

OUTDOOR UNITS

MINI CHILLERS

MODEL			SCV-50EB	SCV-70EB	SCV-100EB	SCV-120EB	SCV-140EB
Power supply		V/Ph/Hz	220-240/1/50				
Heating A7W35	Capacity	W	6500	8400	10000	12200	14100
	Rated input	W	1226	1663	2128	2490	3000
	EER	-	5,30	5,05	4,70	4,90	4,70
Heating A2W35	Capacity	W	5600	7100	8200	12300	13000
	Rated input	W	1333	1797	2158	3417	3714
	EER	-	4,20	3,95	3,80	3,60	3,50
Cooling A35W7	Capacity	W	5500	7400	9000	11600	13400
	Rated input	W	1692	2349	3103	3742	4573
	COP	-	3,25	3,15	2,90	3,10	2,93
Cooling A35W18	Capacity	W	6500	8300	10000	12200	13900
	Rated input	W	1275	1711	2326	2652	3159
	COP	-	5,1	4,85	4,3	4,6	4,4
Seasonal space heating energy efficiency class	Water outlet at 35°C	-	A+++	A+++	A+++	A+++	A+++
SCOP average climate	Water outlet at 35°C	-	5,12	5,18	5,12	5,08	4,89
	Water outlet at 55°C	-	3,59	3,67	3,71	3,62	3,62
SEER	Water outlet at 7°C	-	5,12	5,18	5,12	5,08	4,89
	Water outlet at 18°C	-	7,81	8,09	8,31	7,79	7,59
Sound power level2	Heating max.	dB(A)	64	66	68	74	74
	Cooling max.	dB(A)	64	66	68	74	74
Sound pressure level		dB(A)	48	51	53	56	58
Compressor	Type		DC twin rotary	DC twin rotary	DC twin rotary	DC twin rotary	DC twin rotary
Fan	Motor type		DC Motor	DC Motor	DC Motor	DC Motor	DC Motor
	Air flow	m³/h	3900	5100	7000	7000	7000
Air heat exchanger	Type		Fin-coil				
Water heat exchanger	Type		Plate heat exchanger				
Rated water flow		m³/h	1,12	1,44	1,77	2,10	2,43
Water flow range		m³/h	0,40-1,25	0,40-1,65	0,40-2,10	0,70-2,50	0,70-2,50
Water pump	Type	-	DC	DC	DC	DC	DC
	Max. pump head	m	9	9	9	9	9
Expansion tank volume	Volume	L	5	5	5	5	5
Safety valve		MPa	0,3	0,3	0,3	0,3	0,3
Flow switch		m³/h	0,3	0,3	0,3	0,3	0,3
Throttle	Type		Electronic expansion valve				
Refrigerant	Type		R32	R32	R32	R32	R32
	Charged volume	kg / t eq. CO ₂	1,25 / 0,84	1,25 / 0,84	1,25 / 0,84	1,8 / 1,22	1,8 / 1,22
Unit net dimension (WxHxD)		mm	865x1040x410	865x1040x410	865x1040x410	865x1040x410	865x1040x410
Packing dimension (WxHxD)		mm	970x1190x560	970x1190x560	970x1190x560	970x1190x560	970x1190x560
Net / Gross weight		kg	87/103	87/103	87/103	106/122	106/122
Pipe connections	Water inlet/outlet	-	G1"BSP	G1"BSP	G1"BSP	G5/4"BSP	G5/4"BSP
Controller			Wire controller SWC-120F (standard)				
Ambient temperature range	Cooling	°C	-5-43	-5-43	-5-43	-5-43	-5-43
	Heating	°C	-25-35	-25-35	-25-35	-25-35	-25-35
Water outlet temperature range	Cooling	°C	5-25	5-25	5-25	5-25	5-25
	Heating	°C	25-65	25-65	25-65	25-65	25-65
ADDITIONAL TECHNICAL INFORMATION							
Screw holes distance of chiller	w x d	mm	656x458	656x458	656x458	656x458	656x458
Recommended power cable		mm²	3x4,0	3x4,0	3x4,0	3x6,0	3x6,0
Recommended air switch		A	B20	B20	B20	B32	B32
EQUIPMENT							
Crancase heater			yes	yes	yes	yes	yes
Drain pipe connector			yes	yes	yes	yes	yes
ON/OFF connector			yes (dry-contact)	yes (dry-contact)	yes (dry-contact)	yes (dry-contact)	yes (dry-contact)
External room thermostat			yes	yes	yes	yes	yes
Alarm or Defrost connector			yes	yes	yes	yes	yes
Additional pump connector			yes	yes	yes	yes	yes
STANDARD ACCESSORIES							
Wire controller			yes	yes	yes	yes	yes
Hydraulic module			yes	yes	yes	yes	yes

