

Condensing unit RAHU

Imoto 3,5-7,3 kW ^[R14]



1. Optional RCU-AHUBOX-1C module not included
2. Outdoor units have a 5-year warranty
3. RCU-AHUBOX module has a 2-year warranty

Unit features



Digital DC Inverter SKY®



Automatic operation mode (heating/cooling)



Anti-corrosive gold fins



Compatible with AHUs 0-10V



Integrated expansion valve



Drip tray heater



Compressor crankcase heater



Self-diagnostics

Characteristics of RAHU unit

The RCU-AHUBOX-1C communication module works with the Imoto I26Xo, I35Xo, I50Xo, I70Xo and UNICO UO35Xo, UO50Xo, UO70Xo, UO90Xo, UO100Xo, UO120Xo, UO140Xo, UO160Xo series of outdoor inverter units with outputs of 2.6 kW to 15.3 kW.

The Rotenso outdoor units, together with the air handling unit connection module, form an ideal solution for operating in both cooling and heating mode. One air handling unit requires at least one RAHU kit.

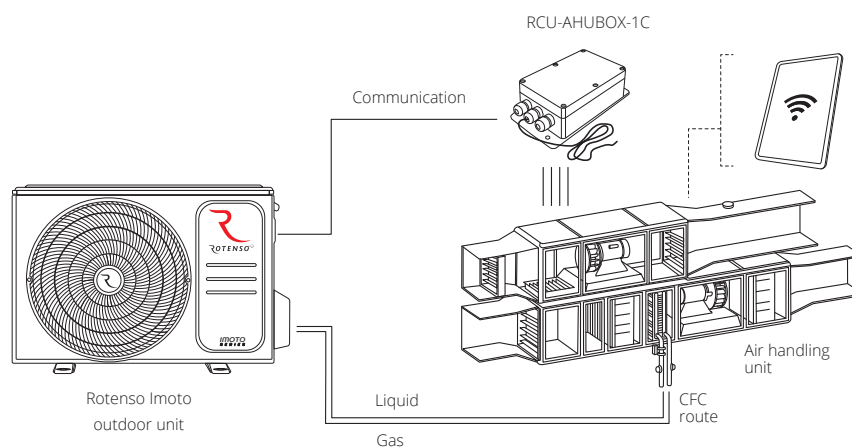
Control of the cooling/heating mode is via a 0-10V voltage signal in the performance range from 0 to 100%. The module is equipped with a defrost and alarm mode control output.

Technical specification

Air handling unit connection module				RCU-AHUBOX-1C			
EAN product code				5905567605130			
Control				0 - 10V			
RCU power supply type		V-Hz, Ø		220-240-50, 1f			
Control and power cables: outdoor unit - RCU		pcs × mm ²		3 × 1,5			
Control cables: control unit - RCU		pcs × mm ²		10 × 0,25			
Outdoor unit model				126Xo R14	135Xo R14	150Xo R14	170Xo R14
EAN product code				5905567600784	5905567600807	5905567600821	5905567600845
Capacity	Cooling	Nom. (Min. - Max.)	W	2638 (1026-3224)	3517 (1377-4308)	5275 (1714-5988)	7302 (2110-8205)
Rated input		Nom. (Min. - Max.)	W	613 (90-1140)	977 (130-1650)	1550 (180-2050)	2510 (250-3200)
Operating current		Nom. (Min. - Max.)	A	2,67 (0,4-5,0)	4,2 (0,6-7,2)	6,7 (0,8-8,9)	10,9 (1,1-13,9)
Capacity	Heating	Nom. (Min. - Max.)	W	2931 (879-3663)	3810 (1066-4381)	5568 (1537-5997)	7530 (1553-8499)
Rated input		Nom. (Min. - Max.)	W	715 (140-1310)	977 (160-1560)	1502 (193-2002)	2130 (300-3100)
Operating current		Nom. (Min. - Max.)	A	2,8 (0,5-4,7)	4,2 (0,7-6,8)	6,53 (0,8-8,7)	9,3 (1,3-13,5)
Reversible heat pump type				air-to-air			
Fan speed		H / M / L	obr/min	780 / 640 / 450	800 / 710 / 450	810 / 700 / 650	830 / 700 / 550
Maximum air flow			m ³ /h	2150	2200	2100	3500
Sound pressure level			dB(A)	54	55	55	60
Sound power level			dB(A)	60	62	65	67
Net dimensions		W × D × H	mm	765 × 303 × 555	765 × 303 × 555	805 × 330 × 554	890 × 342 × 673
Gross dimensions		W × D × H	mm	887 × 337 × 610	887 × 337 × 610	915 × 370 × 615	995 × 398 × 740
Bracket spacing		W × D	(mm)	452 × 286	452 × 286	511 × 317	663 × 348
Net weight / Gross weight			kg	26,7 / 29,1	26,7 / 29,1	33,5 / 36,1	43,9 / 46,9
Refrigerant	Type			R32	R32	R32	R32
	GWP			675	675	675	675
	Quantity (up to 5 lm)		kg	0,62	0,62	1,10	1,45
			TCO ₂ eq	0,42	0,42	0,74	0,98
	Quantity (over 5 lm)		g/mb	12	12	12	24
Refrigerant volume for the air handling unit's exchanger				according to the technical specifications of the PBX			
Pipe connections		Liquid/Gas	mm (inches)	Φ6,35 / Φ9,52 (1/4" / 3/8")	Φ6,35 / Φ9,52 (1/4" / 3/8")	Φ6,35 / Φ12,7 (1/4" / 1/2")	Φ9,52 / Φ15,9 (3/8" / 5/8")
Maximum installation length			m	25	25	30	50
Maximum height difference			m	10	10	20	25
Compressor type				Rotation DC			
Type of outdoor unit power supply		V-Hz, Ø		220-240-50, 1f	220-240-50, 1f	220-240-50, 1f	220-240-50, 1f
Protection		A		C10	C10	C16	C16
Power cables: outdoor unit		pcs × mm ²		3 × 1,5	3 × 1,5	3 × 2,5	3 × 2,5
Indoor operating range (Cooling / Heating)		°C		17-32 / 0-30	17-32 / 0-30	17-32 / 0-30	17-32 / 0-30
Outdoor operating range (Cooling / Heating)		°C		-15-50 / -22-30	-15-50 / -22-30	-15-50 / -22-30	-15-50 / -22-30
Outdoor unit compatibility							
1:1 SINGLE				•	•	•	•
1:2 DUAL							
1:X MULTI				•	•	•	•
RAHU				•	•	•	•

