Etc)

Refrigeration Capacity



General Info:

Mid-Temp Scroll Smart Packaged Unit is equipped with Emerson Copeland ZB Scroll Compressor. R404A refrigerant is pre-charged. It is suitable for cold-storage temperature from +10°C to -18°C. Nominal capacity of SPU is from 3Hp to 15Hp. Smart controller, self-diagnosis, main circuit EXV and complete system protection are all included. Optional remote monitoring module, leading technology of refrigeration units. You can get exclusive design as your applications.


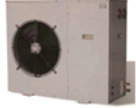






Configuration:

- Fuzzy Control of EXV
- Intelligent Hot-Gas Defrost on Demand
- Intelligent Controller
- Intelligent Fan-Speed Control
- Suction Accumulator/Receiver + 2-Row 100%-Heat-Exchange Condenser + Pressure Sensors
- R404A Pre-Charged
- Standard Installation, Accurate Debugging
- 4.5mm Fin Space for Unit Cooler
- Inner Wave Copper Pipe for Unit Cooler



Cooling Capacity and Power (Watts)				R404A / 50Hz											
Model	Compressor	Ambient Temperature (°C)		Evaporating Temperature (°C)											
				-40	-35	-30	-25	-20	-15	-10	-5	0	5	7	10
	OKS020SM	ZB15KQE	Capacity	27			2200	3100	3800	4500	5200	5800	6500		
				38			1500	2300	3000	3600	4300	5000	5700		
			Input Power	27			1700	1600	1500	1600	1700	1800	1900		
				38			2300	1900	2000	2000	2100	2200	2300		
	OKS030SM	ZB21KQE	Capacity	27			3000	3700	4550	5500	6600	7900	9350		
				38			2450	3100	3750	4550	5500	6550	7800		
			Input Power	27			2240	2240	2240	2230	2220	2210	2190		
				38			2850	2830	2830	2820	2810	2790	2770		
	OKS050SM	ZB38KQE	Capacity	27			5100	6250	7700	9300	11200	13350	15800		
				38			4243	5200	6350	7750	9350	11200	13300		
			Input Power	27			3750	3760	3760	3760	3760	3740	3710		
				38			4658	4670	4680	4680	4680	4670	4650		
	OKS080SM	ZB58KQE	Capacity	27			7050	9250	11700	14400	17500	21000	24900		
				38			5259	6900	9100	11500	14150	17100	20400		
			Input Power	27			5850	5800	5750	5750	5750	5750	5750		
				38			7514	7450	7350	7250	7200	7150	7150		
	OKS100SM	ZB76KQE	Capacity	27			10900	13300	16100	19400	23300	27800	33000		
				38			9179	11200	13200	15700	18700	22200	26400		
			Input Power	27			7250	7300	7400	7450	7500	7600	7700		
				38			9087	9150	9200	9250	9250	9300	9400		
	OKS130SM	ZB95KQE	Capacity	27			12785	15600	19600	23850	28500	33900	40000		
				38			10778	13152	15500	19500	23750	28350	33550		
			Input Power	27			9336	9400	9430	9500	9590	9690	9780		
				38			11794	11875	11940	11920	11940	11980	12020		
	OKS150SM	ZB114KQE	Capacity	27			14998	18300	23050	28250	34100	40700	48200		
				38			12691	15485	18250	23000	28200	33950	40450		
			Input Power	27			11143	11220	11260	11310	11380	11470	11570		
				38			14026	14123	14200	14150	14120	14110	14130		

Mid-Temp Scroll Smart Packaged Unit Technical Specification:

Model	Nominal Hp	2Hp	3Hp	5Hp	8Hp	10Hp	13Hp	15Hp
	Outdoor Unit	OKS020SM	OKS030SM	OKS050SM	OKS080SM	OKS100SM	OKS130SM	OKS150SM
								
