

# PT Johnson Controls-Hitachi Air Conditioning Indonesia

27 May 2025

# Global Leader in Cooling & Heating Technology: Serving Clients Locally & Globally



The Southeast Asia & Pacific Region delivers a broad product portfolio of Components, Equipment, Solutions, and Services under the Hitachi and York brands. This is supported by 6 sales entities, 2 local factories, and additional Global-based support for some manufacturing and R&D.

# Sustainable Innovation: Full Inverter, Environmental-Friendly Refrigerant & Smart Technologies

Compressor      RAC (Room Air Conditioner)      PAC (Package Air Conditioner)      VRF (Variable Refrigerant Flow)



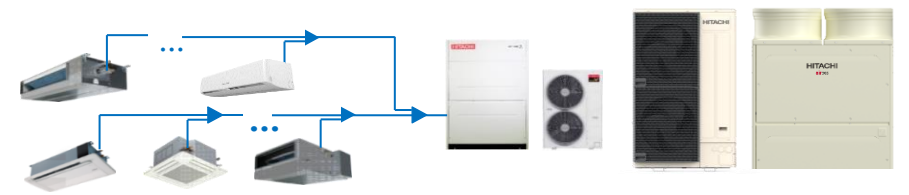
Centrifugal, screw, scroll, rotary compressor



Residential: Wall mounted and floor standing

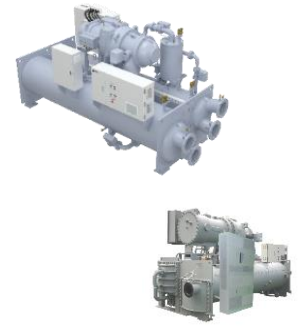


Light Commercial: ducted, cassette, ceiling, etc.



Residential & Light Commercial: side flow, modular side flow, modular top flow and indoor units

Chiller/Heat Pump      Terminal Units



Centrifugal water chiller



Air-cooled/water-cooled screw chiller



Refrigeration unit



Absorption Chiller



Air source scroll chiller/heat pump \* *under development*



Mini-chiller



Fan coil unit & air handling unit

# Chiller System



# Chillers Product Line Up

HITACHI

## 1. Centrifugal Chiller-R134a/R513A/R1234ze



**S-series(300 ~ 3000RT)**  
VSD/CSD, high/low voltage



**SQ-series Heat pump**



**VG-series (300-1100RT)**  
Direct drive VSD



**VM-series (200-1100RT)**  
Magnetic VSD

## 2. Water-cooled Screw Chiller



**WHYZ-series(50-760RT)**  
R407/R410A



**WZPY-series (50-520RT)**  
R134a/R513A



**WZY-series (100-520RT)**  
R134a+economical



**WVY-series(155-510)**  
VSD, R134a/R513A

## 3. Air-cooled Screw Chiller



**AHYZ1-series**  
R407/R22

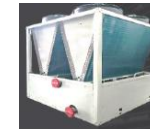


**AZ(P)Y1-series**  
(50-450RT)  
R134a



**AZ(P)Y2-series(150-600RT)**  
R134a/R513A

## 4. Air-cooled Scroll Chiller



**AVMY-150KW**  
1<sup>st</sup> generation



**AVSY-65/130KW**  
2<sup>nd</sup> generation



**AVEY65/130/150KW**  
3<sup>rd</sup> generation

## 5. AHU – Airside Product



**Fan coil**



**Combined  
Air handling unit**

# Chillers Product Applications

Type	Cooling Capacity Range	Typical Applications	Advantages
Centrifugal Chillers	300RT ~ 3,000RT	Large commercial buildings, District cooling plants, Industrial facilities	High efficiency at large capacities, Ideal for continuous operation
Water-cooled Screw Chillers	Medium-load applications	Medium to large commercial buildings, Industrial process cooling	Reliable, Quieter and more efficient than reciprocating chillers
Air-cooled Screw Chillers	Medium-load applications	Commercial buildings with limited water availability, Industrial facilities in moderate climates	Easier to install and maintain, No need for cooling towers
Air-cooled Scroll Chillers	Small to medium loads	Small to medium commercial buildings, Office buildings, schools, hotels	Compact, Energy-efficient, Cost-effective for light commercial use
Airside Products	Varies (depends on product)	HVAC systems in all types of buildings, Cleanrooms and labs	Efficient air distribution, Essential for indoor air quality and comfort