RAHU capacity determined based on a piping length of 8m and a level difference of 1m.
H-High, M-Mid, L-Low

Connection diagram



Technical specification

Air handling unit connection module				RCU-AHUBOX-1C			
EAN product code				5905567605130			
Control				0 - 10V			
RCU power supply type		V-Hz, Ø		220-240-50, 1f			
Control and power cables: outdoor unit - RCU		pcs × mm²		3 × 1,5			
Control cables: control unit - RCU		pcs × mm²		10 × 0,25			
Outdoor unit model				Unico UO100Xo R14	Unico UO120Xo R14	Unico UO140Xo R14	Unico UO160Xo R14
EAN product code				5905567601583	5905567601590	5905567601606	5905567601613
Capacity	Cooling	Nom. (Min. - Max.)	W	12016 (2931-12309)	14067 (3517-15533)	15240 (4103-17291)	15340 (4103-17291)
Rated input		Nom. (Min. - Max.)	W	4200 (680-4500)	4800 (880-6000)	5250 (1030-6650)	5250 (1030-6650)
Operating current		Nom. (Min. - Max.)	A	18,3 (3,0-19,6)	8,1 (1,5-10,1)	8,9 (1,7-11,2)	13,1 (2,6-16,6)
Capacity	Heating	Nom. (Min. - Max.)	W	13481 (3370-14067)	16119 (4103-18170)	18170 (4396-20515)	18170 (4397-20515)
Rated input		Nom. (Min. - Max.)	W	3450 (750-4100)	4500 (950-5700)	5150 (950-6600)	5150 (950-6600)
Operating current		Nom. (Min. - Max.)	A	15,0 (3,3-17,8)	7,6 (1,6-9,6)	8,7 (1,6-11,1)	12,9 (2,4-16,5)
Reversible heat pump type				air-to-air			
Fan speed		H / M / L	obr/min	950 / 850 / 750	830 / 740 / 650	830 / 740 / 650	920 / 830 / 650
Maximum air flow			m³/h	4000	7500	7500	7500
Sound pressure level			dB(A)	64	65	65	65
Sound power level			dB(A)	75	74	74	74
Net dimensions		W × D × H	mm	946 × 410 × 810	952 × 415 × 1333	952 × 415 × 1333	952 × 415 × 1333
Gross dimensions		W × D × H	mm	1090 × 500 × 885	1095 × 495 × 1480	1095 × 495 × 1480	1095 × 495 × 1480
Bracket spacing		W × D	(mm)	673 × 403	634 × 404	634 × 404	634 × 404
Net weight / Gross weight			kg	71,0 / 75,0	103,7 / 118,3	107,0 / 121,2	107,0 / 121,2
Refrigerant	Type			R32	R32	R32	R32
	GWP			675	675	675	675
	Quantity (up to 5 lm)		kg	2,8	2,9	3,0	3,0
			TCO _{eq}	1,89	1,96	2,03	2,03
	Quantity (over 5 lm)		g/mb	24	24	24	24
Refrigerant volume for the air handling unit's exchanger			according to the technical specifications of the PBX				
Pipe connections		Liquid/Gas	mm (inches)	Φ9,52 / Φ15,9 (3/8" / 5/8")	Φ9,52 / Φ15,9 (3/8" / 5/8")	Φ9,52 / Φ15,9 (3/8" / 5/8")	Φ9,52 / Φ15,9 (3/8" / 5/8")
Maximum installation length			m	75	75	75	75
Maximum height difference			m	30	30	30	30
Compressor type				Rotation DC			
Type of outdoor unit power supply		V-Hz, Ø		380-420-50, 3f	220-240-50, 1f	380-420-50, 3f	380-420-50, 3f
Protection				A			
Power cables: outdoor unit		pcs × mm²		5 × 2,5	3 × 2,5	5 × 2,5	5 × 2,5
Indoor operating range (Cooling / Heating)			°C	16-32 / 0-30	16-32 / 0-30	16-32 / 0-30	16-32 / 0-30
Outdoor operating range (Cooling / Heating)			°C	-15-50 / -20-24	-15-50 / -20-24	-15-50 / -20-24	-15-50 / -20-24
Outdoor unit compatibility							
1:1 SINGLE				•	•	•	•
1:2 DUAL				•		•	•
1:X MULTI							
RAHU				•	•	•	•

RAHU capacity determined based on a piping length of 8m and a level difference of 1m.
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