

TECHNICAL  
CATALOGUE  
RESIDENTIAL  
AIR CONDITIONING  
2022

- WALL MOUNTED AC
- MULTI VARIABLE SERIES
- UNI SPLIT SERIES
- HIGH STATIC PRESSURE  
DUCT UNIT
- PORTABLE DEVICES



**SINCLAIR**

AIR CONDITIONING





# CONTENT

SPECTRUM+ SERIES	2
TERREL SERIES	5
KEYON SERIES	10
RAY SERIES	13
CONSOLE SERIES	17
MULTI VARIABLE SERIES	20
UNI SPLIT SERIES	35
HIGH STATIC PRESSURE DUCT UNIT	52
TOWER SERIES	54
WINDOW SERIES	56
MONOBLOCK SERIES	57
CAMPER TRAILER	58
BOAT SERIES	59
LOCAL AIR CONDITIONERS	61
DEHUMIDIFIERS	62
AIR PURIFIER	63
COMMUNICATION MODULE SCMI-01.4	64
HEALTH FILTERS	67
WIRED CONTROLLERS	68
CENTRAL CONTROLLERS	70
OTHER ACCESSORY	72
SYSTEM ERROR DIAGNOSIS	74
SCMI-01.4 MODULE ERROR CODES	75

WALL MOUNTED SPLIT AIR CONDITIONERS

**SPECTRUM PLUS SERIES**

MODEL			ASH-09BIS2/W	ASH-13BIS2/W	ASH-18BIS2/W	ASH-24BIS2/W	
Capacity cooling / heating 1)	Nominal (min-max)	kW	2,7 (0,7-5,0) / 3,5 (0,7-5,5)	3,5 (0,9-5,0) / 4,2 (0,9-7,2)	5,3 (1,2-7,2) / 5,6 (1,2-9,2)	7,0 (2,0-9,0) / 7,0 (2,0-9,5)	
Power supply		Hz / V	1~ / 50 / 220-240	1~ / 50 / 220-240	1~ / 50 / 220-240	1~ / 50 / 220-240	
Power supply			outdoor	outdoor	outdoor	outdoor	
Power input cooling / heating 1)		W	550 / 745	840 / 950	1320 / 1320	1850 / 1750	
Maximal power input 2)		W	2400	2600	3300	3700	
Power current cooling / heating		A	3,6 / 4,7	5,1 / 5,7	5,9 / 5,9	11,0 / 11,0	
Maximal power current 2)		A	10,7	12,0	13,0	16,4	
Energy class cooling 3)			A+++	A+++	A++	A++	
Pdesign cooling		kW	2,7	3,5	5,3	7,0	
SEER			8,5	8,5	6,6	6,5	
Annual power consumption		kWh / annum	111	144	247	377	
Energy class heating 3)	Aver. / Warm. / Cool.		A+++ / A+++ / A	A+++ / A+++ / A+	A+ / A+++ / A	A+ / A+++ / A	
Pdesign heating	Average climate	kW	3,5	3,5	5,9	7,0	
SCOP	Average climate		5,1	5,1	4,4	4,1	
Annual power consumption	Average climate	kWh / annum	961	961	1877	2390	
Air flow of ID	SH/MH/H/ML/ML/SL	m³ / h	800/720/570/620/560/500/450	800/730/680/630/580/530/430	1200/1150/1050/950/850/780/600	1200/1050/950/900/850/800/750	
Airflow of OD	H	m³ / h	2400	2400	4000	4000	
Sound pressure level of ID at 1m 4)	SH/MH/H/ML/ML/SL	dB(A)	43/41/38/36/33/31/18	46/43/41/38/36/34/21	48/45/43/40/37/35/33	50/46/43/41/39/37/35/27	
Sound pressure level of OD at 1m 4)	H	dB(A)	53	54	56	58	
Sound power of ID 4)	SH/MH/H/ML/ML/SL	dB(A)	58/51/48/46/43/41/28	58/55/53/50/48/46/33	60/57/55/52/49/47/45	64/60/57/55/53/51/49/41	
Sound power of OD 4)	H	dB(A)	62	62	63	66	
Dehumidifying volume		l / h	0,8	1,4	1,8	2,0	
Refrigerant type / charge		Type / kg / t eq. CO <sub>2</sub>	R32 / 1,00 / 0,67	R32 / 1,00 / 0,67	R32 / 1,50 / 1,01	R32 / 2,00 / 1,35	
Additional refrigerant		g / m	20	20	40	50	
Pipe diameter - liquid side 5)		inch / mm	¼ / 6,0	¼ / 6,0	¼ / 6,0	¼ / 6,0	
Pipe diameter - gas side 5)		inch / mm	¾ / 9,5	¾ / 9,5	¾ / 16,0	¾ / 16,0	
Max pipe length without additional refrigerant 6)		m	5	5	5	7,5	
Allowed pipe length 7)	min. / max.	m	3 / 15	3 / 40	3 / 40	3 / 50	
Max. elevation / Drop height		m	10	20	20	30	
Dimension of ID	w × h × d	mm	996 × 301 × 225	996 × 301 × 225	1101 × 327 × 249	1101 × 327 × 249	
Dimensions of outdoor unit	w × h × d	mm	899 × 596 × 378	899 × 596 × 378	1003 × 790 × 427	1003 × 790 × 427	
Package dimension of ID	w × h × d	mm	1060 × 380 × 322	1060 × 380 × 322	1167 × 405 × 354	1167 × 405 × 354	
Package dimensions of outdoor unit	w × h × d	mm	948 × 645 × 420	948 × 645 × 420	1083 × 855 × 488	1083 × 855 × 488	
Weight of ID	netto / brutto	kg	13,0 / 16,0	13,5 / 16,5	16,5 / 20,0	16,5 / 20,0	
Weight of OD	netto / brutto	kg	44,5 / 47,5	45,5 / 48,5	62,5 / 67,5	65,0 / 70,0	
Set temperature range		°C	16-30	16-30	16-30	16-30	
Operating temperature range cooling 8)		°C	-18-54	-18-54	-18-52	-18-52	
Operating temperature range heating 8)		°C	-30-24	-30-24	-30-24	-30-24	
<b>ADDITIONAL TECHNICAL INFORMATION</b>							
Screw holes distance of OD	w × d	mm	550 × 354	550 × 354	610 × 395	610 × 395	
Communication cable		mm <sup>2</sup>	4 × 0,75 (5m included)				
Recommended power cable		mm <sup>2</sup>	3 × 1,5	3 × 1,5	3 × 2,5	3 × 4,0	
Recommended air switch		A	13	13	16	20	
<b>EQUIPMENT</b>							
Plasma generator	indoor		✓	✓	✓	✓	
WiFi module			✓	✓	✓	✓	
Drain pump			-	-	-	-	
Max. lift (from bottom of ID unit)		mm	-	-	-	-	
Door contact (SMR-03V connector)			✓	✓	✓	✓	
Alarm contact			-	-	-	-	
Left-right guide louvres			✓	✓	✓	✓	
Throttling method	outdoor		EXV	EXV	EXV	EXV	
Bottom chassis heater			Heating belt	Heating belt	Heating belt	Heating belt	
Crankcase heater			Preheating	Preheating	Preheating	Preheating	
Bottom plugs for OD			✓	✓	✓	✓	
Drain pipe connector			✓	✓	✓	✓	
<b>STANDARD ACCESSORIES</b>							
Standard health filter			SAF-OPWC4, SAF-OPWS4				
Remote controller (IR)			YAG1FB2	YAG1FB2	YAG1FB2	YAG1FB2	
Wired controller			-	-	-	-	
<b>OPTIONAL ACCESSORIES</b>							
Optional health filters			SAF-OPWA4, SAF-OPWB4, SAF-OPWK4, SAF-OPWM4, SAF-OPWP4				
Wired controller			SWC-02, SWC-04				
Central controller			SCC-36				
Other			G2S-T, SAI-01, SBG-01				

The specification of products is subject to change based on further development of the units by the producer and can be changed without prior notice. Refer to rating label.

R32 (single component refrigerant HFC), GWP of refrigerant used: 675.

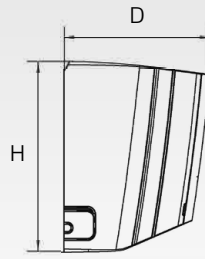
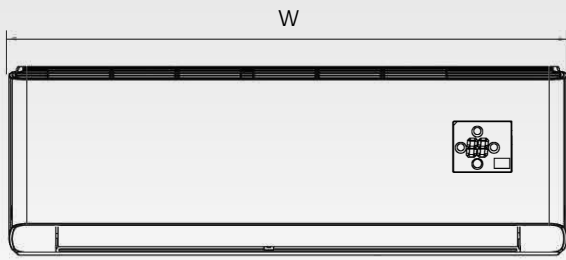
Contains fluorinated greenhouse gases covered by the Kyoto Protocol.

Explanatory notes on the very last page of the catalogue.

The device is being sold as a set (indoor + outdoor unit).

## APPEARANCE AND DIMENSIONS OF INDOOR UNIT

### SPECTRUM PLUS SERIES

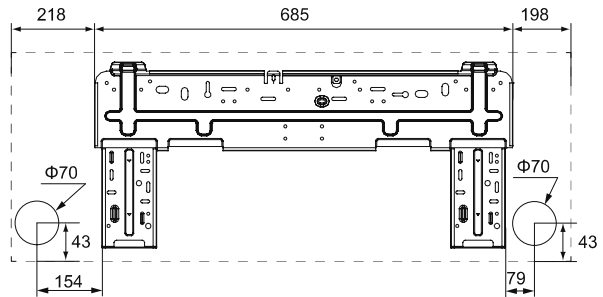
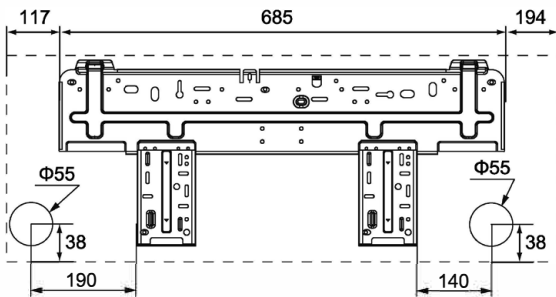


ASH-09BIS2/W

ASH-13BIS2/W

ASH-18BIS2/W

ASH-24BIS2/W



	W	H	D
ASH-09BIS2/W	996	301	225
ASH-13BIS2/W	996	301	225
ASH-18BIS2/W	1101	327	249
ASH-24BIS2/W	1101	327	249

units: mm

## APPEARANCE AND DIMENSIONS OF OUTDOOR UNIT

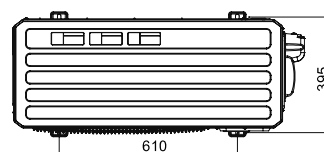
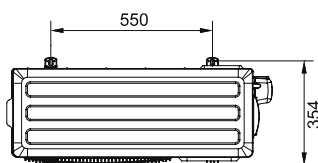
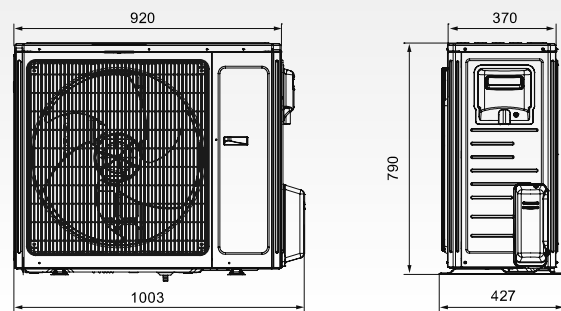
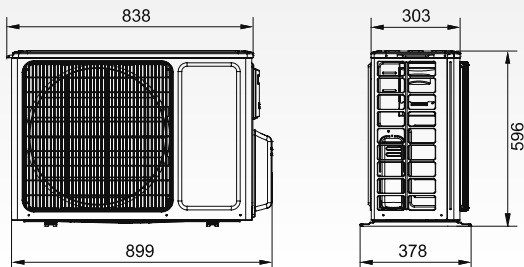
### SPECTRUM PLUS SERIES

ASH-09BIS2/W

ASH-13BIS2/W

ASH-18BIS2/W

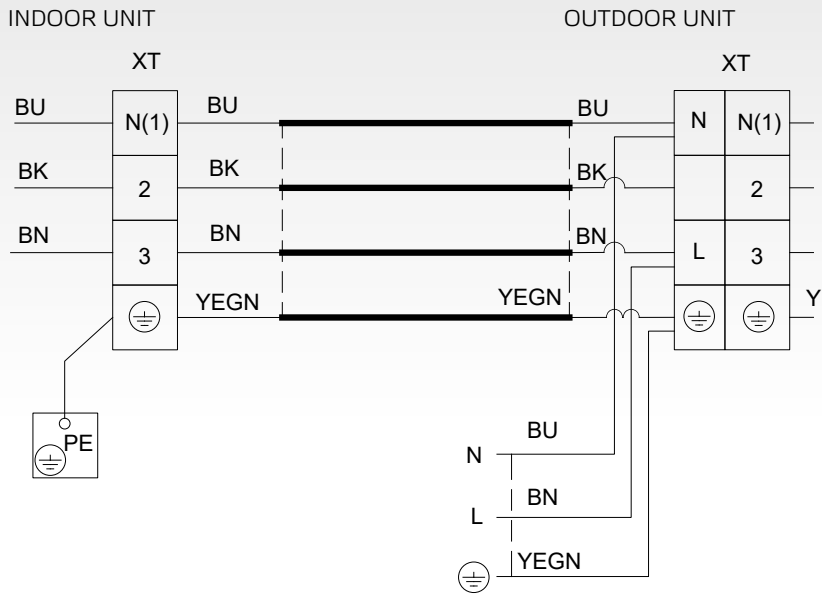
ASH-24BIS2/W



units: mm

ELECTRICAL WIRING DIAGRAM

**SPECTRUM PLUS SERIES**



WALL MOUNTED SPLIT AIR CONDITIONERS

**TERREL SERIES**

MODEL			SIH+SOH-09BIT	SIH+SOH-13BIT	SIH+SOH-18BIT	SIH+SOH-24BIT	
Capacity cooling / heating 1)	Nominal (min-max)	kW	2,7 (0,8-3,8) / 3,0 (0,9-4,2)	3,5 (1,0-3,8) / 3,8 (0,9-4,7)	5,2 (1,0-6,1) / 5,3 (1,1-6,0)	7,0 (2,0-9,0) / 7,4 (1,8-9,0)	
Power supply		Hz / V	1~ / 50 / 220-240	1~ / 50 / 220-240	1~ / 50 / 220-240	1~ / 50 / 220-240	
Power supply			outdoor	outdoor	outdoor	outdoor	
Power input cooling / heating 1)		W	695 / 700	962 / 953	1528 / 1410	1900 / 1897	
Maximal power input 2)		W	1400	1550	2600	3750	
Power current cooling / heating		A	3,1 / 3,2	4,3 / 4,6	6,8 / 6,3	8,7 / 8,8	
Maximal power current 2)		A	6,2	6,9	11,5	17,5	
Energy class cooling 3)			A++	A++	A++	A++	
Pdesign cooling		kW	2,7	3,5	5,2	7,0	
SEER			7,5	7,1	7,0	6,5	
Annual power consumption		kWh / annum	126	173	260	377	
Energy class heating 3)	Aver. / Warm. / Cool.		A+ / A+++ / A	A+ / A+++ / B	A+ / A+++ / A	A+ / A+++ / B	
Pdesign heating	Average climate	kW	2,7	3,2	4,2	6,4	
SCOP	Average climate		4,2	4,1	4,0	4,0	
Annual power consumption	Average climate	kWh / annum	900	1093	1470	2240	
Air flow of ID	SH/MH/H/ML/ML/SL	m³ / h	610/570/540/470/440/420/390	700/650/600/540/480/420/360	800/720/650/610/570/520/470	1250/1100/1000/950/900/850/750	
Airflow of OD	H	m³ / h	1950	1950	3200	3200	
Sound pressure level of ID at 1m 4)	SH/MH/H/ML/ML/SL	dB(A)	38/36/34/31/29/27/25	42/38/35/32/29/27/25	45/43/41/38/35/34/31	48/45/42/39/37/36/33	
Sound pressure level of OD at 1m 4)	H	dB(A)	50	52	57	57	
Sound power of ID 4)	SH/MH/H/ML/ML/SL	dB(A)	56/48/46/43/41/39/37	57/50/47/44/41/39/37	59/57/55/52/49/48/45	58/55/52/49/47/46/43	
Sound power of OD 4)	H	dB(A)	61	63	64	67	
Dehumidifying volume		l / h	0,8	1,4	1,8	2,4	
Refrigerant type / charge		Type / kg / t eq. CO <sub>2</sub>	R32 / 0,53 / 0,36	R32 / 0,57 / 0,38	R32 / 1,00 / 0,68	R32 / 1,70 / 1,18	
Additional refrigerant		g / m	16	16	16	50	
Pipe diameter - liquid side 5)		inch / mm	¼ / 6,0	¼ / 6,0	¼ / 6,0	¼ / 6,0	
Pipe diameter - gas side 5)		inch / mm	¾ / 9,5	¾ / 9,5	½ / 12,0	¾ / 16,0	
Max pipe length without additional refrigerant 6)		m	5	5	5	5	
Allowed pipe length 7)	min. / max.	m	3 / 15	3 / 15	3 / 25	3 / 25	
Max. elevation / Drop height		m	10	10	10	10	
Dimension of ID	w × h × d	mm	889 × 294 × 212	889 × 294 × 212	1013 × 307 × 221	1122 × 329 × 247	
Dimensions of outdoor unit	w × h × d	mm	732 × 555 × 330	732 × 555 × 330	965 × 700 × 396	965 × 700 × 396	
Package dimension of ID	w × h × d	mm	940 × 365 × 284	940 × 365 × 284	1080 × 378 × 315	1177 × 406 × 332	
Package dimensions of outdoor unit	w × h × d	mm	794 × 615 × 376	794 × 615 × 376	1029 × 750 × 458	1029 × 750 × 458	
Weight of ID	netto / brutto	kg	11,0 / 13,0	11,0 / 13,0	13,5 / 16,5	17,5 / 21,0	
Weight of OD	netto / brutto	kg	23,5 / 26,0	24,5 / 27,0	45,0 / 49,5	53,5 / 58,0	
Set temperature range		°C	16~30	16~30	16~30	16~30	
Operating temperature range cooling 8)		°C	-15~50	-15~50	-15~43	-15~43	
Operating temperature range heating 8)		°C	-25~30	-25~30	-22~24	-22~24	
<b>ADDITIONAL TECHNICAL INFORMATION</b>							
Screw holes distance of OD	w × d	mm	455 × 310	455 × 310	560 × 364	560 × 364	
Communication cable		mm <sup>2</sup>	4 × 0,75 (5m included)				
Recommended power cable		mm <sup>2</sup>	3 × 1,5	3 × 1,5	3 × 1,5	3 × 4,0	
Recommended air switch		A	13	13	13	20	
<b>EQUIPMENT</b>							
Plasma generator	indoor		✓	✓	✓	✓	
WiFi module			✓	✓	✓	✓	
Drain pump			-	-	-	-	
Max. lift (from bottom of ID unit)		mm	-	-	-	-	
Door contact (SMR-03V connector)			✓	✓	✓	✓	
Alarm contact			-	-	-	-	
Left-right guide louvres			✓	✓	-	-	
Throttling method	outdoor		Capillary	EXV	EXV	EXV	
Bottom chassis heater			Heating belt	Heating belt	Heating belt	Heating belt	
Crankcase heater			Preheating	Preheating	Preheating	Preheating	
Bottom plugs for OD			-	-	✓	✓	
Drain pipe connector			✓	✓	✓	✓	
<b>STANDARD ACCESSORIES</b>							
Standard health filter			SAF-OPWC4, SAF-OPWB4				
Remote controller (IR)			YAC1FB9 (WiFi)				
Wired controller			-	-	-	-	
<b>OPTIONAL ACCESSORIES</b>							
Optional health filters			SAF-OPWA4, SAF-OPWK4, SAF-OPWM4, SAF-OPWP4, SAF-OPWS4				
Wired controller			SWC-02, SWC-04				
Central controller			SCC-36				
Other			G2S-T, SAI-01, SBG-01				

The specification of products is subject to change based on further development of the units by the producer and can be changed without prior notice. Refer to rating label.

R32 (single component refrigerant HFC), GWP of refrigerant used: 675.

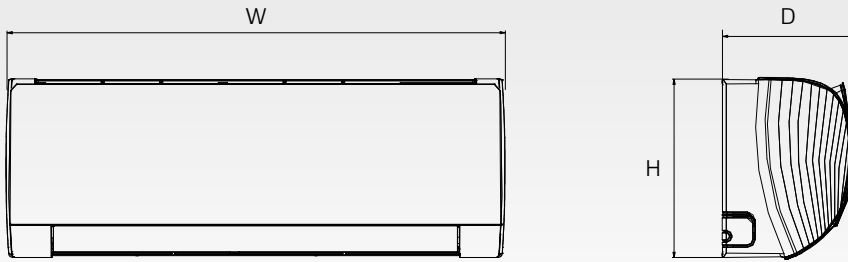
Contains fluorinated greenhouse gases covered by the Kyoto Protocol.

Explanatory notes on the very last page of the catalogue.

The device is being sold as a set (indoor + outdoor unit).

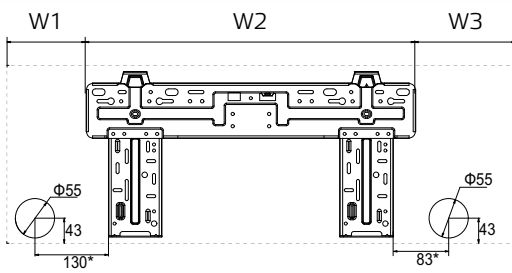
APPEARANCE AND DIMENSIONS OF INDOOR UNIT

**TERREL SERIES**



SIH-09BITx

SIH-13BITx



Model	W	H	D	W1	W2	W3
SIH-09/13BITx	889	294	212	146	542	201

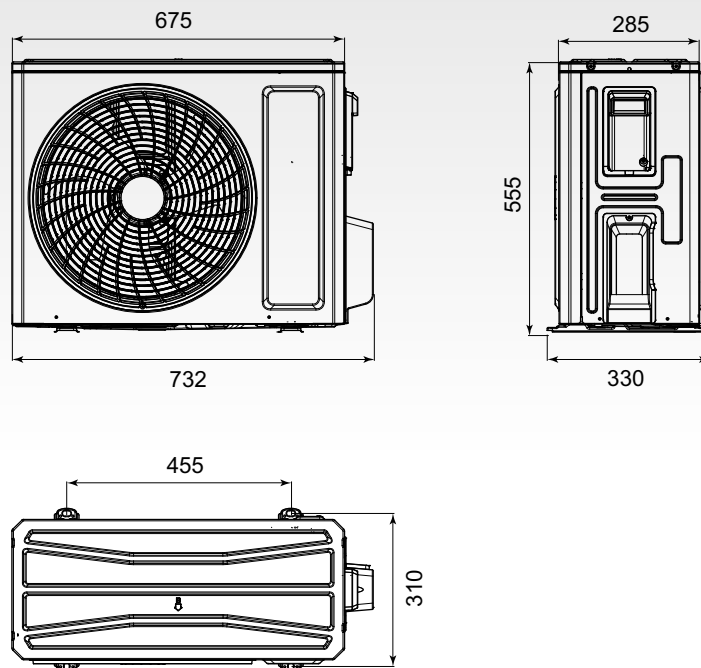
units: mm

APPEARANCE AND DIMENSIONS OF OUTDOOR UNIT

**TERREL SERIES**

SOH-09BIT

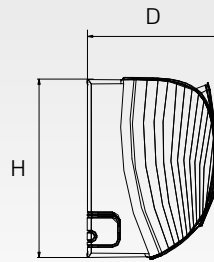
SOH-13BIT



units: mm

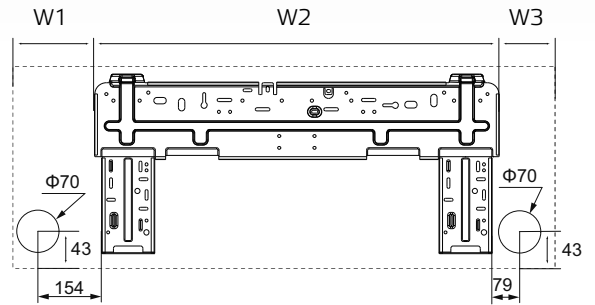
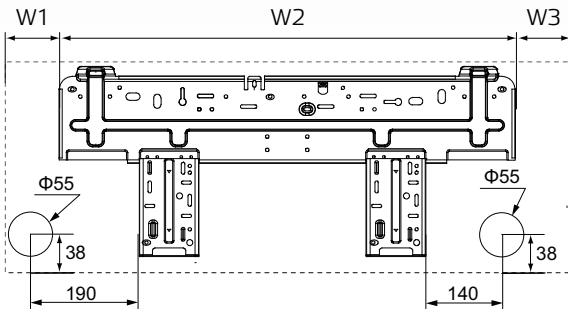
## APPEARANCE AND DIMENSIONS OF INDOOR UNIT

### TERREL SERIES



SIH-18BITx

SIH-24BITx



Models	W	H	D	W1	W2	W3
SIH-18BITx	1013	307	221	125.5	685	202.5
SIH-24BITx	1122	329	247	207	685	230

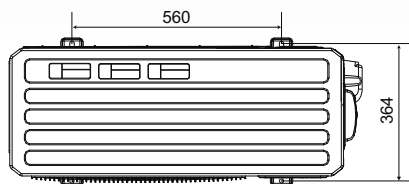
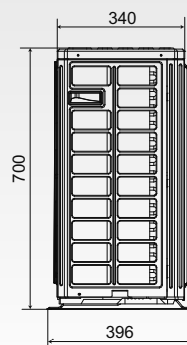
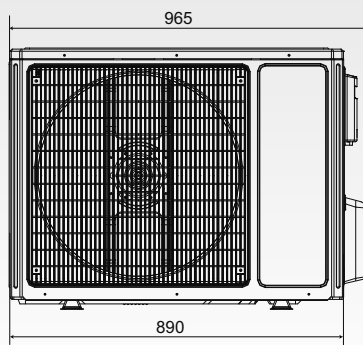
units: mm

## APPEARANCE AND DIMENSIONS OF OUTDOOR UNIT

### TERREL SERIES

SOH-18BIT

SOH-24BIT



units: mm

# WALL MOUNTED SPLIT AIR CONDITIONERS

## TERREL2 SERIES

MODEL			SIH+SOH-18BIT2	SIH+SOH-24BIT2			
Capacity cooling / heating 1)	Nominal (min-max)	kW	5,3 (1,3-6,6) / 5,6 (1,4-7,5)	7,1 (2,0-8,9) / 7,8 (1,8-9,5)			
Power supply		Hz / V	1~ / 50 / 220-240	1~ / 50 / 220-240			
Power supply			outdoor	outdoor			
Power input cooling / heating 1)		W	1413 / 1333	2030 / 2000			
Maximal power input 2)		W	2500	3000			
Power current cooling / heating		A	6,5 / 6,2	9,0 / 9,3			
Maximal power current 2)		A	12,5	13,5			
Energy class cooling 3)			A++	A++			
Pdesign cooling		kW	5,3	7,1			
SEER			7,6	7,0			
Annual power consumption		kWh / annum	244	355			
Energy class heating 3)	Aver. / Warm. / Cool.		A+ / A+++ / A	A+ / A+++ / A			
Pdesign heating	Average climate	kW	4,3	5,6			
SCOP	Average climate		4,3	4,2			
Annual power consumption	Average climate	kWh / annum	1400	1867			
Air flow of ID	SH/MH/H/ML/ML/SL	m³ / h	850/750/680/610/570/520/460	1250/1100/1000/950/900/850/800/600			
Airflow of OD	H	m³ / h	3600	3600			
Sound pressure level of ID at 1m 4)	SH/MH/H/ML/ML/SL	dB(A)	47/41/39/37/35/32/31/21	50/47/43/41/40/36/35/27			
Sound pressure level of OD at 1m 4)	H	dB(A)	57	59			
Sound power of ID 4)	SH/MH/H/ML/ML/SL	dB(A)	60/57/55/54/52/50/46/34	64/59/56/55/53/51/48/42			
Sound power of OD 4)	H	dB(A)	64	70			
Dehumidifying volume		l / h	1,9	2,4			
Refrigerant type / charge		Type / kg / t eq. CO <sub>2</sub>	R32 / 1,00 / 0,68	R32 / 1,50 / 1,01			
Additional refrigerant		g / m	16	40			
Pipe diameter - liquid side 5)		inch / mm	¼ / 6,0	¼ / 6,0			
Pipe diameter - gas side 5)		inch / mm	½ / 12,0	¾ / 16,0			
Max pipe length without additional refrigerant 6)		m	5	5			
Allowed pipe length 7)	min. / max.	m	3 / 25	3 / 25			
Max. elevation / Drop height		m	10	10			
Dimension of ID	w × h × d	mm	1013 × 307 × 221	1122 × 329 × 247			
Dimensions of outdoor unit	w × h × d	mm	958 × 660 × 402	958 × 660 × 402			
Package dimension of ID	w × h × d	mm	1060 × 374 × 297	1177 × 406 × 332			
Package dimensions of outdoor unit	w × h × d	mm	1032 × 456 × 737	1032 × 456 × 737			
Weight of ID	netto / brutto	kg	13,5 / 15,5	16,5 / 19,5			
Weight of OD	netto / brutto	kg	40,5 / 45,0	41,5 / 46,0			
Set temperature range		°C	16~30	16~30			
Operating temperature range cooling 8)		°C	-15~50	-15~50			
Operating temperature range heating 8)		°C	-25~30	-25~30			
<b>ADDITIONAL TECHNICAL INFORMATION</b>							
Screw holes distance of OD	w × d	mm	570 × 371	570 × 371			
Communication cable		mm <sup>2</sup>	4 × 0,75 (5m included)				
Recommended power cable		mm <sup>2</sup>	3 × 1,5	3 × 4,0			
Recommended air switch		A	13	20			
<b>EQUIPMENT</b>							
Plasma generator	indoor		✓	✓			
WiFi module			✓	✓			
Drain pump			-	-			
Max. lift (from bottom of ID unit)		mm		-	-		
Door contact (SMR-03V connector)				✓	✓		
Alarm contact				-	-		
Left-right guide louvres	outdoor		✓	✓			
Throttling method			EXV	EXV			
Bottom chassis heater			Heating belt	Heating belt			
Crankcase heater			Preheating	Preheating			
Bottom plugs for OD				-	-		
Drain pipe connector				✓	✓		
<b>STANDARD ACCESSORIES</b>							
Standard health filter			SAF-OPWC4, SAF-OPWB4				
Remote controller (IR)			YAC1FB9 (Wifi)				
Wired controller			-	-			
<b>OPTIONAL ACCESSORIES</b>							
Optional health filters			SAF-OPWA4, SAF-OPWK4, SAF-OPWM4, SAF-OPWP4, SAF-OPWS4				
Wired controller			SWC-02, SWC-04				
Central controller			SCC-36				
Other			G2S-T, SAI-01, SBG-01				

The specification of products is subject to change based on further development of the units by the producer and can be changed without prior notice. Refer to rating label.

R32 (single component refrigerant HFC), GWP of refrigerant used: 675.

Contains fluorinated greenhouse gases covered by the Kyoto Protocol.

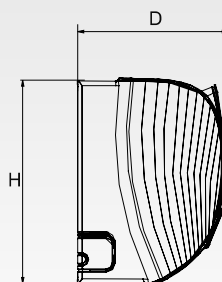
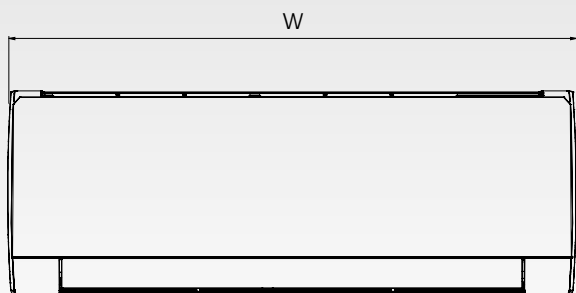
Explanatory notes on the very last page of the catalogue.

The device is being sold as a set (indoor + outdoor unit).