# Centrifugal Chillers – S Series

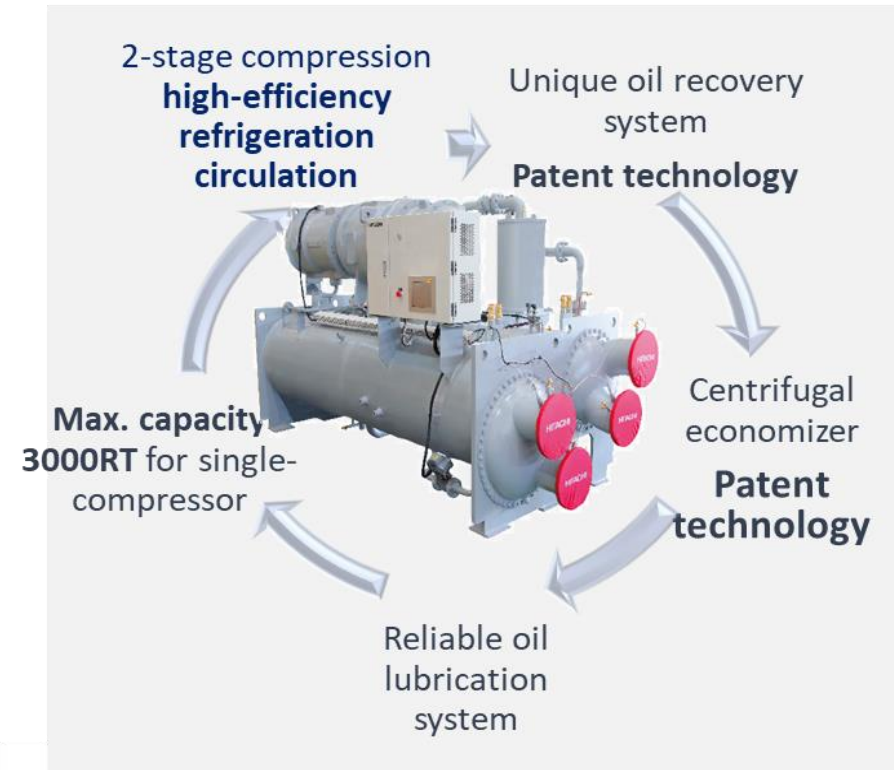
## GXG/ GFG – S Series

- Cooling Capacity Range: 300 ~ 3,000RT
- Refrigerant: R134a / R513A/ R1234ze
- COP: 5.25 ~ 7.00

## Key Benefit

- High energy efficiency, often leading to significant reductions in operating costs and lower environmental impact.
- Achieved through features like advanced inverter technology (Variable Speed Drives - VSDs), optimized two-stage compressor design, and the use of low Global Warming Potential (GWP) R1234ze refrigerants.

High efficiency with New  
HFO-R1234ze Refrigerant



*Note: we are going to release cooling capacity 3500RT with single compressor soon*