Voltage		380V/3Ph/50Hz						
Refrigerant		R404A						
Control Module		Hot-Gas Defrost on Demand, EXV, Fan-speed Control, All-in-One Intelligent Controller, LED+LCD Display, etc.						
Throttling Mode		Fuzzy EXV Control						
Compressor	Type	Hermetic Scroll Compressor						
	Series	Copeland ZB15KQE	Copeland ZB21KQE	Copeland ZB38KQE	Copeland ZB58KQE	Copeland ZB76KQE	Copeland ZB95KQE	Copeland ZB114KQE
Condenser Fan	Type	Low-Noise 6Ph Fan Motor						
	Fan QTY x Power	PCSxW	1x60	1x60	2x60	1x250	2x250	2x250
	Diameter	mm	450	450	450	560	560x2	560x2
Unit Cooler	Air-Flow Direction	Side-Blow						
	Fan Motor (Diameter x QTY)	mmxPCS	350x1	300x2	350x2	450x2	450x2	450x3
	Voltage	V	220	220	220	380	380	380
	Fan Range	m	10	10	10	15	15	20
	Fin Space	mm	4.5	4.5	4.5	4.5	4.5	4.5
	Drain Pipe Dimension	inch	G 1"	G 1"	G 1"	G 1"	G 1"	G 1"
	Air Flow	m ³ /h	3150x1	1810x2	3150x2	5580x2	5580x3	5580x3
	Fan Input Power	W	150x1	90x2	150x2	240x2	240x2	240x3
	Drain Pan Heater	W	500	500	700	1300	1300	1300
	Dimension	mm	658x456x485	945x449x466	1377x450x483	1607x486x687	1607x486x687	1877x477x827
Connection	Top Fixed Part Dimension	mm	372x540	373x822	367x1254	386x1468	386x1468	392x1129x597
	Liquid	mm	Φ12.7	Φ12.7	Φ12.7	Φ19.05	Φ19.05	Φ22.22
Level of Noise	Suction	mm	Φ15.88	Φ15.88	Φ19.05	Φ28.58	Φ28.58	Φ34.93
	Outdoor Unit	dB(A)	62	58	58	60	62	62
Outdoor Unit Dimension	Unit Cooler	dB(A)	64	60	60	65	65	68
	LxWxH	mm	950x353x825	1034x424x845	1027x424x1248	800x753x1005	1460x810x1001	1460x810x1001
Weight	Installation Dimension	mm	532x365	700x388	580x388	530x771	1126x774	1126x774
	Outdoor Unit	kg	95	85	120	180	220	250
Unit Cooler	Unit Cooler	kg	40	30	45	70	95	96

Refrigeration Capacity









General Info:

Low-Temp Scroll Smart Packaged Unit is equipped with Emerson Copeland ZSI Scroll Compressor. R404A refrigerant is pre-charged. It is suitable for the cold-storage temperature from +5°C to -25°C. Nominal Capacity of SPU is from 3Hp to 15Hp. Smart controller, self-diagnosis, dual-EXV control and complete system protection are all included. Optional remote monitoring module, leading technology of refrigeration units. You can get exclusive design as your applications.

Configuration:

- Fuzzy Control of Double EXV
- Intelligent Hot-Gas Defrost on Demand
- Intelligent Controller
- Intelligent Fan-Speed Control
- Suction Accumulator/Oil Separator + 2-Row 100%-Heat-Exchange Condenser + Pressure Sensors
- R404A Pre-Charged
- Standard Installation, Accurate Debugging
- 4.5mm Fin Space for Unit Cooler
- Inner Wave Copper Pipe for Unit Cooler



Cooling Capacity and Power (Watts)				R404A / 50Hz											
Model	Compressor		Ambient Temperature (°C)	Evaporating Temperature (°C)											
				-40	-35	-30	-25	-20	-15	-10	-5	0	5	7	10
	OKS020SL	ZSI06KQE	Capacity	27			1660	2060	2550	3150	3840	4660	5590		
			Capacity	38			1340	1700	2120	2620	3210	3880	4650		
			Input Power	27			1540	1620	1680	1720	1740	1750	1740		
			Input Power	38			1820	1880	1930	1960	1980	1990	1980		
	OKS030SL	ZSI09KQE	Capacity	27			2350	2940	3620	4390	5270	6290	7470		
			Capacity	38			1820	2340	2910	3560	4300	5150	6140		
			Input Power	27			1890	1980	2030	2060	2090	2130	2190		
			Input Power	38			2390	2460	2500	2510	2530	2560	2630		
	OKS040SL	ZSI11KQE	Capacity	27			2800	3590	4440	5400	6520	7850	9420		
			Capacity	38			2450	3120	3830	4630	5560	6670	8010		
			Input Power	27			2120	2260	2340	2380	2410	2450	2520		
			Input Power	38			2820	2920	2970	2990	3000	3030	3090		
	OKS050SL	ZSI15KQE	Capacity	27			4030	5140	6340	7690	9280	11150	13400		
			Capacity	38			3570	4540	5560	6690	7990	9540	11400		
			Input Power	27			3030	3120	3250	3400	3550	3670	3730		
			Input Power	38			3680	3820	3980	4140	4280	4370	4370		
	OKS060SL	ZSI18KQE	Capacity	27			5180	6410	7850	9530	11450	13700	16300		
			Capacity	38			4410	5460	6670	8070	9700	11600	13750		
			Input Power	27			3820	3940	4110	4290	4470	4610	4700		
			Input Power	38			4610	4710	4860	5030	5190	5320	5400		
	OKS070SL	ZSI21KQE	Capacity	27			5790	7130	8730	10600	12800	15300	18100		
			Capacity	38			4940	6090	7450	9030	10850	12950	15350		
			Input Power	27			4180	4350	4520	4700	4890	5080	5270		
			Input Power	38			5090	5220	5370	5520	5690	5870	6050		

