Ecoline
Solar Thermal Air Conditioning

R407C

Therm-Aire

Most Energy Efficient Air Conditioning System

VRF

Ecoline
Solar Thermal Air Conditioning

Note: Designs and specifications are subject to change without prior notice

Why Ecoline ?

Ecoline specializes in thermal energy and energy management. We develop and assemble our own proprietary patent-pending thermal solar air conditioning system.

Against the backdrop of accelerating global warming, we have made it our mission to contribute to efforts to reduce global carbon footprint by promoting the adoption of affordable and sustainable, green cooling technology.

Ecoline
Solar Thermal Air Conditioning

Energy Saving *(vs Energy Efficient Inverter Models)*

- ✓ 30-55% Energy Cost Savings
- ✓ Delivers COP> 5
- ✓ ROI< 2 years

Eco-Friendly

- ✓ Harnesses Waste Heat
- ✓ Ozone-friendly Refrigerant
- ✓ Lower Heat Rejection
- ✓ Reduced Carbon Emission

Easy to Maintain

- ✓ Hassle-free

Versatile

- ✓ Supports Connectivity

INDOOR UNIT

Wall Mount

- Three interchangeable panels allow units to blend easily with any
- Perfect for rooms with no false ceilings or free floor space
- Refrigerant pipe direction can be left, right or rear as the installation situation requires

Four-way Cassette

- Fresh air intake
- 4 way airflow allows wide-angle, equal distribution of cooling.
- Drain pump with 750mm pump head fitted as standard
- Elegant panel with four independently controlled louvers

Ceiling / Floor

- Can be installed either on the ceiling or floor

EcoLine
Solar Thermal Air Conditioning

Fresh Air Processing Unit

- 100% fresh air processing unit, both fresh air filtration and heating/cooling can be achieved in a single system
- External static pressure up to 280Pa facilitates extensive duct and grille network
- Water pump box is available as a customization option

High Static Pressure Duct

- External static pressure up to 400Pa facilitates extensive duct and grille network
- 20-step static pressure control on all models (requires 2nd generation wired controllers)
- A double-skin drainage pan provides double protection for ceilings (models 71 to 160)
- Water pump box is available as a customization option

Medium Static Pressure Duct

- Fresh air intake
- 6-step static pressure control on 2.2kW to 7.1kW models and 10-step static pressure control on 8kW to 14kW units (requires 2 generation wired controllers)
- Drain pump with 750mm pump head fitted as standard
- Flexible installation for the air inlet may be positioned either on the underside or the rear of the unit

INDOOR WALL MOUNT

INDOOR: STA-XXXVIMWM

Model			STA-022VIMWM	STA-028VIMWM	STA-036VIMWM	STA-045VIMWM
Power supply		V-Ph-Hz	1 phase, 220-240V, 50/60Hz			
Cooling[1]	Capacity	kW	2.2	2.8	3.6	4.5
	Input	W	28	28	30	40
Heating[2]	Capacity	kW	2.4	3.2	4	5
	Input	W	28	28	30	40
Air flow rate[3]		m^3/h	422/411/402/393/380/368/356	417/402/386/370/353/338/316	656/628/591/573/544/515/488	594/563/535/507/478/450/424
Sound pressure level[4]		dB(A)	31/30/30/30/29/29/29	31/30/30/30/29/29/29	33/32/32/31/31/30/30	35/34/33/33/32/31/31
Unit	Net dimension (WxHxD)	mm	835×280×203	835×280×203	990×315×223	990×315×223
	Packed dimensions (W×H×D)	mm	935×385×320	935×385×320	1085×420×335	1085×420×335
	Net/Gross weight	kg	8.4/12.1	9.5/13.1	11.4/15.5	12.8/16.9
Refrigerant piping	Liquid side/ Gas side	mm	Φ6.35/Φ12.7	Φ6.35/Φ12.7	Φ6.35/Φ12.7	Φ6.35/Φ12.7
Drainage water pipe diameter		mm	OD Φ16	OD Φ16	OD Φ16	OD Φ16

Model			STA-056VIMWM	STA-071VIMWM	STA-080VIMWM	STA-090VIMWM
Power supply		V-Ph-Hz	1 phase, 220-240V, 50/60Hz			
Cooling[1]	Capacity	kW	5.6	7.1	8	9
	Input	W	45	55	55	82
Heating[2]	Capacity	kW	6.3	8	9	10
	Input	W	45	55	55	82
Air flow rate[3]		m^3/h	747/713/685/648/613/578/547	1195/1130/1065/1005/940/875/809	1195/1130/1065/1005/940/875/809	1421/1300/1125/1067/1005/934/867
Sound pressure level[4]		dB(A)	38/37/36/36/35/34/34	44/43/42/39/38/37/36	44/43/42/39/38/37/36	48/46/45/43/41/40/38
Unit	Net dimension (WxHxD)	mm	990×315×223	1194×343×262	1194×343×262	1194×343×262
	Packed dimensions (W×H×D)	mm	1085×420×335	1290×375×460	1290×375×460	1290×375×460
	Net/Gross weight	kg	12.8/16.9	17.0/22.4	17.0/22.4	17.0/22.4
Refrigerant piping	Liquid side/ Gas side	mm	Φ9.53/Φ15.9	Φ9.53/Φ15.9	Φ9.53/Φ15.9	Φ9.53/Φ15.9
Drainage water pipe diameter		mm	OD Φ16	OD Φ16	OD Φ16	OD Φ16

Notes:

1. Indoor temperature 27°C DB, 19°C WB; outdoor temperature 35°C DB; equivalent refrigerant piping length 7.5m with zero level difference.
2. Indoor temperature 20°C DB; outdoor temperature 7°C DB, 6°C WB; equivalent refrigerant piping length 7.5m with zero level difference.
3. Each model's 7 airflow rate options are listed in order, from highest to lowest.
4. Each model's 7 sound pressure levels are listed in order from highest to lowest and correspond to the model's 7 airflow rate options (see Note 3). Sound pressure level is measured 1m in front and 1m below the unit in a semi-anechoic chamber.
5. Unit body dimensions given are the largest external dimensions of the unit, including hanger attachments.

INDOOR 4-WAY CEILING CASSETTE

INDOOR: STA-XXXVICC

Model			STA-028VICC	STA-036VICC	STA-045VICC	STA-056VICC	STA-071VICC
Power supply		V-Ph-Hz	1 phase, 220-240V, 50/60Hz				
Cooling[1]	Capacity	kW	2.8	3.6	4.5	5.6	7.1
	Input	W	40	45	50	60	70
Heating[2]	Capacity	kW	3.2	4	5	6.3	8
	Input	W	40	45	50	60	70
Air flow rate[3]		m^3/h	801/751/711/658/637/611/542	801/751/711/658/637/611/542	893/866/804/744/714/698/635	893/866/804/744/714/698/635	977/937/864/800/778/738/671
Sound pressure level[4]		dB(A)	32/31/30/28/28/26/23	32/31/30/28/28/26/23	35/34/31/31/30/28/26	35/34/31/31/30/28/26	35/35/34/31/30/28/27
Main Body	Net dimension (WxHxD)	mm	840×230×840	840×230×840	840×230×840	840×230×840	840×230×840
	Packed dimensions (WxHxD)	mm	955×260×955	955×260×955	955×260×955	955×260×955	955×260×955
	Net/Gross weight	kg	21.3/25.8	21.3/25.8	23.2/27.6	23.2/27.6	23.2/27.6
Panel	Net Dimension (WxHxD)	mm	950×54.5×950	950×54.5×950	950×54.5×950	950×54.5×950	950×54.5×950
	Packed dimensions (WxHxD)	mm	1035×90×1035	1035×90×1035	1035×90×1035	1035×90×1035	1035×90×1035
	Net/Gross weight	kg	5.5/8.2	5.5/8.2	5.5/8.2	5.5/8.2	5.5/8.2
Refrigerant piping	Liquid side/ Gas side	mm	Φ6.35/Φ12.7	Φ6.35/Φ12.7	Φ6.35/Φ12.7	Φ9.53/Φ15.9	Φ9.53/Φ15.9
Drainage water pipe diameter		mm	OD Φ32	OD Φ32	OD Φ32	OD Φ32	OD Φ32

Model			STA-080VICC	STA-090VICC	STA-100VICC	STA-112VICC	STA-140VICC	STA-160VICC
Power supply		V-Ph-Hz	1 phase, 220-240V, 50/60Hz					
Cooling[1]	Capacity	kW	8	9	10	11.2	14	16
	Input	W	96	100	150	160	170	170
Heating[2]	Capacity	kW	9	10	11	12.5	16	18
	Input	W	96	100	150	160	170	170
Air flow rate[3]		m^3/h	1203/1131/1064/977/912/840/774	1349/1294/1230/1201/1111/1029/970	1700/1600/1440/1250/1200/1150/1100	1700/1600/1440/1250/1200/1150/1100	1800/1650/1500/1300/1250/1200/1150	2100/1950/1800/1750/1600/1450/1350
Sound pressure level[4]		dB(A)	36/35/34/31/31/29/28	37/35/34/31/31/30/28	43/42/40/38/37/35/34	43/42/40/38/37/35/34	45/44/42/41/40/39/37	46/44/42/41/39/38/37
Main Body	Net dimension (WxHxD)	mm	840×230×840	840×300×840	840×300×840	840×300×840	840×300×840	950×300×950
	Packed dimensions (WxHxD)	mm	955×260×955	955×330×955	955×330×955	955×330×955	955×330×955	1050×335×1050
	Net/Gross weight	kg	23.2/27.6	28.4/33.8	28.4/33.8	28.4/33.8	30.7/35.8	35.3/41.2
Panel	Net Dimension (WxHxD)	mm	950×54.5×950	950×54.5×950	950×54.5×950	950×54.5×950	950×54.5×950	1050×55.0×1050
	Packed dimensions (WxHxD)	mm	1035×90×1035	1035×90×1035	1035×90×1035	1035×90×1035	1035×90×1035	1115×100×1115
	Net/Gross weight	kg	5.5/8.2	5.5/8.2	5.5/8.2	5.5/8.2	5.5/8.2	7.4/9.7
Refrigerant piping	Liquid side/ Gas side	mm	Φ9.53/Φ15.9	Φ9.53/Φ15.97	Φ9.53/Φ15.9	Φ9.53/Φ15.9	Φ9.53/Φ15.9	Φ9.53/Φ15.9
Drainage water pipe diameter		mm	OD Φ32	OD Φ32	OD Φ32	OD Φ32	OD Φ32	OD Φ32

Notes:

1. Indoor temperature 27°C DB, 19°C WB; outdoor temperature 35°C DB; equivalent refrigerant piping length 7.5m with zero level difference.
2. Indoor temperature 20°C DB; outdoor temperature 7°C DB, 6°C WB; equivalent refrigerant piping length 7.5m with zero level difference.
3. Each model's 7 airflow rate options are listed in order, from highest to lowest.
4. Each model's 7 sound pressure levels are listed in order from highest to lowest and correspond to the model's 7 airflow rate options (see Note 3). Sound pressure level is measured 1.4m below the unit in a semi-anechoic chamber.
5. Unit body dimensions given are the largest external dimensions of the unit, including hanger attachments.