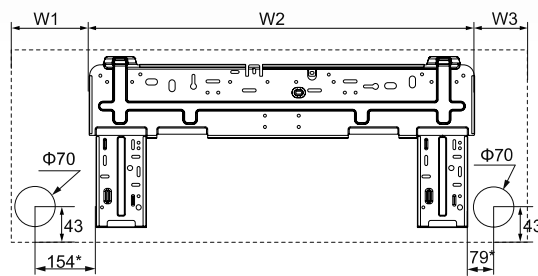
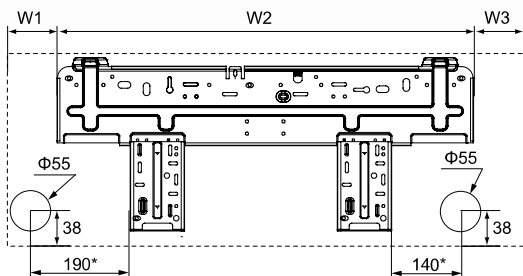
## APPEARANCE AND DIMENSIONS OF INDOOR UNIT

### TERREL2 SERIES



#### SIH18BIT2

#### SIH24BIT2



Model	W	H	D	W1	W2	W3
SIH-18BIT2x	1013	307	221	125.5	685	202.5
SIH-24BIT2x	1122	329	247	207	685	230

units: mm

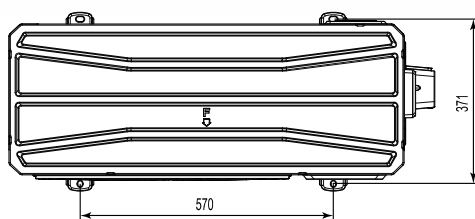
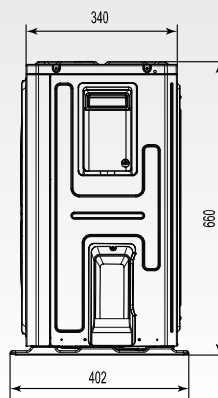
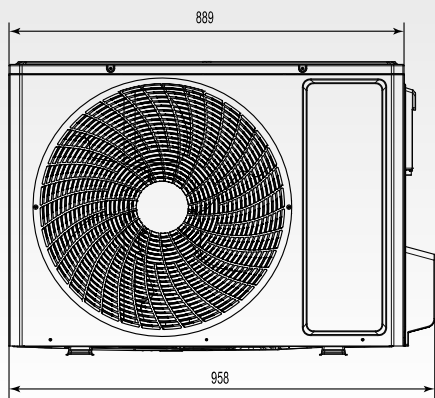
\* Recommended distance

## APPEARANCE AND DIMENSIONS OF OUTDOOR UNIT

### TERREL2 SERIES

#### SOH-18BIT2

#### SOH-24BIT2



units: mm

# WALL MOUNTED SPLIT AIR CONDITIONERS

## KEYON SERIES

MODEL			SIH+SOH-09BIK	SIH+SOH-12BIK	SIH+SOH-18BIK	SIH+SOH-24BIK		
Capacity cooling / heating 1)	Nominal (min-max)	kW	2,7 (0,6-3,4) / 2,8 (0,6-3,7)	3,2 (0,9-3,7) / 3,4 (0,9-4,1)	4,6 (1,0-5,3) / 5,2 (1,0-5,7)	6,2 (1,8-6,4) / 6,5 (1,6-6,6)		
Power supply		Hz / V	1~ / 50 / 220-240	1~ / 50 / 220-240	1~ / 50 / 220-240	1~ / 50 / 220-240		
Power supply			outdoor	outdoor	outdoor	outdoor		
Power input cooling / heating 1)		W	735 / 695	991 / 916	1355 / 1340	1771 / 1646		
Maximal power input 2)		W	1500	1500	1900	2200		
Power current cooling / heating		A	3,5 / 3,3	4,4 / 4,0	5,9 / 5,8	7,9 / 7,3		
Maximal power current 2)		A	7,5	7,5	9,0	10,0		
Energy class cooling 3)			A++	A++	A++	A++		
Pdesign cooling		kW	2,7	3,2	4,6	6,2		
SEER			6,6	6,5	6,4	6,8		
Annual power consumption		kWh / annum	143	172	251	319		
Energy class heating 3)	Aver. / Warm. / Cool.		A+ / A+++ / -	A+ / A+++ / -	A+ / A+++ / -	A+ / A+++ / -		
Pdesign heating	Average climate	kW	2,5	2,7	3,7	4,7		
SCOP	Average climate		4,2	4,1	4,0	4,0		
Annual power consumption	Average climate	kWh / annum	833	922	1295	1645		
Air flow of ID	SH/MH/H/ML/ML/SL	m³ / h	550/500/430/290	680/560/450/390	850/750/650/550	1100/950/750/650		
Airflow of OD	H	m³ / h	1950	1950	1950	2800		
Sound pressure level of ID at 1m 4)	SH/MH/H/ML/ML/SL	dB(A)	40/38/34/23	41/36/32/23	48/41/37/31	48/44/40/35		
Sound pressure level of OD at 1m 4)	H	dB(A)	51	52	53	58		
Sound power of ID 4)	SH/MH/H/ML/ML/SL	dB(A)	55/48/44/36	57/46/42/37	58/51/47/34	61/58/53/49		
Sound power of OD 4)	H	dB(A)	62	64	63	67		
Dehumidifying volume		l / h	1,4	1,4	1,8	1,8		
Refrigerant type / charge		Type / kg / t eq. CO <sub>2</sub>	R32 / 0,53 / 0,36	R32 / 0,57 / 0,38	R32 / 0,75 / 0,51	R32 / 1,30 / 0,88		
Additional refrigerant		g / m	16	16	16	16		
Pipe diameter - liquid side 5)		inch / mm	¼ / 6,0	¼ / 6,0	¼ / 6,0	¼ / 6,0		
Pipe diameter - gas side 5)		inch / mm	¾ / 9,5	¾ / 9,5	¾ / 9,5	½ / 12,0		
Max pipe length without additional refrigerant 6)		m	5	5	5	5		
Allowed pipe length 7)	min. / max.	m	3 / 15	3 / 15	3 / 25	3 / 25		
Max. elevation / Drop height		m	10	10	10	10		
Dimension of ID	w × h × d	mm	770 × 251 × 190	849 × 289 × 215	972 × 300 × 225	1081 × 325 × 248		
Dimensions of outdoor unit	w × h × d	mm	732 × 550 × 330	732 × 550 × 330	732 × 550 × 330	873 × 555 × 376		
Package dimension of ID	w × h × d	mm	822 × 324 × 262	902 × 357 × 279	1022 × 374 × 299	1137 × 407 × 334		
Package dimensions of outdoor unit	w × h × d	mm	792 × 615 × 393	792 × 615 × 393	792 × 615 × 393	951 × 620 × 431		
Weight of ID	netto / brutto	kg	8,5 / 10,0	10,5 / 12,5	13,5 / 16,0	16,5 / 19,5		
Weight of OD	netto / brutto	kg	25,0 / 27,5	25,0 / 27,5	26,5 / 29,0	36,5 / 39,5		
Set temperature range		°C	16~30	16~30	16~30	16~30		
Operating temperature range cooling 8)		°C	-15~43	-15~43	-15~43	-15~43		
Operating temperature range heating 8)		°C	-15~24	-15~24	-15~24	-15~24		
<b>ADDITIONAL TECHNICAL INFORMATION</b>								
Screw holes distance of OD	w × d	mm	455 × 310			528 × 349		
Communication cable		mm <sup>2</sup>	4 × 0,75 (5m included)					
Recommended power cable		mm <sup>2</sup>	3 × 1,5	3 × 1,5	3 × 1,5	3 × 1,5		
Recommended air switch		A	13	13	13	13		
<b>EQUIPMENT</b>								
Plasma generator	indoor		✓	✓	✓	✓		
WiFi module			✓	✓	✓	✓		
Drain pump			-	-	-	-		
Max. lift (from bottom of ID unit)		mm	-	-	-	-		
Door contact (SMR-03V connector)			-	✓	✓	✓		
Alarm contact			-	-	-	-		
Left-right guide louvres			-	-	-	-		
Throttling method	outdoor		Capillary	Capillary	Capillary	Capillary		
Bottom chassis heater			-	-	-	-		
Crankcase heater			Preheating	Preheating	Preheating	Preheating		
Bottom plugs for OD			-	-	-	-		
Drain pipe connector			-	-	✓	✓		
<b>STANDARD ACCESSORIES</b>								
Standard health filter			SAF-OPWC4, SAF-OPWA4					
Remote controller (IR)			YAA1FB6 (WiFi)					
Wired controller			-	-	-	-		
<b>OPTIONAL ACCESSORIES</b>								
Optional health filters			SAF-OPWB4, SAF-OPWK4, SAF-OPWM4, SAF-OPWP4, SAF-OPWS4					
Wired controller			SWC-02, SWC-04					
Central controller			SCC-36					
Other			G2S-T, SAI-01	G2S-T, SAI-01, SBG-01				

The specification of products is subject to change based on further development of the units by the producer and can be changed without prior notice. Refer to rating label.

R32 (single component refrigerant HFC), GWP of refrigerant used: 675.

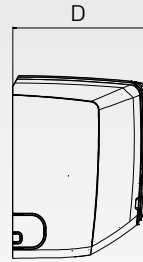
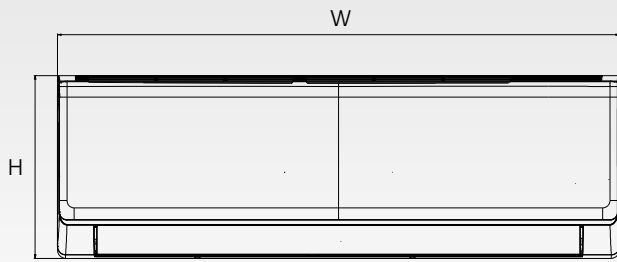
Contains fluorinated greenhouse gases covered by the Kyoto Protocol.

Explanatory notes on the very last page of the catalogue.

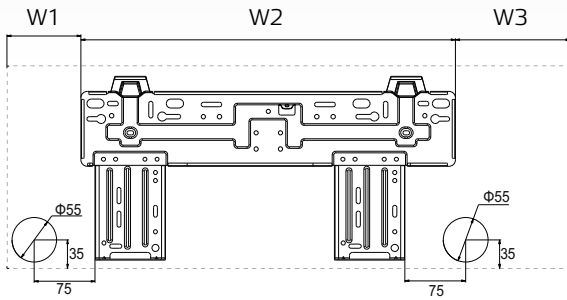
The device is being sold as a set (indoor + outdoor unit).

# APPEARANCE AND DIMENSIONS OF INDOOR UNIT

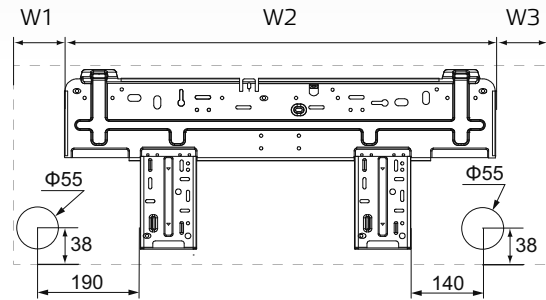
## KEYON SERIES



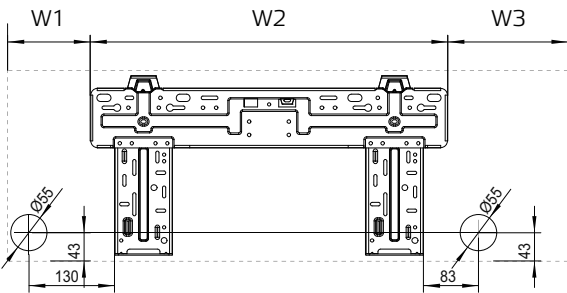
SIH-09BIK



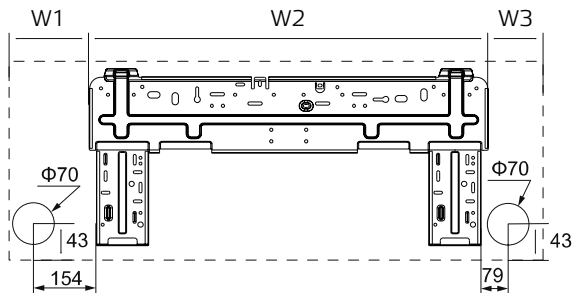
SIH-18BIK



SIH-12BIK



SIH-24BIK



Model	W	H	D	W1	W2	W3
SIH-09BIK	770	251	190	129.5	462	178.5
SIH-12BIK	849	289	215	125	542	182
SIH-18BIK	972	300	225	105	685	182
SIH-24BIK	1081	325	248	207	685	189

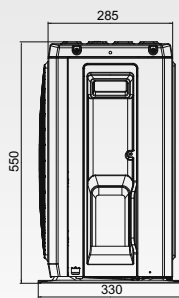
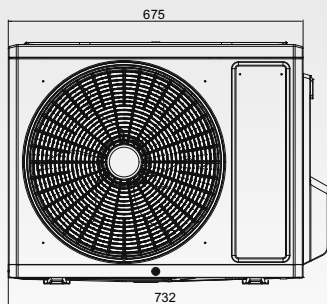
units: mm

APPEARANCE AND DIMENSIONS OF OUTDOOR UNIT

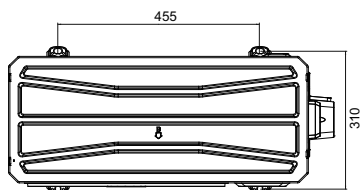
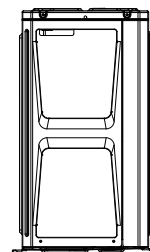
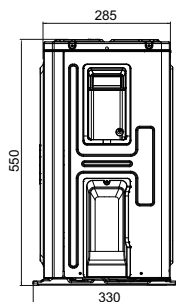
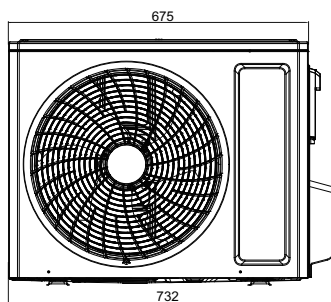
**KEYON PLUS SERIES**

SOH-09BIK

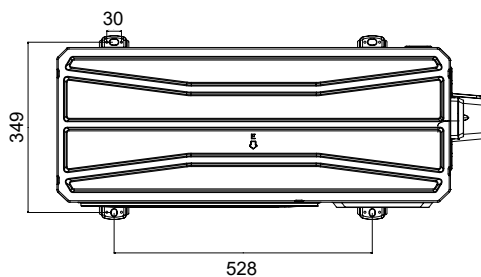
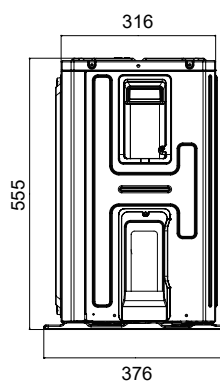
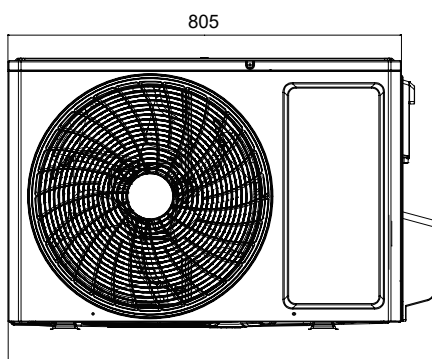
SOH-12BIK



SOH-18BIK



SOH-24BIK



WALL MOUNTED SPLIT AIR CONDITIONERS

**RAY SERIES**

MODEL			SIH+SOH-09BIR	SIH+SOH-12BIR	SIH+SOH-18BIR	SIH+SOH-24BIR
Capacity cooling / heating 1)	Nominal (min-max)	kW	2,7 (0,5-3,3) / 2,8 (0,5-3,5)	3,2 (0,9-3,6) / 3,4 (0,9-4,0)	4,6 (1,0-5,3) / 5,2 (1,0-5,6)	6,2 (1,8-6,9) / 6,5 (1,3-7,0)
Power supply		Hz / V	1~ / 50 / 220-240	1~ / 50 / 220-240	1~ / 50 / 220-240	1~ / 50 / 220-240
Power supply			outdoor	outdoor	outdoor	outdoor
Power input cooling / heating 1)		W	735 / 695	991 / 916	1355 / 1340	1827 / 1912
Maximal power input 2)		W	1500	1500	1900	2300
Power current cooling / heating		A	3,5 / 3,3	4,4 / 4,0	5,9 / 5,8	7,6 / 7,6
Maximal power current 2)		A	7,5	7,5	9,0	10,2
Energy class cooling 3)			A++	A++	A++	A++
Pdesign cooling		kW	2,7	3,2	4,6	6,2
SEER			6,6	6,1	6,4	6,8
Annual power consumption		kWh / annum	143	184	264	350
Energy class heating 3)	Aver. / Warm. / Cool.		A+ / A+++ / -	A+ / A+++ / -	A+ / A+++ / -	A+ / A+++ / -
Pdesign heating	Average climate	kW	2,5	2,7	3,7	4,7
SCOP	Average climate		4,2	4,0	4,0	4,0
Annual power consumption	Average climate	kWh / annum	833	945	1260	1645
Air flow of ID	SH/MH/H/ML/ML/SL	m³ / h	550/500/430/290	590/520/400/320	850/800/700/600	900/800/600/400
Airflow of OD	H	m³ / h	1950	1950	1950	3200
Sound pressure level of ID at 1m 4)	SH/MH/H/ML/ML/SL	dB(A)	40/38/34/23	41/37/33/26	48/42/38/31	48/45/37/26
Sound pressure level of OD at 1m 4)	H	dB(A)	51	51	55	57
Sound power of ID 4)	SH/MH/H/ML/ML/SL	dB(A)	55/48/44/36	56/49/45/38	58/52/48/34	58/55/47/36
Sound power of OD 4)	H	dB(A)	62	64	63	65
Dehumidifying volume		l / h	1,4	1,4	1,8	1,8
Refrigerant type / charge	Type / kg / t eq. CO <sub>2</sub>		R32 / 0,53 / 0,34	R32 / 0,55 / 0,37	R32 / 0,75 / 0,51	R32 / 1,23 / 0,83
Additional refrigerant	g / m		16	16	16	16
Pipe diameter - liquid side 5)	inch / mm		¼ / 6,0	¼ / 6,0	¼ / 6,0	¼ / 6,0
Pipe diameter - gas side 5)	inch / mm		¾ / 9,5	¾ / 9,5	¾ / 9,5	½ / 12,0
Max pipe length without additional refrigerant 6)	m		5	5	5	5
Allowed pipe length 7)	min. / max.	m	3 / 15	3 / 15	3 / 25	3 / 25
Max. elevation / Drop height		m	10	10	10	10
Dimension of ID	w × h × d	mm	773 × 250 × 185	773 × 250 × 185	970 × 300 × 225	970 × 300 × 225
Dimensions of outdoor unit	w × h × d	mm	732 × 550 × 330	732 × 550 × 330	732 × 555 × 330	873 × 555 × 376
Package dimension of ID	w × h × d	mm	822 × 322 × 255	822 × 322 × 255	1020 × 369 × 295	1020 × 369 × 295
Package dimensions of outdoor unit	w × h × d	mm	792 × 615 × 393	792 × 615 × 393	794 × 615 × 376	951 × 620 × 431
Weight of ID	netto / brutto	kg	8,5 / 9,5	8,0 / 9,5	13,5 / 16,0	13,0 / 15,5
Weight of OD	netto / brutto	kg	25,0 / 27,5	25,0 / 27,5	26,5 / 29,0	36,5 / 39,5
Set temperature range		°C	16-30	16-30	16-30	16-30
Operating temperature range cooling 8)		°C	-15-43	-15-43	-15-43	-15-43
Operating temperature range heating 8)		°C	-15-24	-15-24	-15-24	-15-24
<b>ADDITIONAL TECHNICAL INFORMATION</b>						
Screw holes distance of OD	w × d	mm	455 × 310		455 × 310	528 × 349
Communication cable		mm <sup>2</sup>	4 × 0,75 (5m included)			
Recommended power cable		mm <sup>2</sup>	3 × 1,5	3 × 1,5	3 × 1,5	3 × 1,5
Recommended air switch		A	13	13	13	13
<b>EQUIPMENT</b>						
Plasma generator	indoor		✓	✓	✓	✓
WiFi module			Optional (SWM-04)			
Drain pump			-	-	-	-
Max. lift (from bottom of ID unit)	mm		-	-	-	-
Door contact (SMR-03V connector)			-	-	-	-
Alarm contact			-	-	-	-
Left-right guide louvres			-	-	-	-
Throttling method	outdoor		Capillary	Capillary	Capillary	Capillary
Bottom chassis heater			-	-	-	-
Crankcase heater			Preheating	Preheating	Preheating	Preheating
Bottom plugs for OD			-	-	-	-
Drain pipe connector			-	-	-	-
<b>STANDARD ACCESSORIES</b>						
Standard health filter			-	-	-	-
Remote controller (IR)			YAW1F5 (WiFi)			
Wired controller			-	-	-	-
<b>OPTIONAL ACCESSORIES</b>						
Optional health filters			SAF-OPWAA, SAF-OPWB4, SAF-OPWC4, SAF-OPWK4, SAF-OPWM4, SAF-OPWP4, SAF-OPWS4			
Wired controller			-	-	-	-
Central controller			-	-	-	-
Other			G2S-T, SAI-01, SWM-04			

The specification of products is subject to change based on further development of the units by the producer and can be changed without prior notice. Refer to rating label.

R32 (single component refrigerant HFC), GWP of refrigerant used: 675.

Contains fluorinated greenhouse gases covered by the Kyoto Protocol.

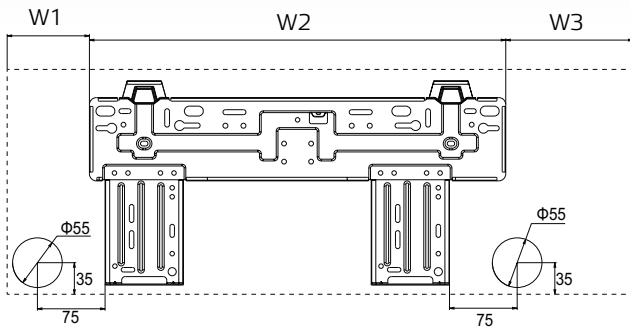
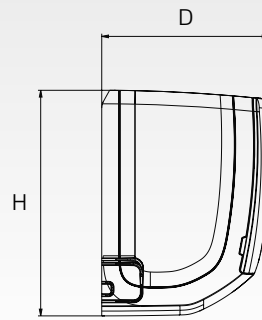
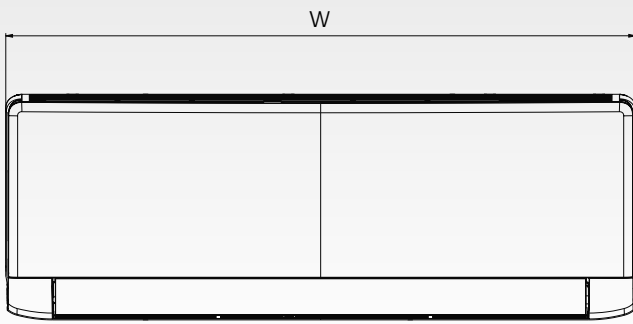
Explanatory notes on the very last page of the catalogue.

The device is being sold as a set (indoor + outdoor unit).

APPEARANCE AND DIMENSIONS OF INDOOR UNIT

**RAY SERIES**

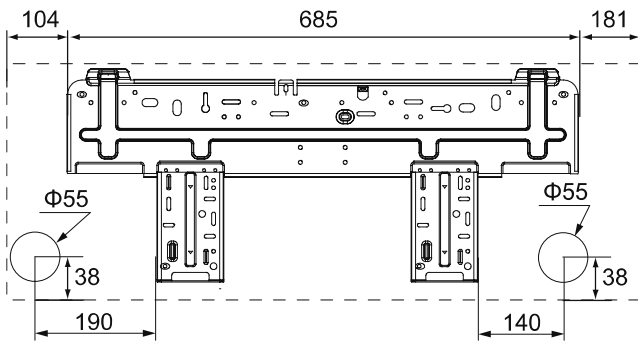
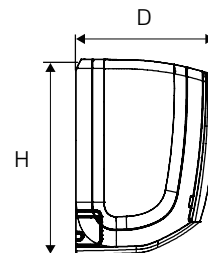
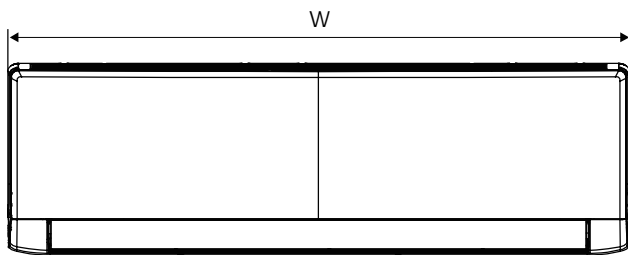
SIH-09BIR, SIH-12BIR



units: mm

Model	W	H	D	W1	W2	W3
SIH-09/12BIR	773	250	185	131	462	180

SIH-18BIR, SIH-24BIR



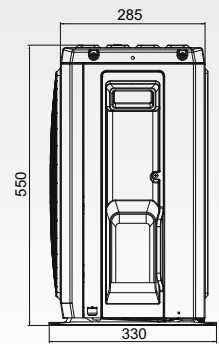
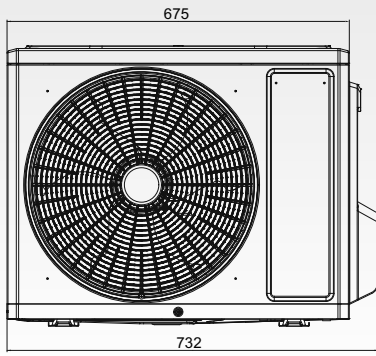
Model	W	H	D
SIH-18/24BIR	970	300	225

units: mm

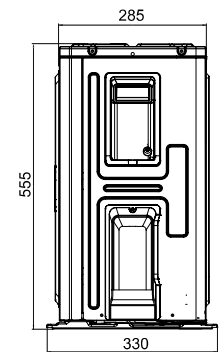
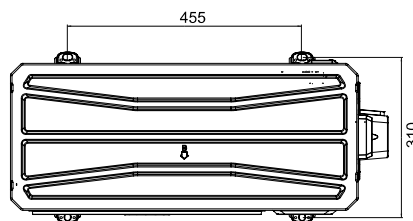
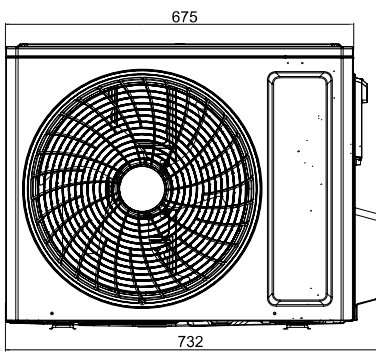
# APPEARANCE AND DIMENSIONS OF OUTDOOR UNIT

## RAY SERIES

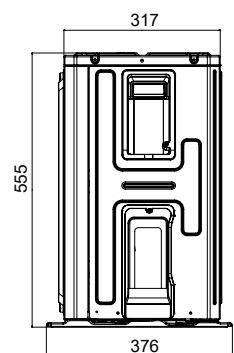
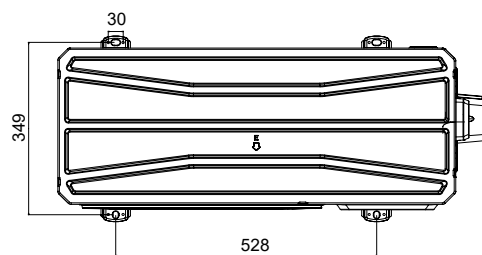
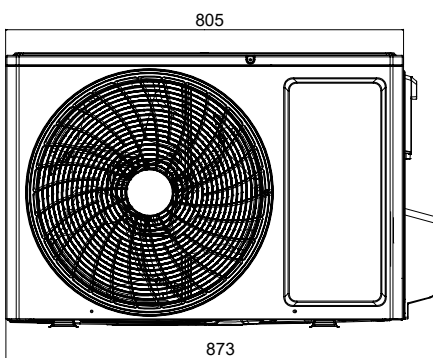
SOH-09BIR, SOH-12BIR



SOH-18BIR



SOH-24BIR

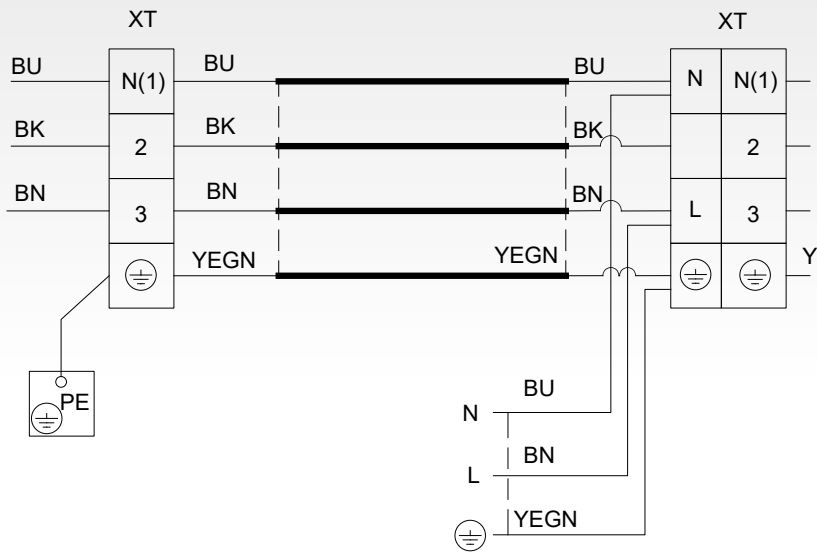


units: mm

ELECTRICAL WIRING DIAGRAM

**RAY SERIES**

INDOOR UNIT





CONSOLE SPLIT AIR CONDITIONERS

**CONSOLE SERIES**

MODEL			ASP-09BI	ASP-12BI	ASP-18BI			
Capacity cooling / heating 1)	Nominal (min-max)	kW	2,7 (0,7-3,4) / 2,9 (0,6-3,5)	3,5 (0,8-4,4) / 3,8 (1,1-4,4)	5,2 (1,3-6,6) / 5,3 (1,1-6,8)			
Power supply		Hz / V	1~ / 50 / 220-240	1~ / 50 / 220-240	1~ / 50 / 220-240			
Power supply			outdoor	outdoor	outdoor			
Power input cooling / heating 1)		W	720 / 730	1000 / 960	1550 / 1500			
Maximal power input 2)		W	1350	1500	2500			
Power current cooling / heating		A	3,5 / 3,6	4,5 / 4,3	7,1 / 6,7			
Maximal power current 2)		A	6,0	6,7	11,1			
Energy class cooling 3)			A++	A++	A++			
Pdesign cooling		kW	2,7	3,5	5,2			
SEER			7,2	7,0	6,6			
Annual power consumption		kWh / annum	131	175	276			
Energy class heating 3)	Aver. / Warm. / Cool.		A+ / A+++ / -	A+ / A+++ / -	A+ / A+++ / -			
Pdesign heating	Average climate	kW	2,6	3,2	5,0			
SCOP	Average climate		4,0	4,1	4,1			
Annual power consumption	Average climate	kWh / annum	910	1093	1707			
Air flow of ID	SH/MH/H/ML/ML/SL	m³ / h	500/430/410/370/330/280/250	600/520/480/440/400/360/280	700/650/580/520/460/410/320			
Airflow of OD	H	m³ / h	1600	2200	3200			
Sound pressure level of ID at 1m 4)	SH/MH/H/ML/ML/SL	dB(A)	39/36/33/31/29/26/22	44/40/38/36/33/29/25	47/45/42/40/37/35/31			
Sound pressure level of OD at 1m 4)	H	dB(A)	49	52	57			
Sound power of ID 4)	SH/MH/H/ML/ML/SL	dB(A)	50/48/45/44/42/38/34	54/50/48/46/43/39/35	57/55/52/50/47/45/41			
Sound power of OD 4)	H	dB(A)	60	62	65			
Dehumidifying volume		l / h	0,8	1,2	1,8			
Refrigerant type / charge	Type / kg / t eq. CO <sub>2</sub>		R32 / 0,55 / 0,37	R32 / 0,75 / 0,51	R32 / 0,95 / 0,64			
Additional refrigerant		g / m	16	16	20			
Pipe diameter - liquid side 5)		inch / mm	¼ / 6,0	¼ / 6,0	¼ / 6,0			
Pipe diameter - gas side 5)		inch / mm	¾ / 9,5	¾ / 9,5	¾ / 12,0			
Max pipe length without additional refrigerant 6)		m	5	5	5			
Allowed pipe length 7)	min. / max.	m	3 / 20	3 / 20	3 / 25			
Max. elevation / Drop height		m	10	10	10			
Dimension of ID	w × h × d	mm	700 × 600 × 215	700 × 600 × 215	700 × 600 × 215			
Dimensions of outdoor unit	w × h × d	mm	782 × 540 × 320	848 × 596 × 320	965 × 700 × 396			
Package dimension of ID	w × h × d	mm	788 × 685 × 295	788 × 685 × 295	788 × 697 × 283			
Package dimensions of outdoor unit	w × h × d	mm	823 × 595 × 358	881 × 645 × 363	1029 × 458 × 750			
Weight of ID	netto / brutto	kg	15,5 / 18,5	15,5 / 18,5	15,5 / 18,5			
Weight of OD	netto / brutto	kg	27,5 / 30,0	30,5 / 33,5	46,0 / 50,5			
Set temperature range		°C	16-30	16-30	16-30			
Operating temperature range cooling 8)		°C	-15-43	-15-43	-15-43			
Operating temperature range heating 8)		°C	-22-24	-22-24	-22-24			
<b>ADDITIONAL TECHNICAL INFORMATION</b>								
Screw holes distance of OD	w × d	mm	510 × 286	540 × 286	560 × 364			
Communication cable		mm <sup>2</sup>	4 × 0,75 (5m included)					
Recommended power cable		mm <sup>2</sup>	3 × 1,5	3 × 1,5	3 × 2,5			
Recommended air switch		A	10	13	16			
<b>EQUIPMENT</b>								
Plasma generator	indoor		✓	✓	✓			
WiFi module			✓	✓	✓			
Drain pump			-	-	-			
Max. lift (from bottom of ID unit)		mm		-	-	-		
Door contact				-	-	-		
Alarm contact				-	-	-		
Fresh air inlet			-	-	-			
Throttling method	outdoor		EXV	EXV	EXV			
Bottom chassis heater			Heating belt	Heating belt	Heating belt			
Crankcase heater			Preheating	Preheating	Preheating			
Bottom plugs for OD				-	-	✓		
Drain pipe connector				✓	✓	✓		
<b>STANDARD ACCESSORIES</b>								
Standard health filter			SAF-OPWA4, SAF-OPWC4					
Remote controller (IR)			YAA1FB8	YAA1FB8	YAA1FB8			
Wired controller			-	-	-			
<b>OPTIONAL ACCESSORIES</b>								
Optional health filters			SAF-OPWB4, SAF-OPWK4, SAF-OPWM4, SAF-OPWP4, SAF-OPWS4					
Wired controller			SWC-02, SWC-04					
Central controller			SCC-36					
Other			G2S-T, SBG-01, SAI-01					

The specification of products is subject to change based on further development of the units by the producer and can be changed without prior notice. Refer to rating label.

R32 (single component refrigerant HFC), GWP of refrigerant used: 675.

Contains fluorinated greenhouse gases covered by the Kyoto Protocol.

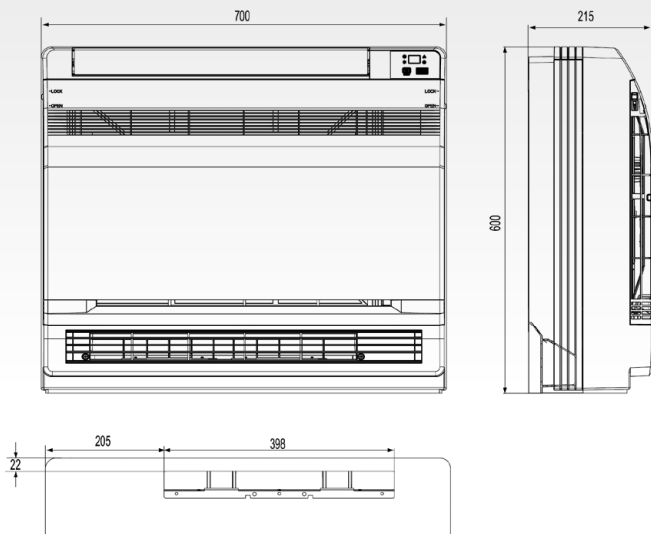
Explanatory notes on the very last page of the catalogue.

The device is being sold as a set (indoor + outdoor unit).