Low-Temp Scroll Smart Packaged Unit Technical Specification:

Model	Nominal Hp	2Hp	3Hp	4Hp	5Hp	6Hp	7Hp
	Outdoor Unit	OKS020SL	OKS030SL	OKS040SL	OKS050SL	OKS060SL	OKS070SL
							
Voltage		380V/3Ph/50Hz					
Refrigerant		R404A					
Control Module		Hot-Gas Defrost on Demand, EXV, Fan-speed Control, All-in-One Intelligent Controller, LED+LCD Display, etc.					
Throttling Mode		Fuzzy EXV Control					
Compressor	Type	Hermetic Scroll Compressor					
	Series	Copeland ZSI06KQE	Copeland ZSI09KQE	Copeland ZSI11KQE	Copeland ZSI15KQE	Copeland ZSI18KQE	Copeland ZSI21KQE
Condenser Fan	Type	Low-Noise 6Ph Fan Motor					
	Fan QTY x Power	PCSxW	1x60	1x60	2x60	2x60	1x250
	Diameter	mm	450	450	450	450	560
Unit Cooler	Air-Flow Direction	Side-Blow					
	Fan Motor (Diameter x QTY)	mm x PCS	350x1	300x2	350x2	350x2	450x2
	Voltage	V	220	220	220	220	380
	Fan Range	m	10	10	10	10	15
	Fin Space	mm	4.5	4.5	4.5	4.5	4.5
	Drain Pipe Dimension	inch	G 1"	G 1"	G 1"	G 1"	G 1"
	Air Flow	m ³ /h	3150x1	1810x2	3150x2	3150x2	5580x2
	Fan Input Power	W	150x1	90x2	150x2	150x2	240x2
	Drain Pan Heater	W	500	500	700	700	1300
	Dimension	mm	658x456x485	945x449x466	1377x450x483	1377x450x483	1607x486x687
Connection	Top Fixed Part Dimension	mm	372x540	373x822	367x1254	367x1254	386x1468
	Liquid	mm	Φ12.7	Φ12.7	Φ12.7	Φ12.7	Φ19.05
	Suction	mm	Φ15.88	Φ15.88	Φ19.05	Φ19.05	Φ28.58
Level of Noise	Outdoor Unit	dB(A)	62	58	58	58	60
	Unit Cooler	dB(A)	64	60	60	60	65
Outdoor Unit Dimension	LxWxH	mm	950x353x825	1034x424x845	1027x424x1248	1027x424x1248	800x753x1005
	Installation Dimension	mm	532x365	700x388	580x388	580x388	530x771
Weight	Outdoor Unit	kg	95	85	120	120	180
	Unit Cooler	kg	40	30	45	45	70

Refrigeration Capacity



General Info:

Super Low-Temp Scroll Smart Packaged Unit is equipped with Emerson Copeland

EVI (Enhanced Vapor Injection) Scroll Compressor.

R404A refrigerant is pre-charged. It is suitable for the cold-storage temperature from +5°C to -30°C.

Nominal Capacity of SPU is from 3Hp to 15Hp.

Smart controller, self-diagnosis, dual-EXV control and complete system protection are all included.

Optional remote monitoring module, leading technology of refrigeration units.

You can get exclusive design as your applications.