# Centrifugal Chillers – VG Series

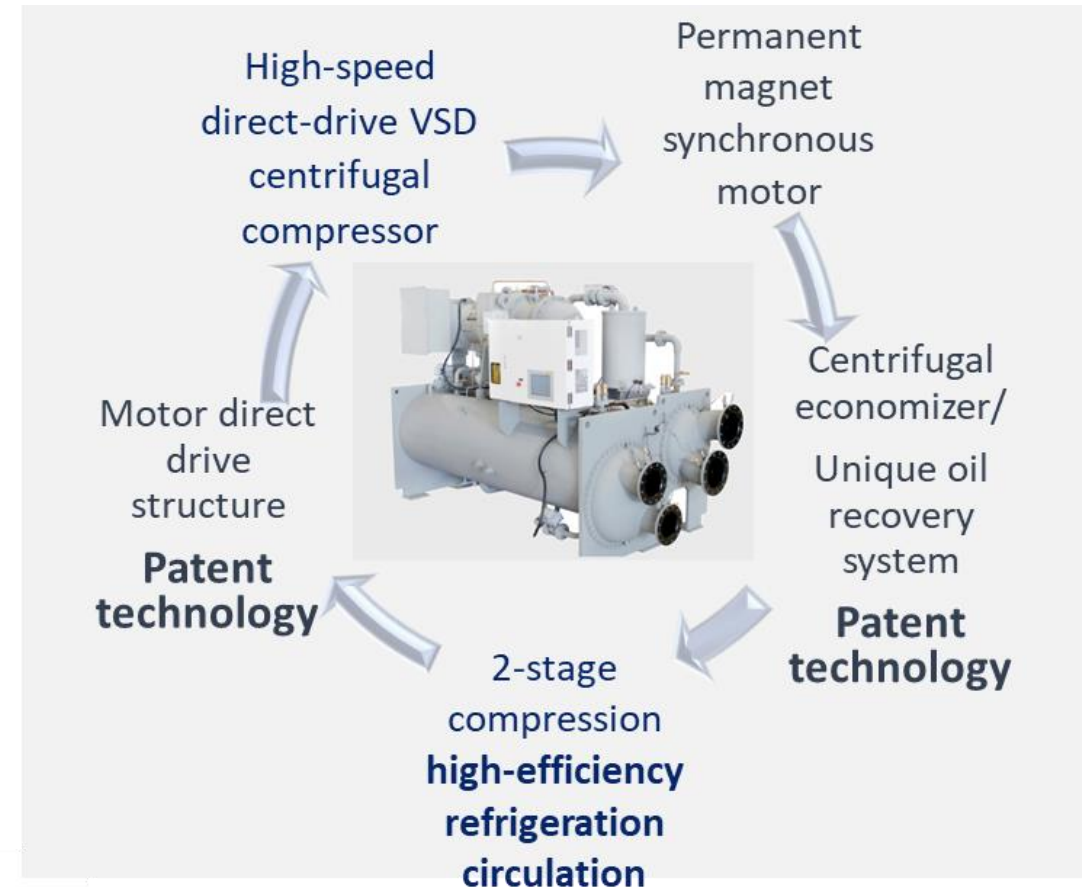
## Direct Drive Inverter Technology

### D/M-VG Series

- **Cooling Capacity Range: 300 ~ 1,100RT**
- **Refrigerant: R134a / R513A/ R1234ze**
- **IPLV: 9.821 ~ 10.80**

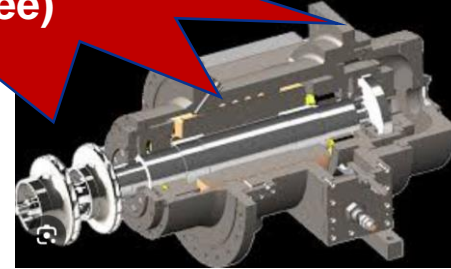
### Key Benefit

- World-class **energy efficiency**, particularly at **part-load** conditions.
- Due to their advanced two-stage compressor design combined with **variable speed drive (VSD)** technology, allowing them to precisely match cooling output to demand and operate exceptionally efficiently across a wide range of conditions.



# Centrifugal Chillers – VM Series

**Magnetic Bearing  
(Oil-free)**



## VM Series

- Cooling Capacity Range: 200 ~ 1,100RT
- Refrigerant: R134a / R513A/ R1234ze
- IPLV: 9.218 ~ 12.00

Reliability

Energy Efficiency

Reduce maintenance

## Key Benefit

- Oil-free operation, enabled by **magnetic bearing** technology.
- This leads to several advantages, including enhanced **reliability** (no oil system failures), sustained **high efficiency** (no oil contamination of heat exchangers), and significantly **reduced maintenance** (no oil changes or related component wear).