## APPEARANCE AND DIMENSIONS OF INDOOR UNIT

### CONSOLE SERIES

ASP-09BI, ASP-12BI, ASP-18BI

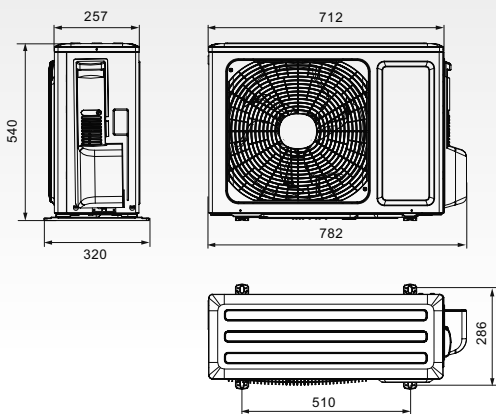


units: mm

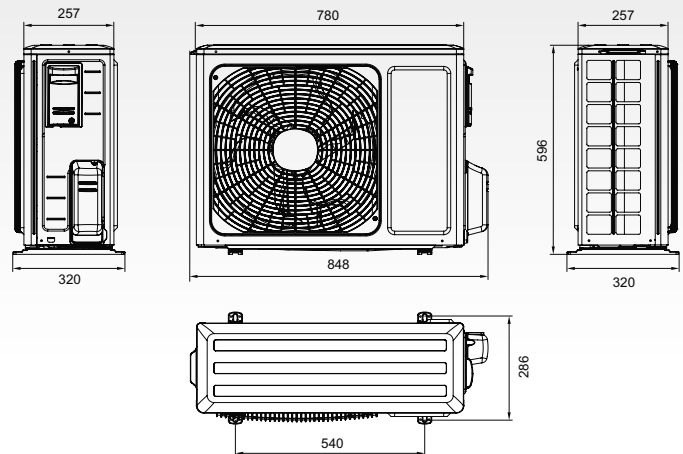
## DIMENSIONS OF OUTDOOR UNIT

### CONSOLE SERIES

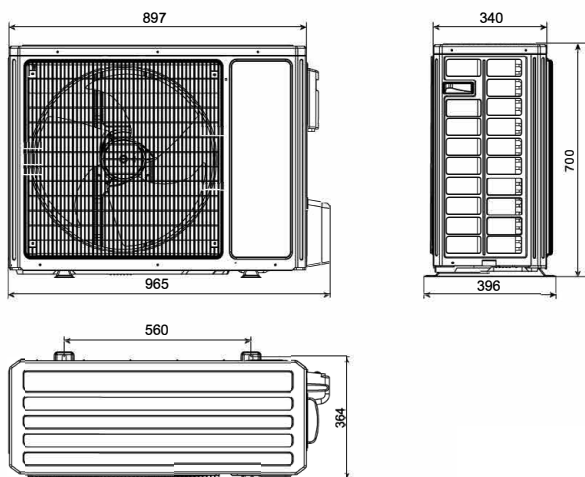
ASP-09BI



ASP-12BI



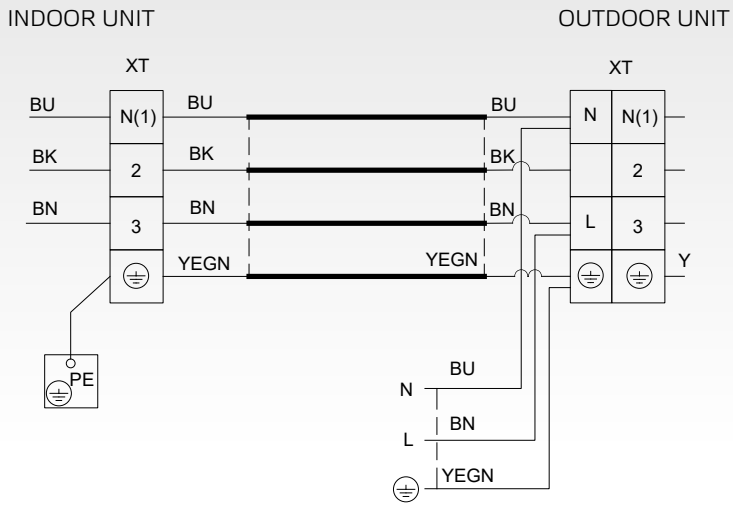
ASP-18BI



units: mm

# ELECTRICAL WIRING DIAGRAM

## CONSOLE SERIES



**MULTI VARIABLE SERIES**

MODEL			SIH-09BIT	SIH-13BIT	SIH-18BIT	SIH-24BIT	
Capacity cooling / heating 1)	Nominal (min-max)	kW	2,7 (0,8-3,8) / 3,0 (0,9-4,2)	3,5 (1,0-3,8) / 3,8 (0,9-4,7)	5,2 (1,0-6,1) / 5,3 (1,1-6,0)	7,0 (2,0-8,6) / 7,4 (1,8-9,0)	
Power supply		Hz / V	1~ / 50 / 220-240	1~ / 50 / 220-240	1~ / 50 / 220-240	1~ / 50 / 220-240	
Air flow of ID	SH/MH/H/ML/ML/SL	m <sup>3</sup> / h	610/570/540/470/440/420/390	700/650/600/540/480/420/360	800/720/650/610/570/520/470	1250/1100/1000/950/900/850/750	
Sound pressure level of ID at 1m 4)	SH/MH/H/ML/ML/SL	dB(A)	38/36/34/31/29/27/25	42/38/35/32/29/27/25	45/43/41/38/35/34/31	48/45/42/39/37/36/33	
Sound power of ID 4)	SH/MH/H/ML/ML/SL	dB(A)	56/48/46/43/41/39/37	57/50/47/44/41/39/37	59/57/55/52/49/48/45	58/55/52/49/47/46/43	
Dehumidifying volume		l / h	0,8	1,4	1,8	2,4	
Refrigerant type		Type	R32	R32	R32	R32	
Pipe diameter - liquid side 5)		inch / mm	¼ / 6,0	¼ / 6,0	¼ / 6,0	¼ / 6,0	
Pipe diameter - gas side 5)		inch / mm	¾ / 9,5	¾ / 9,5	½ / 12,0	¾ / 16,0	
Dimension of ID	w × h × d	mm	889 × 294 × 212	889 × 294 × 212	1013 × 307 × 221	1122 × 329 × 247	
Package dimension of ID	w × h × d	mm	940 × 365 × 284	940 × 365 × 284	1080 × 378 × 315	1177 × 406 × 332	
Weight of ID	netto / brutto	kg	11,0 / 13,0	11,0 / 13,0	13,5 / 16,5	17,5 / 21,0	
Set temperature range		°C	16-30	16-30	16-30	16-30	
<b>ADDITIONAL TECHNICAL INFORMATION</b>							
Communication cable		mm <sup>2</sup>	4 × 0,75 (5m included)				
Recommended power cable		mm <sup>2</sup>	Outdoor unit power supplied				
Recommended air switch		A	Outdoor unit power supplied				
<b>EQUIPMENT</b>							
Plasma generator	indoor		✓	✓	✓	✓	
WiFi module			✓	✓	✓	✓	
Drain pump			-	-	-	-	
Max. lift (from bottom of ID unit)		mm	-	-	-	-	
Door contact (SMR-03V connector)			✓	✓	✓	✓	
Alarm contact			-	-	-	-	
Fresh air inlet			-	-	-	-	
<b>STANDARD ACCESSORIES</b>							
Standard health filter			SAF-OPWC4, SAF-OPWB4				
Remote controller (IR)			YAC1FB9 (WiFi)				
Wired controller			-	-	-	-	
<b>OPTIONAL ACCESSORIES</b>							
Optional health filters			SAF-OPWA4, SAF-OPWK4, SAF-OPWM4, SAF-OPWP4, SAF-OPWS4				
Wired controller			SWC-02, SWC-04				
Central controller			SCC-36				
Other			G2S-T, SBG-01				

The specification of products is subject to change based on further development of the units by the producer and can be changed without prior notice. Refer to rating label.

R32 (single component refrigerant HFC), GWP of refrigerant used: 675.

Contains fluorinated greenhouse gases covered by the Kyoto Protocol.

Explanatory notes on the very last page of the catalogue.

These indoor units may be combined with other indoor units from MULTI VARIABLE series, it is essential to follow combinations recommended in the combination table.

**MULTI VARIABLE SERIES**

MODEL			SIH-18BIT2	SIH-24BIT2			
Capacity cooling / heating 1)	Nominal (min-max)	kW	5,3 (1,3-6,6) / 5,6 (1,4-7,5)	7,1 (2,0-8,9) / 7,8 (1,8-9,5)			
Power supply		Hz / V	1~ / 50 / 220-240	1~ / 50 / 220-240			
Air flow of ID	SH/MH/H/ML/ML/SL	m <sup>3</sup> / h	850/750/680/610/570/520/460	1250/1100/1000/950/900/850/800/600			
Sound pressure level of ID at 1m 4)	SH/MH/H/ML/ML/SL	dB(A)	47/41/39/37/35/32/31/21	50/47/43/41/40/36/35/27			
Sound power of ID 4)	SH/MH/H/ML/ML/SL	dB(A)	60/57/55/54/52/50/46/34	64/59/56/55/53/51/48/42			
Dehumidifying volume		l / h	1,9	2,4			
Refrigerant type		Type	R32	R32			
Pipe diameter - liquid side 5)		inch / mm	¼ / 6,0	¼ / 6,0			
Pipe diameter - gas side 5)		inch / mm	½ / 12,0	¾ / 16,0			
Dimension of ID	w × h × d	mm	1013 × 307 × 221	1122 × 329 × 247			
Package dimension of ID	w × h × d	mm	958 × 660 × 402	1177 × 406 × 332			
Weight of ID	netto / brutto	kg	13,5 / 15,5	16,5 / 19,5			
Set temperature range		°C	16-30	16-30			
<b>ADDITIONAL TECHNICAL INFORMATION</b>							
Communication cable		mm <sup>2</sup>	4 × 0,75 (5m included)				
Recommended power cable		mm <sup>2</sup>	Outdoor unit power supplied				
Recommended air switch		A	Outdoor unit power supplied				
<b>EQUIPMENT</b>							
Plasma generator	indoor		✓	✓			
WiFi module			✓	✓			
Drain pump			-	-			
Max. lift (from bottom of ID unit)		mm	-	-			
Door contact (SMR-03V connector)			✓	✓			
Alarm contact			-	-			
Fresh air inlet			-	-			
<b>STANDARD ACCESSORIES</b>							
Standard health filter			SAF-OPWC4, SAF-OPWB4				
Remote controller (IR)			YAC1FB9 (WIFI)				
Wired controller			-	-			
<b>OPTIONAL ACCESSORIES</b>							
Optional health filters			SAF-OPWA4, SAF-OPWK4, SAF-OPWM4, SAF-OPWP4, SAF-OPWS4				
Wired controller			SWC-02, SWC-04				
Central controller			SCC-36				
Other			G2S-T, SBG-01				

The specification of products is subject to change based on further development of the units by the producer and can be changed without prior notice. Refer to rating label.

R32 (single component refrigerant HFC), GWP of refrigerant used: 675.

Contains fluorinated greenhouse gases covered by the Kyoto Protocol.

Explanatory notes on the very last page of the catalogue.

These indoor units may be combined with other indoor units from MULTI VARIABLE series, it is essential to follow combinations recommended in the combination table.

# MULTI VARIABLE SERIES

MODEL			SIH-07BIK	SIH-09BIK	SIH-12BIK	SIH-18BIK	SIH-24BIK
Capacity cooling / heating 1)	Nominal (min-max)	kW	2,2 (0,3-2,9) / 2,4 (0,6-2,9)	2,7 (0,6-3,4) / 2,8 (0,6-3,7)	3,2 (0,9-3,7) / 3,4 (0,9-4,1)	4,6 (1,0-5,3) / 5,2 (1,0-5,7)	6,2 (1,8-6,4) / 6,5 (1,6-6,6)
Power supply		Hz / V	1~ / 50 / 220-240	1~ / 50 / 220-240	1~ / 50 / 220-240	1~ / 50 / 220-240	1~ / 50 / 220-240
Air flow of ID	SH/MH/H/M/L/ML/SL	m <sup>3</sup> / h	520/470/420/250	550/500/430/290	680/560/450/390	850/750/650/550	1100/950/750/650
Sound pressure level of ID at 1m 4)	SH/MH/H/M/L/ML/SL	dB(A)	39/37/33/22	40/38/34/23	41/36/32/23	48/41/37/31	48/44/40/35
Sound power of ID 4)	SH/MH/H/M/L/ML/SL	dB(A)	55/49/45/34	55/48/44/36	57/46/42/37	58/51/47/34	61/58/53/49
Dehumidifying volume		l / h	0,6	1,4	1,4	1,8	1,8
Refrigerant type		Type	R32	R32	R32	R32	R32
Pipe diameter - liquid side 5)		inch / mm	¼ / 6,0	¼ / 6,0	¼ / 6,0	¼ / 6,0	¼ / 6,0
Pipe diameter - gas side 5)		inch / mm	¾ / 9,5	¾ / 9,5	¾ / 9,5	¾ / 9,5	¾ / 12,0
Dimension of ID	w × h × d	mm	696 × 251 × 190	770 × 251 × 190	849 × 289 × 215	972 × 300 × 225	1081 × 325 × 248
Package dimension of ID	w × h × d	mm	747 × 324 × 262	822 × 324 × 262	902 × 357 × 279	1022 × 374 × 299	1137 × 407 × 334
Weight of ID	netto / brutto	kg	7,5 / 9,0	8,5 / 10,0	10,5 / 12,5	13,5 / 16,0	16,5 / 19,5
Set temperature range		°C	16-30	16-30	16-30	16-30	16-30

### ADDITIONAL TECHNICAL INFORMATION

Communication cable		mm <sup>2</sup>	4 × 0,75 (5m included)				
Recommended power cable		mm <sup>2</sup>	Outdoor unit power supplied				
Recommended air switch		A	Outdoor unit power supplied				

### EQUIPMENT

Plasma generator	indoor		✓	✓	✓	✓	✓
WiFi module			optional (via SWM-04)	✓	✓	✓	✓
Drain pump			-	-	-	-	-
Max. lift (from bottom of ID unit)		mm	-	-	-	-	-
Door contact (SMR-03V connector)			-	-	✓	✓	✓
Alarm contact			-	-	-	-	-
Fresh air inlet			-	-	-	-	-

### STANDARD ACCESSORIES

Standard health filter			SAF-OPWC4, SAF-OPWA4				
Remote controller (IR)			YAA1FB6 (WiFi)				
Wired controller			-	-	-	-	-

### OPTIONAL ACCESSORIES

Optional health filters			SAF-OPWB4, SAF-OPWK4, SAF-OPWM4, SAF-OPWP4, SAF-OPWS4				
Wired controller			-	-	SWC-02, SWC-04		
Central controller			-	-	SCC-36		
Other			G2S-T			G2S-T, SBG-01	

The specification of products is subject to change based on further development of the units by the producer and can be changed without prior notice. Refer to rating label.

R32 (single component refrigerant HFC), GWP of refrigerant used: 675.

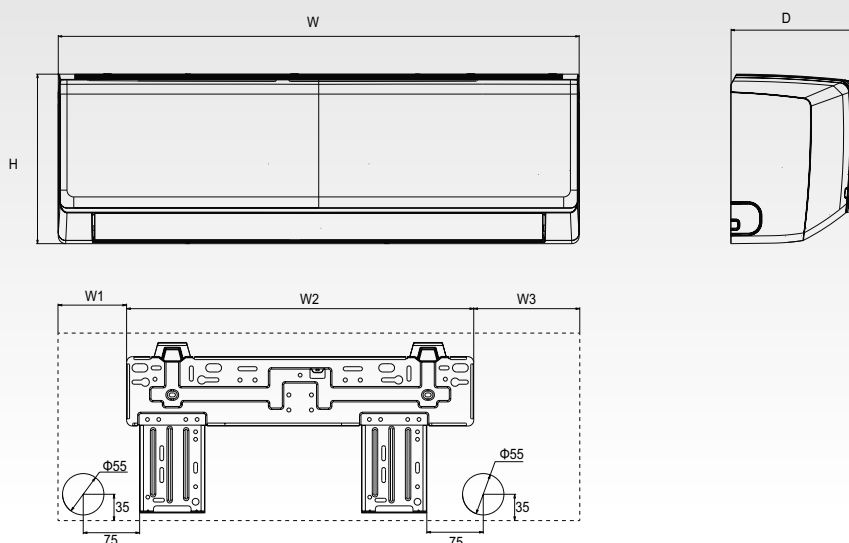
Contains fluorinated greenhouse gases covered by the Kyoto Protocol.

Explanatory notes on the very last page of the catalogue.

These indoor units may be combined with other indoor units from MULTI VARIABLE series, it is essential to follow combinations recommended in the combination table.

## APPEARANCE AND DIMENSIONS OF INDOOR UNIT

SIH-07BIK



	W	H	D	W1	W2	W3
SIH-07BIK	696	251	190	92	462	142

WALL MOUNTED AIR CONDITIONERS RAY

**MULTI VARIABLE SERIES**

MODEL			SIH-09BIR	SIH-12BIR	SIH-18BIR	SIH-24BIR
Capacity cooling / heating 1)	Nominal (min-max)	kW	2,7 (0,5-3,3) / 2,8 (0,5-3,5)	3,2 (0,9-3,6) / 3,4 (0,9-4,0)	4,6 (1,0-5,3) / 5,2 (1,0-5,6)	6,2 (1,8-6,9) / 6,5 (1,3-7,0)
Power supply		Hz / V	1~ / 50 / 220-240	1~ / 50 / 220-240	1~ / 50 / 220-240	1~ / 50 / 220-240
Air flow of ID	SH/MH/H/M/L/ML/SL	m <sup>3</sup> / h	550/500/430/290	590/520/400/320	850/800/700/600	900/800/600/400
Sound pressure level of ID at 1m 4)	SH/MH/H/M/L/ML/SL	dB(A)	40/38/34/23	41/37/33/26	48/42/38/31	48/45/37/26
Sound power of ID 4)	SH/MH/H/M/L/ML/SL	dB(A)	55/48/44/36	56/49/45/38	58/52/48/34	58/55/47/36
Dehumidifying volume		l / h	1,4	1,4	1,8	1,8
Refrigerant type		Type	R32	R32	R32	R32
Pipe diameter - liquid side 5)		inch / mm	¼ / 6,0	¼ / 6,0	¼ / 6,0	¼ / 6,0
Pipe diameter - gas side 5)		inch / mm	¾ / 9,5	¾ / 9,5	¾ / 9,5	¾ / 12,0
Dimension of ID	w × h × d	mm	773 × 250 × 185	773 × 250 × 185	970 × 300 × 225	970 × 300 × 225
Package dimension of ID	w × h × d	mm	822 × 322 × 255	822 × 322 × 255	1020 × 369 × 295	1020 × 369 × 295
Weight of ID	netto / brutto	kg	8,5 / 9,5	8,0 / 9,5	13,5 / 16,0	13,0 / 15,5
Set temperature range		°C	16-30	16-30	16-30	16-30
<b>ADDITIONAL TECHNICAL INFORMATION</b>						
Communication cable		mm <sup>2</sup>	4 × 0,75 (5m included)			
Recommended power cable		mm <sup>2</sup>	Outdoor unit power supplied			
Recommended air switch		A	Outdoor unit power supplied			
<b>EQUIPMENT</b>						
Plasma generator	indoor		✓	✓	✓	✓
WiFi module			Optional (SWM-04)			
Drain pump			-	-	-	-
Max. lift (from bottom of ID unit)		mm	-	-	-	-
Door contact (SMR-03V connector)			-	-	-	-
Alarm contact			-	-	-	-
Fresh air inlet			-	-	-	-
<b>STANDARD ACCESSORIES</b>						
Standard health filter			-	-	-	-
Remote controller (IR)			YAW1F5 (WiFi)			
Wired controller			-	-	-	-
<b>OPTIONAL ACCESSORIES</b>						
Optional health filters			SAF-OPWA4, SAF-OPWB4, SAF-OPWC4, SAF-OPWK4, SAF-OPWM4, SAF-OPWP4, SAF-OPWS4			
Wired controller			-	-	-	-
Central controller			-	-	-	-
Other			G2S-T, SWM-04			

The specification of products is subject to change based on further development of the units by the producer and can be changed without prior notice. Refer to rating label.

R32 (single component refrigerant HFC), GWP of refrigerant used: 675.

Contains fluorinated greenhouse gases covered by the Kyoto Protocol.

Explanatory notes on the very last page of the catalogue.

These indoor units may be combined with other indoor units from MULTI VARIABLE series, it is essential to follow combinations recommended in the combination table.

## CONSOLE INDOOR UNITS

### MULTI VARIABLE SERIES

MODEL			MV-P09BI	MV-P12BI	MV-P18BI		
Capacity cooling / heating 1)	Nominal	kW	2,7 / 2,8	3,5 / 3,8	5,2 / 5,3		
Power supply		Hz / V	1~ / 50 / 220-240	1~ / 50 / 220-240	1~ / 50 / 220-240		
Air flow of ID	SH/MH/H/ML/ML/SL	m <sup>3</sup> / h	500/430/410/370/330/280/250	600/520/480/440/400/360/280	700/650/580/520/460/410/320		
Sound pressure level of ID at 1m 4)	SH/MH/H/ML/ML/SL	dB(A)	39/36/33/31/29/26/22	44/40/38/36/33/29/25	47/45/42/40/37/35/31		
Sound power of ID 4)	SH/MH/H/ML/ML/SL	dB(A)	50/48/45/44/42/38/34	54/50/48/46/43/39/35	57/55/52/50/47/45/41		
Dehumidifying volume		l / h	0,8	1,2	1,8		
Refrigerant type		Type	R32	R32	R32		
Pipe diameter - liquid side 5)		inch / mm	¼ / 6,0	¼ / 6,0	¼ / 6,0		
Pipe diameter - gas side 5)		inch / mm	¾ / 9,5	¾ / 9,5	¾ / 12,0		
Dimension of ID	w × h × d	mm	700 × 600 × 215	700 × 600 × 215	700 × 600 × 215		
Package dimension of ID	w × h × d	mm	788 × 685 × 295	788 × 685 × 295	788 × 697 × 283		
Weight of ID	netto / brutto	kg	15,5 / 18,5	15,5 / 18,5	15,5 / 18,5		
Set temperature range		°C	16-30	16-30	16-30		
<b>ADDITIONAL TECHNICAL INFORMATION</b>							
Screw holes distance	w × d	mm	See service manual				
Communication cable		mm <sup>2</sup>	4 × 0,75				
Recommended power cable 11)		mm <sup>2</sup>	Outdoor unit power supplied				
Recommended air switch		A	Outdoor unit power supplied				
<b>EQUIPMENT</b>							
Plasma generator			✓	✓	✓		
WiFi module			✓	✓	✓		
Drain pump			-	-	-		
Max. lift (from bottom of ID unit)		mm	-	-	-		
Dry contact (ON / OFF)			-	-	-		
Alarm contact			-	-	-		
Fresh air inlet			-	-	-		
<b>STANDARD ACCESSORIES</b>							
Standard health filter			SAF-OPWC1, SAF-OPWA1				
Remote controller (IR)			YAA1FB8	YAA1FB8	YAA1FB8		
Wired controller			-	-	-		
<b>OPTIONAL ACCESSORIES</b>							
Optional health filters			SAF-OPWB4, SAF-OPWK4, SAF-OPWM4, SAF-OPWP4, SAF-OPWS4				
Wired controller			SWC-02, SWC-04				
Central controller			SCC-36				
Other			G2S-T, SBG-01				

The specification of products is subject to change based on further development of the units by the producer and can be changed without prior notice. Refer to rating label.

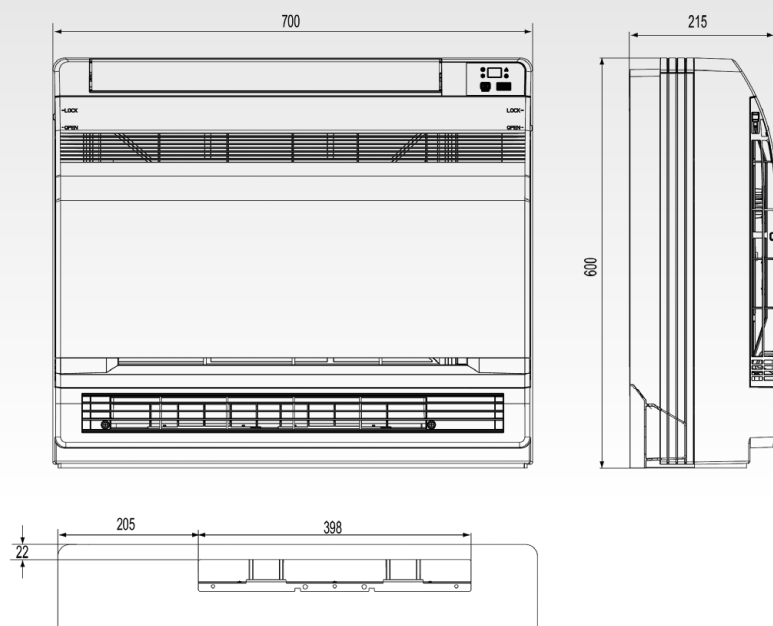
R32 (single component refrigerant HFC), GWP of refrigerant used: 675.

Contains fluorinated greenhouse gases covered by the Kyoto Protocol.

Explanatory notes on the very last page of the catalogue.

These indoor units may be combined with other indoor units from MULTI VARIABLE series, it is essential to follow combinations recommended in the combination table.

## APPEARANCE AND DIMENSIONS OF INDOOR UNIT



units: mm



## FLOOR CEILING INDOOR UNITS

### MULTI VARIABLE SERIES

MODEL			MV-F09BI	MV-F12BI	MV-F18BI	MV-F24BI	
Capacity cooling / heating 1)	Nominal	kW	2,6 / 2,7	3,5 / 4,0	4,5 / 5,0	7,1 / 8,0	
Power supply		Hz / V	1~ / 50 / 220-240	1~ / 50 / 220-240	1~ / 50 / 220-240	1~ / 50 / 220-240	
Air flow of ID	SH/H/M/L	m³ / h	700/610/540/420	700/610/540/420	680/590/520/410	950/870/800/720	
Sound pressure level of ID at 1m 4)	SH/H/M/L	dB(A)	38/35/30/26	38/35/30/26	38/35/30/26	38/35/30/26	
Sound power of ID 4)	SH/H/M/L	dB(A)	52/49/44/40	52/49/44/40	52/49/44/40	52/49/44/41	
Dehumidifying volume		l / h	0,8	1,4	1,8	2,5	
Refrigerant type		Type	R32	R32	R32	R32	
Pipe diameter - liquid side 5)		inch / mm	¼ / 6,0	¼ / 6,0	¼ / 6,0	¾ / 9,5	
Pipe diameter - gas side 5)		inch / mm	¾ / 9,5	½ / 12,0	½ / 12,0	¾ / 16,0	
Dimension of ID	w × h × d	mm	870 × 665 × 235	870 × 665 × 235	870 × 665 × 235	1200 × 665 × 235	
Package dimension of ID	w × h × d	mm	1033 × 770 × 300	1033 × 770 × 300	1033 × 770 × 300	1363 × 770 × 300	
Weight of ID	netto / brutto	kg	25,0 / 30,0	25,0 / 30,0	25,5 / 30,5	33,0 / 40,0	
Set temperature range		°C	16-30	16-30	16-30	16-30	
<b>ADDITIONAL TECHNICAL INFORMATION</b>							
Screw holes distance	w × d	mm	See service manual				
Communication cable		mm²	4 × 1,0	4 × 1,0	4 × 1,0	4 × 1,0	
Recommended power cable 11)		mm²	Outdoor unit power supplied				
Recommended air switch		A	Outdoor unit power supplied				
<b>EQUIPMENT</b>							
Plasma generator			-	-	-	-	
WiFi module			optional (via SWC-04)	optional (via SWC-04)	optional (via SWC-04)	optional (via SWC-04)	
Drain pump			-	-	-	-	
Max. lift (from bottom of ID unit)		mm	-	-	-	-	
Door contact (SMR-03V connector)			✓	✓	✓	✓	
Alarm contact			-	-	-	-	
Fresh air inlet			-	-	-	-	
<b>STANDARD ACCESSORIES</b>							
Standard health filter			-	-	-	-	
Remote controller (IR)			YT1F	YT1F	YT1F	YT1F	
Wired controller			XK19	XK19	XK19	XK19	
<b>OPTIONAL ACCESSORIES</b>							
Optional health filters			-				
Wired controller			SWC-02, SWC-04				
Central controller			SCC-36				
Other			G2S-T, SBG-01				

The specification of products is subject to change based on further development of the units by the producer and can be changed without prior notice. Refer to rating label.

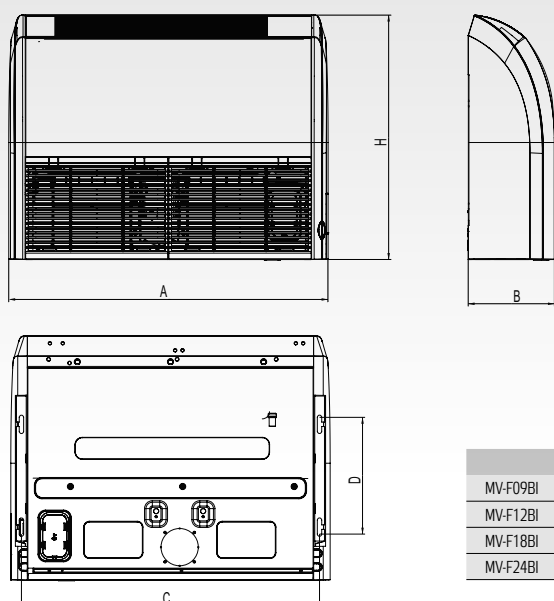
R32 (single component refrigerant HFC), GWP of refrigerant used: 675.

Contains fluorinated greenhouse gases covered by the Kyoto Protocol.

Explanatory notes on the very last page of the catalogue.

These indoor units may be combined with other indoor units from MULTI VARIABLE series, it is essential to follow combinations recommended in the combination table.

## APPEARANCE AND DIMENSIONS OF INDOOR UNIT



	A	B	C	D	H
MV-F09BI					
MV-F12BI	870	235	812	318	665
MV-F18BI					
MV-F24BI	1200	235	1142	318	665

units: mm

# CASSETTE INDOOR UNITS

## MULTI VARIABLE SERIES

MODEL			MV-C12BI2	MV-C18BI2	MV-C24BI2		
Capacity cooling / heating 1)	Nominal	kW	3,5 / 4,0	5,0 / 5,5	7,0 / 8,0		
Power supply		Hz / V	1~ / 50 / 220-240	1~ / 50 / 220-240	1~ / 50 / 220-240		
Air flow of ID	SH/H/M/L	m <sup>3</sup> / h	560/490/420/350	650/490/420/350	1100/950/870/800		
Sound pressure level of ID at 1,4m 4)	SH/H/M/L	dB(A)	41/36/32/28	43/36/32/28	46/42/39/37		
Sound power of ID 4)	SH/H/M/L	dB(A)	57/52/48/44	59/52/48/44	61/59/57/55		
Dehumidifying volume		l / h	1,4	1,8	2,5		
Refrigerant type		Type	R32	R32	R32		
Pipe diameter - liquid side 5)		inch / mm	¼ / 6,0	¼ / 6,0	¼ / 6,0		
Pipe diameter - gas side 5)		inch / mm	¾ / 9,5	¾ / 12,0	¾ / 16,0		
Dimension of ID	w × h × d	mm	570 × 265 × 570	570 × 265 × 570	840 × 240 × 840		
Dimension of panel	w × h × d	mm	620 × 47,5 × 620	620 × 47,5 × 620	950 × 52 × 950		
Package dimension of ID	w × h × d	mm	698 × 295 × 653	698 × 295 × 653	963 × 325 × 963		
Package dimension of panel	w × h × d	mm	701 × 125 × 701	701 × 125 × 701	1033 × 112 × 1038		
Weight of ID	netto / brutto	kg	17,0 / 22,0	17,0 / 22,0	29,0 / 36,0		
Weight of panel	netto / brutto	kg	3,0 / 4,0	3,0 / 4,0	6,0 / 9,5		
Set temperature range		°C	16-30	16-30	16-30		
<b>ADDITIONAL TECHNICAL INFORMATION</b>							
Screw holes distance	w × d	mm	See service manual				
Communication cable		mm <sup>2</sup>	4 × 1,0	4 × 1,0	4 × 1,0		
Recommended power cable 11)		mm <sup>2</sup>	Outdoor unit power supplied				
Recommended air switch		A	Outdoor unit power supplied				
<b>EQUIPMENT</b>							
Plasma generator			-	-	-		
WiFi module			(via SWC-04)	(via SWC-04)	(via SWC-04)		
Drain pump			✓	✓	✓		
Max. lift (from bottom of ID unit)		mm	500	500	500		
Door contact (SMR-03V connector)			✓	✓	✓		
Alarm contact			-	-	-		
Fresh air inlet			✓	✓	✓		
Decorative panel			✓	✓	✓		
<b>STANDARD ACCESSORIES</b>							
Standard health filter			-	-	-		
Remote controller (IR)			YAP1F7	YAP1F7	YAP1F7		
Wired controller			SWC-04	SWC-04	SWC-04		
<b>OPTIONAL ACCESSORIES</b>							
Optional health filter				-			
Wired controller				SWC-02			
Central controller				SCC-36			
Other				G2S-T, SBG-01			

The specification of products is subject to change based on further development of the units by the producer and can be changed without prior notice. Refer to rating label.

R32 (single component refrigerant HFC), GWP of refrigerant used: 675.

Contains fluorinated greenhouse gases covered by the Kyoto Protocol.

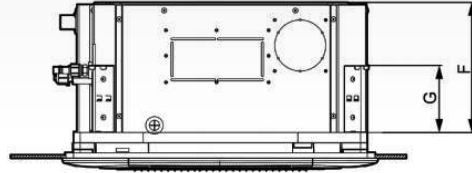
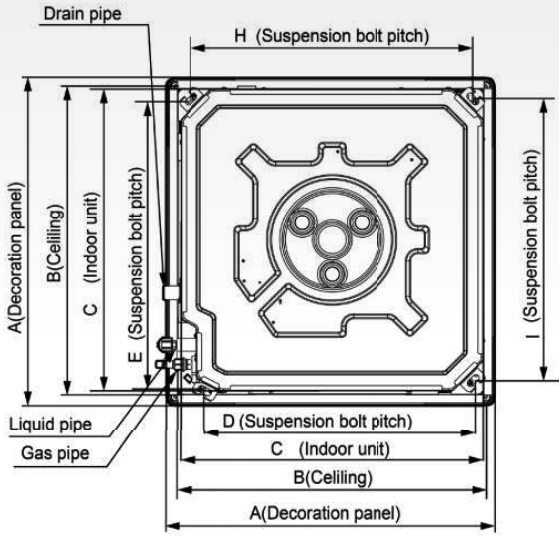
Explanatory notes on the very last page of the catalogue.

These indoor units may be combined with other indoor units from MULTI VARIABLE series, it is essential to follow combinations recommended in the combination table.

# APPEARANCE AND DIMENSIONS OF INDOOR UNIT

MV-C12BI2

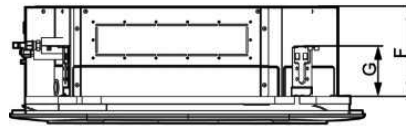
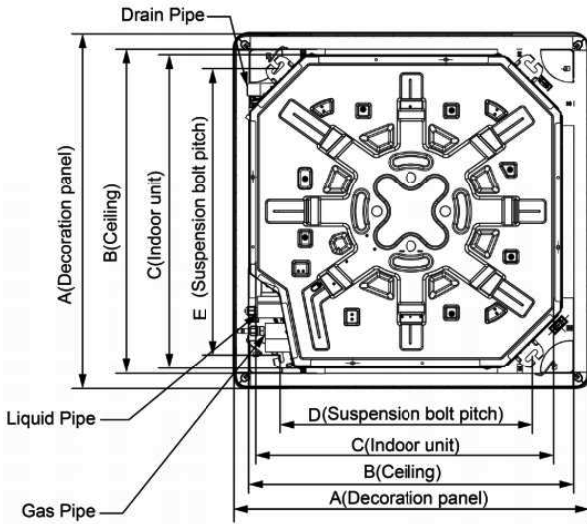
MV-C18BI2



Model	A	B	C	D	E	F	G	H	I
MV-C12BI2	620	580	570	505	550	265	140	530	530
MV-C18BI2	620	580	570	505	550	265	140	530	530

units: mm

MV-C24BI2



Model	A	B	C	D	E	F	G
MV-C24BI2	950	870	840	680	780	240	135

units: mm

DUCT INDOOR UNITS

**MULTI VARIABLE SERIES**

MODEL			MV-D09BI	MV-D12BI	MV-D18BI	MV-D24BI	
Capacity cooling / heating 1)	Nominal	kW	2,5 / 2,8	3,5 / 3,9	5,0 / 5,5	7,1 / 8,0	
Power supply		Hz / V	1~ / 50 / 220-240	1~ / 50 / 220-240	1~ / 50 / 220-240	1~ / 50 / 220-240	
Air flow of ID	SH/H/M/L	m³ / h	450/350/280	550/400/300	700/600/500	1000/750/550	
Sound pressure level of ID at 1,4m 4)	SH/H/M/L	dB(A)	47/41/37/34/31	49/42/39/35/32	51/43/41/33/-	52/44/42/34/-	
Sound power of ID 4)	SH/H/M/L	dB(A)	57/51/47/44/41	59/52/49/45/42	61/53/51/43/-	62/55/52/44/-	
External static pressure	nom / min-max	Pa	25 / 0-50	25 / 0-50	25 / 0-50	25 / 0-50	
Dehumidifying volume		l / h	0,8	1,4	1,8	2,5	
Refrigerant type		Type	R32	R32	R32	R32	
Pipe diameter - liquid side 5)		inch / mm	¼ / 6,0	¼ / 6,0	¼ / 6,0	¾ / 9,5	
Pipe diameter - gas side 5)		inch / mm	¾ / 9,5	¾ / 9,5	½ / 12,0	¾ / 16,0	
Dimension of ID	w x h x d	mm	700 x 200 x 615	700 x 200 x 615	900 x 200 x 615	1100 x 200 x 615	
Package dimension of ID	w x h x d	mm	893 x 305 x 743	893 x 305 x 743	1123 x 305 x 743	1323 x 305 x 743	
Weight of ID	netto / brutto	kg	21,0 / 26,0	22,0 / 28,0	26,0 / 32,0	30,0 / 40,0	
Set temperature range		°C	16-30	16-30	16-30	16-30	
<b>ADDITIONAL TECHNICAL INFORMATION</b>							
Screw holes distance	w x d	mm	742 x 491	742 x 491	942 x 491	1142 x 491	
Communication cable		mm²	4 x 1,0	4 x 1,0	4 x 1,0	4 x 1,0	
Recommended power cable 11)		mm²			Outdoor unit power supplied		
Recommended air switch		A			Outdoor unit power supplied		
<b>EQUIPMENT</b>							
Plasma generator			-	-	-	-	
WiFi module			optional (via SWC-04)	optional (via SWC-04)	optional (via SWC-04)	optional (via SWC-04)	
Drain pump			✓	✓	✓	✓	
Max. lift (from bottom of ID unit)		mm	1000	1000	1000	1000	
Dry contact (ON / OFF)			-	-	-	-	
Alarm contact			-	-	-	-	
Fresh air inlet			-	-	-	-	
<b>STANDARD ACCESSORIES</b>							
Standard health filter			-	-	-	-	
Remote controller (IR)			YT1F	YT1F	YT1F	YT1F	
Wired controller			XK19	XK19	XK19	XK19	
<b>OPTIONAL ACCESSORIES</b>							
Optional health filters							
Wired controller					SWC-02, SWC-04		
Central controller					SCC-36		
Other					G2S-T, SBG-01		

The specification of products is subject to change based on further development of the units by the producer and can be changed without prior notice. Refer to rating label.