1. The above data test reference standard EN14511; EN14825; EN50564; EN12102; (EU) No:811/2013; (EU)No:813/2013; OJ 2014/C 207/02.

2. Sound pressure level is measured at a position 1m in front of the unit and (1+H)/2 m (where H is the height of the unit) above the floor in a semi-anechoic chamber. During in-site operation, sound pressure levels may be higher as a result of ambient noise.

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.

Contains fluorinated greenhouse gases covered by the Kyoto Protocol. R32 (50% HFC-32, 50% HFC-125), GWP of refrigerant used: 675.

OUTDOOR UNITS

MINI CHILLERS

MODEL			SCV-160EB	SCV-120EB-3	SCV-140EB-3	SCV-160EB-3	
Power supply		V/Ph/Hz	220-240/1/50		380-415/3/50		
Heating A7W35	Capacity	W	16000	12200	14100	16000	
	Rated input	W	3556	2490	3000	3556	
	EER	-	4,50	4,90	4,70	4,50	
Heating A2W35	Capacity	W	14500	12300	13000	14500	
	Rated input	W	4462	3417	3714	4462	
	EER	-	3,25	3,60	3,50	3,25	
Cooling A35W7	Capacity	W	14000	11600	13400	14000	
	Rated input	W	4828	3742	4573	4828	
	COP	-	2,90	3,10	2,93	2,90	
Cooling A35W18	Capacity	W	15400	12200	13900	15400	
	Rated input	W	3667	2652	3159	3667	
	COP	-	4,2	4,6	4,4	4,2	
Seasonal space heating energy efficiency class	Water outlet at 35°C	-	A+++	A+++	A+++	A+++	
SCOP average climate	Water outlet at 35°C	-	4,84	5,08	4,89	4,84	
	Water outlet at 55°C	-	3,59	3,62	3,62	3,59	
SEER	Water outlet at 7°C	-	4,84	5,08	4,89	4,84	
	Water outlet at 18°C	-	7,49	7,86	7,65	7,54	
Sound power level2	Heating max.	dB(A)	74	74	74	74	
	Cooling max.	dB(A)	74	74	74	74	
Sound pressure level		dB(A)	58	57	59	59	
Compressor	Type		DC twin rotary	DC twin rotary	DC twin rotary	DC twin rotary	
Fan	Motor type		DC Motor	DC Motor	DC Motor	DC Motor	
	Air flow	m³/h	7000	7000	7000	7000	
Air heat exchanger	Type		Fin-coil				
Water heat exchanger	Type		Plate heat exchanger				
Rated water flow		m³/h	2,75	2,10	2,43	2,75	
Water flow range		m³/h	0,70-3,00	0,70-2,50	0,70-2,50	0,70-3,00	
Water pump	Type	-	DC	DC	DC	DC	
	Max. pump head	m	9	9	9	9	
Expansion tank volume	Volume	L	5	5	5	5	
Safety valve		MPa	0,3	0,3	0,3	0,3	
Flow switch		m³/h	0,3	0,3	0,3	0,3	
Throttle	Type		Electronic expansion valve				
Refrigerant	Type		R32	R32	R32	R32	
	Charged volume	kg / t eq. CO ₂	1,8 / 1,22	1,8 / 1,22	1,8 / 1,22	1,8 / 1,22	
Unit net dimension (WxHxD)		mm	865x1040x410	865x1040x410	865x1040x410	865x1040x410	
Packing dimension (WxHxD)		mm	970x1190x560	970x1190x560	970x1190x560	970x1190x560	
Net / Gross weight		kg	106/122	120/136	120/136	120/136	
Pipe connections	Water inlet/outlet	-	G5/4"BSP	G5/4"BSP	G5/4"BSP	G5/4"BSP	
Controller			Electronic controller (standard)				
Ambient temperature range	Cooling	°C	-5-43	-5-43	-5-43	-5-43	
	Heating	°C	-25-35	-25-35	-25-35	-25-35	
Water outlet temperature range	Cooling	°C	5-25	5-25	5-25	5-25	
	Heating	°C	25-65	25-65	25-65	25-65	
ADDITIONAL TECHNICAL INFORMATION							
Screw holes distance of chiller	w x d	mm	656x458	656x458	656x458	656x458	
Recommended power cable		mm²	3x6,0	5x2,5	5x2,5	5x2,5	
Recommended air switch		A	B32	B16	B16	B16	
EQUIPMENT							
Crancase heater			yes	yes	yes	yes	
Drain pipe connector			yes	yes	yes	yes	
ON/OFF connector			yes (dry-contact)	yes (dry-contact)	yes (dry-contact)	yes (dry-contact)	
External room thermostat			yes	yes	yes	yes	
Alarm or Defrost connector			yes	yes	yes	yes	
Additional pump connector			yes	yes	yes	yes	
STANDARD ACCESSORIES							
Wire controller			yes	yes	yes	yes	
Hydraulic module			yes	yes	yes	yes	

