









# Clean Room Air Conditioner





















#### **Features**

This innovative unit used the best concept of cooling and dehumidifying system with hot gas bypass. It would be an equipment that is reliable to be operated to meet indoor sensible and latent load requirements.

This product dedicated to be applied in special room requirements (temperature and humidity control), e.g. server room, surgery room, archive room, laboratory, telecommunication facility, museum, control center, IC chip product area, area of graphics and printing machine, and other space office room that using high-tech facility.

## Standard Features

## INDOOR UNIT AND PARTS



#### **How It Works**

In this schematic, the refrigerant flow at the compressor exit splits into two streams, with one of them completing the conventional path through the condenser and the other rerouted around the condenser coil. Both refrigerant streams rejoin at the condenser exit, forming a two-phase mixture. As in the warm liquid dehumidification concept, the refrigerant subsequently enters the reheat coil, but in an entirely different two-phase state, where it is further condensed and then subcooled. As before, during this heat transfer interaction the airstream exiting the evaporator is reheated.

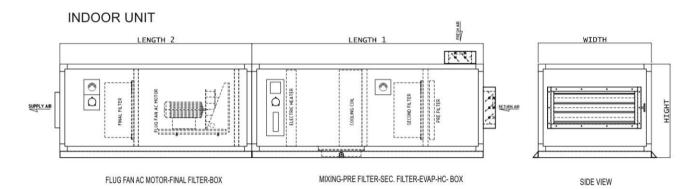


# **Technical Data**

		Mo	odels		RHDX - S - 100	RHDX - S - 125	RHDX - S - 150A	П	RHDX - S - 150B	RHDX - S - 175	RHDX - S - 200	
Surgery Room Dimension					6 x 6 x 3 (m) 6 x 7 x 3 (m) 7,2 x 7 x 3 (m)		11	8 x 7 x 3 (m)	9 x 7 x 3 (m)	9 x 8 x 3 (m)		
Air Systems					Return Air 80 % and Fresh Air 20 %			┨╏		turn Air 80 % and Fresh Air		
	000000				TO COMPANY TO COMPANY A STATE OF THE COMPANY AND STATE				I I HANDERS TO THE HELLENGE WHE THE STANK TO HAVE			
Air Change per Hour ( ACH )					25~30 x / hour				25~30 x / hour			
Room Temperature and Humidity					Range 20 ~ 24 C / Range 50 ~ 60 %				Range 20 ~ 24 C / Range 50 ~ 60 %			
Room Pressure Differential					Positive Pressure ( Range +5 Pa ~ +15 Pa )			4 1	Positive Pressure ( Range +5 Pa ~ +15 Pa )			
вти/н					100,000	125,000	150,000	11	150,000	175,000	200,000	
Nominal Cooling Capacity				kW	29.3	36.6	44.0		44.0	51,3	44.0	
TR  Kcal/h  Nominal Heating Capacity  BTU/H  kW					8.3	10.4	12.5	$\prod$	12.5	14.6	12.5	
					25,100	31,375	37,650	⅃⅃	37,650	44,099	37,650	
					20,472	25,590	34,120	П	34,120	50,000	60,000	
					6	7,5	10	П	10	14.6	17,5	
Refriger	ant		>		R-407 C			1 [	R-407 C			
		v		СМН	3240 3780 4536			1 [	5040 5670 6480			
	Air Flow CFM			CFM	1910	2250	2670	11	2965	3355	3812	
		Fan Type		Plug Fan AC Motor / Centrifugal Backward + Variable Speed Drive (Optional)			11	Plug Fan AC Motor / Centrifugal Backward + Variable Speed Drive (Optional)				
		Total Static Pressure		Pascal	1250	1250	1250	1 1	1250	1250	1250	
	Blower	Power Supply		kW/POLE	2,2 / 2	2,2 / 2	2,2 / 2	1 1	3/2	3/2	4/2	
	e B			35	3,18	3,18	6,06	┨╂	7850101.	0.00000	200	
				Ampere			· · · · · ·	┨	6,06	7,36	7,36	
	_	Power Supp	0)	V/ph/Hz Inch	380 - 400 / 3 / 50	380 - 400 / 3 / 50	380 - 400 / 3 / 50	┨╏	380 - 400 / 3 / 50	380 - 400 / 3 / 50	380 - 400 / 3 / 50	
	gui.	Copper Tub	Copper Tube Diamater		1/2"	1/2"	1/2"	11	1/2"	1/2"	1/2"	