INDOOR CEILING FLOOR

INDOOR: STA-XXXVI5CF

Model			STA-036VI5CF	STA-045VI5CF	STA-056VI5CF	STA-071VI5CF
Power supply		V-Ph-Hz	1 phase, 220-240V, 50/60Hz			
Cooling[1]	Capacity	kW	3.6	4.5	5.6	7.1
	Input	W	49	115	115	115
Heating[2]	Capacity	kW	4	5	6.3	8
	Input	W	49	115	115	115
Air flow rate[3]		m^3/h	550/525/500/480/460/440/420	800/750/700/650/600/550/500	800/750/700/650/600/550/500	800/750/700/650/600/550/500
Sound pressure level[4]		dB(A)	36/35/34/33/32/31/30	43/42/41/41/39/38/38	43/42/41/41/39/38/38	43/42/41/41/39/38/38
Unit	Net dimension (WxHxD)	mm	990×660×203	990×660×203	990×660×203	990×660×203
	Packed dimensions (W×H×D)	mm	1089×744×296	1089×744×296	1089×744×296	1089×744×296
	Net/Gross weight	kg	27/33	28/34	28/34	28/34
Refrigerant piping	Liquid side/ Gas side	mm	Φ6.35/Φ12.7	Φ6.35/Φ12.7	Φ9.53/Φ15.9	Φ9.53/Φ15.9
Drainage water pipe diameter		mm	OD Φ16	OD Φ16	OD Φ16	OD Φ16

Model			STA-080VI5CF	STA-090VI5CF	STA-112VI5CF	STA-140VI5CF	STA-160VI5CF
Power supply		V-Ph-Hz	1 phase, 220-240V, 50/60Hz				
Cooling[1]	Capacity	kW	8	9	11.2	14	16
	Input	W	130	130	180	180	288
Heating[2]	Capacity	kW	9	10	12.5	15	18
	Input	W	130	130	180	180	288
Air flow rate[3]		m^3/h	1280/1245/1210/1170/1130/1085/1050	1280/1245/1210/1170/1130/1085/1050	1890/1830/1765/1700/1660/1620/1580	1890/1830/1765/1700/1660/1620/1580	2300/2240/2180/2100/2005/1950/1800
Sound pressure level[4]		dB(A)	45/44/43/43/42/41/40	45/44/43/43/42/41/40	47/46/45/45/44/43/42	47/46/45/45/44/43/42	50/49/48/47/46/45/44
Unit	Net dimension (WxHxD)	mm	1280×660×203	1280×660×203	1670×680×244	1670×680×244	1670×680×244
	Packed dimensions (W×H×D)	mm	1379×744×296	1379×744×296	1915×760×330	1915×760×330	1915×760×330
	Net/Gross weight	kg	35/41	35/41	48/58	48/58	48/58
Refrigerant piping	Liquid side/ Gas side	mm	Φ9.53/Φ15.9	Φ9.53/Φ15.9	Φ9.53/Φ15.9	Φ9.53/Φ15.9	Φ9.53/Φ15.9
Drainage water pipe diameter		mm	OD Φ16	OD Φ16	OD Φ16	OD Φ16	OD Φ16

Notes:

1. Indoor temperature 27°C DB, 19°C WB; outdoor temperature 35°C DB; equivalent refrigerant piping length 7.5m with zero level difference.
2. Indoor temperature 20°C DB; outdoor temperature 7°C DB, 6°C WB; equivalent refrigerant piping length 7.5m with zero level difference.
3. Each model's 7 airflow rate options are listed in order, from highest to lowest.
4. Each model's 7 sound pressure levels are listed in order from highest to lowest and correspond to the model's 7 airflow rate options (see Note 3). Floor standing: Sound pressure level is measured 1m in front and 1m above the floor in a semi-anechoic chamber.
   Ceiling mounted: Sound pressure level is measured 1m in front and 1m below the unit in a semi-anechoic chamber.
5. Unit body dimensions given are the largest external dimensions of the unit, including hanger attachments.

INDOOR FRESH AIR DUCT

INDOOR: STA-XXXVIHDDFA

Model			STA-125VIHDDFA	STA-140VIHDDFA	STA-200VIHDDFA
Power supply		V-Ph-Hz	1 phase, 220-240V, 50/60Hz		
Cooling[1]	Capacity	kW	12.5	14	20
	Input	W	480	480	850
Heating[2]	Capacity	kW	10.5	12	12.8
	Input	W	480	480	850
Air flow rate[3]		m^3/h	2000/1917/1833/1750/1667/1583/1500	2000/1917/1833/1750/1667/1583/1500	3000/2833/2667/2500/2333/2167/2000
External static pressure		Pa	150(100~250)	150(100~250)	200(100~400)
Sound pressure level[4]		dB(A)	48/47/46/45/44/43/42	48/47/46/45/44/43/42	50/49/48/47/46/44/43
Unit	Net dimension (WxHxD)	mm	1322×423×691	1322×423×691	1454×515×931
	Packed dimensions (WxHxD)	mm	1436×450×768	1436×450×768	1509×550×990
	Net/Gross weight	kg	68/76	68/76	130/142
Refrigerant piping	Liquid side/ Gas side	mm	Φ9.53/Φ15.9	Φ9.53/Φ15.9	Φ12.7/Φ22.2
Drainage water pipe diameter		mm	OD Φ25	OD Φ25	OD Φ32

Model			βSTA-250VIHDDFA	STA-280VIHDDFA	STA-450VIHDDFA	STA-560VIHDDFA
Power supply		V-Ph-Hz	1 phase, 220-240V, 50/60Hz			
Cooling[1]	Capacity	kW	25	28	45	56
	Input	W	850	850	1080	2272
Heating[2]	Capacity	kW	16	18	28	39
	Input	W	850	850	1080	2272
Air flow rate[3]		m^3/h	3000/2833/2667/2500/2333/2167/2000	3000/2833/2667/2500/2333/2167/2000	4200/3967/3733/3500/3267/3033/2800	6000/5665/5330/5000/4665/4330/4000
External static pressure		Pa	200(100~400)	200(100~400)	300(100~ 400)	300(100~ 400)
Sound pressure level[4]		dB(A)	50/49/48/47/46/44/43	50/49/48/47/46/44/43	58/56/55/53/51/49/48	59/57/56/55/53/51/50
Unit	Net dimension (WxHxD)	mm	1454×515×931	1454×515×931	2010×680×905	2010×680×905
	Packed dimensions (WxHxD)	mm	1509×550×990	1509×550×990	2095×800×964	2095×800×964
	Net/Gross weight	kg	130/142	130/142	195/215	218/248
Refrigerant piping	Liquid side/ Gas side	mm	Φ12.7/Φ22.2	Φ12.7/Φ22.2	Φ15.9/Φ28.6	Φ15.9/Φ28.6
Drainage water pipe diameter		mm	OD Φ32	OD Φ32	OD Φ32	OD Φ32

Notes:

1. Outdoor temperature 33°C DB, 28°C WB;equivalent refrigerant piping length 7.5m with zero level difference.

2. Outdoor temperature 0°C DB, -2.9°C WB;equivalent refrigerant piping length 7.5m with zero level difference.

3. Each model's 7 airflow rate options are listed in order, from highest to lowest.

4. Each model's 7 sound pressure levels are listed in order from highest to lowest and correspond to the model's 7 airflow rate options (see Note 3). Sound pressure level is measured 1.4m below the unit in a semi-anechoic chamber.

5. Unit body dimensions given are the largest external dimensions of the unit, including hanger attachments. All specifications are measured at standard external static pressure.

The Fresh Air Processing Unit can be used either independently or in conjunction with other types of indoor unit. If used independently, the total capacity of the Fresh Air Processing Units must be between 50% and 100% of that of the outdoor units. If used in conjunction with other types of indoor unit, the total capacity of the indoor units and Fresh Air Processing

Units must be between 50% and 100% of that of the outdoor units and the total capacity of the Fresh Air Processing Units must not exceed 30% of that of the outdoor units.

INDOOR HIGH STATIC PRESSURE DUCT

INDOOR: STA-XXXVIHDD

Model			STA-071VIHDD	STA-080VIHDD	STA-090VIHDD	STA-112VIHDD	STA-140VIHDD	STA-160VIHDD
Power supply		V-Ph-Hz	1 phase, 220-240V, 50/60Hz					
Cooling[1]	Capacity	kW	7.1	8	9	11.2	14	16
	Input	W	180	180	220	380	420	700
Heating[2]	Capacity	kW	8	9	10	12.5	16	17
	Input	W	180	180	220	380	420	700
Air flow rate[3]		m^3/h	1360/1327/1293/1260 /1227/1193/1160	1360/1327/1293/1260 /1227/1193/1160	1420/1373/1327/1280 /1233/1187/1140	1870/1783/1697/1610 /1523/1437/1350	2240/2133/2027/1920 /1813/1707/1600	2660/2530/2400/2270 /2140/2010/1880
External static pressure		Pa	100 (30~ 200)	100 (30~ 200)	100 (30~ 200)	100 (30~ 200)	100 (30~ 200)	100 (30~ 200)
Sound pressure level[4]		dB(A)	42/41/40/40/39/39/38	42/41/40/40/39/39/38	45/44/43/42/41/40/39	48/47/46/45/43/42/41	45/44/43/42/41/40/40	46/45/44/43/42/41/40
Unit	Net dimension (WxHxD)	mm	965×423×690	965×423×690	965×423×690	965×423×690	1322×423×691	1322×423×691
	Packed dimensions (WxHxD)	mm	1090×440×768	1090×440×768	1090×440×768	1090×440×768	1436×450×768	1436×450×768
	Net/Gross weight	kg	41/47	41/47	48/55	48/55	68/76	68/76
Refrigerant piping	Liquid side/ Gas side	mm	Φ9.53/Φ15.9	Φ9.53/Φ15.9	Φ9.53/Φ15.9	Φ9.53/Φ15.9	Φ9.53/Φ15.9	Φ9.53/Φ15.9
Drainage water pipe diameter		mm	OD Φ25	OD Φ25	OD Φ25	OD Φ25	OD Φ25	OD Φ25

Model			STA-200VIHDD	STA-250VIHDD	STA-280VIHDD	STA-400VIHDD	STA-450VIHDD	STA-560VIHDD
Power supply		V-Ph-Hz	1-phase, 220-240V, 50/60Hz					
Cooling[1]	Capacity	kW	20	25	28	40	45	56
	Input	W	990	1200	1200	1800	1800	2272
Heating[2]	Capacity	kW	22.5	26	31.5	45	56	63
	Input	W	990	1200	1200	1800	1800	2272
Air flow rate[3]		m^3/h	4330/4230/4130/4030 /3930/3830/3730	4330/4230/4130/4030 /3930/3830/3730	4330/4230/4130/4030 /3930/3830/3730	6500/6150/5800/5450 /5100/4750/4400	6500/6150/5800/5450 /5100/4750/4400	7400/7000/6600/6200 /5800/5400/5000
External static pressure		Pa	170(20~250)	170(20~250)	170(20~250)	300(100~400)	300(100~400)	300(100~400)
Sound pressure level[4]		dB(A)	51/50/50/49/49/48/47	51/50/50/49/49/48/47	51/50/50/49/49/48/47	60/59/58/57/55/54/52	60/59/58/57/55/54/52	59/58/57/56/55/53/51
Unit	Net dimension (WxHxD)	mm	1454×515×931	1454×515×931	1454×515×931	2010×680×905	2010×680×905	2010×680×905
	Packed dimensions (WxHxD)	mm	1509×550×990	1509×550×990	1509×550×990	2095×800×964	2095×800×964	2095×800×964
	Net/Gross weight	kg	130/142	130/142	130/142	220/245	220/245	218/248
Refrigerant piping	Liquid side/ Gas side	mm	Φ12.7/Φ22.2	Φ12.7/Φ22.2	Φ12.7/Φ22.2	Φ15.9/Φ28.6	Φ15.9/Φ28.6	Φ15.9/Φ28.6
Drainage water pipe diameter		mm	OD Φ32	OD Φ32	OD Φ32	OD Φ32	OD Φ32	OD Φ32

Notes:

1. Indoor temperature 27°C DB, 19°C WB; outdoor temperature 35°C DB; equivalent refrigerant piping length 7.5m with zero level difference.
2. Indoor temperature 20°C DB; outdoor temperature 7°C DB, 6°C WB; equivalent refrigerant piping length 7.5m with zero level difference.
3. Each model's 7 airflow rate options are listed in order, from highest to lowest.
4. Each model's 7 sound pressure levels are listed in order from highest to lowest and correspond to the model's 7 airflow rate options (see Note 3). Sound pressure level is measured 1.4m below the unit in a semi-anechoic chamber.
5. Unit body dimensions given are the largest external dimensions of the unit, including hanger attachments.

All specifications are measured at standard external static pressure.