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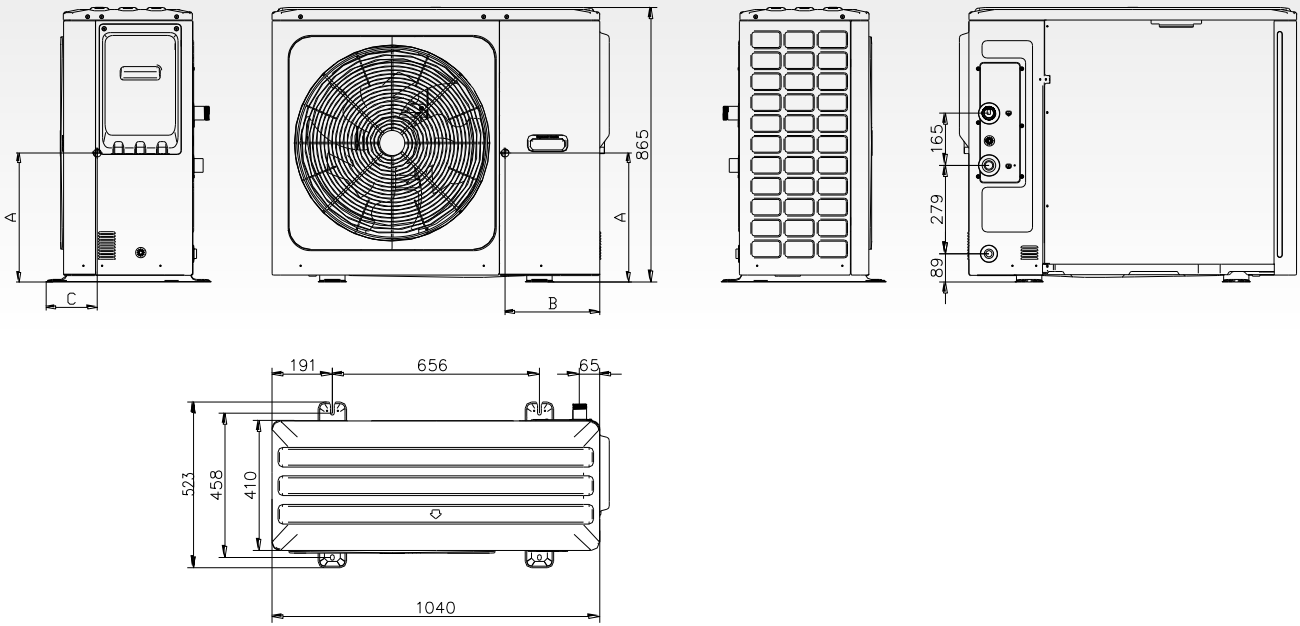
2. Sound pressure level is measured at a position 1m in front of the unit and (1+H)/2 m (where H is the height of the unit) above the floor in a semi-anechoic chamber. During in-site operation, sound pressure levels may be higher as a result of ambient noise.