	Cooling	Aluminium	Fin	Row	6~8	6~8	6~8	11	6~8	6~8	6~8	
E				FPI	10 / 12	10 / 12	10 / 12	↓ ↓	10 / 12	10 / 12	10 / 12	
INDOOR UNIT	=		Heating System	n	Electric Heater	/Heating Coil / Hot Gas (Re	efrigerant) Bypass		Electric Heater	/Heating Coil / Hot Gas (Refr	igerant) Bypass	
NDOC	Heating Coil	Copper Tub	e Diamater	Inch	3/8" or 1/2"	3/8" or 1/2"	3/8" or 1/2"	П	3/8" or 1/2"	3/8" or 1/2"	3/8" or 1/2"	
-	Heati	Aluminium	Fin	Row	2	2	2	П	2	2	2	
	222	Aldinimidin	niii.	FPI	12	12	12	7 [	12	12	12	
	Coil	Copper Tub	e Diamater	Inch	3/8" or 1/2"	3/8" or 1/2"	3/8" or 1/2"	11	3/8" or 1/2"	3/8" or 1/2"	3/8" or 1/2"	
	Cooling Coil (Optional)			Row	2	2	2	11	2	2	2	
	re Coc (Opt	Aluminium	Fin	FPI	12	12	12	11	12	12	12	
	<u>a</u>	Pre Filter	200000		G4 Washable Filter			1 1	2000	G4 Washable Filter		
	Filter	Second Filte	r		F5 - Bag / Medium Filter			11	F5 - Bag / Medium Filter			
	Air	Final Filter			F8 Medium Filter			┪╂	F8 Medium Filter			
	Mixing Box Section				90 C (100 M C))))))))))))))))))))))))))				Optional			
	WIIXIII D	1000			Optional			┨╏	900 - 00000 00000			
	8	Туре			Hermetic Scroll Compressor			┨	Hermetic Scroll Compressor			
	essor	Power Supply		V/ph/Hz	380-400 / 3 / 50	380-400 / 3 / 50	380-400 / 3 / 50	-	380-400 / 3 / 50	380-400 / 3 / 50	380-400 / 3 / 50	
	Compressor	Power Input		kW	8.96	10.81	13.6	-	13.6	6,95 + 8,96	8,96 + 8,96	
		RLA	V-22		16.4	21.6	24	11	24	12,9 + 16,4	16,5 + 16,4	
		LRA		Ampere	118 140		174	11	174 95 + 118		140 + 140	
	13	Fan Type / Drive		Compact Axial Fan / Direct Drive			П	Compact Axial Fan / Direct Drive				
	į.	Diamater		mm	630	630	630	П	630	630	630	
L	Fan Condenser	Qty		pcs	1	1	2	П	2	2	2	
OUTDOOR UNIT		Power Supply		V/ph/Hz	380 / 3 / 50	380 / 3 / 50	380 / 3 / 50	1 [	380 / 3 / 50	380 / 3 / 50	380 / 3 / 50	
TDOOL		Power Input		Watt	800	800	1600	11	1600	1600	1600	
9		RLA Amper		Ampere	1.6	1.6	2 x 1.6	11	2 x 1.6	2 x 1.6	2 x 1.6	
	111111111	Copper Tube Diameter Inch			3/8"	3/8"	3/8"	11	3/8"	3/8"	3/8"	
	Condenser Coil		Row	XXXXIII	2	2	2	11	2	2	2	
		Aluminium	Fin per Inch		14	14	14	╁	14	14	14	
		Face Area	, iii per iiieii	ft2	17	21		┨╂	33			
		race Area			2020	70.00	33	┨┠	110001	17 + 17	17 + 17	
		Pipe Size Units	Liquid	Inch	5/8"	5/8"	5/8"	-	5/8"	2 x 5/8"	2 x 5/8"	
		011110	Suction	Inch	1.1/8"	1.1/8"	1.1/8"	┨┟	1.1/8"	2 x 1.1/8"	2 x 1.1/8"	
		Rehaet	Inlet/Outlet	Inch	5/8"	5/8"	5/8"	11	5/8"	5/8"	5/8"	
	Weight	AHU (Kg)			480 620 680			П	680	720	785	
	Connect	tion			Brazing Connection				Brazing Connection			
		Temp	erature Control		Room Temperature Sensor and Temperature Display			1	Room Temperature Sensor and Temperature Display  Room Humidity Sensor and Humdity Display			
_		Hu	midity Control		Room Humidity Sensor and Humdity Display			1 †				
Control System	Motor Blower Speed Control				Variable Speed Drive Control			1	Variable Speed Drive Control  Solenoid Valve Control  Magnahelic 0 ~ 500 Pascal			
trol S	Heating System Control / Hot Gas Flow Control				Solenoid Valve Control			† †				
Con	Medium Filter				Solehold Valve Control  Magnahelic 0 ~ 500 Pascal			1 }				
	Pressu	re Indicator	1752 000			0050		┪┝		(150)		
			Room Pi	ressure	l	Aagnahelic -30 ∼ +30 Pasc	a1	П		Magnahelic -30 ~ +30 Pasc	31	