INDOOR MEDIUM STATIC PRESSURE DUCT

INDOOR: STA-XXXVIMDD

Model			STA-022VIMDD	STA-028VIMDD	STA-036VIMDD	STA-045VIMDD	STA-056VIMDD	STA-071VIMDD
Power supply		V-Ph-Hz	1 phase, 220-240V, 50/60Hz					
Cooling[1]	Capacity	kW	2.2	2.8	3.6	4.5	5.6	7.1
	Input	W	40	40	45	92	92	98
Heating[2]	Capacity	kW	2.6	3.2	4	5	6.3	8
	Input	W	40	40	45	92	92	98
Air flow rate[3]		m^3/h	520/480/440/400/360/330/300	520/480/440/400/360/330/300	580/540/500/460/430/400/370	800/740/680/620/540/480/400	830/790/750/710/660/620/580	1000/960/900/840/780/720/680
External static pressure		Pa	10 (0~50)	10 (0~50)	10 (0~50)	10 (0~50)	10 (0~50)	10 (0~50)
Sound pressure level[4]		dB(A)	32/31/30/28/28/26/23	32/31/30/28/28/26/23	33/32/31/30/28/27/25	36/34/32/31/29/27/25	36/34/33/32/30/29/28	37/35/33/32/30/29/28
Unit	Net dimension (WxHxD)	mm	780×210×500	780×210×500	780×210×500	1000×210×500	1000×210×500	1220×210×500
	Packed dimensions (W×H×D)	mm	870×285×525	870×285×525	870×285×525	1090x285x525	1090x285x525	1335×285×525
	Net/Gross weight	kg	18/21	18/21	18/21	21.5/25	21.5/25	25.7/30.2
Refrigerant piping	Liquid side/ Gas side	mm	Φ6.35/Φ12.7	Φ6.35/Φ12.7	Φ6.35/Φ12.7	Φ6.35/ Φ12.7	Φ9.53/Φ15.9	Φ9.53/Φ15.9
Drainage water pipe diameter		mm	OD Φ25	OD Φ25	OD Φ25	OD Φ25	OD Φ25	OD Φ25

Model			STA-080VIMDD	STA-090VIMDD	STA-112VIMDD	STA-140VIMDD	STA-160VIMDD
Power supply		V-Ph-Hz	1 phase, 220-240V, 50/60Hz				
Cooling[1]	Capacity	kW	8	9	11.2	14	16
	Input	W	110	120	200	250	250
Heating[2]	Capacity	kW	9	10	12.5	15.5	18
	Input	W	110	120	200	250	250
Air flow rate[3]		m^3/h	1260/1180/1100/1020/940/860/780	1260/1180/1100/1020/940/860/780	1500/1430/1360/1290/1210/1140/1080	1960/1860/1760/1660/1560/1460/1360	2300/2100/2000/1900/1750/1600/1450
External static pressure		Pa	20 (10~100)	20 (10~100)	20 (10~100)	40 (30~150)	40 (30~150)
Sound pressure level[4]		dB(A)	36/35/34/31/31/29/28	36/35/34/31/31/29/28	39/38/38/37/35/34/33	41/39/38/37/36/35/33	42/41/39/38/37/35/34
Unit	Net dimension (WxHxD)	mm	1230×270×775	1230×270×775	1290×300×865	1290×300×865	1490×300×865
	Packed dimensions (W×H×D)	mm	1355×355×795	1355×355×795	1355×355×795	1400×375×925	1605×345×955
	Net/Gross weight	kg	36.5/44.5	37/45	37/45	46.5/55.5	54/63
Refrigerant piping	Liquid side/ Gas side	mm	Φ9.53/Φ15.9	Φ9.53/Φ15.97	Φ9.53/Φ15.9	Φ9.53/Φ15.9	Φ9.53/Φ15.9
Drainage water pipe diameter		mm	OD Φ25	OD Φ25	OD Φ25	OD Φ25	OD Φ25

Notes:

1. Indoor temperature 27°C DB, 19°C WB; outdoor temperature 35°C DB; equivalent refrigerant piping length 7.5m with zero level difference.
2. Indoor temperature 20°C DB; outdoor temperature 7°C DB, 6°C WB; equivalent refrigerant piping length 7.5m with zero level difference.
3. Each model's 7 airflow rate options are listed in order, from highest to lowest.
4. Each model's 7 sound pressure levels are listed in order from highest to lowest and correspond to the model's 7 airflow rate options (see Note 3). Sound pressure level is measured 1.4m below the unit in a semi-anechoic chamber.
5. Unit body dimensions given are the largest external dimensions of the unit, including hanger attachments.

All specifications are measured at standard external static pressure.

VRF OUTDOOR

Optimized for Small to Large Buildings

- ✓ *Energy Management Systems (EMS)*
- ✓ *Triple Configurations*
- ✓ *High Efficiency Heat Exchanger*
- ✓ *ESP up to 60Pa*
- ✓ *Precise Oil Control*
- ✓ *Multi Silent Modes*
- ✓ *Duty Cycling*
- ✓ *Back Up Operation*
- ✓ *Refrigerant Cooling PCB*
- ✓ *Dust Clean Function*
- ✓ *Automatic Refrigerant Detecting/Charging*

Wide Capacity Range

For Single Unit, max capacity up to 30HP. Combined unit, max capacity up to 90HP

8-16HP Single fan

18-22HP Dual fan

24-30HP Dual fan

16-60HP

24-90HP

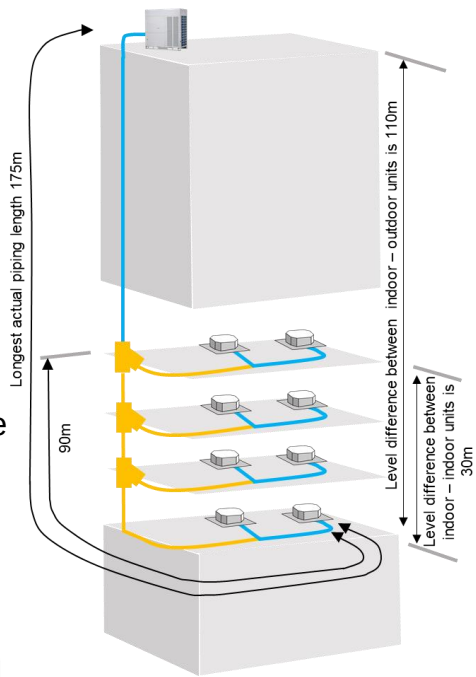
EcoLine Solar Thermal Air Conditioning

Wide Operating Range

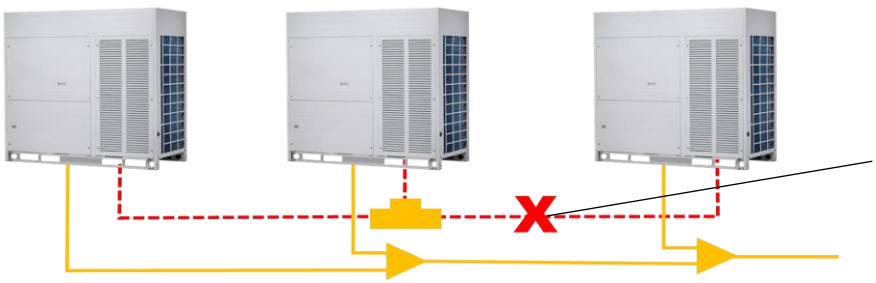
Wide Ambient temperature from -5°C to 55°C

Long Piping Capability

- Total length: 1000m
- Longest length-actual (equivalent): 175m (200m)
- Longest length after branch: 40-90m (under certain conditions)
- Level difference between indoor-outdoor units, above (below): 90m (100m)
- Level difference between indoor units: 30m



Oil Balance Pipe Not Required



With an oil management system, there is no need for an oil balance pipe between units

VRF OUTDOOR UNIT

OUTDOOR: STA-VCXXXVF03

Model			STA-VC224VF03	STA-VC280VF03	STA-VC335VF03	STA-VC400VF03	STA-VC450VF03	STA-VC500VF03	STA-VC560VF03
Power supply		V/Ph/Hz	380-415V / 3 / 50&60Hz						
Cooling	Capacity	kW	22.4	28.0	33.5	40.0	45.0	50.0	56.0
		kBtu/h	76.4	95.5	114.3	136.5	153.5	170.6	191.1
	Power input	kW	3.361	4.427	5.935	6.877	7.969	9.672	11.479
	Running Current	Amp	8.098	10.666	14.300	16.571	19.202	23.306	27.660
Connectable indoor unit	Total capacity		50-130%						
	Max. quantity		13	16	20	23	26	29	33
Compressor	Type		DC	DC	DC	DC	DC	DC	DC
	Model		STAC-008HV	STAC-010HV	STAC-012HV	STAC-014HV	STAC-016HV	STAC-018HV	STAC-020HV
	Brand		ECOLINE	ECOLINE	ECOLINE	ECOLINE	ECOLINE	ECOLINE	ECOLINE
	Quantity		1	1	1	1	1	2	2
Fan motor	Type		DC motor	DC motor	DC motor	DC motor	DC motor	DC motor	DC motor
	Model		ZKSN-560-8-42L	ZKSN-560-8-42L	ZKSN-560-8-42L	ZKSN-750-8-2	ZKSN-750-8-2	ZKSN-560-8-42L	ZKSN-560-8-42L
	Quantity		1	1	1	1	1	2	2
	Output	KW	0.56	0.56	0.56	0.75	0.75	0.56 X 2	0.56 X 2
	Static pressure	Pa	20 default; 60 customization option						
	Airflow rate	m^3/h	10000	10000	11000	12000	12000	12600	12600
Refrigerant	Type								
	Factory charging	kg	8	8	8	11	11	13	13
Pipe connections	Liquid pipe	mm	Φ12.7	Φ12.7	Φ15.9	Φ15.9	Φ15.9	Φ19.1	Φ19.1
	Gas pipe	mm	Φ25.4	Φ25.4	Φ31.8	Φ31.8	Φ31.8	Φ31.8	Φ31.8
Sound pressure level		dB(A)	57	58	60	60	60	63	63
Net dimension (W×H×D)		mm	960×1615×765	960×1615×765	1250×1615×765	1250×1615×765	1250×1615×765	1250×1615×765	1250×1615×765
Packing size (W×H×D)		mm	1025×1790×830	1025×1790×830	1305×1790×820	1305×1790×820	1305×1790×820	1305×1790×820	1305×1790×820
Net weight		kg	188	188	188	197	197	278	278
Gross weight		kg	204	204	204	213	213	297	297
Ambient temp. Cooling		°C	-5°C to 55°C						

EcoLine
Solar Thermal Air Conditioning

Notes:

1. Cooling: Indoor temperature 27°C DB/19°C WB; Outdoor temperature 35°C DB; equivalent refrigerant piping length: 7.5m with zero level difference
2. Diameters given are those of the unit's accessories
3. Sound pressure level is measured at a position 1m in front of the unit and 1m above the floor in a semi-anechoic chamber