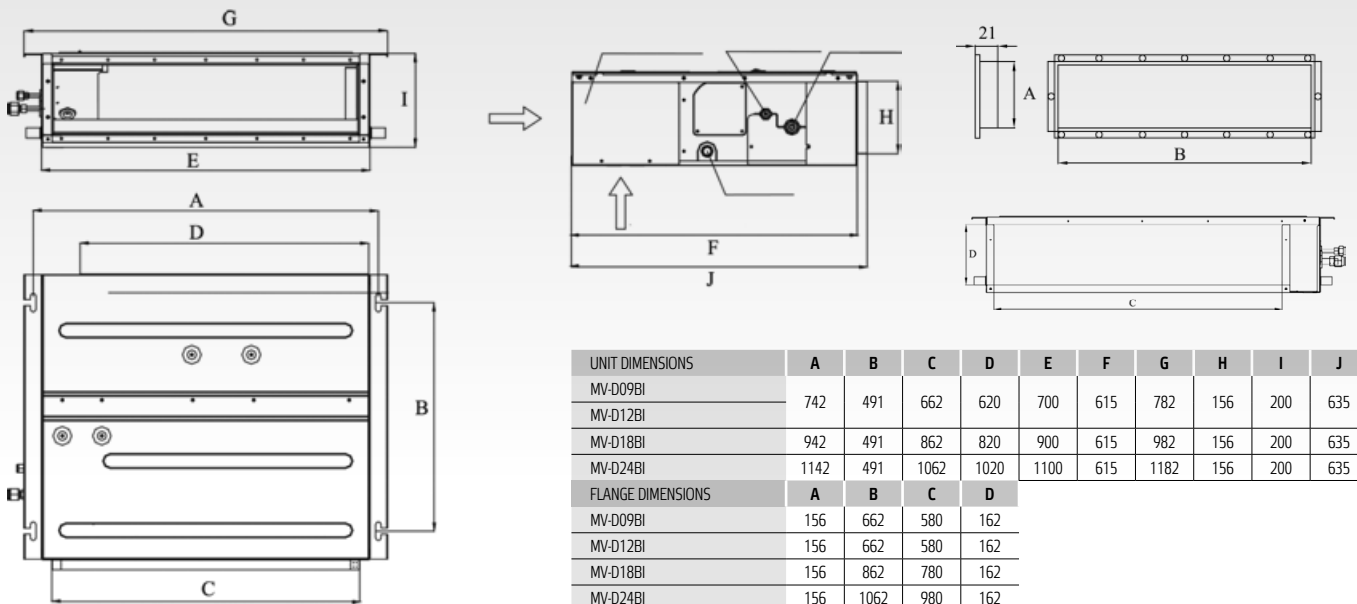
R32 (single component refrigerant HFC), GWP of refrigerant used: 675.

Contains fluorinated greenhouse gases covered by the Kyoto Protocol.

Explanatory notes on the very last page of the catalogue.

These indoor units may be combined with other indoor units from MULTI VARIABLE series, it is essential to follow combinations recommended in the combination table.

APPEARANCE AND DIMENSIONS OF INDOOR UNIT



## DUCT INDOOR UNITS

# MULTI VARIABLE SERIES

MODEL			MV-D09B12	MV-D12B12	MV-D18B12	MV-D24B12	
Capacity cooling / heating 1)	Nominal	kW	2,7 / 2,8	3,5 / 4,0	5,0 / 5,5	7,0 / 8,0	
Power supply		Hz / V	1~ / 50 / 220-240	1~ / 50 / 220-240	1~ / 50 / 220-240	1~ / 50 / 220-240	
Air flow of ID	SH/H/M/L	m <sup>3</sup> / h	560/450/340/220	600/540/420/300	800/720/610/420	1300/1200/1000/900	
Sound pressure level of ID at 1,4m 4)	SH/H/M/L	dB(A)	32/28/25/22	36/34/31/27	36/31/28/25	46/42/40/36	
Sound power of ID 4)	SH/H/M/L	dB(A)	47/43/40/37	51/49/46/42	51/46/43/40	61/57/55/51	
External static pressure	nom / min-max	Pa	0-10	0-10	0-10	0-40	
Dehumidifying volume		l / h	0,8	1,4	1,8	2,5	
Refrigerant type		Type	R32	R32	R32	R32	
Pipe diameter - liquid side 5)		inch / mm	¼ / 6,0	¼ / 6,0	¼ / 6,0	¼ / 6,0	
Pipe diameter - gas side 5)		inch / mm	¾ / 9,5	¾ / 9,5	½ / 12,0	¾ / 16,0	
Dimension of ID	w × h × d	mm	710 × 200 × 450	710 × 200 × 450	1010 × 200 × 450	900 × 260 × 655	
Package dimension of ID	w × h × d	mm	1008 × 275 × 568	1008 × 275 × 568	1308 × 275 × 568	1115 × 320 × 772	
Weight of ID	netto / brutto	kg	18,5 / 22,5	19,0 / 23,0	25,0 / 30,0	31,0 / 36,0	
Set temperature range		°C	16-30	16-30	16-30	16-30	
<b>ADDITIONAL TECHNICAL INFORMATION</b>							
Screw holes distance	w × d	mm	760 × 415	760 × 415	1060 × 415	942 × 530	
Communication cable		mm <sup>2</sup>	4 × 1,0	4 × 1,0	4 × 1,0	4 × 1,0	
Recommended power cable 11)		mm <sup>2</sup>			Outdoor unit power supplied		
Recommended air switch		A			Outdoor unit power supplied		
<b>EQUIPMENT</b>							
Plasma generator			-	-	-	-	
WiFi module			(via SWC-04)	(via SWC-04)	(via SWC-04)	(via SWC-04)	
Drain pump			✓	✓	✓	✓	
Max. lift (from bottom of ID unit)		mm	1000	1000	1000	1000	
Dry contact (ON / OFF)			✓	✓	✓	✓	
Alarm contact			-	-	-	-	
Fresh air inlet			-	-	-	-	
<b>STANDARD ACCESSORIES</b>							
Standard health filter			-	-	-	-	
Remote controller (IR)			YAP1F7	YAP1F7	YAP1F7	YAP1F7	
Wired controller			SWC-04	SWC-04	SWC-04	SWC-04	
<b>OPTIONAL ACCESSORIES</b>							
Optional health filters							
Wired controller				SWC-02			
Central controller				SCC-36			
Other				G2S-T, SBG-01			

The specification of products is subject to change based on further development of the units by the producer and can be changed without prior notice. Refer to rating label.

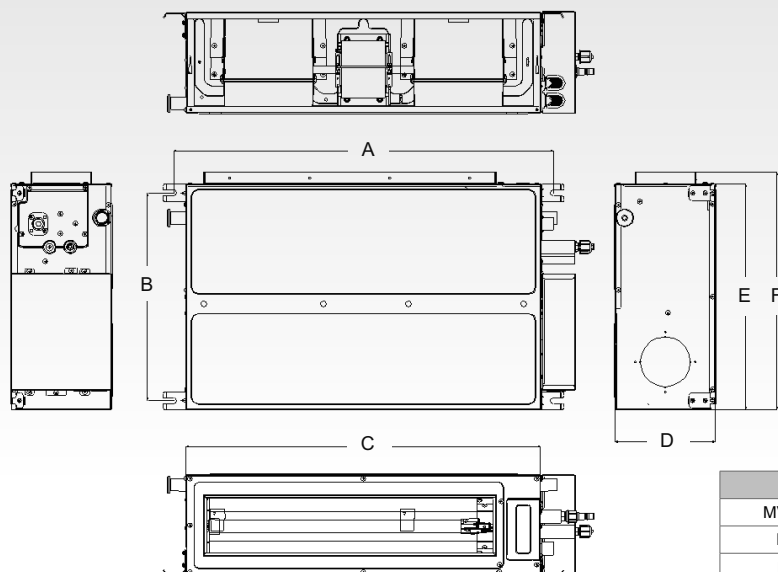
R32 (single component refrigerant HFC), GWP of refrigerant used: 675.

Contains fluorinated greenhouse gases covered by the Kyoto Protocol.

Explanatory notes on the very last page of the catalogue.

These indoor units may be combined with other indoor units from MULTI VARIABLE series, it is essential to follow combinations recommended in the combination table.

## APPEARANCE AND DIMENSIONS OF INDOOR UNIT



Model	A	B	C	D	E	F
MV-D09/12B12	760	415	710	200	450	474
MV-D18B12	1060	415	1010	200	450	474
MV-D24B12	942	530	900	260	655	685

## OUTDOOR UNITS

# MULTI VARIABLE SERIES

MODEL			MV-E14BI2	MV-E18BI2	MV-E21BI2	MV-E24BI2	
Qty of connectable indoor units			1-2	1-2	2-3	2-3	
Capacity cooling / heating 1)	Nominal (min-max)	kW	4,1 (2,1-4,4) / 4,4 (2,5-5,4)	5,3 (2,1-5,8) / 5,7 (2,6-6,0)	6,1 (2,2-7,3) / 6,5 (3,6-8,5)	7,1 (2,3-8,5) / 8,6 (3,7-8,8)	
Power supply		Hz / V	1~ / 50 / 220-240	1~ / 50 / 220-240	1~ / 50 / 220-240	1~ / 50 / 220-240	
Power input cooling / heating 1)		W	1100 / 970	1480 / 1250	1480 / 1430	1880 / 2230	
Maximal power input 2)		W	2250	2500	2900	3400	
Power current cooling / heating		A	4,9 / 4,4	6,6 / 5,6	6,6 / 6,3	8,4 / 9,9	
Maximal power current 2)		A	10,0	11,0	12,9	14,6	
Energy class cooling 3)			-	-	-	-	
Air flow of OD	H	m <sup>3</sup> / h	2300	2300	3800	3800	
Sound pressure level of OD at 1m 4)	H	dB(A)	52	54	58	58	
Sound power of OD 4)	H	dB(A)	62	64	68	68	
Refrigerant type / charge		Type / kg / t eq. CO <sub>2</sub>	R32 / 0,75 / 0,51	R32 / 0,90 / 0,60	R32 / 1,60 / 1,08	R32 / 1,70 / 1,14	
Additional refrigerant		g / m	20	20	20	20	
Pipe diameter - liquid side 5)		qty x mm	2 x 6,0	2 x 6,0	3 x 6,0	3 x 6,0	
Pipe diameter - gas side 5)		qty x mm	2 x 9,5	2 x 9,5	3 x 9,5	3 x 9,5	
Max pipe length without additional refrigerant 6)		m	10	10	30	30	
Maximal pipe length to 1 indoor unit 9)		m	20	20	20	20	
Maximal total pipe length 7)		m	40	40	60	60	
Max. elevation / Drop height		m	15	15	15	15	
Dimension of OD	w x h x d	mm	822 x 550 x 352	822 x 550 x 352	964 x 660 x 402	964 x 660 x 402	
Package dimension of OD	w x h x d	mm	872 x 620 x 398	872 x 620 x 398	1032 x 737 x 456	1032 x 737 x 456	
Weight of OD	netto / brutto	kg	30,0 / 32,5	32,0 / 34,5	47,5 / 52,0	47,5 / 52,0	
Operating temperature range (cooling 8)	Cooling	°C	-15-43	-15-43	-15-43	-15-43	
Operating temperature range (heating 8)	Heating	°C	-22-24	-22-24	-22-24	-22-24	
<b>ADDITIONAL TECHNICAL INFORMATION</b>							
Screw holes distance of OD	w x d	mm	512 x 332	512 x 332	570 x 371	570 x 371	
Communication cable		mm <sup>2</sup>	4 x 1,5				
Recommended power cable		mm <sup>2</sup>	3 x 1,5	3 x 1,5	3 x 2,5	3 x 2,5	
Recommended air switch		A	13	13	16	16	
<b>EQUIPMENT</b>							
Throttling method			EXV	EXV	EXV	EXV	
Bottom chassis heater			Heating belt	Heating belt	Heating belt	Heating belt	
Crankcase heater			✓	✓	✓	✓	
Bottom plugs for OD			✓	✓	✓	✓	
Drain pipe connector			✓	✓	✓	✓	
Pipe reduction			✓	✓	✓	✓	

The specification of products is subject to change based on further development of the units by the producer and can be changed without prior notice. Refer to rating label.

R32 (single component refrigerant HFC), GWP of refrigerant used: 675.

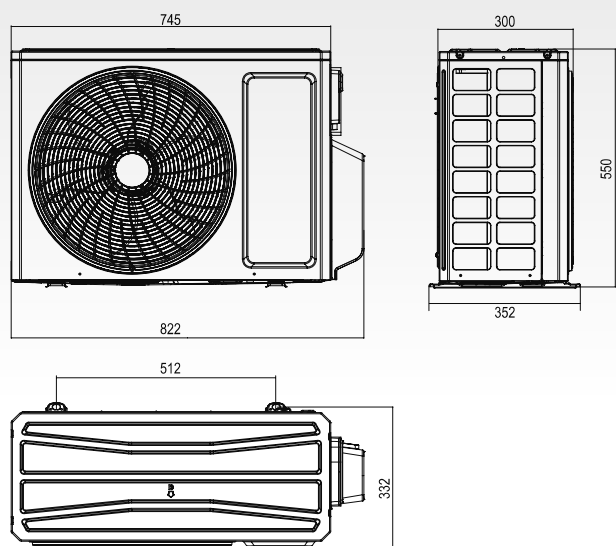
Contains fluorinated greenhouse gases covered by the Kyoto Protocol.

Explanatory notes on the very last page of the catalogue.

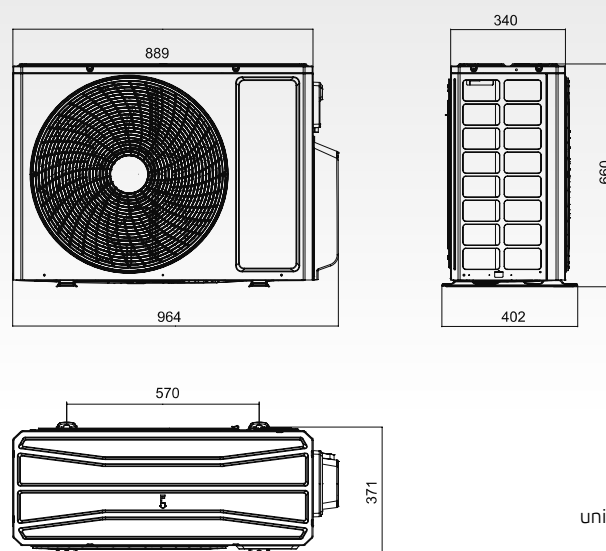
May not be used separately, must be combined with indoor units from Multi Variable (MV) series.

## APPEARANCE AND DIMENSIONS OF INDOOR UNIT

MV-E14BI2, MV-E18BI2



MV-E21BI2, MV-E24BI2



units: mm

## OUTDOOR UNITS

# MULTI VARIABLE SERIES

MODEL			MV-E28BI2	MV-E36BI2	MV-E42BI2		
Qty of connectable indoor units			2-4	2-4	2-5		
Capacity cooling / heating 1)	Nominal (min-max)	kW	8,0 (2,3-10,3) / 9,5 (3,7-10,3)	10,6 (2,6-12,0) / 12,0 (3,0-14,0)	12,1 (2,6-15,2) / 13,0 (3,0-15,5)		
Power supply		Hz / V	1~ / 50 / 220-240	1~ / 50 / 220-240	1~ / 50 / 220-240		
Power input cooling / heating 1)		W	2120 / 2200	3000 / 3040	3400 / 3190		
Maximal power input 2)		W	3600	5000	5000		
Power current cooling / heating		A	9,4 / 9,8	13,3 / 13,5	15,1 / 14,2		
Maximal power current 2)		A	15,9	21,7	21,7		
Energy class cooling 3)			See table below	See table below	See table below		
Air flow of OD	H	m <sup>3</sup> / h	3800	5800	5800		
Sound pressure level of OD at 1m 4)	H	dB(A)	58	60	60		
Sound power of OD 4)	H	dB(A)	68	70	72		
Refrigerant type / charge		Type / kg / t eq. CO <sub>2</sub>	R32 / 1,80 / 1,21	R32 / 2,40 / 1,62	R32 / 2,40 / 1,62		
Additional refrigerant		g / m	20	20	20		
Pipe diameter - liquid side 5)		qty x mm	4 x 6,0	4 x 6,0	4 x 6,0		
Pipe diameter - gas side 5)		qty x mm	4 x 9,5	4 x 9,5	4 x 9,5		
Max pipe length without additional refrigerant 6)		m	40	40	50		
Maximal pipe length to 1 indoor unit 9)		m	20	25	25		
Maximal total pipe length 7)		m	70	80	100		
Max. elevation / Drop height		m	15	25	25		
Dimension of OD	w x h x d	mm	964 x 660 x 402	1020 x 427 x 826	1020 x 427 x 826		
Package dimension of OD	w x h x d	mm	1032 x 737 x 456	1093 x 497 x 885	1093 x 497 x 885		
Weight of OD	netto / brutto	kg	51,0 / 55,5	72,0 / 79,0	73,0 / 80,0		
Operating temperature range (cooling 8)	Cooling	°C	-15~43	-15~43	-15~43		
Operating temperature range (heating 8)	Heating	°C	-22~24	-22~24	-22~24		
<b>ADDITIONAL TECHNICAL INFORMATION</b>							
Screw holes distance of OD	w x d	mm	570 x 371	635 x 396	635 x 396		
Communication cable		mm <sup>2</sup>	4 x 1,5	4 x 1,5	4 x 1,5		
Recommended power cable		mm <sup>2</sup>	3 x 4,0	3 x 4,0	3 x 4,0		
Recommended air switch		A	20	30	30		
<b>EQUIPMENT</b>							
Throttling method			EXV	EXV	EXV		
Bottom chassis heater			Heating belt	Heating belt	Heating belt		
Crankcase heater			✓	✓	✓		
Bottom plugs for OD			✓	✓	✓		
Drain pipe connector			✓	✓	✓		
Pipe reduction			✓	✓	✓		

The specification of products is subject to change based on further development of the units by the producer and can be changed without prior notice. Refer to rating label.

R32 (single component refrigerant HFC), GWP of refrigerant used: 675.

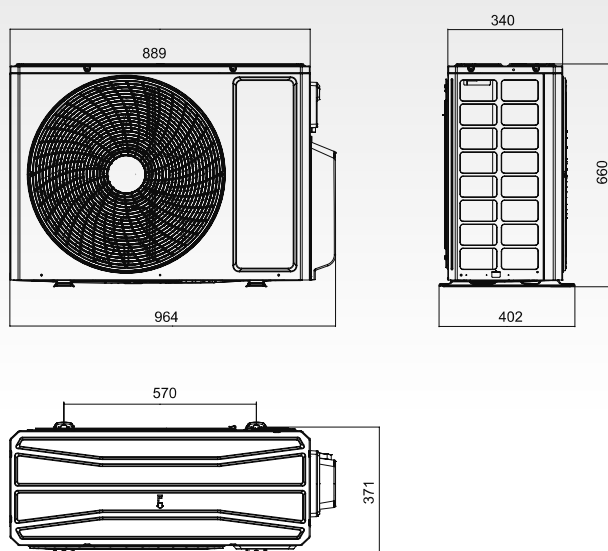
Contains fluorinated greenhouse gases covered by the Kyoto Protocol.

Explanatory notes on the very last page of the catalogue.

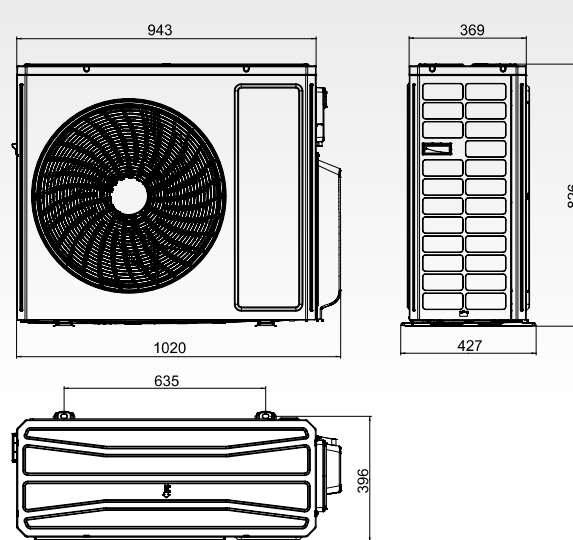
May not be used separately, must be combined with indoor units from Multi Variable (MV) series.

## APPEARANCE AND DIMENSIONS OF INDOOR UNIT

MV-E28BI2



MV-E36BI2, MV-E42BI2



units: mm

OUTDOOR UNITS

**MULTI VARIABLE SERIES**

**COMBINATION TABLES**

(unit: x1000Btu/h)

MV-E14BI2		MV-E21BI2		MV-E24BI2			MV-E28BI2
1 UNIT	2 UNITS	2 UNITS	3 UNITS	2 UNITS	3 UNITS		2 UNITS
7	7+7	7+7	7+7+7	7+7	7+7+7	7+7+18	7+7
9	7+12	7+12	7+7+12	7+12	9+9+12	7+9+18	7+12
12	7+9	9+9	7+7+9	9+9	7+7+9	12+12+12*	9+9
	9+9	7+9	7+9+9	9+18	7+9+9	7+12+12	9+18
	9+12	7+18	9+9+9	12+18	7+7+12	9+9+18*	12+18
		9+12	7+9+12	7+9	7+9+12	9+12+12*	7+9
MV-E18BI2							
1 UNIT	2 UNITS	9+18	7+12+12	7+18	9+9+9		7+18
7	7+7	12+12	9+9+12	9+12			9+12
9	7+12	12+18	12+12+12*	12+12			12+12
12	9+12			18+18			18+18
	7+9						
	9+9						
MV-E28BI2		MV-E36BI2					
3 UNITS		4 UNITS	2 UNITS		3 UNITS		
7+7+7	7+12+18	7+7+7+7	7+7	9+24	7+7+7	7+12+18	9+12+18
7+7+9	9+9+9	7+7+7+9	7+9	12+12	7+7+9	7+12+24	9+12+24
7+7+12	9+9+12	7+7+9+9	7+12	12+18	7+7+12	7+18+18	9+18+18
7+7+18	9+9+18	9+9+9+9	7+18	12+24	7+7+18	7+18+24*	9+18+24*
7+9+9	9+12+18	7+7+7+12	7+24	18+18	7+7+24	9+9+9	12+12+12
7+9+12	9+12+12	7+7+9+12	9+9	18+24	7+9+9	9+9+12	12+12+18
7+9+18	12+12+12	7+9+9+9	9+12	24+24*	7+9+12	9+9+18	12+12+24
7+12+12	12+12+18	7+7+7+18	9+18		7+9+18	9+9+24	12+18+18
		7+7+9+18			7+9+24	9+12+12	18+18+18*
		7+9+9+12			7+12+12		
		9+9+12+12					
		7+7+12+12					
		9+9+9+12					
MV-E36BI2		MV-E42BI2					
4 UNITS		2 UNITS		3 UNITS			
7+7+7+7	7+7+18+18*	9+9+9+9	7+7	9+24	7+7+7	7+12+24	9+18+18
7+7+7+9	7+9+9+9	9+9+9+12	7+9	12+12	7+7+9	7+18+18	9+18+24
7+7+7+12	7+9+9+12	9+9+9+18	7+12	12+18	7+7+12	7+18+24	9+24+24
7+7+7+18	7+9+9+18	9+9+12+12	7+18	12+24	7+7+18	7+24+24	12+12+12
7+7+7+24	7+9+9+24*	9+12+12+12	7+24	18+18	7+7+24	9+9+9	12+12+18
7+7+9+9	7+9+12+12	9+9+9+24*	9+9	18+24	7+9+9	9+9+12	12+12+24
7+7+9+12	7+9+12+18	9+9+12+18	9+12	24+24	7+9+12	9+9+18	12+18+18
7+7+9+18	7+9+18+18*	9+9+18+18*	9+18		7+9+18	9+9+24	12+18+24
7+7+9+24	7+12+12+12	9+12+12+18*			7+9+24	9+12+12	18+18+18
7+7+12+12	7+12+12+18	12+12+12+12			7+12+12	9+12+18	12+24+24*
7+7+12+18					7+12+18	9+12+24	18+18+24
MV-E42BI2		4 UNITS		5 UNITS			
7+7+7+7	7+7+18+18	9+9+9+12	7+9+18+24	7+7+7+7+7	7+7+9+9+12	9+9+9+9+18	7+9+9+12+18
7+7+7+9	7+9+9+9	9+9+9+18	7+12+12+24	7+7+7+7+9	7+7+9+9+18	9+9+9+12+12	7+9+9+12+24*
7+7+7+12	7+9+9+12	9+9+9+24	7+12+18+18	7+7+7+7+12	7+7+9+12+12	9+9+12+12+12	7+9+9+18+18
7+7+7+18	7+9+9+18	9+9+12+12	7+12+18+24	7+7+7+7+18	7+7+9+12+18	9+9+12+12+18*	7+9+12+12+18
7+7+7+24	7+9+9+24	9+9+12+18	7+18+18+18	7+7+7+7+24	7+7+12+12+12	7+7+7+12+24	7+12+12+12+12
7+7+9+9	7+9+12+12	9+9+12+24	9+9+18+24	7+7+7+9+9	7+9+9+9+9	7+7+7+18+18	7+12+12+12+18
7+7+9+12	7+9+12+18	9+9+18+18	9+12+12+24	7+7+7+9+12	7+9+9+9+12	7+7+9+9+24	9+9+9+9+24
7+7+9+18	7+9+12+24*	9+12+12+12*	9+12+18+18	7+7+7+9+18	7+9+9+9+18	7+7+9+12+24	9+9+9+12+18
7+7+9+24	7+9+18+18	9+12+12+18	9+18+18+18	7+7+7+9+24	7+9+9+12+12	7+7+9+18+18	9+9+9+18+18*
7+7+12+12	7+12+12+12	12+12+12+12	12+12+18+18	7+7+7+12+12	7+9+12+12+12	7+7+12+12+18	9+12+12+12+12
7+7+12+18	7+12+12+18	12+12+12+18	12+12+12+24	7+7+7+12+18	9+9+9+9+9	7+7+12+18+18	9+12+12+12+18*
7+7+12+24	9+9+9+9	7+7+18+24		7+7+9+9+9	9+9+9+9+12	7+9+9+9+24	12+12+12+12+12

\*This combinations of indoor units capacities exceed 130% of maximum capacity of the outdoor unit.



OUTDOOR UNITS

**MULTI VARIABLE SERIES**

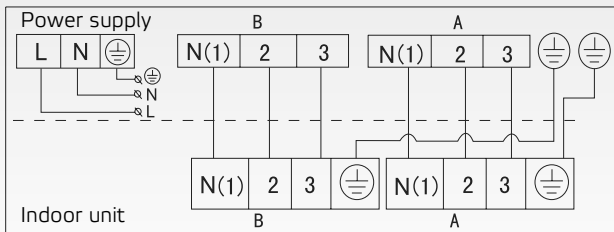
**ENERGY CLASS INFORMATION**

COOLING					
Outdoor unit	Indoor unit	Energy class	Pdesign cooling (kW)	SEER	Annual power consumption (kWh/a)
MV-E14BI2	2x SIH-09BIT	A++	4,1	7,2	199
MV-E18BI2	2x SIH-09BIT	A++	5,3	6,6	281
MV-E21BI2	3x SIH-09BIT	A++	6,1	7,8	273
MV-E24BI2	3x SIH-09BIT	A++	7,1	7,1	350
MV-E28BI2	4x SIH-09BIT	A++	8,0	7,2	388
MV-E36BI2	4x ASH-09BIS/W	A++	10,6	7,2	515
MV-E42BI2	not available for units with rated capacity >12kW				
HEATING-AVERAGE CLIMATE					
Outdoor unit	Indoor unit	Energy class	Pdesign heating (kW)	SCOP	Annual power consumption (kWh/a)
MV-E14BI2	2x SIH-09BIT	A+	3,8	4,2	1266
MV-E18BI2	2x SIH-09BIT	A+	4,3	4,0	1505
MV-E21BI2	3x SIH-09BIT	A+	6,1	4,3	1986
MV-E24BI2	3x SIH-09BIT	A+	6,1	4,3	1986
MV-E28BI2	4x SIH-09BIT	A+	7,2	4,2	2400
MV-E36BI2	4x ASH-09BIS/W	A+	10,5	4,0	3675
MV-E42BI2	not available for units with rated capacity >12kW				

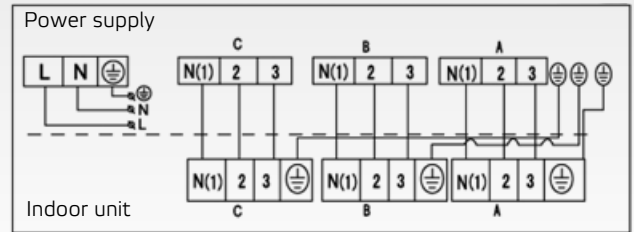
ELECTRICAL WIRING DIAGRAM

**MULTI VARIABLE SERIES**

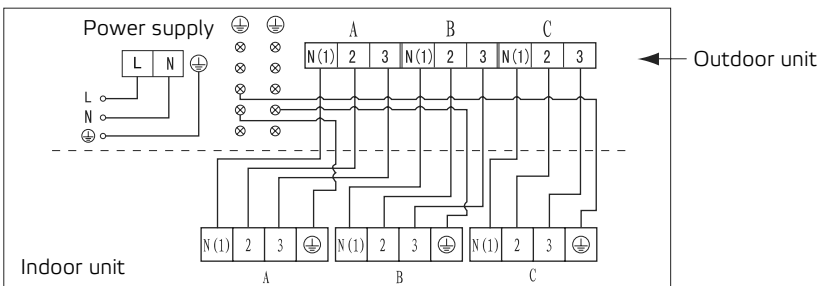
MV-E14BI2, MV-E18BI2



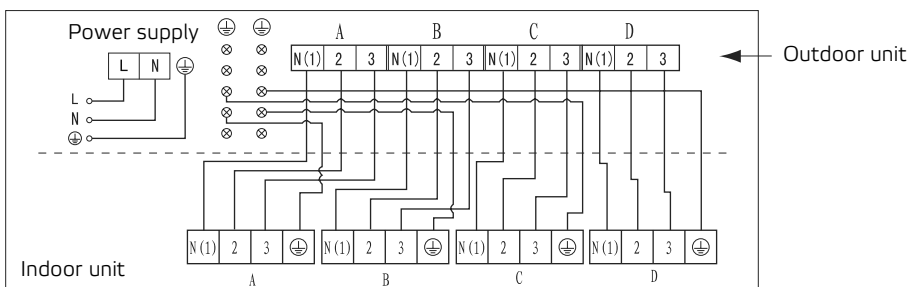
MV-E21BI2



MV-E24BI2



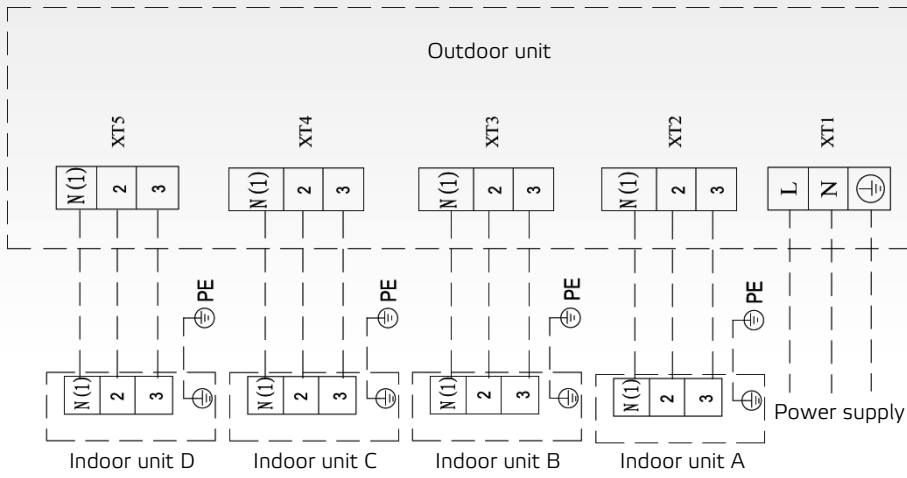
MV-E28BI2



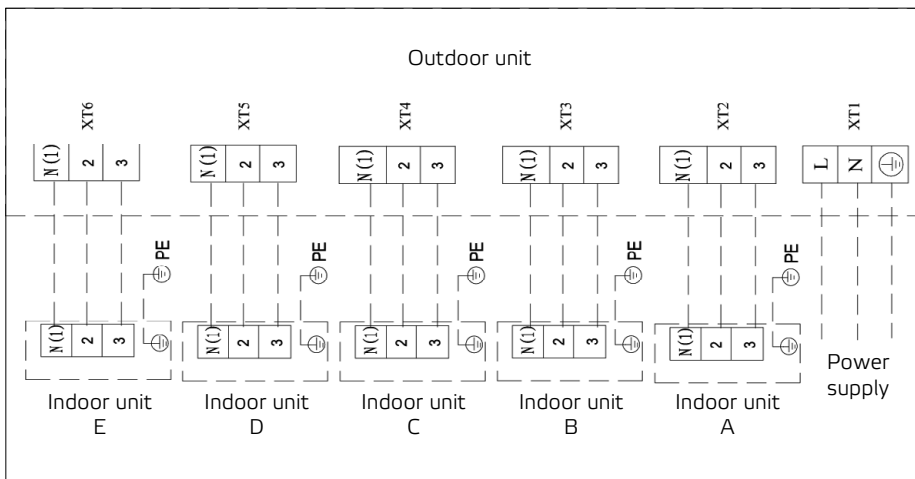
# ELECTRICAL WIRING DIAGRAM

## MULTI VARIABLE SERIES

MV-E36BI2



MV-E42BI2



## OUTDOOR UNITS

# UNI SPLIT SERIES

MODEL			ASGE-12BI	ASGE-18BI	ASGE-24BI	ASGE-30BI	ASGE-36BI
Capacity cooling / heating 1)	Nominal (min-max)	kW	3,5 / 4,0	5,0 / 5,5	7,0 / 8,0	8,5 / 8,8	10,0 / 12,0
Power supply		Hz / V	1~ / 50 / 220-240	1~ / 50 / 220-240	1~ / 50 / 220-240	1~ / 50 / 220-240	1~ / 50 / 220-240
Power input cooling / heating 1)		W	950 / 1050	1550 / 1450	2100 / 2450	2800 / 2650	3300 / 3600
Maximal power input 2)		W	1350	1750	3500	3950	4050
Power current cooling / heating		A	4,2 / 4,7	6,5 / 6,9	8,8 / 10,5	12,7 / 11,7	14,5 / 15,9
Maximal power current 2)		A	6,0	8,0	16,0	18,0	18,5
Air flow of OD	H	m <sup>3</sup> / h	3000	3000	3600	4000	5900
Sound pressure of OD at 1m 4)	H	dB(A)	50	50	52	53	55
Sound power of OD 4)	H	dB(A)	64	65	67	69	70
Refrigerant type / charge		Type / kg / t eq. CO <sub>2</sub>	R32 / 0,78 / 0,53	R32 / 1,00 / 0,68	R32 / 1,60 / 1,08	R32 / 1,80 / 1,22	R32 / 2,50 / 1,69
Additional refrigerant		g / m	16	16	40	40	40
Pipe diameter - liquid side 5)		inch / mm	¼ / 6,4	¼ / 6,4	¾ / 9,5	¾ / 9,5	¾ / 9,5
Pipe diameter - gas side 5)		inch / mm	¾ / 9,5	½ / 12,7	¾ / 15,9	¾ / 15,9	¾ / 15,9
Max pipe length without additional refrigerant 6)		m	5	5	5	5	5
Maximal allowed pipe length 7)		m	3 / 30	3 / 35	3 / 50	3 / 50	3 / 65
Max. elevation / Drop height		m	15	20	25	25	30
Dimension of OD	w × h × d	mm	818 × 596 × 378	818 × 596 × 378	892 × 698 × 396	920 × 790 × 427	940 × 820 × 530
Package dimension of OD	w × h × d	mm	948 × 645 × 420	948 × 645 × 420	1029 × 750 × 458	1083 × 855 × 488	1073 × 868 × 563
Weight of OD	netto / brutto	kg	37,0 / 40,0	39,0 / 42,0	53,0 / 57,0	60,0 / 65,0	83,0 / 95,0
Operating temperature range cooling 8)		°C	-20~48	-20~48	-20~48	-20~48	-20~48
Operating temperature range heating 8)		°C	-20~24	-20~24	-20~24	-20~24	-20~24
<b>ADDITIONAL TECHNICAL INFORMATION</b>							
Screw holes distance of OD	w × d	mm	550 × 348	550 × 348	560 × 364	610 × 395	610 × 486
Communication cable		mm <sup>2</sup>	2 × 0,75	2 × 0,75	2 × 0,75	2 × 0,75	2 × 0,75
Recommended power cable		mm <sup>2</sup>	3 × 1,5	3 × 2,5	3 × 2,5	3 × 4,0	3 × 4,0
Recommended air switch		A	13	16	16	20	25
<b>EQUIPMENT</b>							
Throttling method			EXV	EXV	EXV	EXV	EXV
Bottom chassis heater			-	-	-	-	-
Crankcase heater			Preheating	Preheating	Preheating	Preheating	Heating belt
Bottom plugs for OD			✓	✓	✓	✓	✓
Drain pipe connector			✓	✓	✓	✓	✓
<b>OPTIONAL ACCESSORIES</b>							
Communication module			SCMI-01.4	SCMI-01.4	SCMI-01.4	SCMI-01.4	SCMI-01.4

The specification of products is subject to change based on further development of the units by the producer and can be changed without prior notice. Refer to rating label.