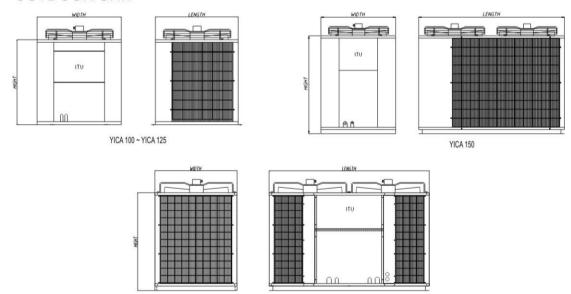
# AHU Split Type



#### **DIMENSI INDOOR UNIT**

MODEL		RDHX-S-100	RHDX-S-125	RHDX-S-150A	RHDX-S-150B	RHDX-S-175	RHDX-S-200
WIDTH	MM	1150	1150	1350	1350	1350	1350
LENGTH 1	MM	2350	2350	2350	2350	2350	2350
LENGTH 2	MM	1950	1950	1950	1950	1950	1950
HIGHT	MM	950	950	950	950	950	950
WEIGHT	KG	480	620	680	680	720	780

## **OUTDOOR UNIT**



YICA 175 ~ YICA 200

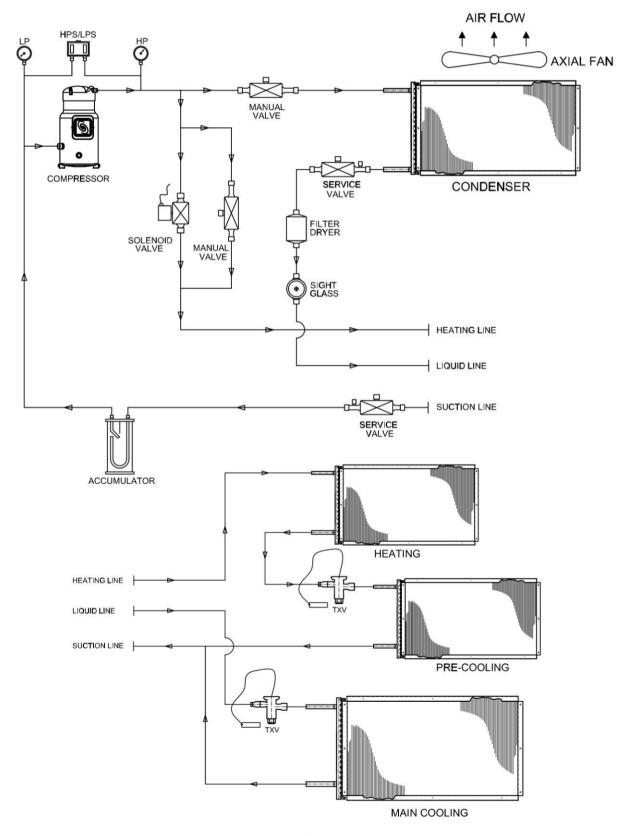
#### **DIMENSI OUTDOO UNIT**

MODEL		YICA 100	YICA 125	YICA 150	YICA 175	YICA 200
WIDTH	MM	815	815	815	815	815
LENGTH	MM	800	800	1850	1580	1580
HIGHT	MM	820	1020	1020	965	965
WEIGHT	KG	137	150	170	250	270