VRF OUTDOOR UNIT

OUTDOOR: STA-VCXXXVF03

Model			STA-VC615VF03	STA-VC670VF03	STA-VC730VF03	STA-VC785VF03	STA-VC850VF03	STA-VC900VF03	STA-VC950VF03
								STA-VC450 x 2	STA-VC615 + STA-VC335
Power supply		V/Ph/Hz	380-415V / 3 / 50&60Hz						
Cooling	Capacity	kW	61.5	67.0	73.0	78.5	85.0	90.0	95.0
		kBtu/h	209.8	228.6	249.1	267.8	290.0	307.1	324.1
	Power input	kW	13.150	13.442	15.210	16.952	19.182	15.938	19.084
	Running Current	Amp	31.686	32.390	36.651	40.848	46.220	38.405	45.986
Connectable indoor unit	Total capacity								
	Max. quantity		36	39	43	46	50	53	56
Compressor	Type		DC	DC	DC	DC	DC	DC	DC
	Model		STAC-022HV	STAC-024HV	STAC-026HV	STAC-028HV	STAC-030HV	STAC-032HV	STAC-034HV
	Brand		ECOLINE	ECOLINE	ECOLINE	ECOLINE	ECOLINE	ECOLINE	ECOLINE
	Quantity		2	2	2	2	2	2	3
Fan motor	Type		DC motor	DC motor	DC motor	DC motor	DC motor	DC motor	DC motor
	Brand		Panasonic&Nidec	Panasonic&Nidec	Panasonic&Nidec	Panasonic&Nidec	Panasonic&Nidec	Panasonic&Nidec	Panasonic&Nidec
	Quantity		1	1	2	2	2	2	2
	Insulation class		E	E	E	E	E	E	E
	Safe class		IPX4	IPX5	IPX6	IPX7	IPX8	IPX9	IPX9
	Input	W	534	534	272×2	450×2	450×2	450×2	450×2
	Output	W	420	420	210×2	360×2	360×2	360×2	360×2
	Static pressure	Pa(in. W.G.)	0-20(0-0.08) (default)	0-20(0-0.08) (default)	0-20(0-0.08) (default)	0-20(0-0.08) (default)	0-20(0-0.08) (default)	0-20(0-0.08) (default)	0-20(0-0.08) (default)
		Pa(in. W.G.)	0-40(0-0.16) (customized)	0-40(0-0.16) (customized)	0-60(0-0.24) (customized)	0-40(0-0.16) (customized)	0-40(0-0.16) (customized)	0-40(0-0.16) (customized)	0-40(0-0.16) (customized)
Fan	Material		Plastic	Plastic	Plastic	Plastic	Plastic	Plastic	Plastic
	Type		Axial	Axial	Axial	Axial	Axial	Axial	Axial
	Quantity		1	1	2	2	2	2	2
Outdoor coil	Number of rows		2	2	2	2	2	2	2
	Tube pitch(a)× row pitch(b)	mm(in.)	22×19(7/8×3/4)	22×19(7/8×3/4)	22×19(7/8×3/4)	22×19(7/8×3/4)	22×19(7/8×3/4)	22×19(7/8×3/4)	22×19(7/8×3/4)
	Fin spacing	mm(in.)				1.6(1/16)			
	Fin type		Hydrophilic aluminum	Hydrophilic aluminum	Hydrophilic aluminum	Hydrophilic aluminum	Hydrophilic aluminum	Hydrophilic aluminum	Hydrophilic aluminum
	Tube outside diameter	mm(in.)	Φ7.94(Φ5/16)	Φ7.94(Φ5/16)	Φ7.94(Φ5/16)	Φ7.94(Φ5/16)	Φ7.94(Φ5/16)	Φ7.94(Φ5/16)	Φ7.94(Φ5/16)
	Tube type		Inner-grooved	Inner-grooved	Inner-grooved	Inner-grooved	Inner-grooved	Inner-grooved	Inner-grooved
	Coil length × height	mm(in.)			2270×1232(89-3/8×48-1/2)	2270×1232(89-3/8×48-1/2)		2867×1232(112-7/8×48-1/2)	2867×1232(112-7/8×48-1/2)
	Number of circuits		22	22	22	22	22	22	22
Refrigerant	Type								
	Factory charging	kg(lbs.)	10(22)	10(22)	12(26)	15(33)	15(33)	16(35)	16(35)
Pipe connections	Liquid pipe	mm(in.)	Φ12.7(Φ1/2)	Φ12.7(Φ1/2)	Φ15.9(Φ5/8)	Φ15.9(Φ5/8)	Φ15.9(Φ5/8)	Φ19.1(Φ3/4)	Φ19.1(Φ3/4)
	Gas pipe	mm(in.)	Φ25.4(Φ1)	Φ25.4(Φ1)	Φ31.8(Φ1-1/4)	Φ31.8(Φ1-1/4)	Φ31.8(Φ1-1/4)	Φ31.8(Φ1-1/4)	Φ31.8(Φ1-1/4)
	Oil balance pipe	mm(in.)	Φ6(Φ1/4)	Φ6(Φ1/4)	Φ6(Φ1/4)	Φ6(Φ1/4)	Φ6(Φ1/4)	Φ6(Φ1/4)	Φ6(Φ1/4)
Design pressure(High/low)		MPa	4.4/2.6	4.4/2.6	4.4/2.6	4.4/2.6	4.4/2.6	4.4/2.6	4.4/2.6
		PSI	640/380	640/380	640/380	640/380	640/380	640/380	640/380
Air flow rate		m^3/h	11242	11242	13000	15620	15620	15620	15620
Sound pressure level		dB(A)	57	57	59	61	62	62	62
Net dimension (W×H×D)		mm	960×1615×765	960×1615×765	1250×1615×765	1250×1615×765	1250×1615×765	1250×1615×765	1250×1615×765
Packing size (W×H×D)		mm	1025×1790×830	1025×1790×830	1305×1790×820	1305×1790×820	1305×1790×820	1305×1790×820	1305×1790×820
Net weight		kg(lbs.)	278	212(466)	288(634)	288(634)	288(634)	310(682)	310(682)
Gross weight		kg(lbs.)	297	227(499)	308(678)	308(678)	308(678)	330(726)	330(726)
Ambient temp. Cooling		°C	-5°C to 55°C						

Notes:

1. Cooling: Indoor temperature 27°C DB/19°C WB; Outdoor temperature 35°C DB; equivalent refrigerant piping length: 7.5m with zero level difference
2. Diameters given are those of the unit's accessories
3. Sound pressure level is measured at a position 1m in front of the unit and 1m above the floor in a semi-anechoic chamber

VRF OUTDOOR UNIT

OUTDOOR: STA-VCXXXXVF03

Model			STA-VC1010VF03	STA-VC1065VF03	STA-VC1120VF03	STA-VC1180VF03	STA-VC1235VF03	STA-VC1300VF03	STA-VC1345VF03
			STA-VC560 + STA-VC450	STA-VC615 + STA-VC450	STA-VC670 + STA-VC450	STA-VC730 + STA-VC450	STA-VC785 + STA-VC450	STA-VC850 + STA-VC450	STA-VC730 + STA-VC615
Power supply		V/Ph/Hz	380-415V / 3 / 50&60Hz						
Cooling	Capacity	kW	101.0	106.5	112.0	118.0	123.5	130.0	134.5
		kBtu/h	344.6	363.4	382.1	402.6	421.4	443.6	458.9
	Power input	kW	19.448	21.119	21.411	23.179	24.921	27.151	28.360
	Running Current	Amp	46.863	50.888	51.593	55.853	60.051	65.423	68.336
Connectable indoor unit	Total capacity								
	Max. quantity		59	63	64	64	64	64	64
Compressor	Type		DC	DC	DC	DC	DC	DC	DC
	Model		STAC-036HV	STAC-038HV	STAC-040HV	STAC-042HV	STAC-044HV	STAC-046HV	STAC-048HV
	Brand		ECOLINE	ECOLINE	ECOLINE	ECOLINE	ECOLINE	ECOLINE	ECOLINE
	Quantity		3	3	3	3	3	3	4
Fan motor	Type		DC motor	DC motor	DC motor	DC motor	DC motor	DC motor	DC motor
	Brand		Panasonic&Nidec	Panasonic&Nidec	Panasonic&Nidec	Panasonic&Nidec	Panasonic&Nidec	Panasonic&Nidec	Panasonic&Nidec
	Quantity		1	1	2	2	2	2	2
	Insulation class		E	E	E	E	E	E	E
	Safe class		IPX4	IPX5	IPX6	IPX7	IPX8	IPX9	IPX9
	Input	W	534	534	272×2	450×2	450×2	450×2	450×2
	Output	W	420	420	210×2	360×2	360×2	360×2	360×2
	Static pressure	Pa(in. W.G.)	0-20(0-0.08) (default)	0-20(0-0.08) (default)	0-20(0-0.08) (default)	0-20(0-0.08) (default)	0-20(0-0.08) (default)	0-20(0-0.08) (default)	0-20(0-0.08) (default)
		Pa(in. W.G.)	0-40(0-0.16) (customized)	0-40(0-0.16) (customized)	0-60(0-0.24) (customized)	0-40(0-0.16) (customized)	0-40(0-0.16) (customized)	0-40(0-0.16) (customized)	0-40(0-0.16) (customized)
Fan	Material		Plastic	Plastic	Plastic	Plastic	Plastic	Plastic	Plastic
	Type		Axial	Axial	Axial	Axial	Axial	Axial	Axial
	Quantity		1	1	2	2	2	2	2
Outdoor coil	Number of rows		2	2	2	2	2	2	2
	Tube pitch(a)× row pitch(b)	mm(in.)	22×19(7/8×3/4)	22×19(7/8×3/4)	22×19(7/8×3/4)	22×19(7/8×3/4)	22×19(7/8×3/4)	22×19(7/8×3/4)	22×19(7/8×3/4)
	Fin spacing	mm(in.)				1.6(1/16)			
	Fin type		Hydrophilic aluminum	Hydrophilic aluminum	Hydrophilic aluminum	Hydrophilic aluminum	Hydrophilic aluminum	Hydrophilic aluminum	Hydrophilic aluminum
	Tube outside diameter	mm(in.)	Φ7.94(Φ5/16)	Φ7.94(Φ5/16)	Φ7.94(Φ5/16)	Φ7.94(Φ5/16)	Φ7.94(Φ5/16)	Φ7.94(Φ5/16)	Φ7.94(Φ5/16)
	Tube type		Inner-grooved	Inner-grooved	Inner-grooved	Inner-grooved	Inner-grooved	Inner-grooved	Inner-grooved
	Coil length × height	mm(in.)			2270×1232(89-3/8×48-1/2)	2270×1232(89-3/8×48-1/2)		2867×1232(112-7/8×48-1/2)	2867×1232(112-7/8×48-1/2)
	Number of circuits		22	22	22	22	22	22	22
Refrigerant	Type								
	Factory charging	kg(lbs.)	10(22)	10(22)	12(26)	15(33)	15(33)	16(35)	16(35)
Pipe connections	Liquid pipe	mm(in.)	Φ12.7(Φ1/2)	Φ12.7(Φ1/2)	Φ15.9(Φ5/8)	Φ15.9(Φ5/8)	Φ15.9(Φ5/8)	Φ19.1(Φ3/4)	Φ19.1(Φ3/4)
	Gas pipe	mm(in.)	Φ25.4(Φ1)	Φ25.4(Φ1)	Φ31.8(Φ1-1/4)	Φ31.8(Φ1-1/4)	Φ31.8(Φ1-1/4)	Φ31.8(Φ1-1/4)	Φ31.8(Φ1-1/4)
	Oil balance pipe	mm(in.)	Φ6(Φ1/4)	Φ6(Φ1/4)	Φ6(Φ1/4)	Φ6(Φ1/4)	Φ6(Φ1/4)	Φ6(Φ1/4)	Φ6(Φ1/4)
Design pressure(High/low)		MPa	4.4/2.6	4.4/2.6	4.4/2.6	4.4/2.6	4.4/2.6	4.4/2.6	4.4/2.6
		PSI	640/380	640/380	640/380	640/380	640/380	640/380	640/380
Air flow rate		m^3/h	11242	11242	13000	15620	15620	15620	15620
Sound pressure level		dB(A)	57	57	59	61	62	62	62
Net dimension (W×H×D)		mm	960×1615×765	960×1615×765	1250×1615×765	1250×1615×765	1250×1615×765	1250×1615×765	1250×1615×765
Packing size (W×H×D)		mm	1025×1790×830	1025×1790×830	1305×1790×820	1305×1790×820	1305×1790×820	1305×1790×820	1305×1790×820
Net weight		kg(lbs.)	212(466)	212(466)	288(634)	288(634)	288(634)	310(682)	310(682)
Gross weight		kg(lbs.)	227(499)	227(499)	308(678)	308(678)	308(678)	330(726)	330(726)
Ambient temp. Cooling		°C	-5°C to 55°C						

EcoLine Solar Thermal Air Conditioning

Notes:

1. Cooling: Indoor temperature 27°C DB/19°C WB; Outdoor temperature 35°C DB; equivalent refrigerant piping length: 7.5m with zero level difference
2. Diameters given are those of the unit's accessories
3. Sound pressure level is measured at a position 1m in front of the unit and 1m above the floor in a semi-anechoic chamber