Configuration:

Fuzzy Control of Double EXV (one for unit, the other for low temp EVI)

Intelligent Hot-Gas Defrost on Demand

Intelligent Controller

Intelligent Fan-Speed Control

Suction Accumulator/Oil Separator + Economizer + 2-Row 100%-

Heat-Exchange Condenser + Pressure Sensors

R404A Pre-Charged

Standard Installation, Accurate Debugging








4.5mm Fin Space for Unit Cooler

Inner Wave Copper Pipe for Unit Cooler

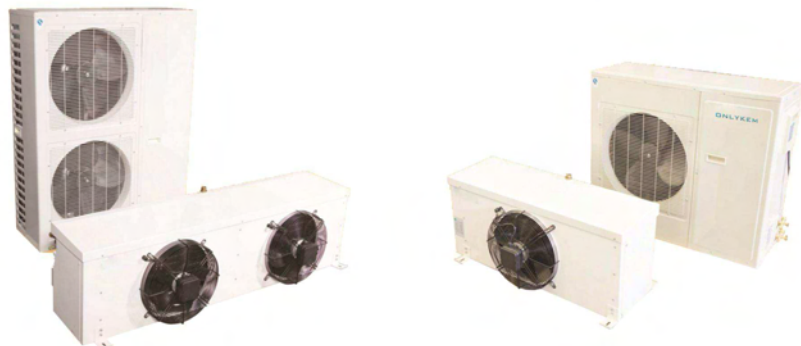


Cooling Capacity and Power (Watts)				R404A/50Hz											
Model	Compressor	Ambient Temperature (°C)		Evaporating Temperature (°C)											
				-40	-35	-30	-25	-20	-15	-10	-5	0	5	7	10
	OKS030SLL	VRI30KQE	Capacity	27	2510	3100	3760	4515	5407	6420	7575	8925	10425	12075	12785
				38	2213	2805	3510	4208	5040	6023	7170	7814	8512	11812	12600
			Input Power	27	1988	2017	2007	2122	2190	2467	2535	2580	2610	2617	2610
				38	2250	2595	2625	2662	2715	3045	3105	3157	3195	3206	3217
	OKS050SLL	VRI61KQE	Capacity	27	3847	4624	5572	6652	7912	10700	12625	14875	17375	20125	21308
				38	3780	4522	5280	6255	7417	10038	11950	13023	14186	19686	21000
			Input Power	27	2797	2963	3112	3255	3390	4111	4225	4300	4350	4361	4350
				38	3420	3622	3810	3982	4140	5075	5175	5261	5325	5343	5361
	OKS080SLL	ZFI36KQE	Capacity	27	6310	7730	9410	11350	13500	15650	18400	21800			
				38	6110	7500	8850	10600	12650	14700	17400	20600			
			Input Power	27	4220	4610	4960	5270	5540	5860	6050	6230			
				38	4890	5450	5950	6380	6750	7140	7360	7560			
	OKS100SLL	ZFI50KQE	Capacity	27	8620	10600	12800	15350	18200	21400	25200	29500			
				38	7990	9590	12100	14450	17150	20100	23800	28100			
			Input Power	27	5770	6210	6600	6960	7310	8010	8280	8520			
				38	6940	7430	7870	8290	8690	9770	10050	10350			
	OKS130SLL	ZFI59KQE	Capacity	27	10700	13100	15850	19000	22500	25900	30500	35800			
				38	9900	11870	15000	17900	21300	24300	28800	34000			
			Input Power	27	7150	7690	8180	8630	9060	9700	10000	10300			
				38	8600	9210	9760	10250	10750	11850	12200	12500			
	OKS150SLL	ZFI68KQE	Capacity	27	12100	14900	17500	21500	25500	29353	34567	40573			
				38	11230	13460	17000	20300	24100	27494	32585	38468			
			Input Power	27	8310	8940	9510	10050	10550	12144	14301	16786			
				38	10000	10710	11350	11950	12500	14388	16943	19887			

Super Low-Temp Scroll Smart Packaged Unit Technical Specification:

Model		Nominal Hp	3Hp	5Hp	8Hp	10Hp	13Hp	15Hp
		Outdoor Unit	OKS030SLL	OKS050SLL	OKS080SLL	OKS100SLL	OKS130SLL	OKS150SLL
								