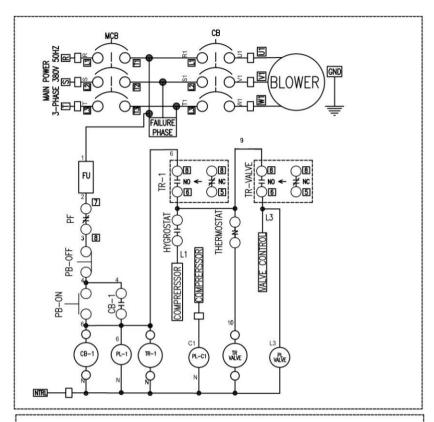
This system is better than typical conventional hot gas or electric heater for reheat system, because it can more effectively control both temperature (down to 22 + /-1) and humidity (down to 55 + /-5). It also has an ability to operate without any restrictions on the unit's normal CFM range.

## HOT GAS PIPING INSTALLATION SCHEMATIC

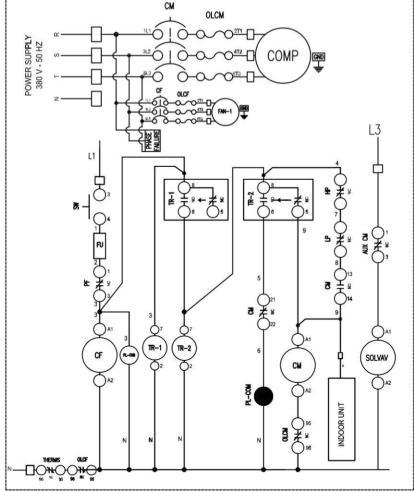




## **WIRING SCHEMATIC**



## **Indoor Unit**



# **Outdoor Unit**





#### **OFFICES**

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Sampurna Strategic Square Selatan & Utara Senayan Office Tower Thamrin Tower Trust Radiator Specialist Wisma Indocement Wisma Pondok Indah Wisma Slipi

#### SHOPPING CENTERS

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KKCC Krampung

Mall Bogor

Mall Emporium Mall Kalibata

Mall Karawaci

Mall Mangga Dua Mall Margo City

Mall Pondok Gede

Pusat Grosir Cililitan

Malang Town Square

Mall Puri Indah Mall Taman Anggrek Mall Tasik Matahari Department Store Mega Mas Metropolitan Mall Mitra 10 Plaza Senayan

Ibis Jayakarta Maharaja Pondok Indah Mall Senen Blok 3 Maharani **Ubertos Bandung** Majapahit Mercure Mirah Bogor Mulia Mustika Nelayan Nikko Bali Novotel PHI Heritage Pondok Indah Quest Surabaya

> Sari Pan Pasific Sentral Sintesa Peninsula Sultan

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RS Pasar Rebo RS PELNI RS Persada Malang **RS Pertamina Pusat** RS Pondok Indah RS Premie RS Sari Asih RS Siloam Gleaneagle RS Siloam Kb Jeruk RS Sulianti Saroso

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Tirtamas Perkasa Unilever Mercy Farma

#### **OTHERS**

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**MOBILE AIR CONDITIONING** 

Kereta Api Indonesia Pelangi Bravo - CONOCO OIL

**OFFSHORE** 

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POWER PLANT PLTU Paiton PLTU Hyundai

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**Head Office & Factory** 

Jl. Raya Serang KM 12, Sukadamai, Cikupa, Tangerang 15710 P: +62 21 5960673-75 +62 21 5962210 : +62 21 5963250 E: factory@ituaircon.co.id

#### Distributor: PT. CILIKON TATAUDARA INDONESIA

Jalan Bintara Raya, Ruko Bintara Permai Blok D No. 3-4 Bintara Jaya -Bekasi Barat Kota Bekasi 17136 Telp. (021) 8895 0444 / 8895 0443 Email: info@chilicond.com Website: www.chilicond.com