VRF OUTDOOR UNIT

OUTDOOR: STA-VCXXXXVF03

Model			STA-VC1400VF03	STA-VC1465VF03	STA-VC1515VF03	STA-VC1570VF03	STA-VC1635VF03	STA-VC1700VF03	STA-VC1750VF03
			STA-VC785 + STA-VC615	STA-VC850 + STA-VC615	STA-VC785 + STA-VC730	STA-VC785 + STA-VC785	STA-VC850 + STA-VC785	STA-VC850 + STA-VC850	STA-VC850 + STA-VC450 + STA-VC450
Power supply		V/Ph/Hz	380-415V / 3 / 50&60Hz						
Cooling	Capacity	kW	140.0	146.5	151.5	157.0	163.5	170.0	175.0
		kBtu/h	477.7	499.9	516.9	535.7	557.9	580.0	597.1
	Power input	kW	30.102	32.331	32.162	33.904	36.134	38.363	35.120
	Running Current	Amp	72.534	77.906	77.499	81.696	87.069	92.441	84.625
Connectable indoor unit	Total capacity								
	Max. quantity		64	64	64	64	64	64	64
Compressor	Type		DC	DC	DC	DC	DC	DC	DC
	Model		STAC-050HV	STAC-052HV	STAC-054HV	STAC-056HV	STAC-058HV	STAC-060HV	STAC-062HV
	Brand		ECOLINE	ECOLINE	ECOLINE	ECOLINE	ECOLINE	ECOLINE	ECOLINE
	Quantity		4	4	4	4	4	4	4
Fan motor	Type		DC motor	DC motor	DC motor	DC motor	DC motor	DC motor	DC motor
	Brand		Panasonic&Nidec	Panasonic&Nidec	Panasonic&Nidec	Panasonic&Nidec	Panasonic&Nidec	Panasonic&Nidec	Panasonic&Nidec
	Quantity		1	1	2	2	2	2	2
	Insulation class		E	E	E	E	E	E	E
	Safe class		IPX4	IPX5	IPX6	IPX7	IPX8	IPX9	IPX9
	Input	W	534	534	272×2	450×2	450×2	450×2	450×2
	Output	W	420	420	210×2	360×2	360×2	360×2	360×2
	Static pressure	Pa(in. W.G.)	0-20(0-0.08) (default)	0-20(0-0.08) (default)	0-20(0-0.08) (default)	0-20(0-0.08) (default)	0-20(0-0.08) (default)	0-20(0-0.08) (default)	0-20(0-0.08) (default)
		Pa(in. W.G.)	0-40(0-0.16) (customized)	0-40(0-0.16) (customized)	0-60(0-0.24) (customized)	0-40(0-0.16) (customized)	0-40(0-0.16) (customized)	0-40(0-0.16) (customized)	0-40(0-0.16) (customized)
Fan	Material		Plastic	Plastic	Plastic	Plastic	Plastic	Plastic	Plastic
	Type		Axial	Axial	Axial	Axial	Axial	Axial	Axial
	Quantity		1	1	2	2	2	2	2
Outdoor coil	Number of rows		2	2	2	2	2	2	2
	Tube pitch(a)× row pitch(b)	mm(in.)	22×19(7/8×3/4)	22×19(7/8×3/4)	22×19(7/8×3/4)	22×19(7/8×3/4)	22×19(7/8×3/4)	22×19(7/8×3/4)	22×19(7/8×3/4)
	Fin spacing	mm(in.)				1.6(1/16)			
	Fin type		Hydrophilic aluminum	Hydrophilic aluminum	Hydrophilic aluminum	Hydrophilic aluminum	Hydrophilic aluminum	Hydrophilic aluminum	Hydrophilic aluminum
	Tube outside diameter	mm(in.)	Φ7.94(Φ5/16)	Φ7.94(Φ5/16)	Φ7.94(Φ5/16)	Φ7.94(Φ5/16)	Φ7.94(Φ5/16)	Φ7.94(Φ5/16)	Φ7.94(Φ5/16)
	Tube type		Inner-grooved	Inner-grooved	Inner-grooved	Inner-grooved	Inner-grooved	Inner-grooved	Inner-grooved
	Coil length × height	mm(in.)			2270×1232(89-3/8×48-1/2)	2270×1232(89-3/8×48-1/2)		2867×1232(112-7/8×48-1/2)	2867×1232(112-7/8×48-1/2)
	Number of circuits		22	22	22	22	22	22	22
Refrigerant	Type								
	Factory charging	kg(lbs.)	10(22)	10(22)	12(26)	15(33)	15(33)	16(35)	16(35)
Pipe connections	Liquid pipe	mm(in.)	Φ12.7(Φ1/2)	Φ12.7(Φ1/2)	Φ15.9(Φ5/8)	Φ15.9(Φ5/8)	Φ15.9(Φ5/8)	Φ19.1(Φ3/4)	Φ19.1(Φ3/4)
	Gas pipe	mm(in.)	Φ25.4(Φ1)	Φ25.4(Φ1)	Φ31.8(Φ1-1/4)	Φ31.8(Φ1-1/4)	Φ31.8(Φ1-1/4)	Φ31.8(Φ1-1/4)	Φ31.8(Φ1-1/4)
	Oil balance pipe	mm(in.)	Φ6(Φ1/4)	Φ6(Φ1/4)	Φ6(Φ1/4)	Φ6(Φ1/4)	Φ6(Φ1/4)	Φ6(Φ1/4)	Φ6(Φ1/4)
Design pressure(High/low)		MPa	4.4/2.6	4.4/2.6	4.4/2.6	4.4/2.6	4.4/2.6	4.4/2.6	4.4/2.6
		PSI	640/380	640/380	640/380	640/380	640/380	640/380	640/380
Air flow rate		m^3/h	11242	11242	13000	15620	15620	15620	15620
Sound pressure level		dB(A)	57	57	59	61	62	62	62
Net dimension (W×H×D)		mm	960×1615×765	960×1615×765	1250×1615×765	1250×1615×765	1250×1615×765	1250×1615×765	1250×1615×765
Packing size (W×H×D)		mm	1025×1790×830	1025×1790×830	1305×1790×820	1305×1790×820	1305×1790×820	1305×1790×820	1305×1790×820
Net weight		kg(lbs.)	212(466)	212(466)	288(634)	288(634)	288(634)	310(682)	310(682)
Gross weight		kg(lbs.)	227(499)	227(499)	308(678)	308(678)	308(678)	330(726)	330(726)
Ambient temp. Cooling		°C	-5°C to 55°C						

EcoLine Solar Thermal Air Conditioning

Notes:

1. Cooling: Indoor temperature 27°C DB/19°C WB; Outdoor temperature 35°C DB; equivalent refrigerant piping length: 7.5m with zero level difference
2. Diameters given are those of the unit's accessories
3. Sound pressure level is measured at a position 1m in front of the unit and 1m above the floor in a semi-anechoic chamber

VRF OUTDOOR UNIT

OUTDOOR: STA-VCXXXXVF03

Model			STA-VC1795VF03	STA-VC1850VF03	STA-VC1915VF03	STA-VC1965VF03	STA-VC2020VF03	STA-VC2085VF03	STA-VC2150VF03
			STA-VC730 + STA-VC615 + STA-VC450	STA-VC785 + STA-VC615 + STA-VC450	STA-VC850 + STA-VC615 + STA-VC450	STA-VC785 + STA-VC730 + STA-VC450	STA-VC785 + STA-VC785 + STA-VC450	STA-VC850 + STA-VC785 + STA-VC450	STA-VC850 + STA-VC850 + STA-VC450
Power supply		V/Ph/Hz	380-415V / 3 / 50&60Hz						
Cooling	Capacity	kW	179.5	185.0	191.5	196.5	202.0	208.5	215.0
		kBtu/h	612.5	631.2	653.4	670.5	689.2	711.4	733.6
	Power input	kW	36.329	38.071	40.300	40.131	41.873	44.103	46.332
	Running Current	Amp	87.539	91.736	97.108	96.701	100.899	106.271	111.643
Connectable indoor unit	Total capacity								
	Max. quantity		64	64	64	64	64	64	64
Compressor	Type		DC	DC	DC	DC	DC	DC	DC
	Model		STAC-064HV	STAC-066HV	STAC-068HV	STAC-070HV	STAC-072HV	STAC-074HV	STAC-076HV
	Brand		ECOLINE	ECOLINE	ECOLINE	ECOLINE	ECOLINE	ECOLINE	ECOLINE
	Quantity		5	5	5	5	5	5	5
Fan motor	Type		DC motor	DC motor	DC motor	DC motor	DC motor	DC motor	DC motor
	Brand		Panasonic&Nidec	Panasonic&Nidec	Panasonic&Nidec	Panasonic&Nidec	Panasonic&Nidec	Panasonic&Nidec	Panasonic&Nidec
	Quantity		1	1	2	2	2	2	2
	Insulation class		E	E	E	E	E	E	E
	Safe class		IPX4	IPX5	IPX6	IPX7	IPX8	IPX9	IPX9
	Input	W	534	534	272×2	450×2	450×2	450×2	450×2
	Output	W	420	420	210×2	360×2	360×2	360×2	360×2
	Static pressure	Pa(in. W.G.)	0-20(0-0.08) (default)	0-20(0-0.08) (default)	0-20(0-0.08) (default)	0-20(0-0.08) (default)	0-20(0-0.08) (default)	0-20(0-0.08) (default)	0-20(0-0.08) (default)
		Pa(in. W.G.)	0-40(0-0.16) (customized)	0-40(0-0.16) (customized)	0-60(0-0.24) (customized)	0-40(0-0.16) (customized)	0-40(0-0.16) (customized)	0-40(0-0.16) (customized)	0-40(0-0.16) (customized)
Fan	Material		Plastic	Plastic	Plastic	Plastic	Plastic	Plastic	Plastic
	Type		Axial	Axial	Axial	Axial	Axial	Axial	Axial
	Quantity		1	1	2	2	2	2	2
Outdoor coil	Number of rows		2	2	2	2	2	2	2
	Tube pitch(a)× row pitch(b)	mm(in.)	22×19(7/8×3/4)	22×19(7/8×3/4)	22×19(7/8×3/4)	22×19(7/8×3/4)	22×19(7/8×3/4)	22×19(7/8×3/4)	22×19(7/8×3/4)
	Fin spacing	mm(in.)				1.6(1/16)			
	Fin type		Hydrophilic aluminum	Hydrophilic aluminum	Hydrophilic aluminum	Hydrophilic aluminum	Hydrophilic aluminum	Hydrophilic aluminum	Hydrophilic aluminum
	Tube outside diameter	mm(in.)	Φ7.94(Φ5/16)	Φ7.94(Φ5/16)	Φ7.94(Φ5/16)	Φ7.94(Φ5/16)	Φ7.94(Φ5/16)	Φ7.94(Φ5/16)	Φ7.94(Φ5/16)
	Tube type		Inner-grooved	Inner-grooved	Inner-grooved	Inner-grooved	Inner-grooved	Inner-grooved	Inner-grooved
	Coil length × height	mm(in.)			2270×1232(89-3/8×48-1/2)	2270×1232(89-3/8×48-1/2)		2867×1232(112-7/8×48-1/2)	2867×1232(112-7/8×48-1/2)
	Number of circuits		22	22	22	22	22	22	22
Refrigerant	Type								
	Factory charging	kg(lbs.)	10(22)	10(22)	12(26)	15(33)	15(33)	16(35)	16(35)
Pipe connections	Liquid pipe	mm(in.)	Φ12.7(Φ1/2)	Φ12.7(Φ1/2)	22.2	22.2	22.2	22.2	22.2
	Gas pipe	mm(in.)	Φ25.4(Φ1)	Φ25.4(Φ1)	44.5	44.5	44.5	44.5	44.5
	Oil balance pipe	mm(in.)	Φ6(Φ1/4)	Φ6(Φ1/4)	Φ6(Φ1/4)	Φ6(Φ1/4)	Φ6(Φ1/4)	Φ6(Φ1/4)	Φ6(Φ1/4)
Design pressure(High/low)		MPa	4.4/2.6	4.4/2.6	4.4/2.6	4.4/2.6	4.4/2.6	4.4/2.6	4.4/2.6
		PSI	640/380	640/380	640/380	640/380	640/380	640/380	640/380
Air flow rate		m^3/h	11242	11242	13000	15620	15620	15620	15620
Sound pressure level		dB(A)	57	57	59	61	62	62	62
Net dimension (W×H×D)		mm	960×1615×765	960×1615×765	1250×1615×765	1250×1615×765	1250×1615×765	1250×1615×765	1250×1615×765
Packing size (W×H×D)		mm	1025×1790×830	1025×1790×830	1305×1790×820	1305×1790×820	1305×1790×820	1305×1790×820	1305×1790×820
Net weight		kg(lbs.)	212(466)	212(466)	288(634)	288(634)	288(634)	310(682)	310(682)
Gross weight		kg(lbs.)	227(499)	227(499)	308(678)	308(678)	308(678)	330(726)	330(726)
Ambient temp. Cooling		°C	-5°C to 55°C						

EcoLine Solar Thermal Air Conditioning

Notes:

1. Cooling: Indoor temperature 27°C DB/19°C WB; Outdoor temperature 35°C DB; equivalent refrigerant piping length: 7.5m with zero level difference
2. Diameters given are those of the unit's accessories
3. Sound pressure level is measured at a position 1m in front of the unit and 1m above the floor in a semi-anechoic chamber