Voltage		380V/3Ph/50Hz						
Refrigerant		R404A						
Control Module		Hot-Gas Defrost on Demand, EXV, Fan-speed Control, All-in-One Intelligent Controller, LED+LCD Display, etc.						
Throttling Mode		Fuzzy EXV Control						
Compressor	Type	Hermetic Scroll Compressor						
	Series		Copeland VRI30KQE	Copeland VRI61KQE	Copeland ZFI36KQE	Copeland ZFI50KQE	Copeland ZFI59KQE	Copeland ZFI68KQE
Condenser Fan	Type	Low-Noise 6Ph Fan Motor						
	Fan QTY x Power	PCSxW	1x60	2x60	1x250	2x250	2x250	2x250
	Diameter	mm	450	450	560	560x2	560x2	560x2
Unit Cooler	Air-Flow Direction		Side-Blow					
	Fan Motor (Diameter x QTY)	mmxPCS	300x2	350x2	450x2	450x2	450x3	450x3
	Voltage	V	220	220	380	380	380	380
	Fan Range	m	10	10	15	15	15	15
	Fin Space	mm	4.5	4.5	4.5	4.5	4.5	4.5
	Drain Pipe Dimension	inch	G 1"	G 1"	G 1"	G 1"	G 1"	G 1"
	Air Flow	m ³ /h	1810x2	1350x2	5580x2	5580x2	5580x3	5580x3
	Fan Input Power	W	90x2	150x2	240x2	240x2	240x3	240x3
	Drain Pan Heater	W	500	700	1300	1300	1300	1300
	Dimension	mm	945x449x466	1377x450x483	1607x485x687	1607x485x687	1877x477x827	1877x477x827
Connection	Top Fixed part Dimension	mm	373x822	367x1254	386x1468	386x1468	392x1129x597	392x1129x597
	Liquid	mm	Φ12.7	Φ12.7	Φ19.05	Φ19.05	Φ22.22	Φ22.22
Level of Noise	Suction	mm	Φ15.88	Φ19.05	Φ28.58	Φ28.58	Φ34.93	Φ34.93
	Outdoor Unit	dB(A)	58	58	60	62	62	62
Outdoor Unit Dimension	Unit Cooler	dB(A)	60	60	65	65	68	68
	LxWxH	mm	1034x424x845	1027x424x1248	800x753x1005	1460x810x1001	1460x810x1001	1460x810x1001
Weight	Installation Dimension	mm	700x388	580x388	530x771	1126x774	1126x774	1126x774
	Outdoor Unit	kg	85	120	180	220	240	250
	Unit Cooler	kg	30	45	70	70	95	96

Refrigeration Capacity



General Info:

Mid (Low)-Temp Rotary Smart Packaged Unit is equipped with HIGHLY Rotary Two Stage Compressor (Refrigerant Injection). R404A refrigerant is pre-charged.

It is suitable for the cold-storage temperature.

- Mid-Temp.: from +10°C to -18°C
- Low-Temp.: from +5°C to -30°C

Nominal capacity of SPU is from 3Hp to 15Hp.

Smart controller, self-diagnosis, dual-EXV control and complete system protection are all included.

Optional remote monitoring module, leading technology of refrigeration units.

You can get exclusive design as your applications.

Optional DC inverter refrigeration proposal.

Configuration:

Fuzzy Control of double EXV (one for unit, the other for low temp EVI)