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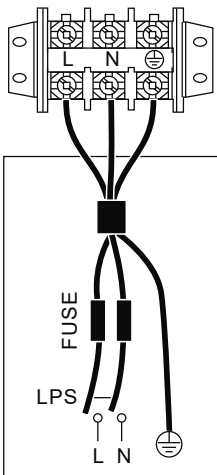
APPEARANCE AND DIMENSIONS OF OUTDOOR UNIT

SCV-50/70/100/120/140/160EB/EB-3

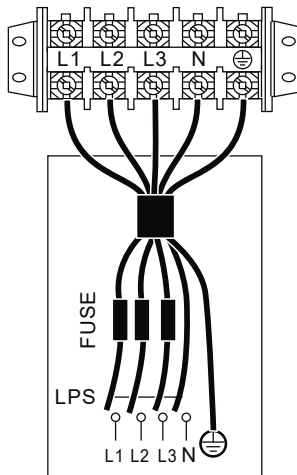


Model	A (mm)	B (mm)	C (mm)
SCV-50EB SCV-70EB SCV-100EB	350	355	285
SCV-120EB SCV-140EB SCV-160EB	540	390	255
SCV-120EB-3 SCV-140EB-3 SCV-160EB-3	500	400	275

Unit	5kW	7kW	10kW	12kW	14kW	16kW	12kW 3-PH	14kW 3-PH	16kW 3-PH
Maximum overcurrent protector(MOP)(A)	18	18	18	30	30	30	14	14	14
Wiring size(mm ²)	4.0	4.0	4.0	6.0	6.0	6.0	2.5	2.5	2.5