VRF OUTDOOR UNIT

OUTDOOR: STA-VCXXXXVF03

Model			STA-VC2185VF03	STA-VC2250VF03	STA-VC2315VF03	STA-VC2355VF03	STA-VC2420VF03	STA-VC2485VF03	STA-VC2550VF03
			STA-VC785 + STA-VC785 + STA-VC615	STA-VC850 + STA-VC785 + STA-VC615	STA-VC850 + STA-VC850 + STA-VC615	STA-VC785 x 3	STA-VC850 + STA-VC785 + STA-VC785	STA-VC850 + STA-VC850 + STA-VC785	STA-VC850 x 3
Power supply		V/Ph/Hz	380-415V / 3 / 50&60Hz						
Cooling	Capacity	kW	218.5	225.0	231.5	235.5	242.0	248.5	255.0
		kBtu/h	745.5	767.7	789.9	803.5	825.7	847.9	870.1
	Power input	kW	47.054	49.283	51.513	50.856	53.086	55.315	57.545
	Running Current	Amp	113.382	118.754	124.127	122.545	127.917	133.289	138.661
Connectable indoor unit	Total capacity								
	Max. quantity		64	64	64	64	64	64	64
Compressor	Type		DC	DC	DC	DC	DC	DC	DC
	Model		STAC-078HV	STAC-080HV	STAC-082HV	STAC-028HV x 3	STAC-030HV + (STAC-028HV x 2)	(STAC-030HV x 2) + STAC-028HV	STAC-030HV x 3
	Brand		ECOLINE	ECOLINE	ECOLINE	ECOLINE	ECOLINE	ECOLINE	ECOLINE
	Quantity		6	6	6	6	6	6	6
Fan motor	Type		DC motor	DC motor	DC motor	DC motor	DC motor	DC motor	DC motor
	Quantity		6	6	6	6	6	6	6
	Static pressure	Pa(in. W.G.)	20 default; 60 customization option						
Refrigerant	Type		R407C						
	Factory charging	kg	19 x 3	19 x 3	19 x 3	19 x 3	19 x 3	19 x 3	19 x 3
Pipe connections	Liquid pipe	mm	22.2	22.2	22.2	25.4	25.4	25.4	25.4
	Gas pipe	mm	44.5	44.5	44.5	50.8	50.8	50.8	50.8
Sound pressure level		dB(A)	68	68	68	68	68	68	68
Net dimension (W×H×D)		mm	(1585×1615×765) x 2 + (1250×1615×765)			(1585×1615×765) x 3			
Packing size (W×H×D)		mm	(1650×1810×840) x 2 + (1305×1790×820)			(1650×1810×840) x 3			
Net weight		kg	212(466)	212(466)	288(634)	288(634)	288(634)	310(682)	310(682)
Gross weight		kg	227(499)	227(499)	308(678)	308(678)	308(678)	330(726)	330(726)
Ambient temp. Cooling		°C	-5°C to 55°C						

EcoLine
Solar Thermal Air Conditioning

Notes:

1. Cooling: Indoor temperature 27°C DB/19°C WB; Outdoor temperature 35°C DB; equivalent refrigerant piping length: 7.5m with zero level difference
2. Diameters given are those of the unit's accessories
3. Sound pressure level is measured at a position 1m in front of the unit and 1m above the floor in a semi-anechoic chamber

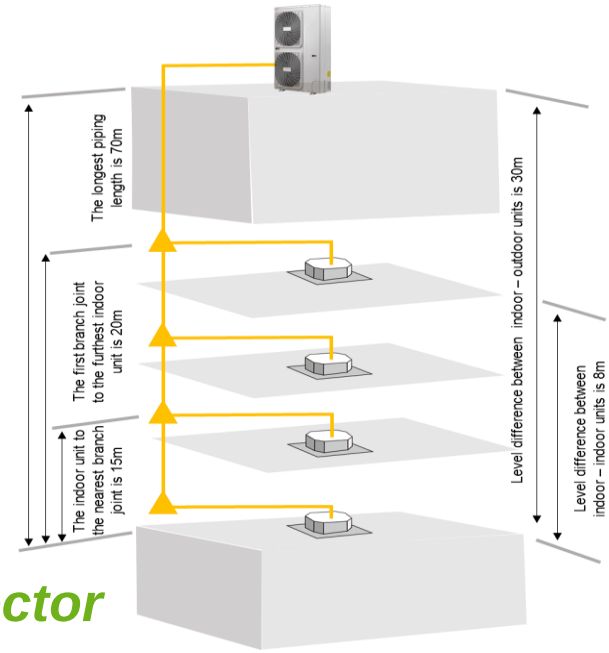
MINI VRF OUTDOOR

Optimized for Small Buildings

- ✓ *Capacity up to 18kW*
- ✓ *Connectable Indoor Units Quantity up to 9*
- ✓ *Precise Oil Control*
- ✓ *Advanced Silence*

Long Piping Capability

Piping length	Capability	
	7-11kW	12-18kW
Total piping length	100m	100m
Longest length - actual (equivalent)	45m (50m)	60m (70m)
Longest length after first branch	20m	20m
Largest height difference between indoor and outdoor units	30m (20m)	30m (20m)
Largest height difference between indoor units	8m	8m



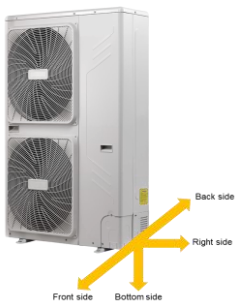
EcoLine
Solar Thermal Air Conditioning

Convenient Piping Connector

Easier and safer installation thanks to a branch box that simplifies piping work greatly.

4 Way Piping Connection

A four-direction space is available for connecting pipes and wiring in various installation sites.



MINI VRF 1-PHASE OUTDOOR UNIT

OUTDOOR: STA-XXXMV01

Model (Mini VRF Series) - 1-ph			STA-080MV01	STA-105MV01	STA-120MV01	STA-140MV01	STA-160MV01
Power supply		V-Ph-Hz	220-240V~50Hz	220-240V~50Hz	220-240V~50Hz	220-240V~50Hz	220-240V~50Hz
Cooling	Capacity	kW	8	10.5	12	14	16
	Input	kW	1.43	1.65	1.96	2.11	2.78
Heating	Capacity	kW	7.2 (1.6-8.4)	9.0 (2.1-10.5)	13.2	15.4	17
	Input	kW	1.79	2.27	3.47	4.16	4.77
Compressor	Brand		ECOLINE	ECOLINE	ECOLINE	ECOLINE	ECOLINE
	Type		Rotary	Rotary	Rotary	Rotary	Rotary
	Capacity	Btu/h	24334	24334	33642	33642	47700
	Input	W	2200	2200	3010	3010	4240
	Rated current(RLA)	A	9.7	9.7	13.5	13.5	16.1
	Crankcase	W	25	25	25	25	25
	Refrigerant oil	ml	FV50S 670ml+200ml	FV50S 670ml+200ml	FV50S 870ml+630ml	FV50S 870ml+630ml	FV50S 1400ml+250ml
Outdoor Fan Motor	Model		WZDK170-38G-1	WZDK170-38G-1	WZDK100-38G	WZDK100-38G	WZDK100-38G
	Type		DC Motor	DC Motor	DC motor	DC motor	DC motor
	Brand		Panasonic	Panasonic	Panasonic	Panasonic	Panasonic
	Insulation class		E	E	E	E	E
	Safe class		IPX4	IPX4	IP23	IP23	IP23
	Input	W	195	195	2*100	2*100	2*100
	Output	W	170	170	2*85	2*85	2*85
	Rated current	A	1.6	1.6	2*0.9	2*0.9	2*0.9
	Speed	r/min	820	820	800	800	800
	Material		ASG20	ASG20	ASG20	ASG20	ASG20
	Type		Axial fan	Axial fan	Axial fan	Axial fan	Axial fan
	Diameter	mm	560	560	508	508	508
	Height	mm	170	170	170	170	170
Outdoor coil	Number of rows		1.7	2	2	2	2
	Tube pitch(a) × row pitch(b)	mm	22 ×19.05	25.4 × 22	22 ×19.05	22 ×19.05	22 ×19.05
	Fin spacing	mm	1.6	1.6	1.6	1.6	1.6
	Fin type (code)		Hydrophilic aluminum				
	Tube outside dia.and type	mm	Φ7.94				
			Inner groove tube				
	Coil length × height	mm	890×880	880×914	1276×870	1276×870	1276×870
	Number of circuits		9	5	7	7	7
Outdoor air flow		m^3/h	5500	5500	6000	6000	6000
Outdoor sound level(sound pressure level)		dB(A)	56	57	57	57	57
Indoor unit connectable (Total Capacity)			45%~130%	45%~130%	45%~130%	45%~130%	45%~130%
Max. quantity of indoor unit			4	5	6	6	7
Outdoor unit	Dimension (W×H×D)	mm	1075×966×396	1075×966×396	900×1327×400	900×1327×400	900×1327×400
	Packing (W×H×D)	mm	1120×1100×435	1120×1100×435	1030×1456×435	1030×1456×435	1030×1456×435
	Net/Gross weight	kg	75.5/85.5	75.5/85.5	95/106	95/106	100/111
Refrigerant	Type		R407C				
	Charged volume	g	2950	2950	3300	3900	3900
Throttle type			Electronic expansion valve				
Design pressure		MPa	4.4/2.6	4.4/2.6	4.4/2.6	4.4/2.6	4.4/2.6
Refrigerant piping	Liquid side/ Gas side	mm	Φ9.52/Φ15.9	Φ9.52/Φ15.9	Φ9.52/Φ15.9	Φ9.52/Φ15.8	Φ9.52/Φ19.0
	Max. refrigerant pipe length	m	100	100	100	100	100
	Max. difference in level	m	8	8	8	8	8
Connection wiring	Power wiring	mm^2	3 core × 4.0				
	Signal wiring	mm^2	3 core shielded wire × 0.75				
Ambient temperaure		℃	(Cooling -15～43) (Heating -15～27)			(Cooling -15～43)	(Heating -15～27)

Notes:

1. Cooling: Indoor temperature 27°C DB/19°C WB; Outdoor temperature 35°C DB; equivalent refrigerant piping length: 7.5m with zero level difference
2. Diameters given are those of the unit's accessories
3. Sound pressure level is measured at a position 1m in front of the unit and 1m above the floor in a semi-anechoic chamber

MINI VRF 3-PHASE OUTDOOR UNIT

OUTDOOR: STA-XXXMV03

Model (Mini VRF Series) - 3-ph			STA-120MV03	STA-140MV03	STA-160MV03	STA-180MV03
Power Supply		V-Ph-Hz	380-415V-3-50			
Cooling	Capacity	kW	12.3	14.0	15.5	17.5
	Power input	kW	2.28	2.77	3.16	3.71
Heating	Capacity	kW	13.2	15.4	17.0	19.0
	Power input	kW	2.6	3.12	3.58	3.8
Connected indoor units	Total capacity		45-130% of outdoor unit capacity			
	Maximum capacity		6	6	7	9
Compressors	Type		DC Inverter			
	Quantity		1			
Fan Motor	Type		DC Motor			
	Quantity		2			
Refrigerant	Type		R407C			
	Factory charge	kg	3.3	3.9	3.9	4.5
Pipe connections	Liquid pipe	mm	φ9.53			
	Gas pipe	mm	φ15.9		φ19.1	
Airflow rate		m^3/h	6000			6800
Sound pressure level		dB(A)	54			56
Net dimensions (WxHxD)		mm	900x1327x400			
Packed dimensions (WxHxD)		mm	1090x1456x435			
Net weight		kg	95		102	107
Gross weight		kg	106		113	118
Operating temperature range		°C	Cooling ~15-~43; Heating ~15-~27			

Notes:
1. Cooling: Indoor temperature 27°C DB/19°C WB; Outdoor temperature 35°C DB/24°C WB; Heating: Indoor temperature 20°C DB/15°C WB; Outdoor temperature 7°C DB/6°C
2. Piping length: Interconnecting piping length is 7.5m, level difference is zero.
3. Sound values are measured in a semi-anechoic room, at a position 1m in front of the unit and 1m above the floor.
4. In Mini VRF system, if only one indoor unit is connected, the capacity of indoor unit should be not more than outdoor unit's capacity. If more than one indoor unit are connected, the capacity of each indoor unit should be not more than 8kW for refrigerant uniform distribution.