Intelligent Hot-Gas Defrost on Demand

Intelligent Controller

Intelligent Fan-Speed Control

Suction Accumulator/Oil Separator + Economizer + Pressure Sensors

R404A Pre-Charged

Standard Installation, Accurate Debugging

4.5mm Fin Space for Unit Cooler

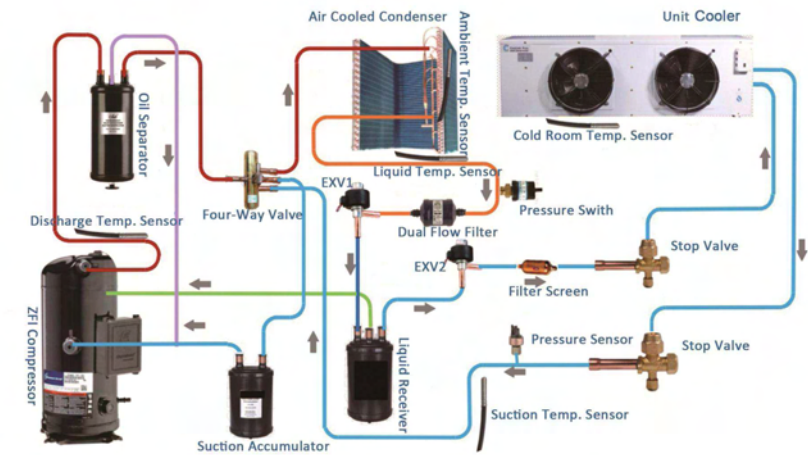
Inner Wave Copper Pipe for Unit Cooler



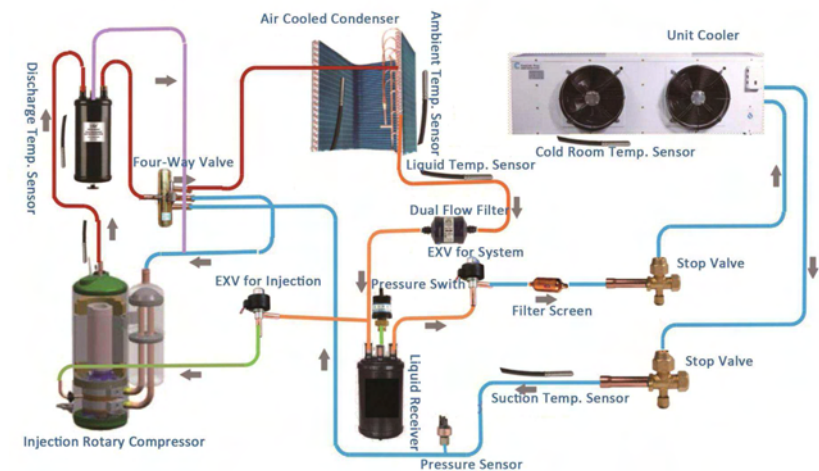
Cooling Capacity and Power (Watts)				R404A/50Hz											
Model	Compressor	Ambient Temperature (°C)		Evaporating Temperature (°C)											
				-40	-35	-30	-25	-20	-15	-10	-5	0	5	7	10
OKS020RM	WHP07140	Capacity	32				1915	2474	2850	3400	4089	4952	5966	6541	7182
			38				1894	2395	2691	3170	3865	4598	5446	6018	6593
			43				1684	2129	2490	2983	3559	4287	5174	5867	6241
		Input Power	32				1382	1415	1579	1498	1501	1535	1598	1601	1605
			38				1544	1580	1632	1655	1734	1759	1814	1834	1855
			43				1615	1674	1732	1792	1829	1899	1983	2001	2072
OKS020RL	WHP07140	Capacity	32	1011	1279	1521	1915	2474	2850	3400	4089	4952	5966	6541	7182
			38	964	1234	1482	1894	2395	2691	3170	3865	4598	5446	6018	6593
			43	901	1116	1354	1684	2129	2490	2983	3559	4287	5174	5867	6241
		Input Power	32	1273	1309	1358	1382	1415	1579	1498	1501	1535	1598	1601	1605
			38	1372	1437	1489	1544	1580	1632	1655	1734	1759	1814	1834	1855
			43	1423	1464	1527	1615	1674	1732	1792	1829	1899	1983	2001	2072
OKS030RM	DTH488	Capacity	32				2998	3676	4354	5475	6757	7951	9011	9670	9951
			38				2793	3505	4196	5152	6051	7376	8769	9012	9376
			43				2478	3015	3852	4821	5738	6877	8052	8372	8777
		Input Power	32				1966	2133	2248	2343	2422	2504	2617	2701	2788
			38				2203	2336	2478	2609	2717	2753	2898	2906	2976
			43				2340	2467	2570	2748	2888	2960	2996	3011	3150
OKS030RL	DTH488	Capacity	32	1555	1974	2387	2340	3676	4354	5475	6757	7951	9011	9670	9951
			38	1408	1806	2214	2793	3505	4196	5152	6051	7376	8769	9012	9376
			43	1252	1554	2015	2478	3015	3852	4821	5738	6877	8052	8372	8777
		Input Power	32	1649	1753	1872	1966	2133	2248	2343	2422	2504	2617	2701	2788
			38	1723	1906	2032	2203	2336	2478	2609	2717	2753	2898	2906	2976
			43	1837	2017	2206	2340	2467	2570	2748	2888	2960	2996	3011	3150
OKS050RM	WHP19460	Capacity	32				6212	7746	9345	11125	13214	15525	18320	20319	22318
			38				5730	7444	9123	11095	13350	15585	18506	20279	22052
			43				4525	6785	8510	10208	12787	14856	18172	20161	22151
		Input Power	32				4238	4257	4266	4290	4379	4386	4395	4400	4406
			38				4590	4890	5172	5378	5552	5735	5769	5808	5848
			43				4783	5107	5419	5711	5976	6205	6392	6460	6528
OKS050RL	WHP19460	Capacity	32	2735	3725	4815	6155	7640	9415	11450	13760	16365	18320	20319	22318
			38	2685	3205	4046	5100	6385	7910	9710	11800	14160	16506	20279	22052
			43	2560	3150	3815	4690	5810	7170	8795	10700	12900	15172	20161	22151
		Input Power	32	3625	3790	3850	3961	4135	4308	4470	4765	4880	4395	4400	4406
			38	4500	4655	4720	4825	5010	5200	5390	5575	5920	5769	5808	5848
			43	5105	5255	5310	5415	5595	5785	5980	6175	6550	6392	6460	6528