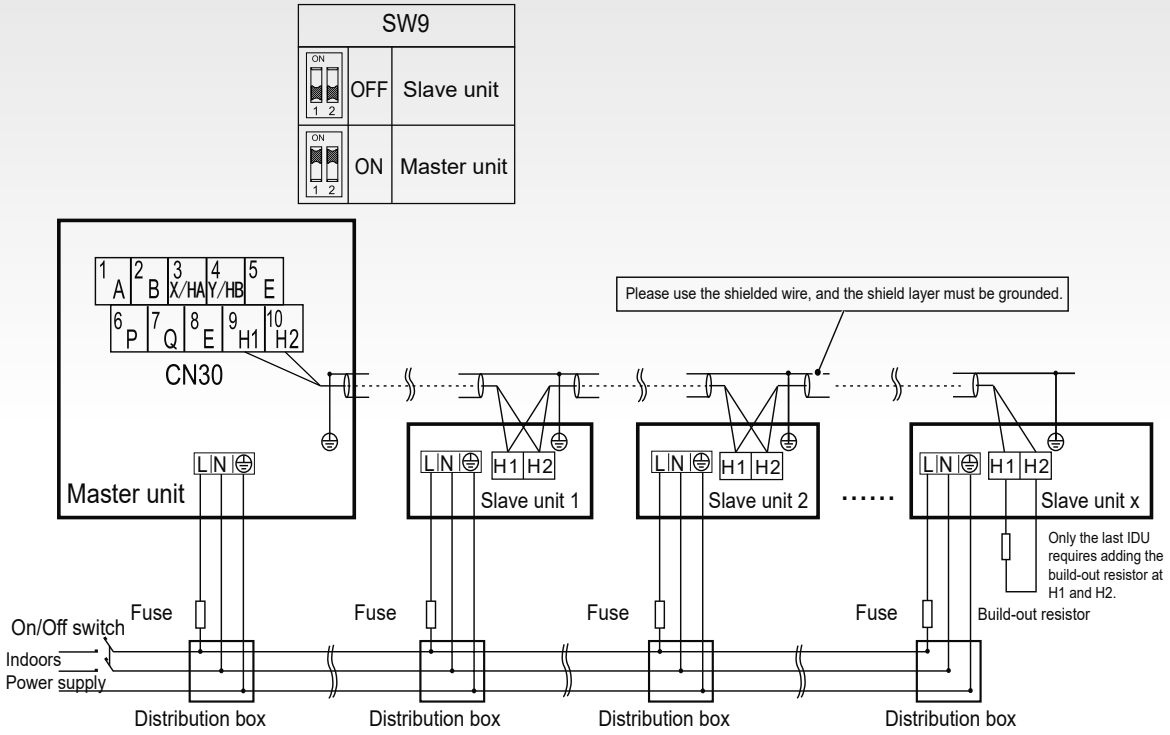


UNIT POWER SUPPLY
1-phase

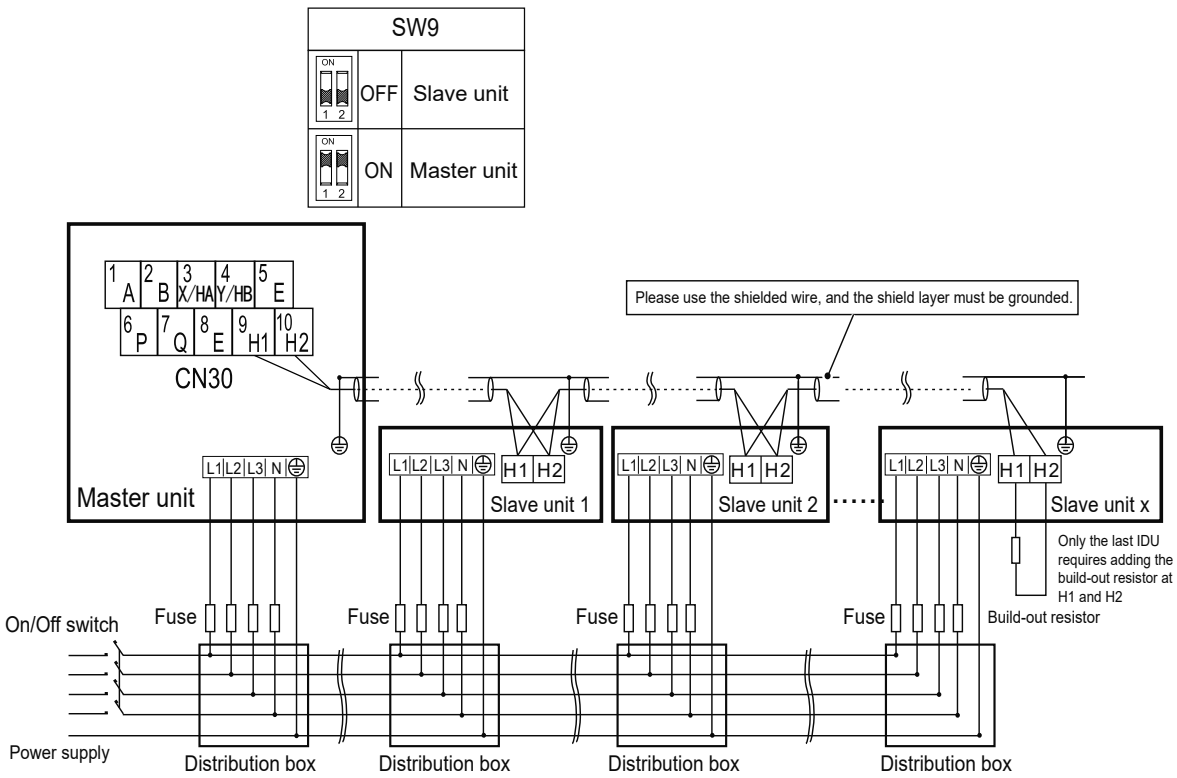


UNIT POWER SUPPLY
3-phase

ELECTRICAL WIRING



The cascade system electrical control system connection diagram(1N~)



The cascade system electrical control system connection diagram(3N~)