R32 (single component refrigerant HFC), GWP of refrigerant used: 675.

Contains fluorinated greenhouse gases covered by the Kyoto Protocol.

Explanatory notes on the very last page of the catalogue.

It is necessary to combine with an appropriate indoor unit from UNI SPLIT series (ASC-xxBI, ASD-xxBI, ASF-xxBI).

## OUTDOOR UNITS

# UNI SPLIT SERIES

MODEL			ASGE-36BI-3	ASGE-42BI-3	ASGE-48BI-3	ASGE-60BI-3
Capacity cooling / heating 1)	Nominal (min-max)	kW	10,0 / 12,0	12,1 / 13,5	13,4 / 15,5	16,0 / 17,0
Power supply		Hz / V	3~ / 50 / 380-415	3~ / 50 / 380-415	3~ / 50 / 380-415	3~ / 50 / 380-415
Power input cooling / heating 1)		W	3300 / 3500	4050 / 4150	4700 / 4450	5450 / 5400
Maximal power input 2)		W	4650	5300	5950	5950
Power current cooling / heating		A	5,1 / 5,6	5,9 / 6,1	7,2 / 6,7	7,7 / 7,6
Maximal power current 2)		A	7	8	9	9
Air flow of OD	H	m <sup>3</sup> / h	5900	5900	5900	6600
Sound pressure of OD at 1m 4)	H	dB(A)	55	56	57	57
Sound power of OD 4)	H	dB(A)	70	71	72	72
Refrigerant type / charge		Type / kg / t eq. CO <sub>2</sub>	R32 / 2,50 / 1,69	R32 / 2,65 / 1,79	R32 / 2,80 / 1,89	R32 / 3,60 / 2,43
Additional refrigerant		g / m	40	40	40	40
Pipe diameter - liquid side 5)		inch / mm	3/8 / 9,5	3/8 / 9,5	3/8 / 9,5	3/8 / 9,5
Pipe diameter - gas side 5)		inch / mm	5/8 / 15,9	5/8 / 15,9	5/8 / 15,9	5/8 / 15,9
Max pipe length without additional refrigerant 6)		m	5	5	7,5	7,5
Maximal allowed pipe length 7)		m	3 / 65	3 / 75	3 / 75	3 / 75
Max. elevation / Drop height		m	30	30	30	30
Dimension of OD	w × h × d	mm	940 × 820 × 530	940 × 820 × 530	940 × 820 × 530	900 × 1345 × 412
Package dimension of OD	w × h × d	mm	1073 × 868 × 563	1073 × 868 × 563	1073 × 868 × 563	1033 × 1395 × 443
Weight of OD	netto / brutto	kg	89,0 / 101,0	95,0 / 107,0	99,0 / 111,0	112,0 / 122,0
Operating temperature range cooling 8)		°C	-20~48	-20~48	-20~48	-20~48
Operating temperature range heating 8)		°C	-20~24	-20~24	-20~24	-20~24
<b>ADDITIONAL TECHNICAL INFORMATION</b>						
Screw holes distance of OD	w × d	mm	610 × 486	610 × 486	610 × 486	572 × 378
Communication cable		mm <sup>2</sup>	2 × 0,75	2 × 0,75	2 × 0,75	2 × 0,75
Recommended power cable		mm <sup>2</sup>	5 × 2,5	5 × 2,5	5 × 2,5	5 × 2,5
Recommended air switch		A	16	16	16	16
<b>EQUIPMENT</b>						
Throttling method			EXV	EXV	EXV	EXV
Bottom chassis heater			-	-	-	-
Crankcase heater			Heating belt	Heating belt	Heating belt	Heating belt
Bottom plugs for OD			✓	✓	✓	✓
Drain pipe connector			✓	✓	✓	✓
<b>OPTIONAL ACCESSORIES</b>						
Communication module			SCMI-01.4	SCMI-01.4	SCMI-01.4	SCMI-01.4

The specification of products is subject to change based on further development of the units by the producer and can be changed without prior notice. Refer to rating label.

R32 (single component refrigerant HFC), GWP of refrigerant used: 675.

Contains fluorinated greenhouse gases covered by the Kyoto Protocol.

Explanatory notes on the very last page of the catalogue.

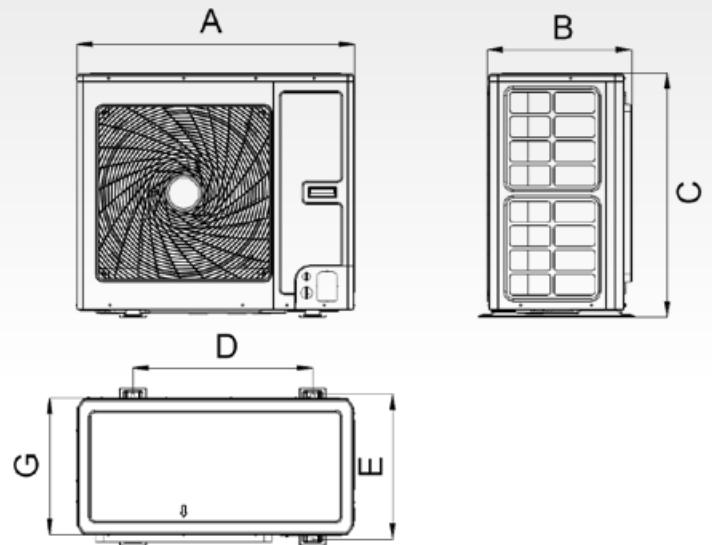
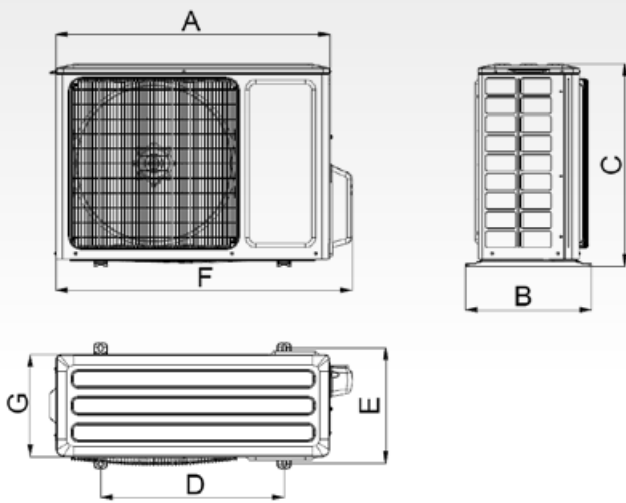
It is necessary to combine with an appropriate indoor unit from UNI SPLIT series (ASC-xxBI, ASD-xxBI, ASF-xxBI).

APPEARANCE AND DIMENSIONS OF OUTDOOR UNIT

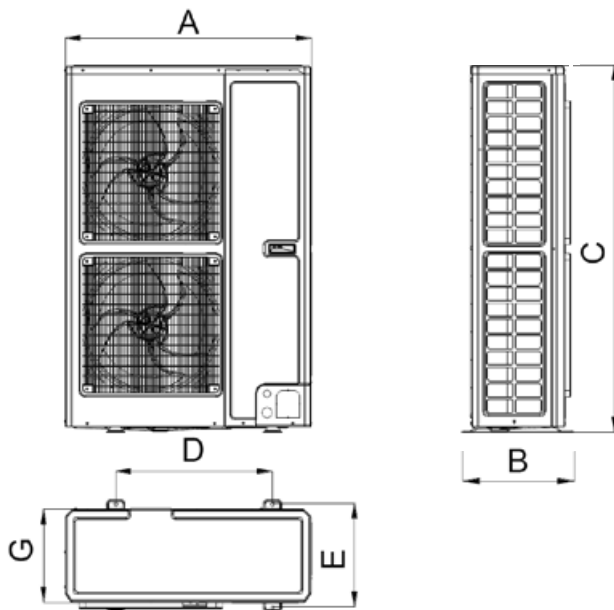
**UNI SPLIT SERIES**

ASGE-12BI, ASGE-18BI, ASGE-24BI, ASGE-30BI

ASGE-36BI, ASGE-36BI-3, ASGE-42BI-3, ASGE-48BI-3



ASGE-60BI-3



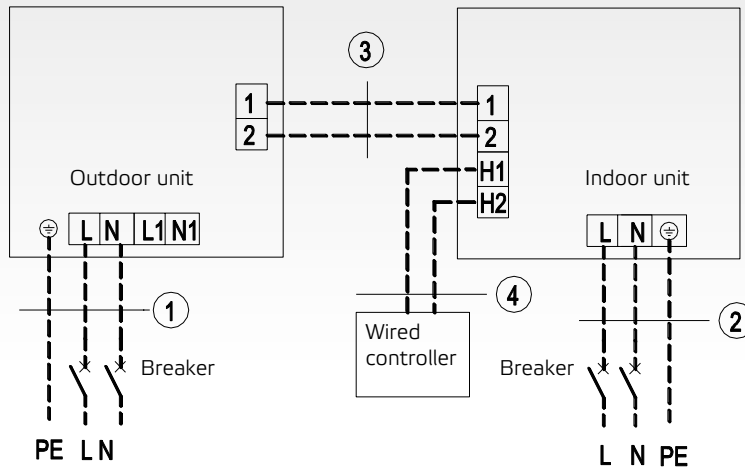
Dimensions Model	A	B	C	D	E	F	G
ASGE-12BI	818	378	596	550	348	887	302
ASGE-18BI	818	378	596	550	348	887	302
ASGE-24BI	892	396	698	560	364	952	340
ASGE-30BI	920	427	790	610	395	1002	370
ASGE-36BI	940	530	820	610	486	/	460
ASGE-36BI-3	940	530	820	610	486	/	460
ASGE-42BI-3	940	530	820	610	486	/	460
ASGE-48BI-3	940	530	820	610	486	/	460
ASGE-60BI-3	900	412	1345	572	378	/	340

units: mm

ELECTRICAL WIRING DIAGRAM

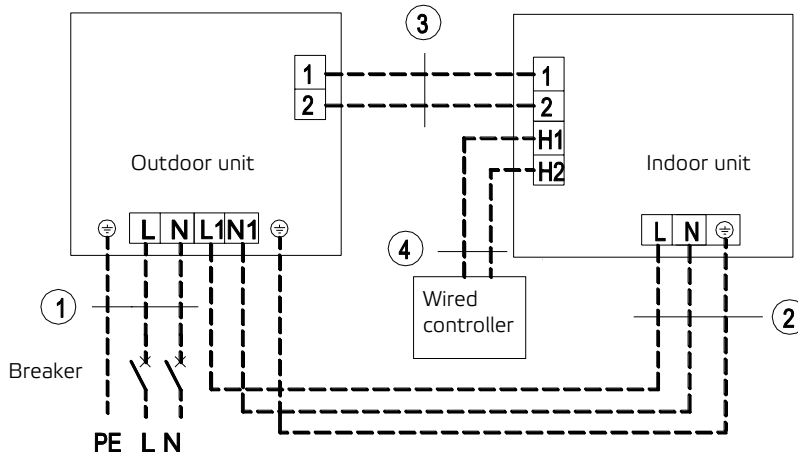
**UNI SPLIT SERIES**

ASGE-12BI, ASGE-18BI, ASGE-24BI, ASGE-30BI



Power : 220–240 V~, 50 Hz / 208–230 V~, 60 Hz

Power : 220–240 V~, 50 Hz / 208–230 V~, 60 Hz



Power : 220–240 V~, 50 Hz / 208–230 V~, 60 Hz

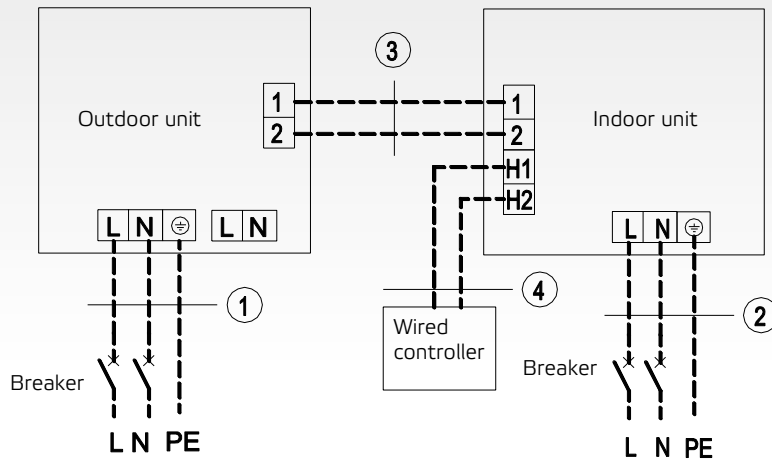
Power : 220–240 V~, 50 Hz / 208–230 V~, 60 Hz

**1** Outdoor unit power supply **2** Indoor unit power supply **3** Communication cable **4** Communication cable

ELECTRICAL WIRING DIAGRAM

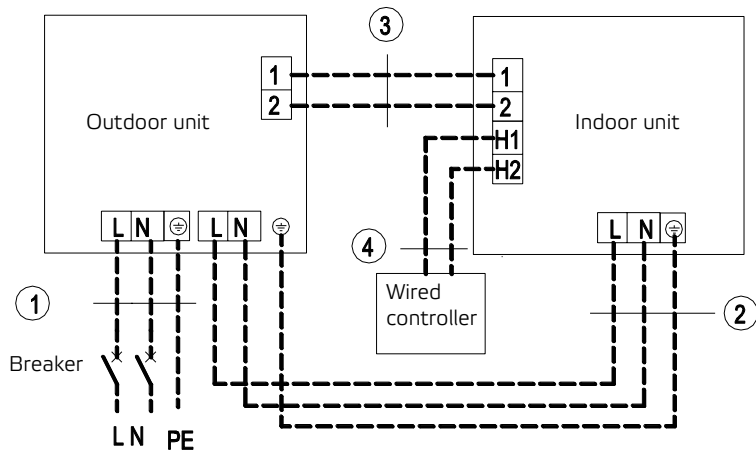
**UNI SPLIT SERIES**

ASGE-36BI



Power : 220–240 V~, 50 Hz / 208–230 V~, 60 Hz

Power : 220–240 V~, 50 Hz / 208–230 V~, 60 Hz



Power : 220–240 V~, 50 Hz / 208–230 V~, 60 Hz

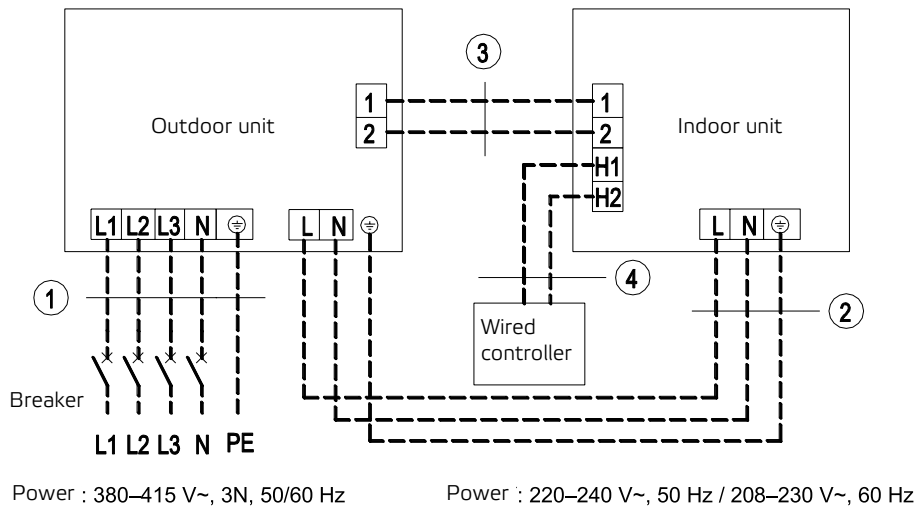
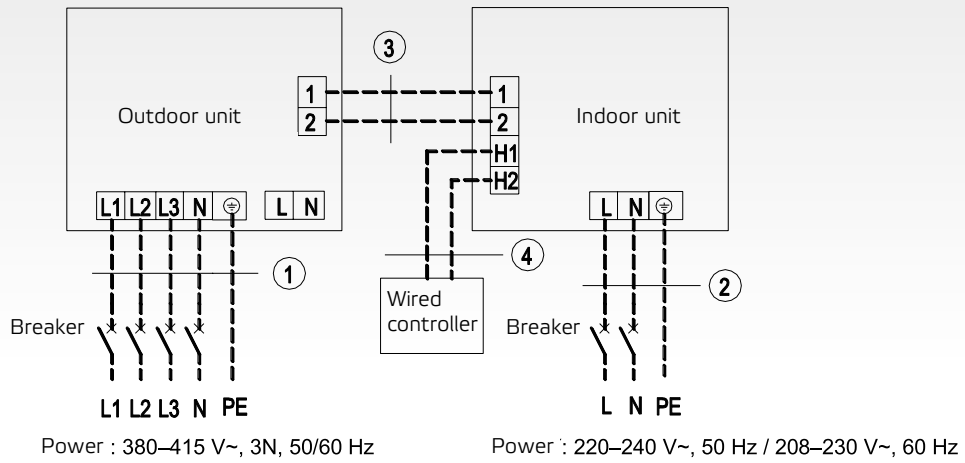
Power : 220–240 V~, 50 Hz / 208–230 V~, 60 Hz

**1** Outdoor unit power supply **2** Indoor unit power supply **3** Communication cable **4** Communication cable

ELECTRICAL WIRING DIAGRAM

**UNI SPLIT SERIES**

ASGE-36BI-3, ASGE-42BI-3, ASGE-48BI-3, ASGE-60BI-3



1 Outdoor unit power supply 2 Indoor unit power supply 3 Communication cable 4 Communication cable



## 4-WAY CASSETTE INDOOR UNITS

# UNI SPLIT SERIES

MODEL			ASC-12BI / ASGE-12BI	ASC-18BI / ASGE-18BI	ASC-24BI / ASGE-24BI	ASC-30BI / ASGE-30BI	ASC-36BI / ASGE-36BI
Capacity cooling / heating 1)	Nominal	kW	3,5 (0,4-3,7) / 4,0 (0,8-4,1)	5,0 (0,6-5,3) / 5,5 (1,2-5,7)	7,0 (0,8-7,3) / 8,0 (1,6-8,4)	8,5 (1,0-8,9) / 8,8 (2,0-9,1)	10,0 (1,2-10,6) / 12,0 (2,6-12,4)
Power supply		Hz / V	1~ / 50 / 220-240	1~ / 50 / 220-240	1~ / 50 / 220-240	1~ / 50 / 220-240	1~ / 50 / 220-240
Energy class cooling 3)			A+	A+	A++	A++	A++
Pdesign cooling		kW	3,5	5,0	7,0	8,5	10,0
SEER			5,9	5,9	7,2	6,1	6,1
Annual power consumption		kWh / annum	213	296	340	472	566
Energy class heating 3)	Average climate		A+	A+	A	A+	A+
Pdesign heating	Average climate	kW	3,1	4,0	6,4	7,2	9,0
SCOP	Average climate		4,0	4,0	3,9	4,0	4,0
Annual power consumption	Average climate	kWh / annum	1069	1405	2297	2616	3139
Air flow of ID	SH/H/M/L	m <sup>3</sup> / h	650/580/480/400	700/580/480/400	1100/1050/960/870	1400/1310/1180/1040	1500/1470/1380/1220
Sound pressure of ID at 1,4m 4)	SH/H/M/L	dB(A)	39/36/33	44/39/36/33	43/42/40/39	49/47/44/41	50/48/46/42
Sound power of ID 4)	H	dB(A)	57	53	52	58	59
Refrigerant type		Type	R32	R32	R32	R32	R32
Pipe diameter - liquid side 5)		inch / mm	¼ / 6,4	¼ / 6,4	¾ / 9,5	¾ / 9,5	¾ / 9,5
Pipe diameter - gas side 5)		inch / mm	¾ / 9,5	½ / 12,7	¾ / 15,9	¾ / 15,9	¾ / 15,9
Dimension of ID	w × h × d	mm	570 × 265 × 570	570 × 265 × 570	840 × 240 × 840	840 × 240 × 840	840 × 240 × 840
Dimension of panel	w × h × d	mm	620 × 47,5 × 620	620 × 47,5 × 620	950 × 52 × 950	950 × 52 × 950	950 × 52 × 950
Package dimension of ID	w × h × d	mm	698 × 295 × 653	698 × 295 × 653	963 × 325 × 963	963 × 325 × 963	963 × 325 × 963
Package dimension of panel	w × h × d	mm	701 × 125 × 701	701 × 125 × 701	1033 × 112 × 1038	1033 × 112 × 1038	1033 × 112 × 1038
Weight of ID	netto / brutto	kg	17,0 / 22,0	17,0 / 22,0	29,0 / 36,0	29,0 / 36,0	31,0 / 38,0
Weight of panel	netto / brutto	kg	3,0 / 4,5	3,0 / 4,5	6,0 / 9,5	6,0 / 9,5	6,0 / 9,5
Set temperature range		°C	16-30	16-30	16-30	16-30	16-30
<b>ADDITIONAL TECHNICAL INFORMATION</b>							
Screw holes distance	w × d	mm	520 × 560	520 × 560	660 × 790	660 × 790	660 × 790
Communication cable		mm <sup>2</sup>	2 × 0,75	2 × 0,75	2 × 0,75	2 × 0,75	2 × 0,75
Recommended power cable		mm <sup>2</sup>	3 × 1,5	3 × 1,5	3 × 1,5	3 × 1,5	3 × 1,5
Recommended air switch		A	6	6	6	6	6
<b>EQUIPMENT</b>							
Plasma generator			-	-	-	-	-
WiFi module					optional (SWM-03)		
Drain pump			✓	✓	✓	✓	✓
Max. lift (from bottom of ID unit)		mm	1000	1000	1000	1000	1000
Door contact (SCC-36K connector)			✓	✓	✓	✓	✓
Alarm contact			-	-	-	-	-
Fresh air inlet			✓	✓	✓	✓	✓
Decorative panel			✓	✓	✓	✓	✓
<b>STANDARD ACCESSORIES</b>							
Standard health filter			-	-	-	-	-
Remote controller (IR)			YAP1F6	YAP1F6	YAP1F6	YAP1F6	YAP1F6
Wired controller			XK117	XK117	XK117	XK117	XK117
<b>OPTIONAL ACCESSORIES</b>							
Optional health filters			-	-	-	-	-
Wired controller with weekly timer			SWC-03, SWC-03U	SWC-03, SWC-03U	SWC-03, SWC-03U	SWC-03, SWC-03U	SWC-03, SWC-03U
Central controller			SCC-36	SCC-36	SCC-36	SCC-36	SCC-36
MODBUS gateway			SMG-01	SMG-01	SMG-01	SMG-01	SMG-01
BACNET gateway			SBG-01	SBG-01	SBG-01	SBG-01	SBG-01
Dry contact gateway			SDG-01	SDG-01	SDG-01	SDG-01	SDG-01

The specification of products is subject to change based on further development of the units by the producer and can be changed without prior notice. Refer to rating label.

R32 (single component refrigerant HFC), GWP of refrigerant used: 675.

Contains fluorinated greenhouse gases covered by the Kyoto Protocol.

Explanatory notes on the very last page of the catalogue.

It is necessary to combine with an appropriate outdoor unit from UNI SPLIT series (ASGE-xxBI, ASGE-xxBI-3).

## 4-WAY CASSETTE INDOOR UNITS

### UNI SPLIT SERIES

MODEL			ASC-36BI / ASGE-36BI-3	ASC-42BI / ASGE-42BI-3	ASC-48BI / ASGE-48BI-3	ASC-60BI / ASGE-60BI-3
Capacity cooling / heating 1)	Nominal	kW	10,0 (1,2-10,6) / 12,0 (2,6-12,4)	12,1 (1,5-12,7) / 13,5 (3,1-14,0)	13,4 (1,7-14,1) / 15,5 (3,2-16,0)	16,0 (2,0-15,2) / 17,0 (3,5-17,6)
Power supply		Hz / V	1~ / 50 / 220-240	1~ / 50 / 220-240	1~ / 50 / 220-240	1~ / 50 / 220-240
Energy class cooling 3)			A++	A++	A++	A++
Pdesign cooling		kW	10,0	-	-	-
SEER			6,1	6,1	6,1	6,1
Annual power consumption		kWh / annum	533	-	-	-
Energy class heating 3)	Average climate		A+	A	A+	A
Pdesign heating	Average climate	kW	9,0	-	-	-
SCOP	Average climate		4,0	3,8	4,0	3,8
Annual power consumption	Average climate	kWh / annum	3168	-	-	-
Air flow of ID	SH/H/M/L	m <sup>3</sup> / h	1500/1470/1380/1220	1800/1690/1470/1260	1900/1690/1480/1140	2000/1880/1620/1430
Sound pressure of ID at 1,4m 4)	SH/H/M/L	dB(A)	50/48/46/42	51/49/46/42	52/51/48/45	54/52/50/48
Sound power of ID 4)	H	dB(A)	59	60	61	63
Refrigerant type		Type	R32	R32	R32	R32
Pipe diameter - liquid side 5)		inch / mm	3/8 / 9,5	3/8 / 9,5	3/8 / 9,5	3/8 / 9,5
Pipe diameter - gas side 5)		inch / mm	1/2 / 15,9	1/2 / 15,9	1/2 / 15,9	1/2 / 15,9
Dimension of ID	w × h × d	mm	840 × 240 × 840	840 × 290 × 840	840 × 290 × 840	840 × 290 × 840
Dimension of panel	w × h × d	mm	950 × 52 × 950	950 × 52 × 950	950 × 52 × 950	950 × 52 × 950
Package dimension of ID	w × h × d	mm	963 × 325 × 963	963 × 325 × 963	963 × 325 × 963	963 × 325 × 963
Package dimension of panel	w × h × d	mm	1033 × 112 × 1038	1033 × 112 × 1038	1033 × 112 × 1038	1033 × 112 × 1038
Weight of ID	netto / brutto	kg	31,0 / 38,0	33,0 / 41,0	36,0 / 44,0	36,0 / 44,0
Weight of panel	netto / brutto	kg	6,0 / 9,5	6,0 / 9,5	6,0 / 9,5	6,0 / 9,5
Set temperature range		°C	16-30	16-30	16-30	16-30
<b>ADDITIONAL TECHNICAL INFORMATION</b>						
Screw holes distance	w × d	mm	660 × 790	660 × 790	660 × 790	660 × 790
Communication cable		mm <sup>2</sup>	2 × 0,75	2 × 0,75	2 × 0,75	2 × 0,75
Recommended power cable		mm <sup>2</sup>	3 × 1,5	3 × 1,5	3 × 1,5	3 × 1,5
Recommended air switch		A	6	6	6	6
<b>EQUIPMENT</b>						
Plasma generator			-	-	-	-
WiFi module				optional (SWM-03)		
Drain pump			✓	✓	✓	✓
Max. lift (from bottom of ID unit)		mm	1000	1000	1000	1000
Door contact (SCC-36K connector)			✓	✓	✓	✓
Alarm contact			-	-	-	-
Fresh air inlet			✓	✓	✓	✓
Decorative panel			✓	✓	✓	✓
<b>STANDARD ACCESSORIES</b>						
Standard health filter			-	-	-	-
Remote controller (IR)			YAP1F6	YAP1F6	YAP1F6	YAP1F6
Wired controller			XK117	XK117	XK117	XK117
<b>OPTIONAL ACCESSORIES</b>						
Optional health filters			-	-	-	-
Wired controller with weekly timer			SWC-03, SWC-03U	SWC-03, SWC-03U	SWC-03, SWC-03U	SWC-03, SWC-03U
Central controller			SCC-36	SCC-36	SCC-36	SCC-36
MODBUS gateway			SMG-01	SMG-01	SMG-01	SMG-01
BACNET gateway			SBG-01	SBG-01	SBG-01	SBG-01
Dry contact gateway			SDG-01	SDG-01	SDG-01	SDG-01

The specification of products is subject to change based on further development of the units by the producer and can be changed without prior notice. Refer to rating label.

R32 (single component refrigerant HFC), GWP of refrigerant used: 675.

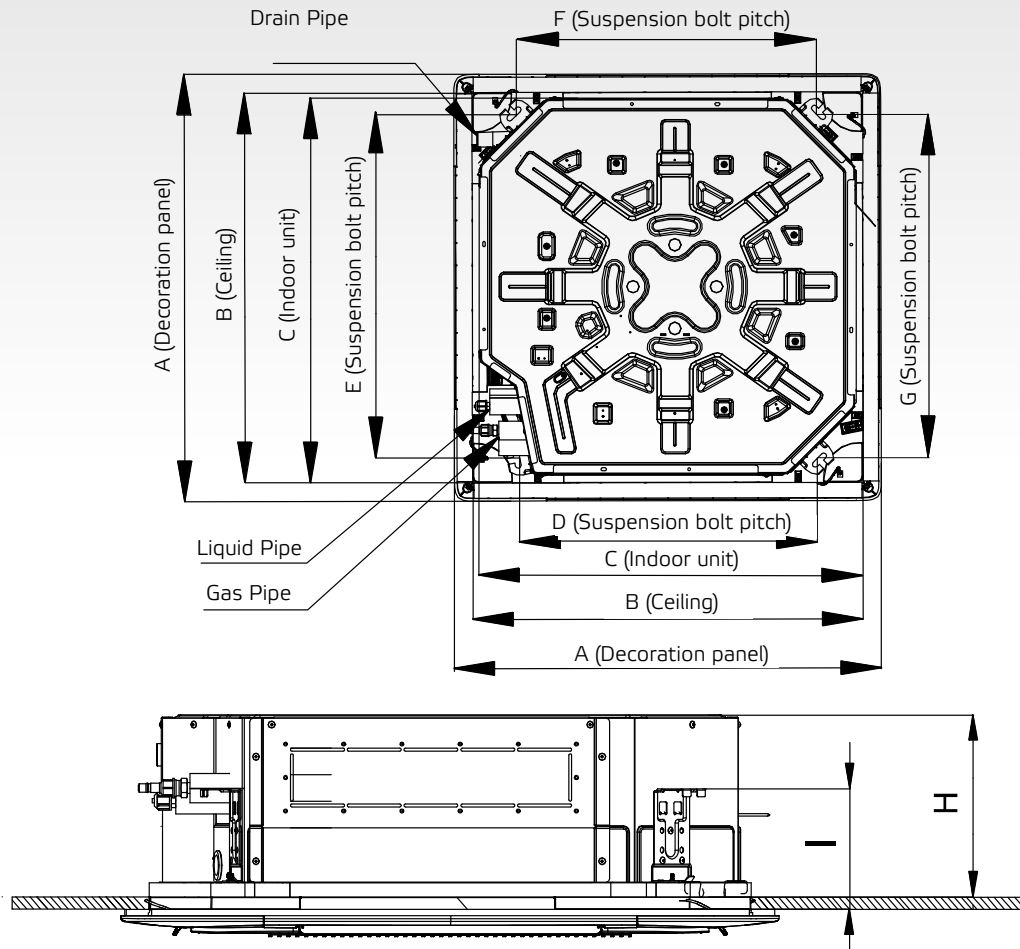
Contains fluorinated greenhouse gases covered by the Kyoto Protocol.

Explanatory notes on the very last page of the catalogue.

It is necessary to combine with an appropriate outdoor unit from UNI SPLIT series (ASGE-xxBI, ASGE-xxBI-3).