EcoLine
Solar Thermal Air Conditioning

Model (Mini VRF Series) - 3-ph			STA-200MV03	STA-224MV03	STA-260MV03	STA-280MV03
Power Supply		V-Ph-Hz				
Cooling	Capacity	kW	20.0	22.4	26.0	28.0
	Power input	kW	4.27	4.76	5.32	5.93
Heating	Capacity	kW	22.0	24.5	28.5	31.5
	Power input	kW	4.58	4.43	5.1	5.63
Connected indoor units	Total capacity		50-130% of outdoor unit capacity			
	Maximum capacity		10	11	12	16
Compressors	Type					
	Quantity					
Fan Motor	Type					
	Quantity					
Refrigerant	Type					
	Factory charge	kg	4.8	6.2	6.2	8
Pipe connections	Liquid pipe	mm				
	Gas pipe	mm			φ22.2	
Airflow rate		m^3/h	10000	10494	10494	11000
Sound pressure level		dB(A)	55	55	55	55
Net dimensions (WxHxD)		mm	1120x1558x528			
Packed dimensions (WxHxD)		mm	1270x1720x565			
Net weight		kg	137	146.5	147	157
Gross weight		kg	153	162.5	163	173
Operating temperature range		°C	Cooling ~15-~46; Heating ~15-~24			Cooling ~15-~54; Heating ~20-~24

Notes:
1. T1 Cooling: Indoor temperature 27°C DB/19°C WB; Outdoor temperature 35°C DB/24°C WB.
2. T3 Cooling: Indoor temperature 29°C DB/19°C WB; Outdoor temperature 46°C DB/24°C WB.
3. Heating: Indoor temperature 20°C DB/15°C WB; Outdoor temperature 7°C DB/6°C WB.
4. Piping length: Interconnecting piping length 7.5m, level difference of zero.
5. Sound values are measured in a semi-anechoic room, at a position 1m in front of the unit and 1m above the floor.

WIRELESS REMOTE CONTROL

Ecoline
Solar Thermal Air Conditioning

Temperature Setting

Set temperature can be adjusted in 0.5°C or 1°C steps, enabling precise comfort control.

7 Speed Fan Control

7 indoor fan speeds provide control flexibility to meet the needs of different indoor conditions.

Display Shut Off

Indoor unit displays can be shut off at night, creating a better environment for rest.

5 Swing Angel (Louver)

Thanks to the 5 swing angles for indoor unit louver, the air flow direction can be controlled more precisely.

Follow Me

With the Follow Me function, the indoor unit responds to the temperature measured by the temperature sensor built-in to the wireless remote controller, rather than the temperature sensor in the indoor unit itself, enabling more precise control of the temperature in the user's immediate environment.

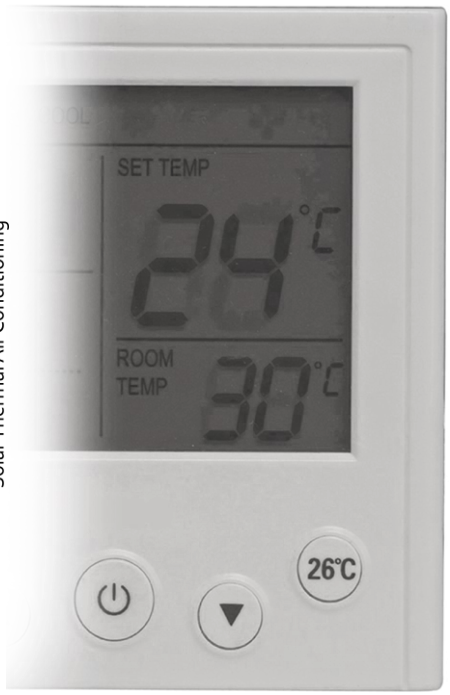
Eco Mode

Eco mode saves energy whilst retaining a comfortable indoor environment.

WIRELESS REMOTE CONTROL

Model					
On / Off	●	●	●	●	●
Mode selection	●	●	●	●	●
Temperature setting	● (0.5℃ or 1℃ steps)	● (0.5℃ or 1℃ steps)	● (1℃ steps)	● (1℃ steps)	● (1℃ steps)
7-speed fan control	●	●	–	–	–
Auto swing	●	●	●	●	●
5-step swing louver	●	●	–	–	–
Address setting	●	●	●	●	●
Follow me	–	●	●	–	●
Eco mode	●	●	●	●	●
Night silent mode	●	●	–	–	●
Display shut-off	●	●	–	–	–
Daily timer	●	●	●	●	●
Keyboard lock	●	●	●	●	●
Background light	●	●	●	●	●
Dimensions (HxWxD) (mm)	150x65x20	170x48x20	150x65x15	150x65x20	170x48x20
Batteries	1.5V (LR03/AAA) x 2				

WIRED REMOTE CONTROL



EcoLine
Solar Thermal Air Conditioning

Group Control

One controller can be used to unify the settings across up to 16 indoor units.

Main or Secondary Controller

Two controllers can be used together with the indoor units' operating mode and settings being set according to the most recent instruction received. The controller display screens are synchronized so that both displays update when a setting is adjusted.

2 Permission Levels

2 permission levels ensure users can easily access control functions and allow administrators convenient access to operating parameters.

Extension Function

The extension function is specifically designed for users working overtime. Pressing the delay button postpones system shutdown by 1 or 2 hours.

Weekly Schedule Timer

The weekly schedule timer allows users to set multiple schedules each with its own operating mode, temperature settings and fan speeds.

Bi-Directional Communication

The wired controller can query the system operating parameters thanks to the new bi-directional communication functionality. In addition, settings including static pressure, cold draft prevention and temperature compensation can be configured on the wired controller.

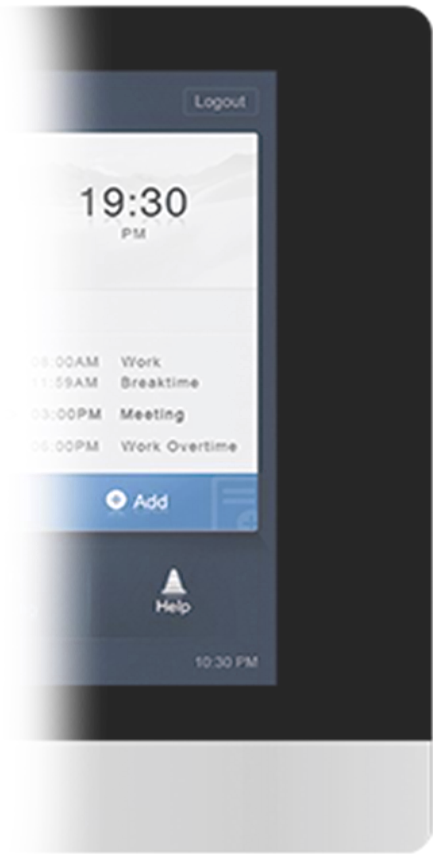
WIRED REMOTE CONTROL

Model		
On / Off	●	●
Mode selection	●	●
Temperature setting	● (1℃ steps)	● (1℃ steps)
Dual temperature set points	–	–
7-speed fan control	–	–
Auto swing	–	●
5-step swing louver	–	–
Address setting	–	●
Follow me	–	●
Eco mode	●	–
Room temperature display	–	–
°F/℃ display	–	–
Keyboard lock	–	●
Background light	–	●
Daily timer	–	●
Weekly schedule timer	–	–
Auto restart	●	●
2 permission levels	–	–
Bi-directional communication	–	–
Group control	–	–
Main or secondary controller setting	–	–
Display shut-off	–	–
Night silent mode	–	–
Remote signal receiver	–	●
Clean filter reminder	–	●
Extension function	–	–
Daylight saving time	–	–
Clock display	–	●
Dot matrix display	–	–
Error check function	–	–
System parameter querying	–	–
System setting control	–	–
Dimensions (WxHxD) (mm)	86x86x18	120x120x20
Power supply	5V DC	

WIRED REMOTE CONTROL

Model		
On / Off	●	●
Mode selection	●	●
Temperature setting	● (0.5℃ or 1℃ steps)	● (0.5℃ or 1℃ steps)
Dual temperature set points	●	●
7-speed fan control	●	●
Auto swing	●	●
5-step swing louver	●	●
Address setting	●	●
Follow me	●	●
Eco mode	●	●
Room temperature display	●	●
°F/℃ display	●	●
Keyboard lock	—	●
Background light	●	●
Daily timer	●	●
Weekly schedule timer	—	●
Auto restart	●	●
2 permission levels	—	●
Bi-directional communication	●	●
Group control	—	●
Main or secondary controller setting	●	●
Display shut-off	●	●
Night silent mode	●	●
Remote signal receiver	●	●
Clean filter reminder	●	●
Extension function	—	●
Daylight saving time	—	●
Clock display	—	●
Dot matrix display	—	●
Error check function	●	●
System parameter querying	●	●
System setting control	●	●
Dimensions (WxHxD) (mm)	86x86x18	120x120x20
Power supply	18V DC	18V DC

CENTRAL CONTROLLER



Touch Screen

Colorful touch screen and vivid display make operation more convenient and simple.

Electricity Charge Distribution

The controller estimates the electricity consumption of the outdoor units and then divide it among the indoor units so that the electricity charges can be equitably divided among building occupants.

Energy Management

User can set limits or locks on an indoor unit, such as minimum cooling temperature, fan speed, operation mode, swing lock, remote controller lock and wired controller lock.

Visual Schematic

By importing floor plans and then dragging and dropping the indoor units to their actual positions on the floor plan, users can create a tailored system schematic which enables monitoring and control of the indoor units through a clear visual representation of the system layout.

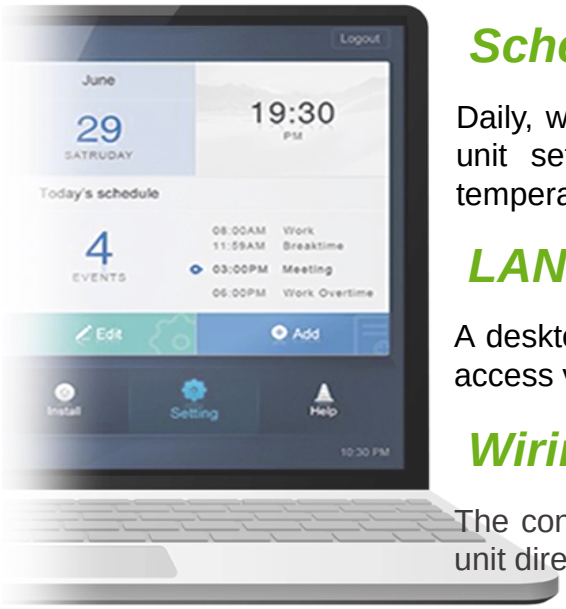
Group Management

Units can be viewed according to group, system or location, making unit management clearer and more convenient.

Outdoor Unit Configuration

Outdoor unit configuration and settings can be monitored and controlled without having to go outdoors.

CENTRAL CONTROLLER



Schedule Management

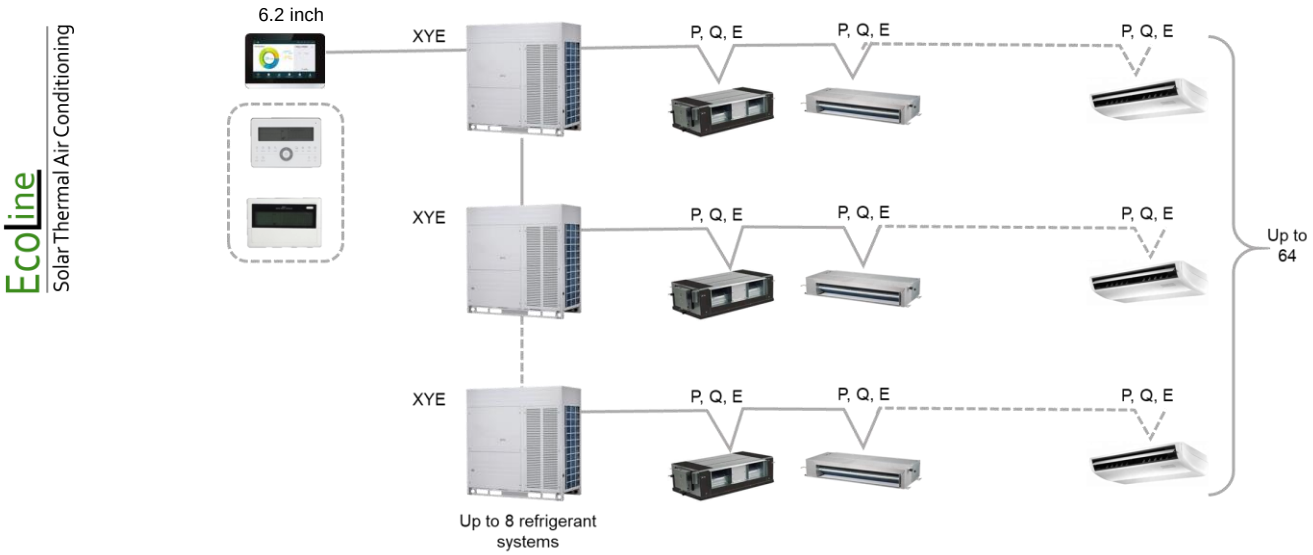
Daily, weekly or annual schedules can be used to set unit settings such as on/off, operating mode, set temperature, fan speed and swing.