Mid/Low-Temp Rotary Smart Packaged Unit:

Model		Nominal Hp	2Hp	2Hp	3Hp	3Hp	5Hp	5Hp
		Outdoor Unit	OKS020RM	OKS020RL	OKS030RM	OKS030RL	OKS050RM	OKS050RL
Cold Room Temp.		°C	+10~-18	+10~-30	+10~-18	+10~-30	+10~-18	+10~-30
Voltage			220V/1Ph/50Hz	220V/1Ph/50Hz	220V/1Ph/50Hz, 380V/3Ph 50Hz Optional		380V/3Ph/50Hz	380V/3Ph/50Hz
Refrigerant			R404A					
Control Mode			Hot-Gas defrost on Demand, EXV, Fan-speed Control, All-in-One Intelligent Controller, LED+LCD Display, etc.					
Throttling Mode			Fuzzy EXV Control	Fuzzy EXV Control	Fuzzy EXV Control	Dual EXV Control	Fuzzy EXV Control	Fuzzy EXV Control
Compressor	Type		Rotary					
	Series		HIGHLY	HIGHLY	HIGHLY	HIGHLY	HIGHLY	HIGHLY
Condenser Fan	Type		Low-Noise 6Ph Fan Motor					
	Fan QTY x Power	PCSxW	1x60	1x60	1x60	1x60	2x60	2x60
Unit Cooler	Diameter	mm	450	450	450	450	450	450
	Air-Flow Direction		Side Blow					
	Fan Motor (Diameter x QTY)	mmxPCS	350x1	350x1	300x2	300x2	350x2	350x2
	Voltage	V	220	220	220	220	220	220
	Fan Range	m	15	15	13	13	15	15
	Fin Space	mm	4.5	4.5	4.5	4.5	4.5	4.5
	Drain Pipe	inch	G 1"	G 1"	G 1"	G 1"	G 1"	G 1"
	Air Flow	m³/h	3150	3150	1810x2	1810x2	3150x2	3150x2
	Fan Input Power	W	150	150	90x2	80x2	150x2	150x2
	Drain Pan Heater	W	500	500	500	500	700	700
	Dimension	mm	657×455×484	657×455×484	945×449×466	945×449×466	1377×450×483	1377×450×483
	Top Installation Dimension	mm	372×540	372×540	373×822	373×822	367×1254	367×1254
Connection	Liquid	mm	Φ12.7	Φ12.7	Φ12.7	Φ12.7	Φ12.7	Φ12.7
	Suction	mm	Φ15.88	Φ15.88	Φ15.88	Φ15.88	Φ19.05	Φ19.05
Level of Noise	Outdoor Unit	dB(A)	58	58	58	56	58	58
	Unit Cooler	dB(A)	60	60	60	60	60	60
Outdoor Unit Dimension	LxWxH	mm	1034×424×845	1034×424×845	1034×424×845	1034×424×845	1027×424×1248	1027×424×1248
	Installation Dimension	mm	700×388	700×388	700×388	700×388	580×388	580×388
Weight	Outdoor Unit	kg	80	80	85	85	120	120
	Unit Cooler	kg	30	30	30	30	45	45