APPEARANCE AND DIMENSIONS OF CASSETTE INDOOR UNITS

**UNI SPLIT SERIES**



Dimensions	A	B	C	D	E	F	G	H	I
ASC-12BI	620	580	570	500	550	530	530	265	140
ASC-18BI	620	580	570	500	550	530	530	265	140
ASC-24BI	950	870	840	670	770	680	770	240	134
ASC-30BI	950	870	840	670	770	680	770	240	134
ASC-36BI	950	870	840	670	770	680	770	240	134
ASC-42BI	950	870	840	670	770	680	770	290	134
ASC-48BI	950	870	840	670	770	680	770	290	134
ASC-60BI	950	870	840	670	770	680	770	290	134

units: mm

FLOOR-CEILING INDOOR UNITS

**UNI SPLIT SERIES**

MODEL			ASF-12BI / ASGE-12BI	ASF-18BI / ASGE-18BI	ASF-24BI / ASGE-24BI	ASF-30BI / ASGE-30BI	ASF-36BI / ASGE-36BI
Capacity cooling / heating 1)	Nominal	kW	3,5 (0,3-3,7) / 4,0 (0,7-4,1)	5,0 (0,6-5,3) / 5,5 (1,2-5,7)	7,0 (0,7-7,4) / 8,0 (1,8-8,3)	8,5 (1,0-8,9) / 8,8 (2,0-9,1)	10,0 (1,2-10,5) / 12,0 (2,5-12,4)
Power supply		Hz / V	1~ / 50 / 220-240	1~ / 50 / 220-240	1~ / 50 / 220-240	1~ / 50 / 220-240	1~ / 50 / 220-240
Energy class cooling 3)			A++	A++	A++	A++	A++
Pdesign cooling		kW	3,5	5,0	7,0	8,5	10,0
SEER			6,7	6,1	6,8	6,1	6,1
Annual power consumption		kWh / annum	177	284	359	477	573
Energy class heating 3)	Average climate		A+	A+	A	A+	A+
Pdesign heating	Average climate	kW	3,1	4,0	6,4	7,2	9,0
SCOP	Average climate		4,0	4,0	3,9	4,0	4,0
Annual power consumption	Average climate	kWh / annum	1040	1394	2295	2577	3149
Air flow of ID	H	m <sup>3</sup> / h	650	850	1300	1500	1600
Sound pressure of ID at 1m 4)	SH/H/M/L	dB(A)	39/36/32/28	44/42/39/36	45/44/41/38	49/47/45/43	49/47/45/43
Sound power of ID 4)	H	dB(A)	51	57	57	65	61
Refrigerant type		Type	R32	R32	R32	R32	R32
Pipe diameter - liquid side 5)		inch / mm	¼ / 6,4	¼ / 6,4	¾ / 9,5	¾ / 9,5	¾ / 9,5
Pipe diameter - gas side 5)		inch / mm	¾ / 9,5	½ / 12,7	¾ / 15,9	¾ / 15,9	¾ / 15,9
Dimension of ID	w x h x d	mm	870 x 665 x 235	870 x 665 x 235	1200 x 665 x 235	1200 x 665 x 235	1200 x 665 x 235
Package dimension of ID	w x h x d	mm	1033 x 770 x 300	1033 x 770 x 300	1363 x 770 x 300	1363 x 770 x 300	1363 x 770 x 300
Weight of ID	netto / brutto	kg	25,0 / 30,0	26,0 / 31,0	31,0 / 37,0	31,0 / 37,0	32,0 / 38,0
Set temperature range		°C	16-30	16-30	16-30	16-30	16-30
<b>ADDITIONAL TECHNICAL INFORMATION</b>							
Screw holes distance	w x d	mm	812 x 318	812 x 318	1142 x 318	1142 x 318	1142 x 318
Communication cable		mm <sup>2</sup>	2 x 0,75	2 x 0,75	2 x 0,75	2 x 0,75	2 x 0,75
Recommended power cable		mm <sup>2</sup>	3 x 1,5	3 x 1,5	3 x 1,5	3 x 1,5	3 x 1,5
Recommended air switch		A	6	6	6	6	6
<b>EQUIPMENT</b>							
Plasma generator			-	-	-	-	-
WiFi module					optional (SWM-03)		
Drain pump			-	-	-	-	-
Max. lift (from bottom of ID unit)		mm	-	-	-	-	-
Door contact (SCC-36K connector)			✓	✓	✓	✓	✓
Alarm contact			-	-	-	-	-
Fresh air inlet			-	-	-	-	-
<b>STANDARD ACCESSORIES</b>							
Standard health filter			-	-	-	-	-
Remote controller (IR)			YAP1F6	YAP1F6	YAP1F6	YAP1F6	YAP1F6
Wired controller			XK117	XK117	XK117	XK117	XK117
<b>OPTIONAL ACCESSORIES</b>							
Optional health filters			-	-	-	-	-
Wired controller with weekly timer			SWC-03, SWC-03U	SWC-03, SWC-03U	SWC-03, SWC-03U	SWC-03, SWC-03U	SWC-03, SWC-03U
Central controller			SCC-36	SCC-36	SCC-36	SCC-36	SCC-36
MODBUS gateway			SMG-01	SMG-01	SMG-01	SMG-01	SMG-01
BACNET gateway			SBG-01	SBG-01	SBG-01	SBG-01	SBG-01
Dry contact gateway			SDG-01	SDG-01	SDG-01	SDG-01	SDG-01

The specification of products is subject to change based on further development of the units by the producer and can be changed without prior notice. Refer to rating label.

R32 (single component refrigerant HFC), GWP of refrigerant used: 675.

Contains fluorinated greenhouse gases covered by the Kyoto Protocol.

Explanatory notes on the very last page of the catalogue.

It is necessary to combine with an appropriate outdoor unit from UNI SPLIT series (ASGE-xxBI, ASGE-xxBI-3).

FLOOR-CEILING INDOOR UNITS

**UNI SPLIT SERIES**

MODEL			ASF-36BI / ASGE-36BI-3	ASF-42BI / ASGE-42BI-3	ASF-48BI / ASGE-48BI-3	ASF-60BI / ASGE-60BI-3
Capacity cooling / heating 1)	Nominal	kW	10,0 (1,2-10,5) / 12,0 (2,5-12,4)	12,1 (1,6-12,7) / 13,5 (3,0-14,0)	13,4 (1,6-14,1) / 15,5 (3,4-16,0)	16,0 (2,0-16,8) / 17,0 (3,7-17,6)
Power supply		Hz / V	1~ / 50 / 220-240	1~ / 50 / 220-240	1~ / 50 / 220-240	1~ / 50 / 220-240
Energy class cooling 3)			A++	A++	A++	A++
Pdesign cooling		kW	10,0	-	-	-
SEER			6,1	6,1	6,1	6,1
Annual power consumption		kWh / annum	561	-	-	-
Energy class heating 3)	Average climate		A+	A	A+	A+
Pdesign heating	Average climate	kW	9,0	-	-	-
SCOP	Average climate		4,0	3,8	4,0	4,0
Annual power consumption	Average climate	kWh / annum	3146	-	-	-
Air flow of ID	H	m³ / h	1600	1800	2100	2300
Sound pressure of ID at 1m 4)	SH/H/M/L	dB(A)	49/47/45/43	49/47/44/42	52/50/48/44	54/53/49/45
Sound power of ID 4)	H	dB(A)	61	61	65	67
Refrigerant type		Type	R32	R32	R32	R32
Pipe diameter - liquid side 5)		inch / mm	3/8 / 9,5	3/8 / 9,5	3/8 / 9,5	3/8 / 9,5
Pipe diameter - gas side 5)		inch / mm	1/2 / 15,9	1/2 / 15,9	1/2 / 15,9	1/2 / 15,9
Dimension of ID	w x h x d	mm	1200 x 665 x 235	1570 x 665 x 235	1570 x 665 x 235	1570 x 665 x 235
Package dimension of ID	w x h x d	mm	1363 x 770 x 300	1729 x 770 x 300	1729 x 770 x 300	1729 x 770 x 300
Weight of ID	netto / brutto	kg	32,0 / 38,0	40,0 / 47,0	42,0 / 49,0	42,0 / 49,0
Set temperature range		°C	16-30	16-30	16-30	16-30
<b>ADDITIONAL TECHNICAL INFORMATION</b>						
Screw holes distance	w x d	mm	1142 x 318	1512 x 318	1512 x 318	1512 x 318
Communication cable		mm²	2 x 0,75	2 x 0,75	2 x 0,75	2 x 0,75
Recommended power cable		mm²	3 x 1,5	3 x 1,5	3 x 1,5	3 x 1,5
Recommended air switch		A	6	6	6	6
<b>EQUIPMENT</b>						
Plasma generator			-	-	-	-
WiFi module				optional (SWM-03)		
Drain pump			-	-	-	-
Max. lift (from bottom of ID unit)		mm	-	-	-	-
Door contact (SCC-36K connector)			✓	✓	✓	✓
Alarm contact			-	-	-	-
Fresh air inlet			-	-	-	-
<b>STANDARD ACCESSORIES</b>						
Standard health filter			-	-	-	-
Remote controller (IR)			YAP1F6	YAP1F6	YAP1F6	YAP1F6
Wired controller			XK117	XK117	XK117	XK117
<b>OPTIONAL ACCESSORIES</b>						
Optional health filters			-	-	-	-
Wired controller with weekly timer			SWC-03, SWC-03U	SWC-03, SWC-03U	SWC-03, SWC-03U	SWC-03, SWC-03U
Central controller			SCC-36	SCC-36	SCC-36	SCC-36
MODBUS gateway			SMG-01	SMG-01	SMG-01	SMG-01
BACNET gateway			SBG-01	SBG-01	SBG-01	SBG-01
Dry contact gateway			SDG-01	SDG-01	SDG-01	SDG-01

The specification of products is subject to change based on further development of the units by the producer and can be changed without prior notice. Refer to rating label.

R32 (single component refrigerant HFC), GWP of refrigerant used: 675.

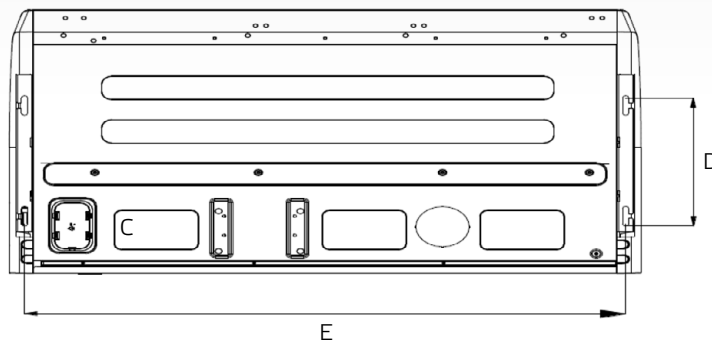
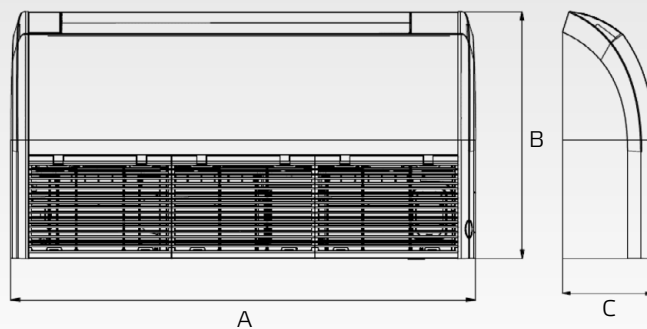
Contains fluorinated greenhouse gases covered by the Kyoto Protocol.

Explanatory notes on the very last page of the catalogue.

It is necessary to combine with an appropriate outdoor unit from UNI SPLIT series (ASGE-xxBI, ASGE-xxBI-3).

APPEARANCE AND DIMENSIONS OF FLOOR-CEILING INDOOR UNITS

**UNI SPLIT SERIES**



units: mm

	A	B	C	D	E
ASF-12BI	870	665	235	318	812
ASF-18BI	870	665	235	318	812
ASF-24BI	1200	665	235	318	1142
ASF-30BI	1200	665	235	318	1142
ASF-36BI	1200	665	235	318	1142
ASF-42BI	1570	665	235	318	1512
ASF-48BI	1570	665	235	318	1512
ASF-60BI	1570	665	235	318	1512

## DUCT INDOOR UNITS

# UNI SPLIT SERIES

MODEL			ASD-12BI / ASGE-12BI	ASD-18BI / ASGE-18BI	ASD-24BI / ASGE-24BI	ASD-30BI / ASGE-30BI	ASD-36BI / ASGE-36BI
Capacity cooling / heating 1)	Nominal	kW	3,5 (0,4-3,7) / 4,0 (0,8-4,1)	5,0 (0,6-5,3) / 5,5 (1,1-5,7)	7,0 (0,8-7,6) / 8,0 (1,7-8,3)	8,5 (1,0-8,9) / 8,8 (2,0-9,1)	10,0 (1,2-10,6) / 12,0 (2,5-12,4)
Power supply		Hz / V	1~ / 50 / 220-240	1~ / 50 / 220-240	1~ / 50 / 220-240	1~ / 50 / 220-240	1~ / 50 / 220-240
Energy class cooling 3)			A++	A++	A++	A++	A++
Pdesign cooling		kW	3,5	5,0	7,0	8,5	10,0
SEER			6,1	6,1	6,8	6,1	6,1
Annual power consumption		kWh / annum	200	277	357	480	571
Energy class heating 3)	Average climate		A+	A+	A+	A+	A+
Pdesign heating	Average climate	kW	3,1	4,2	6,4	7,2	9,0
SCOP	Average climate		4,0	4,0	4,0	4,0	4,0
Annual power consumption	Average climate	kWh / annum	1110	1469	2238	2576	3147
Air flow of ID	H	m <sup>3</sup> / h	650	950	1200	1500	1800
Sound pressure of ID at 1,4m 4)	SH/H/M/L	dB(A)	41/38/36/34	43/42/39/36	40/39/37/36	42/40/37/35	46/44/42/40
Sound power of ID 4)	H	dB(A)	59	58	62	65	65
External static pressure	nom / min-max	Pa	25 (0-50)	25 (0-50)	25 (0-75)	37 (0-75)	37 (0-100)
Refrigerant type		Type	R32	R32	R32	R32	R32
Pipe diameter - liquid side 5)		inch / mm	¼ / 6,4	¼ / 6,4	¾ / 9,5	¾ / 9,5	¾ / 9,5
Pipe diameter - gas side 5)		inch / mm	¾ / 9,5	½ / 12,7	¾ / 15,9	¾ / 15,9	¾ / 15,9
Dimension of ID	w × h × d	mm	700 × 200 × 450	1000 × 200 × 450	1300 × 220 × 450	1300 × 220 × 450	1000 × 300 × 700
Package dimension of ID	w × h × d	mm	1008 × 275 × 568	1308 × 275 × 568	1570 × 283 × 545	1570 × 283 × 545	1205 × 360 × 813
Weight of ID	netto / brutto	kg	20,0 / 24,0	26,0 / 31,0	31,0 / 36,0	31,0 / 36,0	41,0 / 47,0
Set temperature range		°C	16-30	16-30	16-30	16-30	16-30
<b>ADDITIONAL TECHNICAL INFORMATION</b>							
Screw holes distance	w × d	mm	760 × 415	1060 × 415	1360 × 415	1360 × 415	1040 × 500
Communication cable		mm <sup>2</sup>	2 × 0,75	2 × 0,75	2 × 0,75	2 × 0,75	2 × 0,75
Recommended power cable		mm <sup>2</sup>	3 × 1,5	3 × 1,5	3 × 1,5	3 × 1,5	3 × 1,5
Recommended air switch		A	6	6	6	6	6
<b>EQUIPMENT</b>							
Plasma generator			-	-	-	-	-
WiFi module					optional (SWM-03)		
Drain pump			✓	✓	✓	✓	✓
Max. lift (from bottom of ID unit)		mm	1000	1000	1000	1000	1000
Dry contact (ON / OFF)			✓	✓	✓	✓	✓
Alarm contact			-	-	-	-	-
Fresh air inlet			✓	✓	✓	✓	✓
<b>STANDARD ACCESSORIES</b>							
Standard health filter			-	-	-	-	-
Remote controller (IR)			YAP1F6	YAP1F6	YAP1F6	YAP1F6	YAP1F6
Wired controller			XK117	XK117	XK117	XK117	XK117
<b>OPTIONAL ACCESSORIES</b>							
Optional health filters			-	-	-	-	-
Wired controller with weekly timer			SWC-03, SWC-03U	SWC-03, SWC-03U	SWC-03, SWC-03U	SWC-03, SWC-03U	SWC-03, SWC-03U
Central controller			SCC-36	SCC-36	SCC-36	SCC-36	SCC-36
MODBUS gateway			SMG-01	SMG-01	SMG-01	SMG-01	SMG-01
BACNET gateway			SBG-01	SBG-01	SBG-01	SBG-01	SBG-01
Dry contact gateway			SDG-01	SDG-01	SDG-01	SDG-01	SDG-01

The specification of products is subject to change based on further development of the units by the producer and can be changed without prior notice. Refer to rating label.

R32 (single component refrigerant HFC), GWP of refrigerant used: 675.

Contains fluorinated greenhouse gases covered by the Kyoto Protocol.

Explanatory notes on the very last page of the catalogue.

It is necessary to combine with an appropriate outdoor unit from UNI SPLIT series (ASGE-xxBI, ASGE-xxBI-3).

## DUCT INDOOR UNITS

# UNI SPLIT SERIES

MODEL			ASD-36BI / ASGE-36BI-3	ASD-42BI / ASGE-42BI-3	ASD-48BI / ASGE-48BI-3	ASD-60BI / ASGE-60BI-3	
Capacity cooling / heating 1)	Nominal	kW	10,0 (1,2-10,6) / 12,0 (2,5-12,4)	12,1 (1,6-12,7) / 13,5 (3,0-14,0)	13,4 (1,6-14,1) / 15,5 (3,4-16,0)	16,0 (2,0-16,8) / 17,0 (3,7-17,6)	
Power supply		Hz / V	1~ / 50 / 220-240	1~ / 50 / 220-240	1~ / 50 / 220-240	1~ / 50 / 220-240	
Energy class cooling 3)			A++	A+	A+	A++	
Pdesign cooling		kW	10,0	-	-	-	
SEER			6,1	5,8	5,4	6,1	
Annual power consumption		kWh / annum	577	-	-	-	
Energy class heating 3)	Average climate		A+	A	A	A+	
Pdesign heating	Average climate	kW	9,0	-	-	-	
SCOP	Average climate		4,0	3,8	3,7	4,0	
Annual power consumption	Average climate	kWh / annum	3218	-	-	-	
Air flow of ID	H	m <sup>3</sup> / h	1800	2000	2200	2400	
Sound pressure of ID at 1,4m 4)	SH/H/M/L	dB(A)	46/44/42/40	42/40/39/37	43/41/40/38	44/41/39/38	
Sound power of ID 4)	H	dB(A)	65	66	65	66	
External static pressure	nom / min-max	Pa	37 (0-100)	50 (0-150)	50 (0-150)	50 (0-200)	
Refrigerant type		Type	R32	R32	R32	R32	
Pipe diameter - liquid side 5)		inch / mm	3/8 / 9,5	3/8 / 9,5	3/8 / 9,5	3/8 / 9,5	
Pipe diameter - gas side 5)		inch / mm	3/8 / 15,9	3/8 / 15,9	3/8 / 15,9	3/8 / 15,9	
Dimension of ID	w × h × d	mm	1000 × 300 × 700	1400 × 300 × 700	1400 × 300 × 700	1400 × 300 × 700	
Package dimension of ID	w × h × d	mm	1205 × 360 × 813	1601 × 365 × 813	1601 × 365 × 813	1678 × 365 × 808	
Weight of ID	netto / brutto	kg	41,0 / 47,0	50,0 / 56,0	50,0 / 56,0	57,0 / 64,0	
Set temperature range		°C	16~30	16~30	16~30	16~30	
<b>ADDITIONAL TECHNICAL INFORMATION</b>							
Screw holes distance	w × d	mm	1040 × 500	1440 × 500	1440 × 500	1440 × 500	
Communication cable		mm <sup>2</sup>	2 × 0,75	2 × 0,75	2 × 0,75	2 × 0,75	
Recommended power cable		mm <sup>2</sup>	3 × 1,5	3 × 1,5	3 × 1,5	3 × 1,5	
Recommended air switch		A	6	6	6	6	
<b>EQUIPMENT</b>							
Plasma generator			-	-	-	-	
WiFi module			optional (SWM-03)				
Drain pump			✓	✓	✓	✓	
Max. lift (from bottom of ID unit)		mm	1000	1000	1000	1000	
Dry contact (ON / OFF)			✓	✓	✓	✓	
Alarm contact			-	-	-	-	
Fresh air inlet			✓	✓	✓	✓	
<b>STANDARD ACCESSORIES</b>							
Standard health filter			-	-	-	-	
Remote controller (IR)			YAP1F6	YAP1F6	YAP1F6	YAP1F6	
Wired controller			XK117	XK117	XK117	XK117	
<b>OPTIONAL ACCESSORIES</b>							
Optional health filters			-	-	-	-	
Wired controller with weekly timer			SWC-03, SWC-03U	SWC-03, SWC-03U	SWC-03, SWC-03U	SWC-03, SWC-03U	
Central controller			SCC-36	SCC-36	SCC-36	SCC-36	
MODBUS gateway			SMG-01	SMG-01	SMG-01	SMG-01	
BACNET gateway			SBG-01	SBG-01	SBG-01	SBG-01	
Dry contact gateway			SDG-01	SDG-01	SDG-01	SDG-01	

The specification of products is subject to change based on further development of the units by the producer and can be changed without prior notice. Refer to rating label.

R32 (single component refrigerant HFC), GWP of refrigerant used: 675.

Contains fluorinated greenhouse gases covered by the Kyoto Protocol.

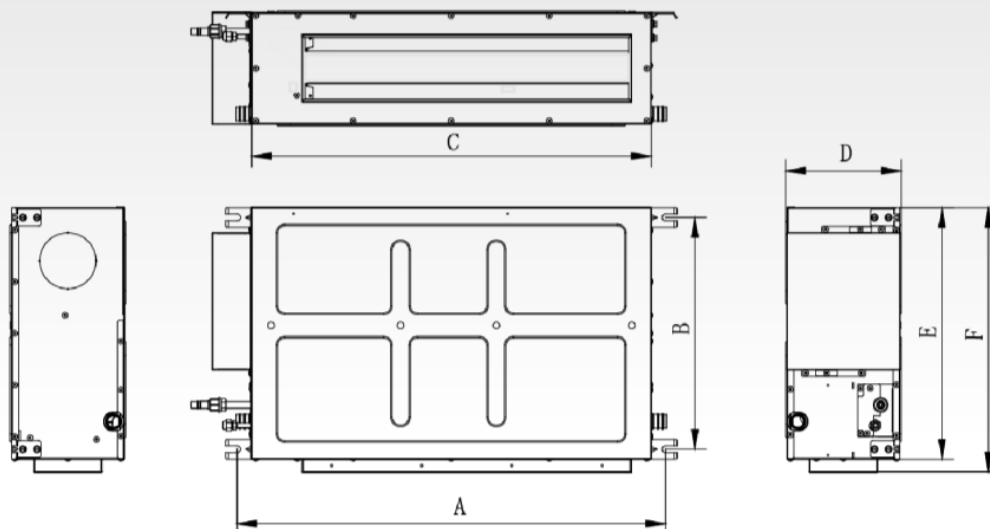
Explanatory notes on the very last page of the catalogue.

It is necessary to combine with an appropriate outdoor unit from UNI SPLIT series (ASGE-xxBI, ASGE-xxBI-3).



# APPEARANCE AND DIMENSIONS OF DUCT INDOOR UNITS

## UNI SPLIT SERIES

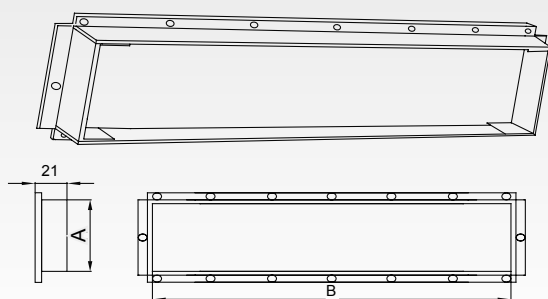


Dimensions Model	A	B	C	D	E	F
ASD-12BI	760	415	700	200	450	474
ASD-18BI	1060	415	1000	200	450	474
ASD-24BI	1360	415	1300	220	450	474
ASD-30BI						
ASD-36BI	1040	500	1000	300	700	754
ASD-42BI	1440	500	1400	300	700	754
ASD-48BI						
ASD-60BI						

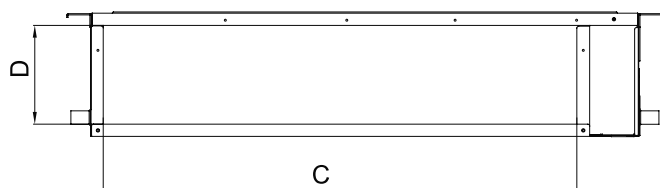
# DIMENSIONS OF AIR INLET AND OUTLET

## UNI SPLIT SERIES

Air outlet



Air inlet



Dimensions	Air outlet		Air inlet	
	A	B	C	D
ASD-12BI	122	585	700	200
ASD-18BI	122	885	1000	200
ASD-24BI	142	1185	1300	220
ASD-30BI				
ASD-36BI	195	746	960	264
ASD-42BI	195	1150	1360	264
ASD-48BI				
ASD-60BI				

WALL MOUNTED INDOOR UNITS

**UNI SPLIT SERIES**

MODEL			ASH-24BIH	ASH-36BIH		
Capacity cooling / heating 1)	Nominal	kW	7,0 (0,7-7,4) / 8,0 (1,8-8,3)	10,0 (1,2-10,5) / 12,0 (2,5-12,4)		
Power supply		Hz / V	1~ / 50 / 220-240	1~ / 50 / 220-240		
Energy class cooling 3)			A++	A++		
Pdesign cooling		kW	7,0	10,0		
SEER			7,2	6,1		
Annual power consumption		kWh / annum	359	573		
Energy class heating 3)	Average climate		A+	A+		
Pdesign heating	Average climate	kW	6,4	9,0		
SCOP	Average climate		4,0	4,0		
Annual power consumption	Average climate	kWh / annum	2295	3149		
Air flow of ID	H	m <sup>3</sup> / h	1300	1600		
Sound pressure of ID at 1m 4)	SH/H/M/L	dB(A)	45/43/40	52/46/43		
Sound power of ID 4)	H	dB(A)	51	57		
Refrigerant type		Type	R32	R32		
Pipe diameter - liquid side 5)		inch / mm	3/8 / 9,5	3/8 / 9,5		
Pipe diameter - gas side 5)		inch / mm	1/2 / 15,9	1/2 / 15,9		
Dimension of ID	w x h x d	mm	1078 x 325 x 246	1350 x 326 x 253		
Package dimension of ID	w x h x d	mm	1127 x 403 x 344	1441 x 421 x 367		
Weight of ID	netto / brutto	kg	15,0 / 18,0	18,0 / 23,0		
Set temperature range		°C	16-30	16-30		
<b>ADDITIONAL TECHNICAL INFORMATION</b>						
Screw holes distance of OD	w x d	mm	1142 x 318			
Communication cable		mm <sup>2</sup>	2 x 0,75			
Recommended power cable		mm <sup>2</sup>	3 x 1,5	3 x 1,5		
Recommended air switch		A	6	6		
<b>EQUIPMENT</b>						
Plasma generator			✓	✓		
WiFi module			✓	✓		
Drain pump			-	-		
Max. lift (from bottom of ID unit)		mm	-	-		
Door contact (SCC-36K connector)			✓	✓		
Alarm contact			-	-		
Fresh air inlet			-	-		
<b>STANDARD ACCESSORIES</b>						
Standard health filter			-	-		
Remote controller (IR)			YAN1F6 (WiFi)	YAN1F6 (WiFi)		
Wired controller			-	-		
<b>OPTIONAL ACCESSORIES</b>						
Optional health filters			SAF-OPWB4, SAF-OPWK4, SAF-OPWM4, SAF-OPWP4, SAF-OPWS4			
Wired controller			XK117, SWC-03, SWC-03U	XK117, SWC-03, SWC-03U		
Central controller			SCC-36	SCC-36		
MODBUS gateway			SMG-01	SMG-01		
BACNET gateway			SBG-01	SBG-01		
Dry contact gateway			SDG-01	SDG-01		

The specification of products is subject to change based on further development of the units by the producer and can be changed without prior notice. Refer to rating label.

R32 (single component refrigerant HFC), GWP of refrigerant used: 675.

Contains fluorinated greenhouse gases covered by the Kyoto Protocol.

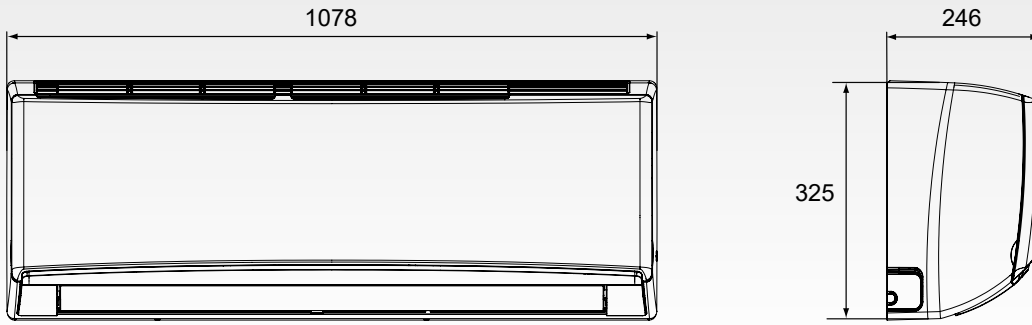
Explanatory notes on the very last page of the catalogue.

It is necessary to combine with an appropriate outdoor unit from UNI SPLIT series (ASGE-xxBI, ASGE-xxBI-3).

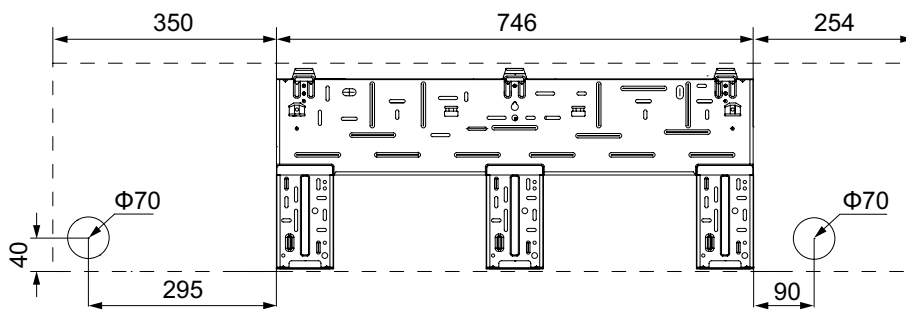
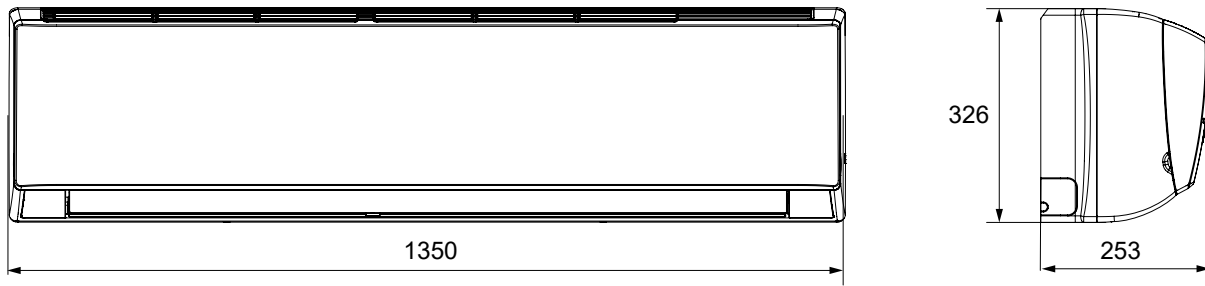
APPEARANCE AND DIMENSIONS OF INDOOR UNIT

**UNI SPLIT SERIES**

ASH-24BIH



ASH-36BIH



SPLIT AIR CONDITIONER

**HIGH STATIC PRESSURE DUCT UNIT**

MODEL		ASDH-96AI				
Capacity cooling / heating 1)	Nominal (min-max)	kW	28,0 / 31,5			
Power supply ID		Hz / V	1~ / 50 / 220-240			
Power supply OD			3~ / 50 / 380-415			
Power input cooling / heating 1)		W	9000 / 8500			
Maximal power input 2)		W	11700			
Nominal current cooling / heating of ID		A	4,5			
Nominal power current of OD 2)		A	16,0			
EER / COP			3,1 / 3,7			
Air flow of ID	H/M/L	m³ / h	4800/4100/3000			
Airflow of OD	H	m³ / h	9800			
Sound pressure of ID 4)	min-max	dB(A)	49-52			
Sound pressure of OD 4)	H	dB(A)	59			
External static pressure		Pa	0-150			
Refrigerant type / charge		Type / kg / t eq. CO <sub>2</sub>	R410A / 7,2 / 15,03			
Additional refrigerant		g / m	30			
Pipe diameter - liquid side 5)		inch / mm	3/8 / 9,5			
Pipe diameter - gas side 5)		inch / mm	1 / 25,4			
Max pipe length without additional refrigerant 6)		m	5			
Maximal allowed pipe length 7)		m	50			
Max. elevation / Drop height*		m	25 / 30			
Dimension of ID	w × h × d	mm	1470 × 512 × 775			
Dimensions of outdoor unit	w × h × d	mm	1120 × 1558 × 528			
Package dimension of ID	w × h × d	mm	1555 × 545 × 875			
Package dimensions of outdoor unit	w × h × d	mm	1270 × 1720 × 565			
Weight of ID	netto / brutto	kg	83,0 / 92,0			
Weight of OD	netto / brutto	kg	147,0 / 163,0			
Set temperature range		°C	17-30			
Operating temperature range 8)	cooling	°C	-15-48			
	heating	°C	-15-24			
<b>ADDITIONAL TECHNICAL INFORMATION</b>						
Screw holes distance of OD	w (w2) × d	mm	668 (874) × 494			
Communication cable		mm²	3 × 0,75			
Recommended power cable	indoor	mm²	3 × 2,5			
	outdoor	mm²	5 × 6,0			
Recommended air switch	indoor	A	C16			
	outdoor	A	C40			
<b>EQUIPMENT</b>						
Plasma generator	indoor		-			
WiFi module			-			
Drain pump			-			
Max. lift (from bottom of ID unit)		mm	-			
Dry contact (ON / OFF)				✓		
Alarm contact				✓		
Fresh air inlet	outdoor		-			
Throttling method			EXV			
Bottom chassis heater			-			
Crankcase heater				✓		
Bottom plugs for OD				✓		
Drain pipe connector				✓		
<b>STANDARD ACCESSORIES</b>						
Standard health filter			-			
Remote controller (IR)			-			
Wired controller			KJR-29B1/BK-E			
<b>OPTIONAL ACCESSORIES</b>						
Optional health filters			-			
Wired controller			-			
Central controller			CCM30			

\* Outdoor unit above indoor unit / Outdoor unit below indoor unit

The specification of products is subject to change based on further development of the units by the producer and can be changed without prior notice. Refer to rating label.

R410A (50% HFC-32, 50% HFC-125), GWP 2088

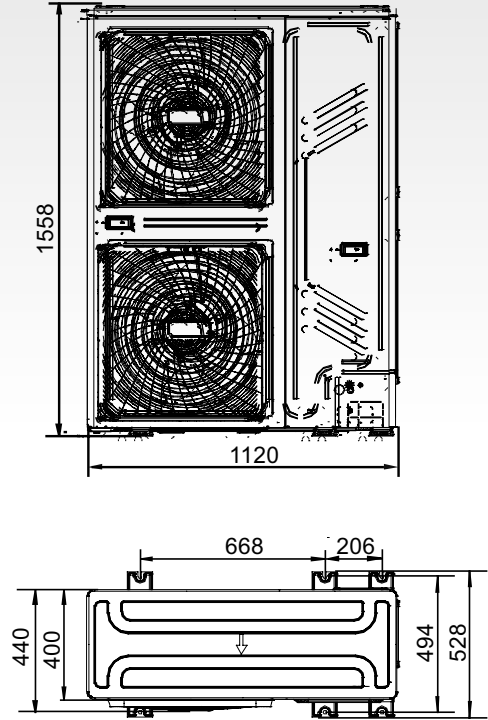
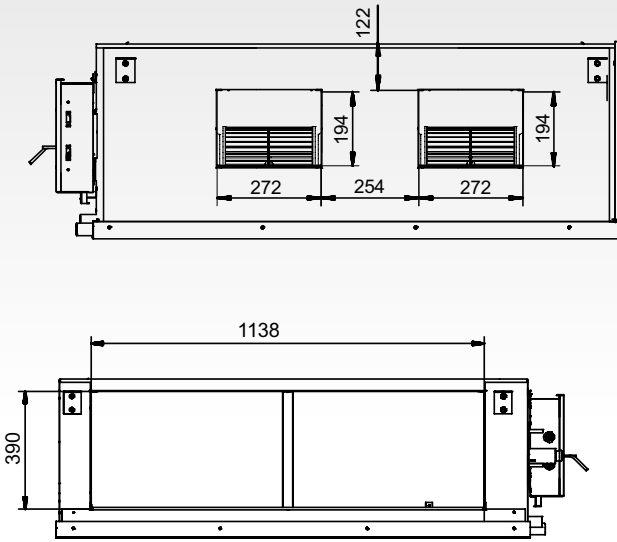
Contains fluorinated greenhouse gases covered by the Kyoto Protocol.