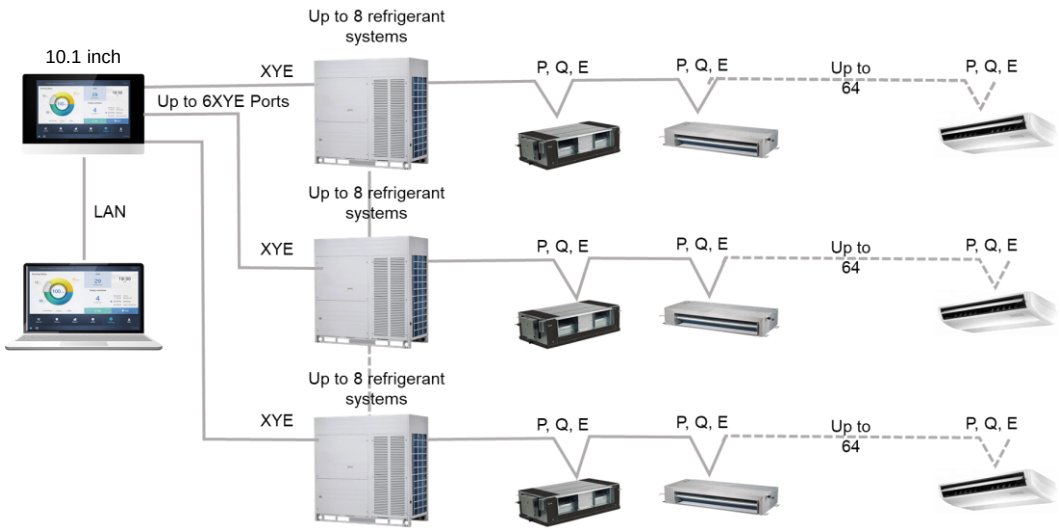
LAN Access

A desktop or laptop PC can be used for browser-based access via a LAN connection.

Wiring Flexibility

The controllers can be connected to the master outdoor unit directly.





CENTRAL CONTROLLER

Function				
Max. number of indoor units	64	384	64	64
Max. number of refrigerant systems	8	48	8	8
Touch screen	● (6.2-inch)	● (10.1-inch)	—	—
On/Off	●	●	●	●
Mode selection	●	●	●	●
Temperature setting	● (0.5℃ setps)*		● (1℃ setps)	
7-speed fan control	7-speed fan control (HP VRF)*; 3-speed fan control (HR VRF)		3-speed fan control	
Auto swing	●	●	●	●
5-step swing louver*	●	●	—	—
Room temperature display	—	●	●	●
Holiday setting	●	●	—	—
℃/℉ display	●	●	●	●
Schedule management	●	●	●	Weekly timer
Clock display	●	●	—	—
2 permission levels	●	●	—	—
Extension function	●	—	—	—
Indoor unit type/model recognition	● (HP VRF)*; — (HR VRF)		—	—
Indoor unit with capacity larger than 16kW recognition	●*		Identify as two or four units (depend on units model)	
Visual schematic	—	●	—	—
Energy management	●	●	Mode/Remote controller limit	
Group management	●	●	—	—
Error check function	●*	●*	●	●
System parameter querying	—	—	●	●
USB output	●	●	—	—
Report display	Error report	Error report and operation record	—	—
Operation log	—	●	—	—
LAN access	—	●	—	—
Language supported	English			
Dimensions (W×H×D) (mm)	182×123×34	270×183×27	179×119×74	179×119×74
Power supply	12V DC	24V AC	198-242V AC (50/60Hz)	

DATA CONVERTER

High Compatibility

Compatible with a variety of operating systems.

User Friendly Interface

Clear, stylish interface designed by leading industrial designers.

Cloud Server Website

Users can control air conditioners and query the status of air conditioning equipment anytime and anywhere through the cloud server website.

Virtual Experience

Experience the operation of the interface through the virtual experience function without registration.

EcoLine
Solar Thermal Air Conditioning

Easy Configuration

User groups can be joined simply by scanning a QR code.

Anytime Control

Remote access allows control anytime, anywhere.

Group Management

The user can group the air conditioner equipment, and the air conditioner in the same group can be controlled together with just one tap.

2 Permission Levels

Administrators can set different permissions for different users to facilitate better management of devices.

Flexible

The Data Converter can be connected directly to a network of indoor/outdoor units.

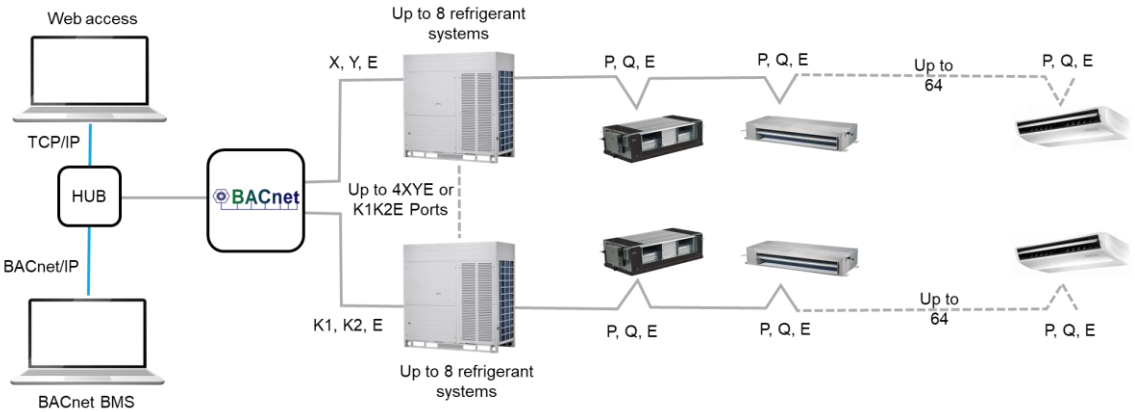
DATA CONVERTER

Hardware model	

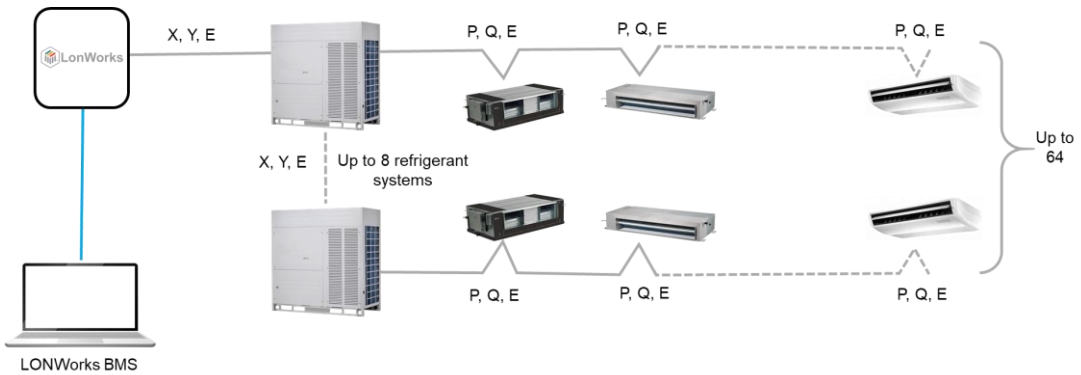
Application scenarios	 Mobile Application	 Cloud Server Website
Max. number of CCM-15 for one mobile APP	10	10
Max. number of indoor units	640	640
Max. number of refrigerant systems	80	80
On/Off	●	●
Mode selection	●	●
Temperature setting	● (1℃ steps)	● (1℃ steps)
7-speed fan control	—	—
Auto swing	●	●
5-step swing louver	—	—
Room temperature display	●	●
℃/℉ display	●	●
Weekly timer	●	●
Indoor unit type recognition	—	—
Energy management	●	●
Group management	●	●
User group management	●	●
Operation log	●	●
Device log	●	●
Login record	●	●
Error log	—	●
Configuration	●	—
Account registration	●	—
Virtual	●	—
Mode display	●	●
Languages supported	English, French, Spanish	English, French, Spanish
Dimensions (W×H×D) (mm)	187×115×28	
Power supply	1 phase, 100-240V, 50/60Hz	

BMS GATEWAY

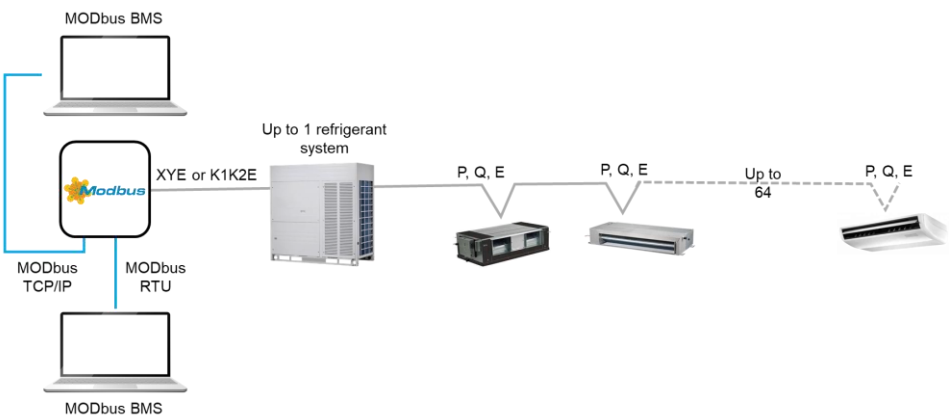
The BACnet Gateway allows the VRF systems to be monitored and controlled alongside other building management technology that use the BACnet protocol such as access control, fire detection and lighting systems. The gateway can be connected to master outdoor units' XYE or K1K2E ports directly.



The LonWorks Gateway allows the VRF systems to be monitored and controlled alongside other building management technology on the LonWorks platform such as security, fire safety and lighting systems. The gateway can be connected to master outdoor units' XYE port directly.



The Modbus Gateway enables seamless connection of the VRF systems with building management systems built on the Modbus communication protocol. The gateway can be connected to master outdoor units' XYE or K1K2E ports directly.



BMS – BACNET GATEWAY

Model		 BACnet
Max. number of devices (include indoor and outdoor units)		256
Max. number of refrigerant systems		32
Control	On / Off	●
	Mode selection	●
	Temperature setting	●
	Fan speed	●
	Energy management	●
Indoor unit monitoring	Room temperature display	●
	Error status	●
	Error alarms	●
Outdoor unit monitoring	Operating mode	●
	Outdoor ambient temperature	●
	Fan speed	●
	Compressor operating frequency	●
	Discharge temperature	●
	System pressure	●
	Error status	●
	Error alarms	●
LAN access		●
BTL certification		●
Compatibility	Siemens	APOGEE
	Trane	TRACER
	Honeywell	ALERTON
	Schneider	Andover Continuum
	Johnson Controls	METASYS
Dimensions (HxWxD)(mm)		116×190×67
Power supply		24V AC~50/60Hz
Outdoor unit series		All series

BMS – LONWORKS GATEWAY

Model		 LonWorks
Max. number of indoor units		32
Max. number of refrigerant systems		8
Control	Mode selection	●
	Temperature setting	●
	Fan speed	●
	Group shut down	●
	On / Off	●
Indoor unit monitoring	Operating mode	●
	Set temperature	●
	Fan speed	●
	Online status	●
	Operating status	●
	Room temperature	●
	Error status	●
Outdoor unit monitoring	Error status	●
Dimensions (HxWxD)(mm)		116×170×67
Power supply		24V AC~50/60Hz
Outdoor unit series		All series

BMS – MODBUS GATEWAY

Model		 Modbus	 Modbus	 Modbus
Max. number of indoor units		64	64	16
Max. number of refrigerant systems		8	1	1
Control	On / Off	●	●	●
	Mode selection	●	●	●
	Temperature setting	●	●	●
	Fan speed	●	●	●
	Group on/off	●	●	●
Indoor unit monitoring	Online status	●	●	●
	Room temperature	●	●	●
	Error status	●	●	●
	Operating mode	●	●	●
Outdoor unit monitoring	Operating mode	●	●	×
	Number of operating IDUs	●	●	×
	Outdoor ambient temperature	●	●	×
	Error status	●	●	×
LAN access		●	●	●
Dimensions (HxWxD)(mm)		225×128×28	187×115×28	
Power supply		12V DC	1 phase, 100-240V, 50/60Hz	
Outdoor unit series		VX/VXi/VC pro/V6R/V4+I(10-12HP), Mini C ODU	V4+I(Except 10/12HP)/V4+W/Mini VRF-Standard Series	