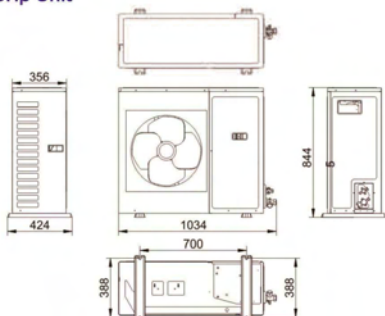
Low-Temp Scroll Smart Packaged Unit



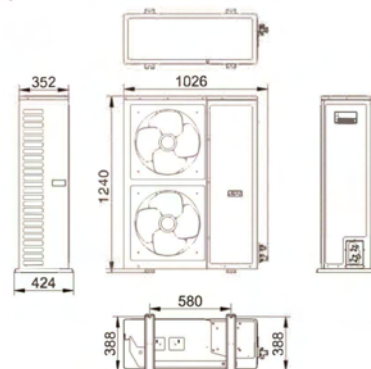
Low-Temp Rotary Smart Packaged Unit

Outdoor Unit Dimension

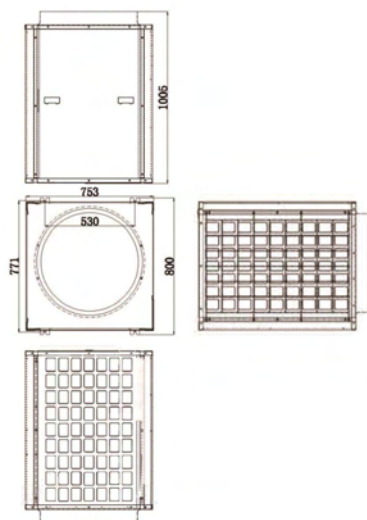
3Hp Unit



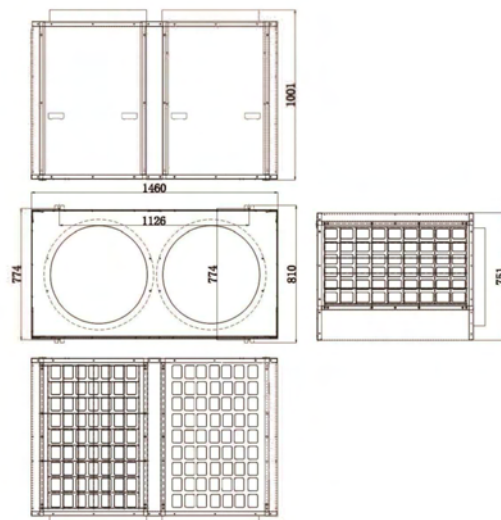
5Hp Unit



8Hp Unit

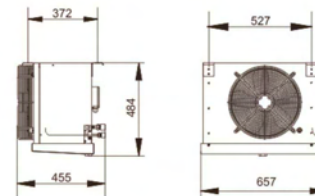


10/13/15Hp Unit

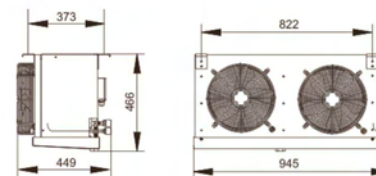


Unit Cooler Dimension

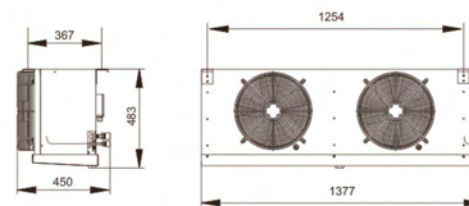
2Hp Cooler



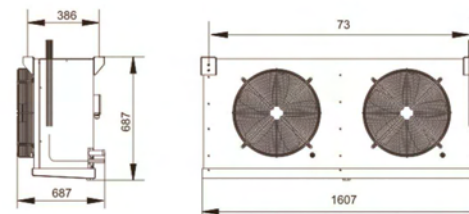
3Hp Cooler



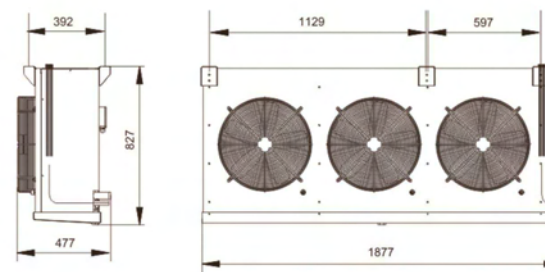
5Hp Cooler



8/10Hp Cooler



13/15Hp Cooler





Fish Cold Room in USA



Seafood Cold Room in Exhibition



Logistics Cold Room in Philippine



Mushroom Cold Room in Malaysia



Vegetable Cold Room in Uzbekistan



Food Cold Room in Myanmar



Controlled Atmosphere Cold Room



Fish Cold Room in Australia



Sausage Cold Room in Singapore



Cold Room in New Zealand



Beer Cold Room in USA



Supermarket Cold Room in Germany