Explanatory notes on the very last page of the catalogue.

The device is being sold as a set (indoor + outdoor unit).

APPEARANCE AND DIMENSIONS OF UNITS

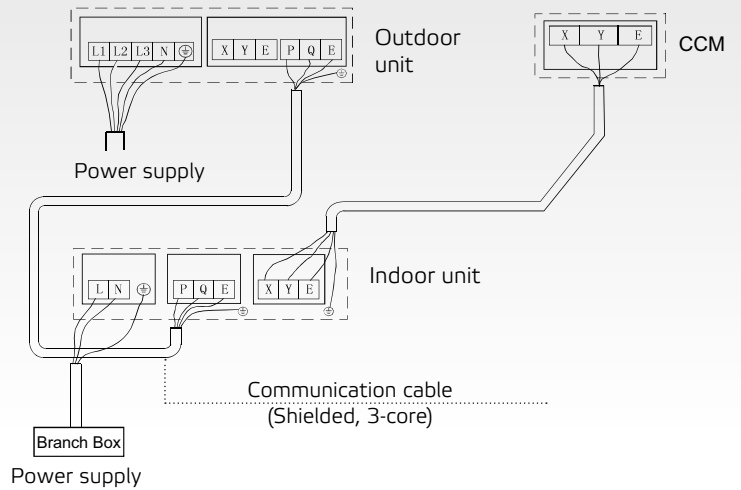
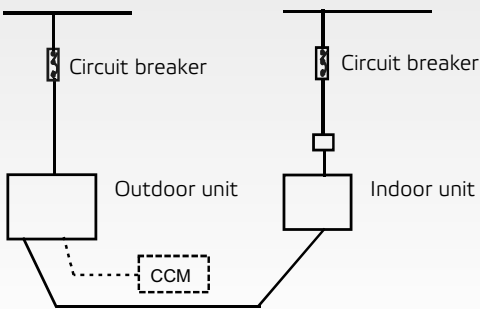
**HIGH STATIC PRESSURE DUCT UNIT**



units: mm

ELECTRICAL WIRING DIAGRAM

POWER SUPPLY 380-415V ~50HZ

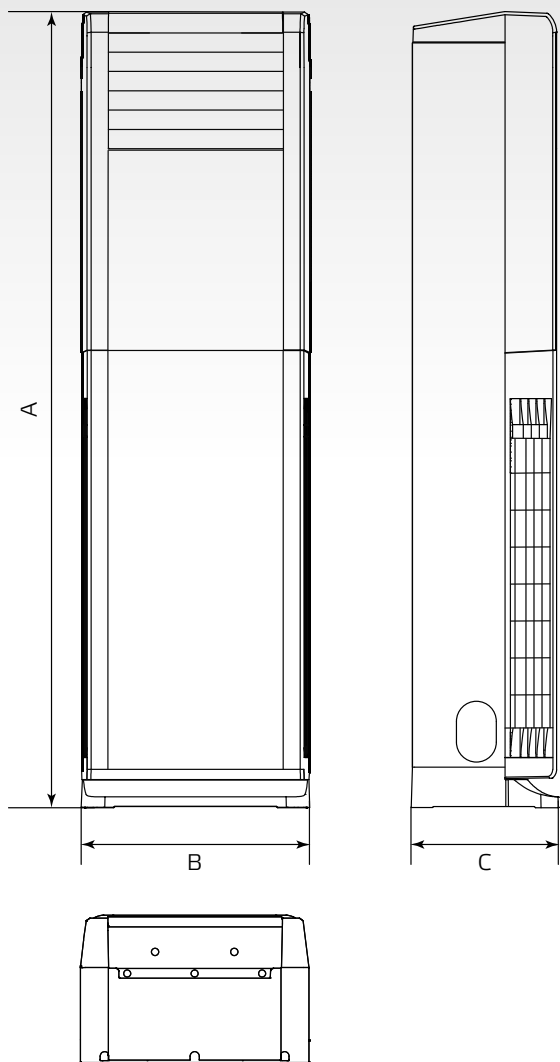


SPLIT AIR CONDITIONER

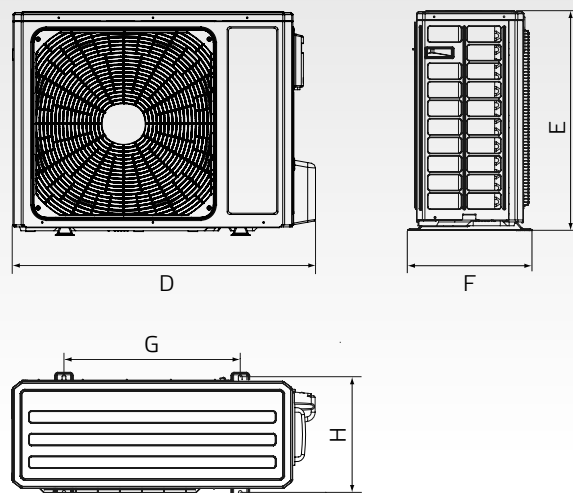
**TOWER SERIES**

MODEL			AST-24BI	AST-48BI			
Capacity cooling / heating 1)	Nominal (min-max)	kW	7,2 / 7,9	12,5 / 13,5			
Power supply 11)	Frequency / Voltage	Hz / V	1~ / 50 / 220-240	1~ / 50 / 220-240			
Application area		m <sup>2</sup>	27-42	55-85			
Power input cooling / heating 1)		W	2050 / 2330	4200 / 4200			
Maximal power input 2)		W	3900	5400			
Power current cooling / heating		A	10,0 / 11,0	19,0 / 19,0			
Maximal power current 2)		A	18	22			
Energy class cooling 3)			A++	A+			
Pdesign cooling		kW	7,2	12,5			
SEER			6,1	5,6			
Annual power consumption		kWh / annum	413	781			
Energy class heating 3)	Average climate		A+	A			
Pdesign heating	Average climate	kW	6,1	9			
SCOP	Average climate		4,0	3,7			
Annual power consumption	Average climate	kWh / annum	2135	3405			
Air flow of ID	SH/H/M/L	m <sup>3</sup> / h	1250/950/850/750	2000/1850/1700/1580			
Air flow of OD	H	m <sup>3</sup> / h	3200	6000			
Sound pressure of ID 4)	SH/H/M/L	dB(A)	45/41/38/35	53/51/50/48			
Sound pressure of OD 4)	H	dB(A)	61	64			
Sound power of ID 4)	SH/H/M/L	dB(A)	60/51/48/45	66			
Sound power of OD 4)	H	dB(A)	70	74			
Dehumidifying volume		l / h	2,0	5,0			
Refrigerant type / charge	Type / kg / t eq. CO <sub>2</sub>		R32 / 1,6 / 1,08	R32 / 2,6 / 1,75			
Additional refrigerant		g / m	40	40			
Pipe diameter - liquid side 5)		inch / mm	¼ / 6,4	¾ / 19,5			
Pipe diameter - gas side 5)		inch / mm	¾ / 15,9	¾ / 15,9			
Max pipe length without additional refrigerant 6)		m	5	5			
Maximal allowed pipe length 7)		m	25	30			
Max. elevation / Drop height		m	10	20			
Dimension of ID	w × h × d	mm	507 × 1770 × 320	587 × 1882 × 394			
Dimensions of outdoor unit	w × h × d	mm	965 × 700 × 396	1028 × 822 × 530			
Package dimension of ID	w × h × d	mm	1988 × 623 × 440	2153 × 738 × 545			
Package dimensions of outdoor unit	w × h × d	mm	1029 × 458 × 750	1083 × 573 × 973			
Weight of ID	netto / brutto	kg	38,0 / 50,0	55,0 / 77,5			
Weight of OD	netto / brutto	kg	53,5 / 58,0	89,0 / 100,0			
Set temperature range		°C	16-30	16-30			
Operating temperature range 8)	cooling	°C	-15-43	-15-43			
	heating	°C	-15-24	-15-24			
<b>ADDITIONAL TECHNICAL INFORMATION</b>							
Screw holes distance of OD	w × d	mm	560 × 364	610 × 490			
Communication cable		mm <sup>2</sup>	4 × 1,5	4 × 1,5			
Recommended power cable		mm <sup>2</sup>	3 × 4,0	3 × 4,0			
Recommended air switch		A	20	25			
<b>EQUIPMENT</b>							
Plasma generator	indoor		-	-			
WiFi module			✓	✓			
Drain pump			-	-			
Max. lift (from bottom of ID unit)		mm		-	-		
Dry contact (ON / OFF)				-	-		
Alarm contact				-	-		
Fresh air inlet	outdoor		-	-			
Throttling method			EXV	EXV			
Bottom chassis heater			-	-			
Crankcase heater			-	-			
Bottom plugs for OD				✓	✓		
Drain pipe connector				✓	✓		
<b>STANDARD ACCESSORIES</b>							
Standard health filter			-	-			
Remote controller (IR)			YAP1F4 (WiFi)	YAP1F4 (WiFi)			
Wired controller			-	-			
<b>OPTIONAL ACCESSORIES</b>							
Optional health filters			-	-			
Wired controller			-	-			
Central controller			-	-			

APPEARANCE AND DIMENSIONS OF UNIT



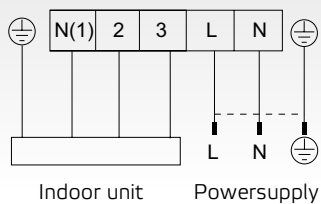
APPEARANCE AND DIMENSIONS OF OUTDOOR UNIT



	A	B	C	D	E	F	G	H
AST-24BI	1770	507	320	965	700	396	560	364
AST-48BI	1882	587	394	1028	822	530	610	490

units: mm

ELECTRICAL WIRING DIAGRAM



# WINDOW MONOBLOCK AIR CONDITIONERS

## WINDOW SERIES

MODEL			ASW-09BI	ASW-12BI		
Cooling capacity 1)	Nominal	kW	2,7	3,7		
Power supply	Frequency / Voltage	Hz / V	1~ / 50 / 220-240	1~ / 50 / 220-240		
Application area		m <sup>2</sup>	12-18	16-24		
Power input cooling 1)		W	782	1030		
Maximal power input 2)		W	1100	1300		
Power current cooling		A	3,5	4,6		
Maximal power current 2)		A	5,5	6,5		
SEER			5,2	5,4		
Energy class cooling			A	A		
Air flow of ID	H/M/L	m <sup>3</sup> / h	400/350/310	480/430/380		
Airflow of OD	H	m <sup>3</sup> / h	800	1200		
Sound pressure of ID 4)	H/M/L	dB(A)	50/48/46	50/48/46		
Sound pressure of OD 4)	H	dB(A)	56/54/52	58/56/54		
Sound power of ID 4)	H/M/L	dB(A)	59/57/55	59/57/55		
Sound power of OD 4)	H	dB(A)	65/63/61	65/63/61		
Dehumidifying volume		l / h	1,0	1,6		
Refrigerant type / charge		Type / kg / t eq. CO <sub>2</sub>	R32 / 0,51 / 0,34	R32 / 0,63 / 0,43		
Dimension	w × h × d	mm	560 × 375 × 708	660 × 428 × 700		
Package dimension	w × h × d	mm	623 × 425 × 806	739 × 505 × 793		
Weight	netto / brutto	kg	43,0 / 47,0	50,0 / 54,0		
Set temperature range		°C	16-30	16-30		
Operating temperature range cooling 8)		°C	16-43	16-43		
<b>STANDARD ACCESSORIES</b>						
Standard health filter			-	-		
Remote controller (IR)			YX1F	YX1F		
Wired controller			-	-		
<b>OPTIONAL ACCESSORIES</b>						
Optional health filters			-	-		
Wired controller			-	-		
Central controller			-	-		

The specification of products is subject to change based on further development of the units by the producer and can be changed without prior notice. Refer to rating label.

R32 (single component refrigerant HFC), GWP of refrigerant used: 675.

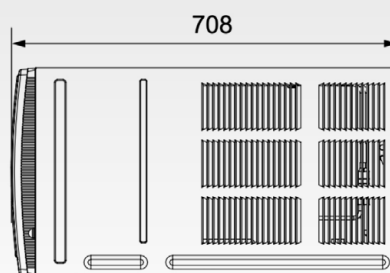
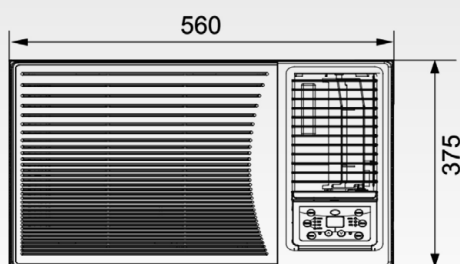
Contains fluorinated greenhouse gases covered by the Kyoto Protocol.

Hermetically sealed system.

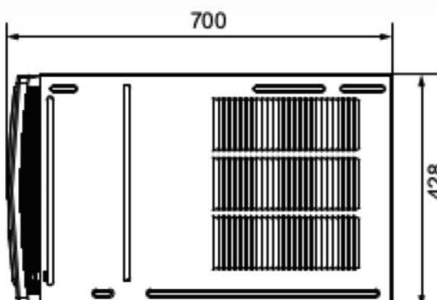
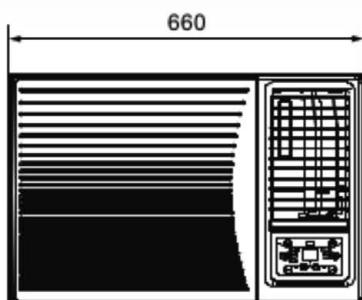
Explanatory notes on the very last page of the catalogue.

## APPEARANCE AND DIMENSIONS OF UNITS

ASW-09BI



ASW-12BI



units: mm



## MONOBLOCK AIR CONDITIONERS

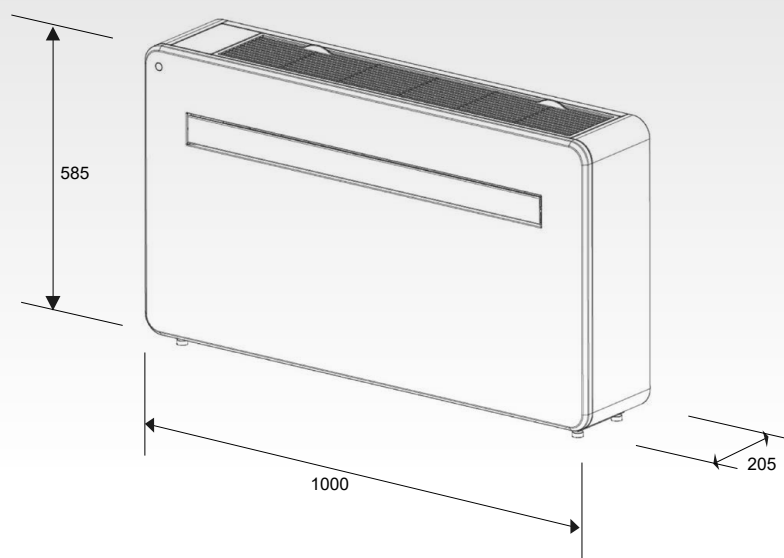
### MONOBLOCK SERIES

MODEL		ASM-12PI					
Capacity cooling / heating 1)	Nominal	kW	3,5 / 2,9				
Power supply	Frequency / Voltage	Hz / V	1~ / 50 / 220-240				
Application area		m <sup>2</sup>	25-30				
Power input cooling / heating 1)		W	1350 / 815				
Power current cooling / heating		A	6,0 / 4,0				
EER / COP			2,6 / 3,1				
Energy class cooling / heating			A / A+				
Air flow of ID		m <sup>3</sup> / h	520				
Sound pressure level - INDOOR 4)	H/M/L/SL	dB(A)	47/46/43/39				
Sound pressure level - OUTDOOR 4)	max.	dB(A)	55				
Dehumidifying volume		l / h	1,2				
Refrigerant type / charge		Type / kg / t eq. CO <sub>2</sub>	R290 / 0,29 / -				
Dimension	w × h × d	mm	1000 × 585 × 205				
Package dimension	w × h × d	mm	1120 × 665 × 335				
Weight	netto / brutto	kg	43,5 / 49,5				
Set temperature range		°C	16-30				
Operating temperature range cooling		°C	-5-43				
Operating temperature range heating		°C	-7-43				
<b>STANDARD ACCESSORIES</b>							
Standard health filter			-				
Remote controller (IR)			✓				
Wired controller			-				
WiFi module			✓				
<b>OPTIONAL ACCESSORIES</b>							
Optional health filters			-				
Wired controller			-				
Central controller			-				

The specification of products is subject to change based on further development of the units by the producer and can be changed without prior notice. Refer to rating label.  
R290 (100% CH<sub>3</sub>CH<sub>2</sub>CH<sub>3</sub>), GWP of refrigerant used: 3  
Hermetically sealed system. Explanatory notes on the very last page of the catalogue.

## APPEARANCE AND DIMENSIONS OF UNIT

ASM-12PI



VEHICLE AIR CONDITIONERS

**CAMPER TRAILER AIR CONDITIONER**

MODEL			ASV-25BS	ASV-35BS		
Capacity cooling / heating 1)	Nominal	kW	2,6 / 2,4	3,6 / 3,4		
Power supply	Frequency/Voltage	Hz / V	1~ / 50 / 220-240	1~ / 50 / 220-240		
Power input cooling / heating 1)		W	1160 / 1000	1270 / 1170		
Maximal power input 2)		W	1600	1600		
Power current cooling / heating		A	4,7 / 4,2	4,7 / 4,2		
Maximal power current 2)		A	6,6	6,6		
EER / COP		-	2,3 / 2,2	2,8 / 2,7		
Airflow of ID	SH/H/ML	m³ / h	330/250/200	350/270/220		
Airflow of OD	H/L	m³ / h	600	600		
Sound pressure of ID 4)	SH/H/ML	dB(A)	53/47/42	54/48/43		
Sound pressure of OD 4)	H/L	dB(A)	53	54		
Sound power of ID 4)	SH/H/ML	dB(A)	63/58/53/48	65/59/54/49		
Sound power of OD 4)	H/L	dB(A)	75 / 65	75 / 65		
Dehumidifying volume		l / h	1,0	1,0		
IP protection		-	IPX4	IPX4		
Roof mounting hole		mm	400 × 400	400 × 400		
Roof thickness		mm	30-80	30-80		
Refrigerant type / charge		Type / kg / t eq. CO <sub>2</sub>	R32 / 0,47 / 0,32	R32 / 0,47 / 0,32		
Dimension of ID	w × h × d	mm	485 × 49 × 610	485 × 49 × 610		
Dimension of OD	w × h × d	mm	720 × 283 × 1077	720 × 283 × 1077		
Package dimension of ID	w × h × d	mm	547 × 109 × 668	547 × 109 × 668		
Package dimension of OD	w × h × d	mm	783 × 322 × 1146	783 × 322 × 1146		
Weight of ID	net / gross	kg	2,7 / 4,0	2,7 / 4,0		
Weight of OD	net / gross	kg	35,0 / 44,0	35,0 / 44,0		
Set temperature range		°C	16-30	16-30		
Operating temperature range 8)	cooling	°C	18-46	18-46		
	heating	°C	-5-24	-5-24		

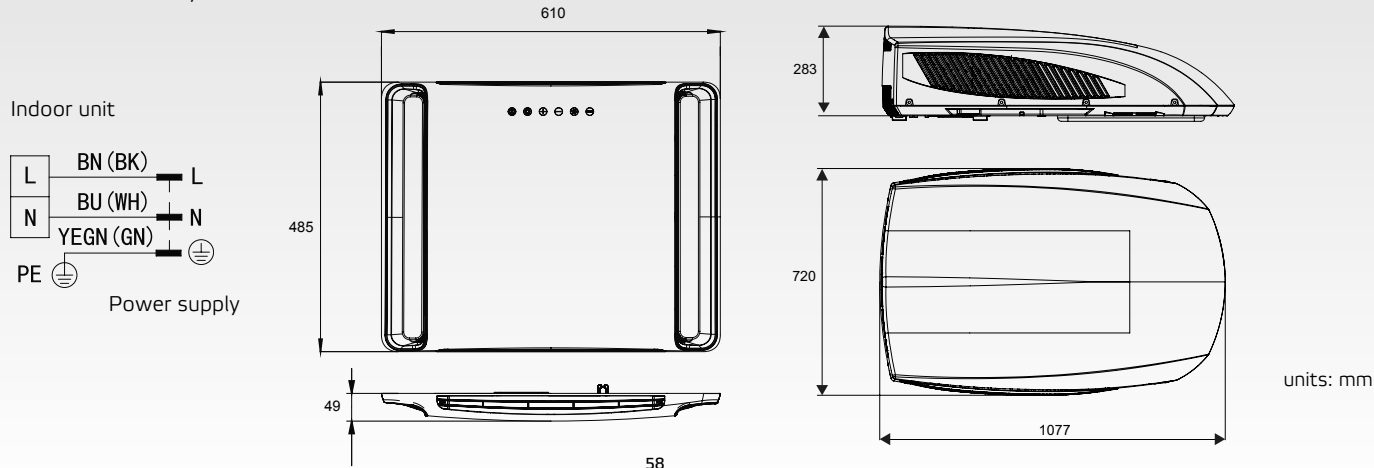
EQUIPMENT						
Plasma generator	indoor		-	-		
WiFi module			✓	✓		
Drain pump			-	-		
Max. lift (from bottom of ID unit)		mm	-	-		
LED light	outdoor		✓	✓		
Dry contact (ON / OFF)			-	-		
Alarm contact			-	-		
Fresh air inlet			-	-		
Throttling method			Capillary	Capillary		
Bottom chassis heater			-	-		
Crankcase heater			-	-		
Bottom plugs for OD			-	-		
Drain pipe connector			-	-		

STANDARD ACCESSORIES						
Standard health filter			-	-		
Remote controller (IR)			YAM1F1	YAM1F1		
Wired controller			-	-		
Plastic adapter (400x400mm)			✓	✓		

OPTIONAL ACCESSORIES						
Optional health filters			-	-		
Wired controller			-	-		

The specification of products is subject to change based on further development of the units by the producer and can be changed without prior notice. Refer to rating label. R32 (single component refrigerant HFC), GWP of refrigerant used: 675. Contains fluorinated greenhouse gases covered by the Kyoto Protocol. Hermetically sealed system. Explanatory notes on the very last page of the catalogue.

POWER SUPPLY, APPEARANCE AND DIMENSIONS OF UNITS



# WATER-TO-AIR HEAT PUMP

## BOAT SERIES

MODEL			ASB-05A	ASB-09A	ASB-12A	ASB-16A	ASB-24A
Capacity cooling / heating 12)	Nominal (min-max)	kW	1,1 / 1,4	2,1 / 2,2	3,1 / 3,2	3,2 / 4,0	6,4 / 6,7
Power supply		Hz / V	1~ / 50 / 220-240	1~ / 50 / 220-240	1~ / 50 / 220-240	1~ / 50 / 220-240	1~ / 50 / 220-240
Power input cooling / heating 1)	Frequency / Voltage	W	560 / 530	900 / 880	1100 / 1100	1200 / 1300	1450 / 1750
Maximal power input 2)		W	800 / 750	1350 / 1100	1600 / 1700	1650 / 1650	2400 / 2700
Power current cooling / heating		A	3,5 / 3,4	4,9 / 4,8	6,1 / 6,0	6,0 / 6,1	6,8 / 8,2
Maximal power current 2)		A	6,2 / 6,1	7,3 / 7,0	9,0 / 9,0	8,2 / 8,6	11,5 / 11,8
EER / COP			1,96 / 2,64	2,33 / 2,50	2,82 / 2,91	2,67 / 3,08	4,41 / 3,80
Air flow of ID	H	m <sup>3</sup> / h	320	450	466	590	951
Sound pressure of ID 4)	H	dB(A)	58	58	58	62	60
Sound power of ID 4)	H	dB(A)	68	68	68	72	70
Refrigerant type / charge		Type / kg / t ekv.CO <sub>2</sub>	R410A / 0,32 / 0,67	R410A / 0,34 / 0,71	R410A / 0,53 / 1,11	R410A / 0,46 / 0,96	R410A / 0,95 / 1,98
Dimension of ID	w × h × d	mm	285 × 408 × 295	380 × 408 × 310	380 × 420 × 330	450 × 465 × 330	595 × 529 × 386
Package dimension of ID	w × h × d	mm	594 × 493 × 360	683 × 513 × 360	608 × 533 × 395	663 × 558 × 395	853 × 638 × 440
Weight of ID	netto / brutto	kg	25,5 / 30,0	28,0 / 33,0	33,0 / 38,0	37,5 / 43,5	60,5 / 68,0
Set temperature range		°C	16-30	16-30	16-30	16-30	16-30
Operating temperature range cooling 8)		°C	16-43	16-43	16-43	16-43	16-43
Operating temperature range heating 8)		°C	-10-30	-10-30	-10-30	-10-30	-10-30
Operating temperature range cooling 8)	water	°C	10-35	10-35	10-35	10-35	10-35
Operating temperature range heating 8)	water	°C	4-25	4-25	4-25	4-25	4-25
<b>STANDARD ACCESSORIES</b>							
Standard health filter					-		
Remote controller (IR)					YX1F		
Wired controller					✓		

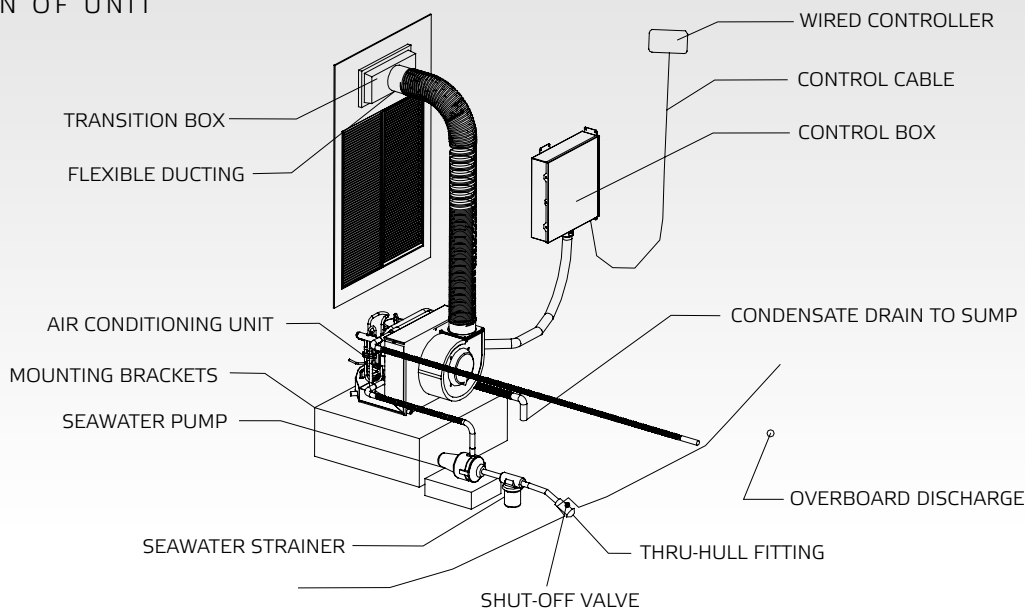
The specification of products is subject to change based on further development of the units by the producer and can be changed without prior notice. Refer to rating label.

R410A (50% HFC-32, 50% HFC-125), GWP 2088

Contains fluorinated greenhouse gases covered by the Kyoto Protocol.

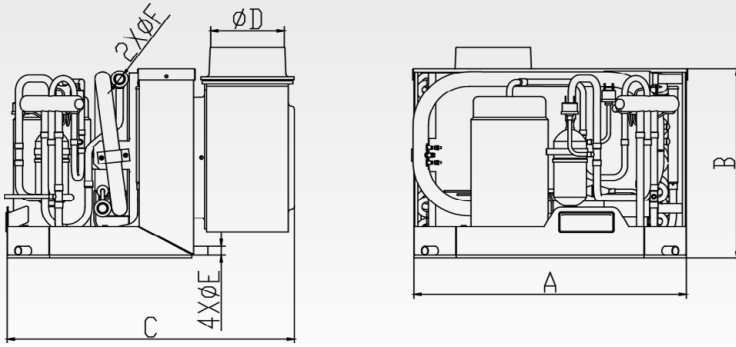
Explanatory notes on the very last page of the catalogue.

### INSTALLATION OF UNIT



# APPEARANCE, DIMENSIONS AND WIRING OF UNITS

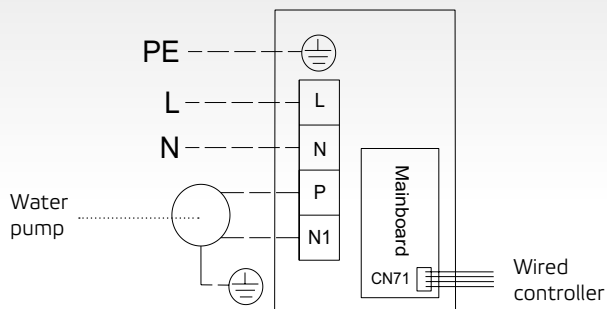
## BOAT SERIES



units: mm

	A	B	C	D	E	F
ASB-05A	285	295	408	91,5	16	19
ASB-09A	380	310	408	91,5	16	19
ASB-12A	380	330	420	119,4	16	19
ASB-16A	450	330	465	119,4	16	19
ASB-24A	529	386	595	119,4	16	19

## ELECTRICAL WIRING DIAGRAM



## PACKAGE CONTENTS

	Package Include
Wired Controller	✓
Remote Controller	✓
Communication Cable of Wired Controller (8 m)	✓
Power Supply Wire	-
Inlet / Outlet water pipe	-
Fixed board	-
Condensing drain pipe	-
Flexible Ducting	-
Air Diffuser	-
Air Return Grill	-
Water pump	-
Filter	-

## LOCAL AIR CONDITIONERS

MODEL			AMC-11P	AMC-14P		
Capacity	Cooling	kW	3,0	4,0		
	Heating	kW	3,0	4,0		
Optimal room size		m <sup>2</sup>	15-25	25-35		
Power supply	Frequency / Voltage	Hz / V	1~ / 50 / 220-240	1~ / 50 / 220-240		
Rated current		A	5,2	6,5		
Power input	Cooling / Heating	W	1150 / 965	1535 / 1290		
EER / COP			2,6 / 3,1	2,6 / 3,1		
Energy class	Cooling / Heating		A / A++	A / A++		
Noise - indoor unit		dB(A)	56	56		
Air flow		m <sup>3</sup> / h	450	450		
Dehumidifying volume		l / h	2,1	2,9		
Refrigerant type / charge		Type / kg	R290 / 0,23	R290 / 0,27		
Dimension	w × h × d	mm	300 × 760 × 532	300 × 760 × 532		
Package dimension	w × h × d	mm	370 × 855 × 620	370 × 855 × 620		
Net / gross weight		kg	28,5 / 32,3	30,6 / 34,2		
Operating temperature	Cooling	°C	17-32	17-32		
	Heating	°C	7-25	7-25		

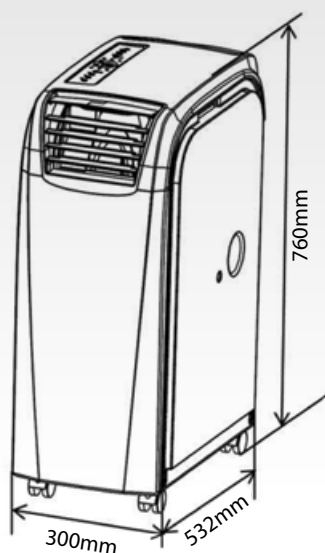
The specification of products is subject to change based on further development of the units by the producer and can be changed without prior notice. Refer to rating label.

R290 (100% CH<sub>3</sub>CH<sub>2</sub>CH<sub>3</sub>), GWP of refrigerant used: 3

Hermetically sealed system.

Explanatory notes on the very last page of the catalogue.

### APPEARANCE AND DIMENSIONS OF UNITS

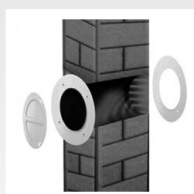


units: mm

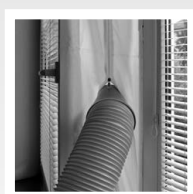
### ACCESSORIES



AMC-WINK  
WINDOW KIT  
(standard)



AMC-WK  
WALL KIT  
(optional)



WK-400A  
WINDOW KIT  
(optional)



AK-15A  
(optional)

# MOBILE DEHUMIDIFIERS

MODEL			CFO-16P	CFO-20P	CFO-40P		
Dehumidifying volume		l / day	16,0	20,0	40,0		
Power supply		Hz / V	1~ / 50 / 220-240	1~ / 50 / 220-240	1~ / 50 / 220-240		
Power input / Max. power input		W	220 / 245	360 / 450	670 / 900		
Rated current		A	1,1	2,1	4,0		
Sound pressure level		dB	41 / 38	43 / 41 / 39	48 / 45 / 42		
Air flow		m <sup>3</sup> / h	115 / 100	130 / 115 / 105	230 / 195 / 170		
Water tank volume		L	2,5	3,5	6,5		
Optimal room size		m <sup>2</sup>	20	28	48		
Refrigerant type / charge		Type / kg	R290 / 0,085	R290 / 0,11	R290 / 0,15		
Dimension	w × h × d	mm	305 × 490 × 192	363 × 577 × 245	396 × 625 × 286		
Package dimension	w × h × d	mm	345 × 540 × 230	428 × 602 × 311	448 × 338 × 638		
Net / gross weight		kg	10,5 / 11,5	15,5 / 17,0	22,5 / 24,5		
Operating temperature		°C	5-32	5-32	5-32		

R290 (100% CH<sub>3</sub>CH<sub>2</sub>CH<sub>3</sub>)

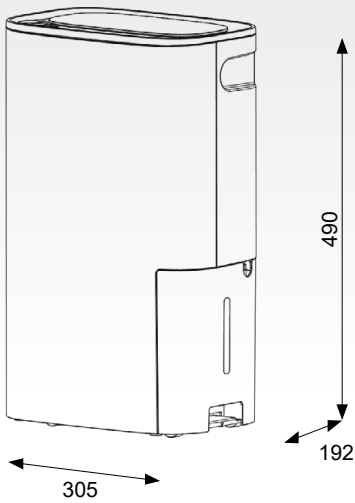
The values stated in the sheet are complying with norm EN810

Dehumidifying volume is measured according to EN60335-2-40, test conditions: DB 30%, RH 80%

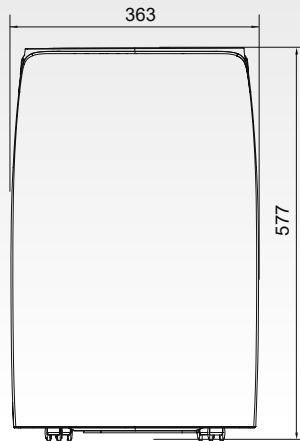
Hermetically sealed system.

## APPEARANCE AND DIMENSIONS OF UNITS

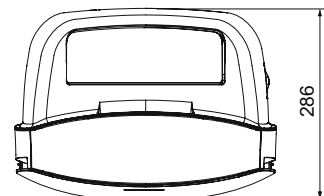
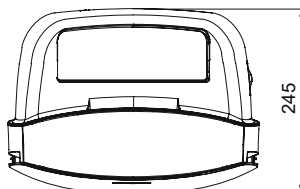
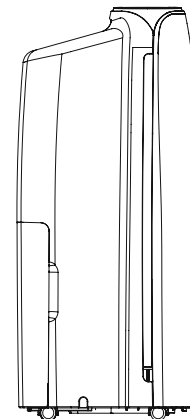
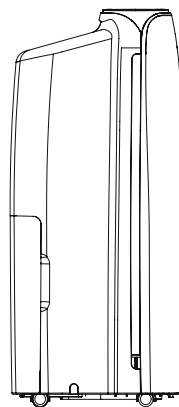
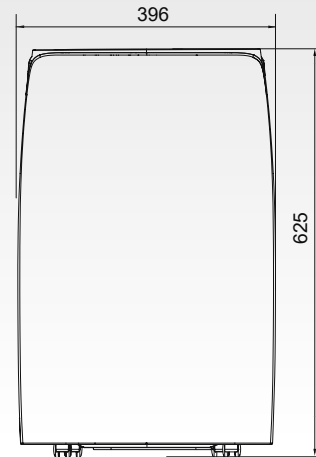
CFO-16P



CFO-20P



CFO-40P



units: mm

PORTABLE DEVICES

**AIR PURIFIER**

MODEL			SP-45A	SP-75UV			
Power supply		Hz / V	1~ / 50 / 220-240	1~ / 50 / 220-240			
Power input		W	80	70			
Rated current		A	0,4	0,3			
Sound pressure level		dB	19-51	22-57			
Cleaning volume		m <sup>3</sup> / h	340	600			
Optimal room size		m <sup>2</sup>	10-45	10-75			
Dimension	w × h × d	mm	374 × 594 × 201	320 × 745 × 320			
Package dimension	w × h × d	mm	433 × 667 × 260	378 × 853 × 378			
Net / gross weight		kg	6,8 / 8,5	9,7 / 11,0			
Operating temperature		°C	0-40	0-40			

APPEARANCE AND DIMENSIONS OF UNITS

SP-45A



Standard:

- 1pc HEPA filter
- 1pc active carbon filter
- 1pc cotton filter

Optional:

- SPF-45: replaceable dust filters

SP-75UV



Standard:

- filter SPF-75 (HEPA H13, active carbon filter and cotton filter)

Optional:

- SPF-45: replaceable dust filters

# COMMUNICATION MODULE SCMI-01.4



## LOW GOAL TEMPERATURE UP TO -10 °C

- SCMI-01.4 offers 3 basic operation modes:
  - Autonomous temperature control mode: The system changes its performance in order to achieve set temperature measured with T2 sensor. You can set temperature from -10 °C to +55 °C
  - Slave unit mode – operated: You set the compressor performance directly via 0-10V input. Evaporating temperature depends on compressor performance and other conditions
  - Autonomous pressure (evaporating temperature) control mode for cooling only: The compressor performance changes based on evaporating pressure. You can set the pressure which corresponds with temperatures from -10 °C to +55 °C.
- Control of separate condensing units of UNI SPLIT series
- Direct operation mode (cooling) or reverse operation mode (heating)
- Control of FMD modules
- Password protected setting
- Language options
- Pre-setting of all parameters via USB Communicator software
- DIN rail compatible – 4M wide, installation in power distribution unit

## DEFAULT SETTINGS

Function		Operated	
Goal Temp.	C (cooling)	+10,0 °C	
	H (heating)	+25,0 °C	
Outputs	Relay 1	Function	On/Off
		Logic	Direct
	Relay 2	Compressor	
	Relay 3	Error	
	DC fan	Off	
Regulation	Time constant	30sec	
	Proportional constant	35	
	Integration constant	0	
	Derivation constant	60	

## TECHNICAL PARAMETERS

Power supply	V / Hz	230 / 50 ±10%
Rated power input	VA	15
Dimension (wxhxd)	mm	90 × 71 × 58
Package dimension (wxhxd)	mm	120 × 100 × 80
Net / gross weight	kg	0,21 / 0,35
Storage temperature	°C	-25 ~ +70
Operating temperature	°C	-10 ~ +55
Outputs		3x output relays 230 / 2V
Inputs		communication input
		2x input for temperature sensors; input for FMD modules (VE+, VE-)
		1x voltage input 0-10V, resistance 100kΩ
		1x current input for pressure sensor 0-18bar
Standard accessories		2x temperature sensor NTC015WF00 (10kΩ; B=3435)
Optional accessories		Pressure sensor Alco Controls PT5-18M

## CONDENSING UNITS ASGE-XXBI, ASGE-XXBI-3

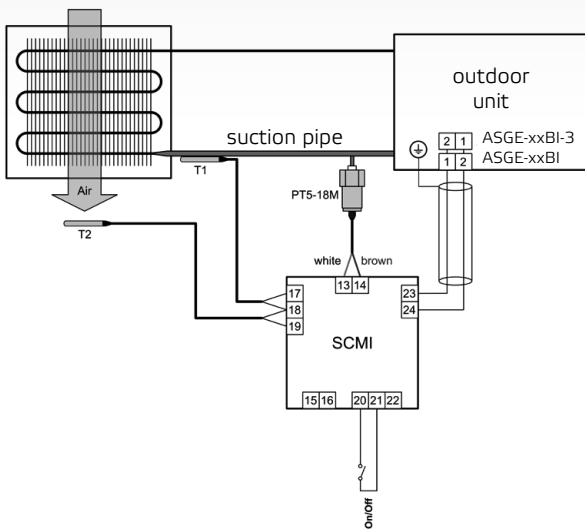
- Automatic protection of outdoor unit
- Automatic defrost of outdoor unit
- Informational error display placed on the main board.
- EC fan motor
- Electronic expansion valve as standard accessory
- Connection valves and terminal block on right side
- Compressor heater as standard accessory
- Bottom heater as optional accessory





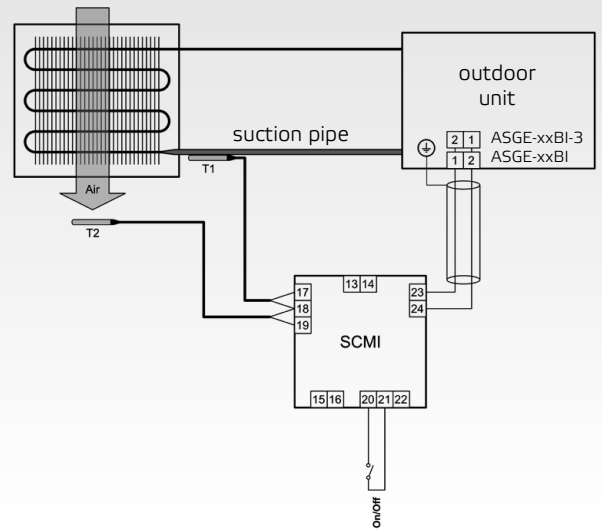
**AUTONOMOUS TEMPERATURE CONTROL MODE FOR COOLING AND HEATING**

Performance of the outdoor unit compressor is controlled to keep the temperature set for cooling/heating/ mode combi. The room temperature is measured with the resistance thermometer T2. It is necessary to set the requested temperature for cooling and heating manually. Use "21" and "22" non-potential contacts for switching between cooling and heating mode.



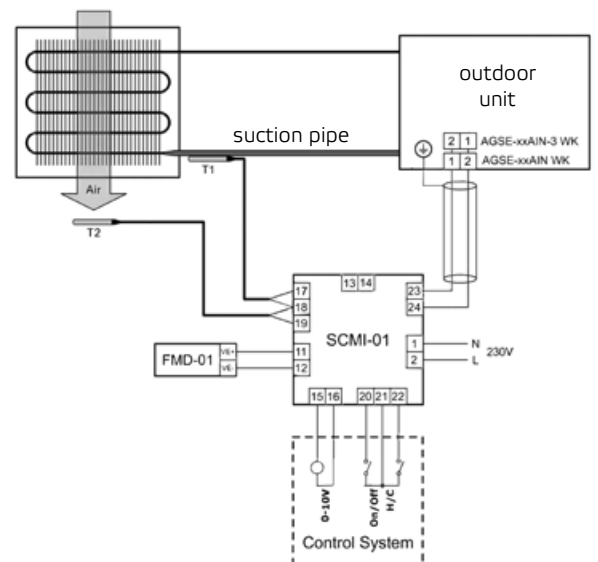
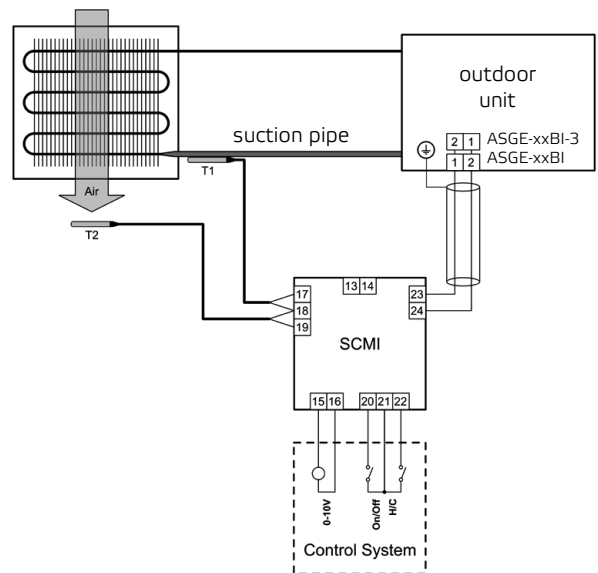
**SLAVE UNIT MODE - OPERATED**

Performance of the outdoor unit compressor is controlled with SCMI-01.4 module according to direct voltage 0-10V from an external supply. The voltage value corresponds with the desired compressor performance 0-100%. The unit can work in both modes – cooling and heating, H/C connectors are used for switching the modes.

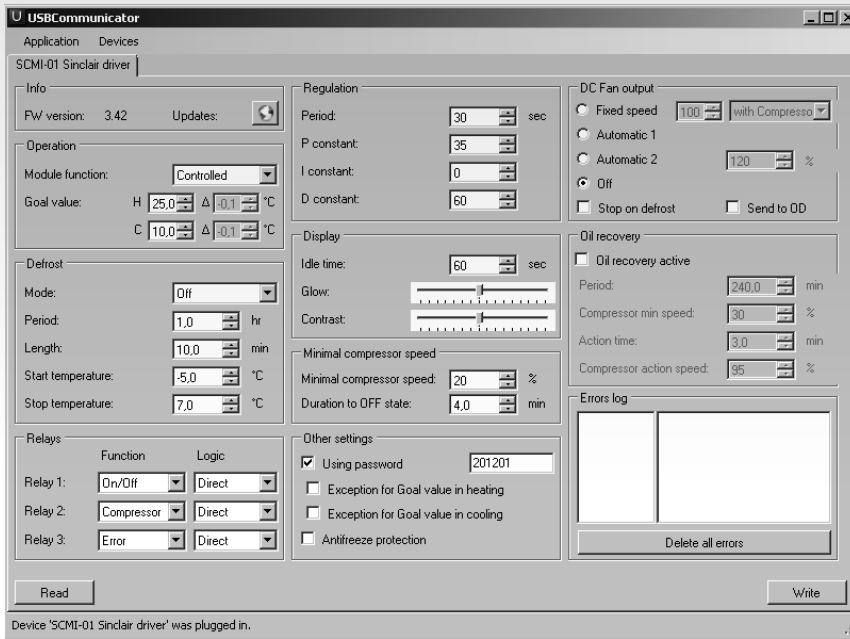


**AUTONOMOUS PRESSURE (EVAPORATION TEMPERATURE) CONTROL FOR COOLING**

Performance of the outdoor unit compressor is controlled to keep the requested cooling temperature recalculated to appropriate refrigerant (R32) pressure.



## USB COMMUNICATOR



## SOFTWARE FOR SCMI-01.4 CONTROL

- Distant setting
- Quick summary of all settings
- Language options (EN, DE, PL, CZ, HU, HR)
- Password setting
- View of error history, history eraser

## FMD MODULES

FMD modules are used to control speed of DC fan motors.

### FMD-01

Designed to control fan motors of indoor units from UNI SPLIT series\*. The fan speed is controlled via SCMI-01.4 module.



\* ASD-xxBI, ASC-xxBI, ASF-xxBI except ASD-48BI, ASD-60BI

### FMD-01T

Designed to control fan motors of indoor units from UNI SPLIT series\*. The fan speed is controlled via multi-turn trimmer.



## OTHER FUNTIONS

### SELF-DIAGNOSIS

- Stopping the system when failure has been detected
- Error code displaying on SCMI-01.4
- Automatic defrost

## HEALTH FILTERS FOR WALL MOUNTED UNITS

SAF-OPWC4

### CATECHIN FILTER

Catechin is a green tea extract added to the filters for its oxidizing and sterilizing effects. Active enzymes form a benzene nucleus which absorbs odors and harmful substances in the air. Catechin filter effectively captures and sterilizes dust particles. It is antibacterial and destroys more than 95% of bacteria, e.g., *Staphylococcus aureus*.

SAF-OPWA4

### ACTIVE CARBON FILTER

Active carbon is an excellent absorbent with capability of dual absorption: physical and chemical, as from air and from fluids. Quickly absorbs harmful gases, e.g. benzene, formaldehyde and ammonia.

SAF-OPWB4

### BIOLOGICAL FILTER

This filter is made of a material with excellent properties of sterilizing and capture of dust. When air flows through the filter, dust and bacteria are retained on the filter surface, which is bio-bactericidal. In case of attachment of microbes, bio-bactericidal surface disrupts its metabolism and limits its growth. Efficiency of capturing of *Escherichia coli* and *Staphylococcus aureus* is higher than 95%.

SAF-OPWS4

### SILVER ION FILTER

Silver ion filter is an entirely new kind of powerful sterilizing product. Silver ions are odorless and colorless and have no side effects, such as irritation, pollution or volatility. After sterilization the ions recycle themselves, therefore have a long lifespan and effectively prevent bacterial growth. The filter is also environmentally friendly and completely safe. It is highly efficient and destroys over 99% of the bacteria. Silver ions themselves attract bacteria and microorganisms, pass through the cell membrane and inhibit the cleavage activity of the bacteria. Disrupts DNA structure of bacteria and microorganisms, causing a loss of reproductive ability of bacteria.

SAF-OPWP4

### PHOTOCATALYST FILTER

Photocatalytic filter reduces odors and germs via its ultraviolet light. Effectively purifies the air and keeps it fresh. Titan TiO<sub>2</sub> contained in this filter has a strong photocatalytic effect, but it is also environmentally friendly. Removes from the air more than 90% of acetic acid, formaldehyde, ammonia and more than 70% of renewable pollutants.

SAF-OPWK4

### COLD CATALYST FILTER

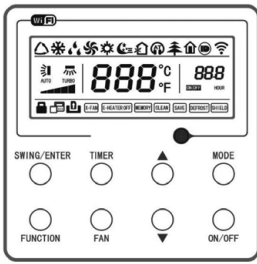
The basic material of the filter are polyurethane (PU) and various catalytic fibers. Effectively captures and removes formaldehyde and other volatile organic compounds (VOCs), as well as harmful gases and odors. The catalyst filter can remove up to 92,9% of formaldehyde from the air within 2,5 hours.

SAF-OPWM4

### ANTI-MITE FILTER

Using this filter, you can quickly remove up to 90% of the dust mites from the air. This filter is especially useful for people suffering from allergies and asthma.

# WIRED CONTROLLERS

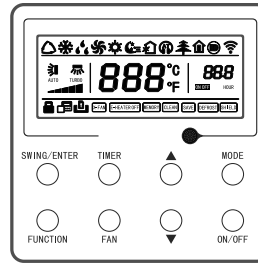


It is necessary to order communication cable SC-H01 or SC-CDF for this controller when ordered separately.

SWC-04

## WIRED CONTROLLER

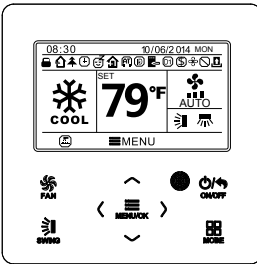
Standard accessory for new (BI2) duct and cassette MULTI VARIABLE units. Optionally can be connected to the indoor units of MULTI VARIABLE, RAY, KEYON, TERREL, SPECTRUM PLUS, SPLIT CONSOLE series. The controller allows direct communication with external MODBUS RTU system and contains WIFI module.



XK117

## WIRED CONTROLLER

Standard accessory for indoor units of UNI SPLIT series.

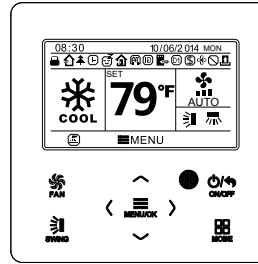


It is necessary to order communication cable SC-H01 or SC-CDF for this controller.

SWC-02

## WIRED CONTROLLER

Optional wired controller with weekly timer for the indoor units of MULTI VARIABLE, RAY, KEYON, TERREL, SPECTRUM PLUS, SPLIT CONSOLE series. Contains MODBUS gateway.



SWC-03U

## WIRED CONTROLLER

Updated optional wired controller with daily, weekly and two-weeks timer to the indoor units of UNI SPLIT series. Contains IR reciever.



SC-H01

Cable for connection R32 split wall mounted units or MULTI VARIABLE wall mounted, console units or split CONSOLE units with wired controllers SWC-02 or SWC-04. Length of cable is about 8 meters.

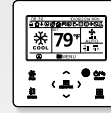
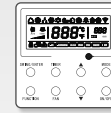
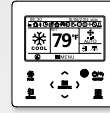
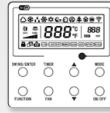


SC-CDF

Cable for connecting MULTI VARIABLE cassette, duct or floor-ceiling indoor units with wired controllers SWC-02 or SWC-04. Length of cable is about 8 meters.

# TECHNICAL PARAMETERS

## WIRED CONTROLLERS



Model	SWC-04	SWC-02	XK117	SWC-03U	
On / Off	✓	✓	✓	✓	
Mode selection	✓	✓	✓	✓	
Temperature setting	✓	✓	✓	✓	
Fan control	✓	✓	✓	✓	
Swing louver	✓	✓	✓	✓	
Save function setting	✓	✓	✓	✓	
Room temperature display	✓	✓	✓	✓	
Buttons lock	✓	✓	✓	✓	
Function lock	-	✓	✓	✓	
On / Off timer	✓	✓	✓	✓	
Daily timer	-	✓	-	✓	
Weekly schedule timer	-	✓	-	✓	
Two week schedule timer	-	✓	-	✓	
Auto restart	✓	✓	✓	✓	
Turbo mode	✓	✓	✓	✓	
Blow (X-fan) mode	✓	✓	✓	✓	
Quiet function	✓	✓	-	✓	
Sleep curve setting	✓	✓	✓	✓	
Clock display	-	✓	-	✓	
Remote signal receiver	✓	-	✓	✓	
Clean filter reminder	-	✓	-	✓	
Error check function	✓	✓	✓	✓	
Unit parameters view	-	✓	-	✓	
°F / °C display	✓	✓	-	✓	
Slave / master controller setting	-	-	✓	-	
8 °C heating mode	✓	-	✓	✓	
Low temperature drying mode (12 °C)	-	-	✓	✓	
Forced defrost mode	✓	✓	✓	✓	
Setting (debugging) menu:	Error code history	✓	✓	✓	
	Address setting for central controlling	✓	✓	✓	
	Ambient temperature sensor setting	✓	✓	✓	
	Fans speed level setting	✓	✓	✓	
	Antifreeze protection of evaporator (E2) display	-	✓	✓	
	Refrigerant leakage protection display	-	✓	✓	
	Blow function setting	-	-	✓	
	Crankcase heater setting	-	-	✓	
	Stand-by power consumption setting	-	-	✓	
	On / Off contact activation	-	✓	✓	
	External device setting	-	-	✓	
	Fan speed setting	-	-	✓	
	Temperature compensation setting	-	✓	✓	
	AUTO mode selection	-	-	✓	
	Defrost mode selection	-	-	✓	
Heat pump enabled	✓	-	✓		
Connection	SC-H01 / SC-CDF	SC-H01 / SC-CDF	2-core wire	2-core wire	
Dimension	w × h × d	86 × 98 × 39	112 × 112 × 22	86 × 98 × 39	112 × 112 × 22

# CENTRAL CONTROLLERS

SCC-36



## CENTRAL CONTROLLER AND WEEKLY TIMER

- Stylish central controller with 7" touch screen
- Connects up to 36 indoor units
- User friendly interface
- Weekly timer
- Single or all units control

It can be used with UNI SPLIT series (has to be connected via Modbus gateway SMG-01 – each indoor unit has to have one SMG-01) or when connected via wired controller SWC-02 or SWC-04 and communication cable SCC-36K it can be used with MULTI VARIABLE series, R32 wall mounted split units or split CONSOLE series (each indoor unit has to have one SWC-02 (SWC-04) and two SCC-36K).

SCC-36K



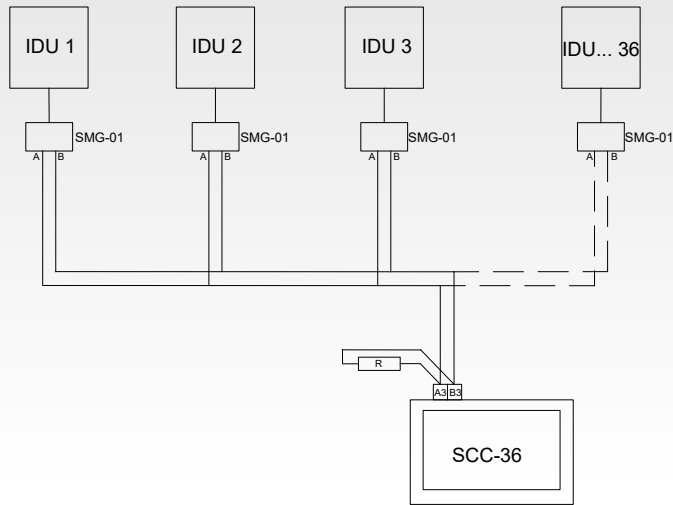
## COMMUNICATION CABLE FOR CENTRAL CONTROLLER SCC-36

Used for connection of indoor units with central controller SCC-36 and wired controller SWC-02 or SWC-04 (for MULTI VARIABLE series, R32 wall mounted units or split Console series).

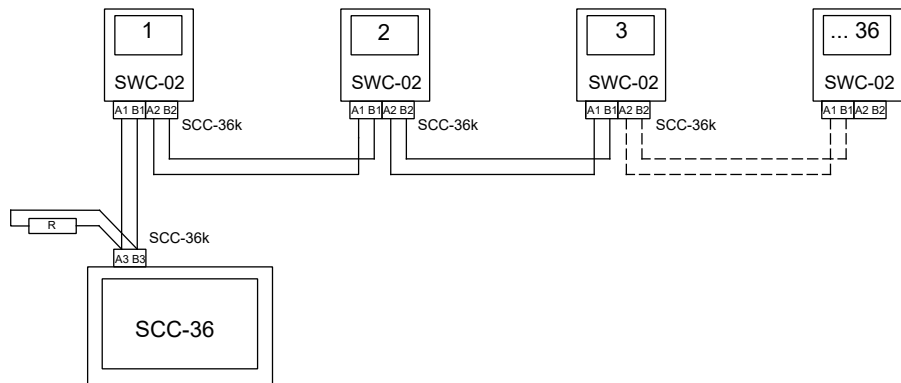
Order in amount 2N-1 where N is number of indoor units.

## CONNECTING SCHEMAS

Central controller SCC-36 with UNI SPLIT series



Central controller SCC-36 with multi variable, R32 wall mounted or split console series



## OTHER ACCESSORIES

SBG-01



### BACNET GATEWAY

Bacnet gateway allows external control via Bacnet protocol. One gateway can communicate with up to 255 indoor units. The connection is done via SWC-02, SWC-04 or SMG-01, so the gateway is compatible with UNI SPLIT series and with all indoor units that allow connection of SWC-02 or SWC-04 wired controller.

SCMI-03S



### CONTROL MODULE

Control module for Air Conditioners in Server Rooms

- For 2 air conditioners in same room
- Periodic switching of the units
- Turning on the 2nd unit when there is lack of capacity
- Error signalization when limit temperature is exceeded

SWM-03



### SINCLAIR WIFI MODULE FOR UNI SPLIT SERIES

WiFi module can be connected to indoor unit to achieve long distance control with smart phone or tablet. SWM-03 is optional accessory for UNI SPLIT units.

SMG-01



### MODBUS GATEWAY FOR UNI SPLIT SERIES

Enables the communication of indoor units of UNI SPLIT series via the Modbus protocol. It can be used for connecting SCC-36 central controller or for connection of external control system using Modbus protocol. Control software is not included, it has to be field supplied.

SDG-01



### SINCLAIR DRY CONTACT GATEWAY

Dry contact gateway allows to externally turn the unit on or off and switch its modes. Module is also equipped with more functions like signalizing of malfunction, etc.

## OTHER ACCESSORIES

G2S-T



### GSM MODULE FOR TEMPERATURE MONITORING

G2S-T module is used for remote monitoring of room temperature. When the set temperature is exceeded, the module sends an information to user's mobile phone. Hence the module has to be equipped with a mini SIM card in order to secure the operation. G2S-T is stand-alone device, there is no connection between the module and the air conditioner itself. Therefore you can use our G2S-T module for all kinds of applications involving installations with devices of another brands.

SAI-01



### ALARM INTERFACE

The SAI-01 SINCLAIR Alarm Interface is an external, separately powered module, which can be connected to the communication line of wall-mounted air conditioner to indicate the operational or malfunction status of the A/C.



# SYSTEM ERROR DIAGNOSTICS

**SDT-ASH**

**DIAGNOSTIC TOOL FOR SPLIT WALL MOUNTED AC**

- Indoor and outdoor unit diagnostic
- Running parameters
- Simulation run of indoor or outdoor unit
- Test of indoor and outdoor mainboard during communication malfunction
- IR receiver (can be used during outdoor unit's test run)
- User friendly (just 4 buttons)
- Simple display (4 lines)
- No need for other accessories
- Connected to terminal board of units

**SDT-MV**

**DIAGNOSTIC TOOL FOR MULTI SPLIT AC**

- Compatible with Multi Variable, Multi System and High Power Multi System series
- Automatic detection of connected units
- User friendly interface
- Running parameters of whole system
- Connected to outdoor unit's mainboard
- 3 diodes (power supply, running, error)
- Power supply: USB connector (cable is included in the package, 5V adapter is field supplied)

**TECHHELP**

**SINCLAIR TECHHELP APP**

- This practical tool is used for identification of error codes and their brief analysis.
- List of our products and their error codes, brief description of each error and suggested solution together with possible causes.
- Search comfortably by error code or device name
- Save the already installed devices between "My Devices" and have relevant information about errors available immediately



The app is available at below mentioned web page. Login is required, please use following user name and password. Installing of an application requires permission to install applications from unknown sources.

<b>EN</b>	User name: SinclairTechHelp.en	
	Password: TechHelp1	
<b>DE</b>	User name: SinclairTechHelp.de	
	Password: TechHelp1	
<b>HU</b>	User name: SinclairTechHelp.hu	
	Password: TechHelp1	
<b>PL</b>	User name: SinclairTechHelp.pl	
	Password: TechHelp1	



For downloading of Sinclair tech Help application use the App Store and the following password:

<b>EN</b>	Password: 100285	

**GENERAL OVERVIEW OF ERROR CODES**

APPLIES TO WALL MOUNTED SPLIT UNITS AND TO MULTI VARIABLE SERIES

ERROR		Others	
E0	Start-up protection to adjust the frequency when the power input is low	AL	X-fan
E1	High pressure protection	C5	Malfunction of jumper cap
E2	Freeze protection	C6	Ground wire missing
E3	Low pressure protection, refrigerant lacking protection	CC	Wrong wired controller / locked buttons
E4	Compressor high discharge temperature protection	CP	Protection from cold air blowing
E5	Overcurrent protection of the complete unit	EE	Malfunction of outdoor main control memory chip
E6	Communication malfunction	ee	Malfunction of outdoor drive module memory chip
E7	Mode conflict	EU	Limit / decrease frequency due to module temperature protection
E8	Malfunction of indoor fan motor	H0	Decrease frequency for high temperature resistant in heating mode
E9	Full water protection	H1	Defrosting
<b>Failure</b>		H2	Electrostatic dedust protection
F0	Refrigerant lacking / system blockage protection	H3	Overload protection of compressor
F1	Indoor ambient temperature sensor is open / short circuited	H4	Overload protection
F2	Indoor evaporator temperature sensor is open / short circuited	H5	IPM protection (module current protection)
F3	Outdoor ambient temperature sensor is open / short circuited	H6	Malfunction of indoor fan motor
F4	Outdoor condenser temperature sensor is open / short circuited	H7	Desynchronizing of compressor
F5	Outdoor discharge temperature sensor is open / short circuited	H8	Water overflow protection
F7	Condenser overheat protection, lowering compressor frequency	H9	Electric heater malfunction
F8	Oil return cycle	Hc	PFC protection
F9	Limit / decrease frequency due to current protection of the complete unit	HE	Demagnetizing protection of compressor
FA	Decrease frequency due to high air discharge	Hp	Evaporator temperature is higher than 58 °C (heating mode)
FH	Limit / decrease frequency due to high evaporator or condenser temperature	JF	Malfunction of Wi-Fi module
Fo	Limit / decrease frequency due to freeze protection	L3	Malfunction of ODU DC fan motor
<b>Protection</b>	<b>Gathering refrigerant</b>	L9	Power input protection
P0	Drive module reset protection	Lp	Indoor unit and outdoor unit do not match
P5	Overcurrent protection of compressor	U1	Malfunction of phase current circuit detection for compressor
P6	Communication malfunction between main control and drive	Ld	Compressor phase lack protection
P7	Malfunction of module temperature sensor circuit	U3	Malfunction of voltage drooping of DC bus-bar
P8	Module high temperature protection	U4	Compressor is reversing
P9	Zero-crossing protection	U5	Malfunction of complete unit's current detection
PL	Voltage of DC bus-bar is too low	U6	High temperature protection of oil
PH	Voltage of DC bus-bar is too high	U7	The 4-way valve is abnormal
PU	Charging malfunction of capacitor		
PP	Input voltage is abnormal		

\* Does not apply to UNI SPLIT SERIES

**GENERAL OVERVIEW OF ERROR CODES**

E1	Phase sequence error	P1	High pressure protection or high temperature protection of discharge sensor
E2	Indoor & outdoor unit communication error	P2	Low pressure protection
E4	Ambient temperature T4 / pipe temperature T3 sensor error	P3	Outdoor input current protection
E5	Voltage error	P4	Compressor discharge temperature protection
E6	DC fan motor fault	P5	Pipe temperature protection
E7	Discharge sensor error	P6	Inverter module protection
Eb	2 times of E6 protection in 10 minutes	P8	Storm protection
E8	Outdoor unit address is wrong	PE	Evaporator high temperature protection
E9	EEPROM error	P9	DC fan module protection
H0	IR341 and main control chip communication error	L0	Inverter module error
H1	Communication chip and main control chip communication error	L1	DC generatrix low voltage error
H4	Three times P6 protection in 60 minutes	L2	DC generatrix high voltage error
H5	Three times P2 protection in 60 minutes	L4	MCE error / synchronization / closed loop
H6	Three times P4 protection in 100 minutes	L5	Zero speed protection
H7	The number of indoor units decreases	L7	Phase sequence error
H8	High pressure sensor error	L8	Frequency protection - frequency difference in one second more than 15Hz
H9	Three times P9 protection in 60 minutes	L9	Frequency protection - frequency difference between the real and the setting frequency more than 15Hz
P0	Top high temperature protection of inverter compressor		

## GENERAL OVERVIEW OF ERROR CODES

Module SCMI-01.4 error	
Error T1 open	Open circuit of temperature sensor T1
Error T2 open	Open circuit of temperature sensor T2
Error T1 short	Short circuit of temperature sensor T1
Error T2 short	Short circuit of temperature sensor T2
Error P open	Open circuit of pressure sensor P
Error P short	Short circuit of pressure sensor P
Error P low	Low pressure on suction side of compressor
Err. com disconnected	Communication malfunction between SCMI-01.4 module and outdoor unit
Error of UNI SPLIT series outdoor unit	
01000000	E4 - Compressor discharge high-temperature protection
02000000	Lack of refrigerant protection
04000000	Fan DC motor protection
08000000	4-way valve protection
10000000	Overcurrent protection
20000000	H3 - Overload protection
40000000	E3 - Compressor low pressure protection
80000000	E1 - Compressor high pressure protection
00010000	Indoor unit freezing protection
00020000	F3 - Indoor unit freezing protection
00040000	F4 - Discharge temperature sensor malfunction
00080000	F2 - Condenser temperature sensor malfunction
00100000	Condenser inlet tube temperature sensor malfunction
00200000	C5 - Invalid power code (invalid position of the jumper)
00400000	Drive unit memory chip malfunction
00000100	Protection against starting compressor at a low frequency at a low voltage
00000200	DC Bus overvoltage protection
00000400	AC current protection
00000800	IPM protection
00001000	PFC protection
00002000	Start up malfunction
00004000	Compressor wrong phase order protection
00008000	Drive unit module sensor malfunction
00000001	Compressor overcurrent protection
00000002	Power supply protection
00000004	Circuit current measurement malfunction
00000008	H7 - Compressor desynchronization protection
00000010	Compressor stalling protection
00000040	Drive unit module high-temperature protection
00000080	Drive unit module sensor malfunction

### EXPLANATORY NOTES:

- 1) Data are based on following conditions: Length of connection pipe: 5m. Cooling: indoor temperature 27 °C DB/19 °C WB, outdoor temperature 35 °C DB/24 °C WB. Heating condition: indoor temperature 20 °C DB/15 °C WB, outdoor temperature 7 °C DB/6 °C WB.
- 2) Data are based on following conditions: Length of connection pipe: 5m. Cooling: indoor temperature 27 °C DB/19 °C WB, outdoor temperature 35 °C DB/24 °C WB. Heating condition: indoor temperature 20 °C DB/15 °C WB, outdoor temperature 7 °C DB/6 °C WB.
- 3) SEER/SCOP was calculated according to European standards contained in EN14825, based on part load classifying and testing conditions given by norm EN14511. Energy label can be downloaded from Sinclair product web page after B2B login.
- 4) Noise is tested in the semi-anechoic room, so it should be slightly higher in the actual Operation due to environmental change.
- 5) Cooling mode
- 6) Standard length of liquid pipes pre-filled with refrigerant.
- 7) Maximum length of liquid pipes in one-way including elevation between indoor and outdoor unit.
- 8) Guaranteed range of operational temperatures.
- 9) Maximum length of liquid pipes to last indoor unit.
- 10) EER/COP in accordance with EN14511.
- 11) If the outdoor unit is power supplied, the cable between indoor unit and outdoor unit is also common for communication.
- 12) Data are based on following conditions: Cooling: indoor temperature 27 °C DB/19 °C WB, water temperature 25 °C, water temperature slope 5 °C, pressure 0Pa; Heating: indoor temperature 20 °C DB/15 °C WB, water temperature 15 °C, water flow same as for cooling, pressure 0Pa.

<b>SH/MH/H/M/L/ML/SL</b>	super high / mid high / high / mid / low / mid low / super low
<b>EXV</b>	electromagnetic expansion valve
<b>R32</b>	(100% HFC-32), GWP 675.
<b>R290</b>	(100% CH <sub>3</sub> CH <sub>2</sub> CH <sub>3</sub> ), GWP 3
<b>R410A</b>	(50% HFC-32, 50% HFC-125), GWP 2088
<b>R134A</b>	(100% HFC-134a), GWP 1300
<b>R290</b>	(100% CH <sub>3</sub> CH <sub>2</sub> CH <sub>3</sub> ), GWP 3
<b>ID/OD</b>	indoor unit/outdoor unit

This catalogue is informative only and does not constitute a binding offer from the side of SINCLAIR CORPORATION LTD. The Company takes no responsibility for any damage arising out of using or interpretation of this catalogue. The noise levels mentioned in this catalogue are values measured under ideal conditions, in an anechoic chamber. These values can be influenced by local conditions (acoustical bouncing area, the equipment of the room, etc.). The specification of products is subject to change based on further development of the units by the producer and can be changed without prior notice. The reproduction of information or data, in particular the use of texts, text excerpts or images, requires the prior written approval of the company. The contents of this catalogue is protected by copyright of SINCLAIR CORPORATION LTD.