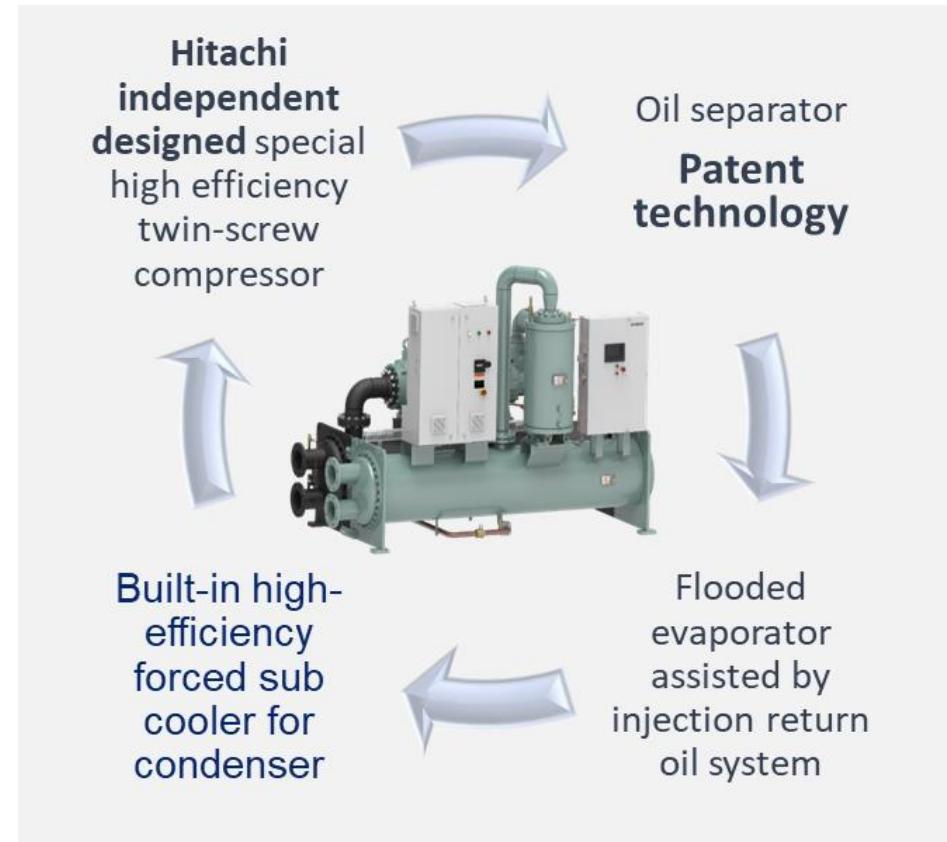
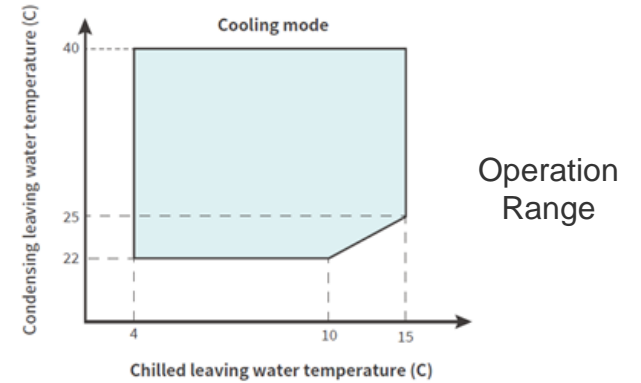
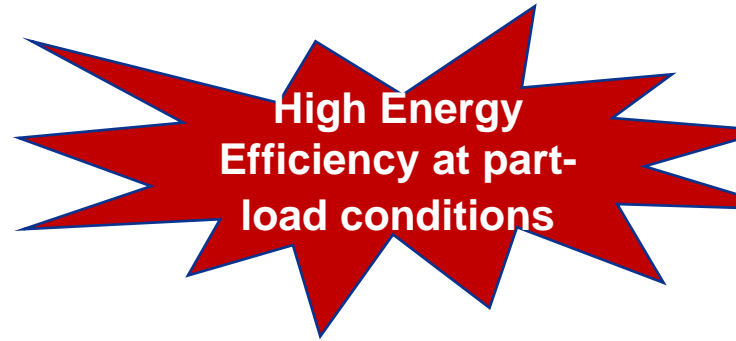
# Water-cooled Screw Chiller

## WVY/ WZPY/ WZY Series

- Cooling Capacity Range: 50~520RT
- Refrigerant: R134a / R513A

## Key Benefit

- WZY Series: 100 ~ 520RT  
➔ Cost-Effective
- WZPY Series: 50 ~ 520RT  
➔ High-end market focus on ROI
- WVY Series: 155 ~ 520RT  
➔ VSD Type



# Air-cooled Screw Chiller

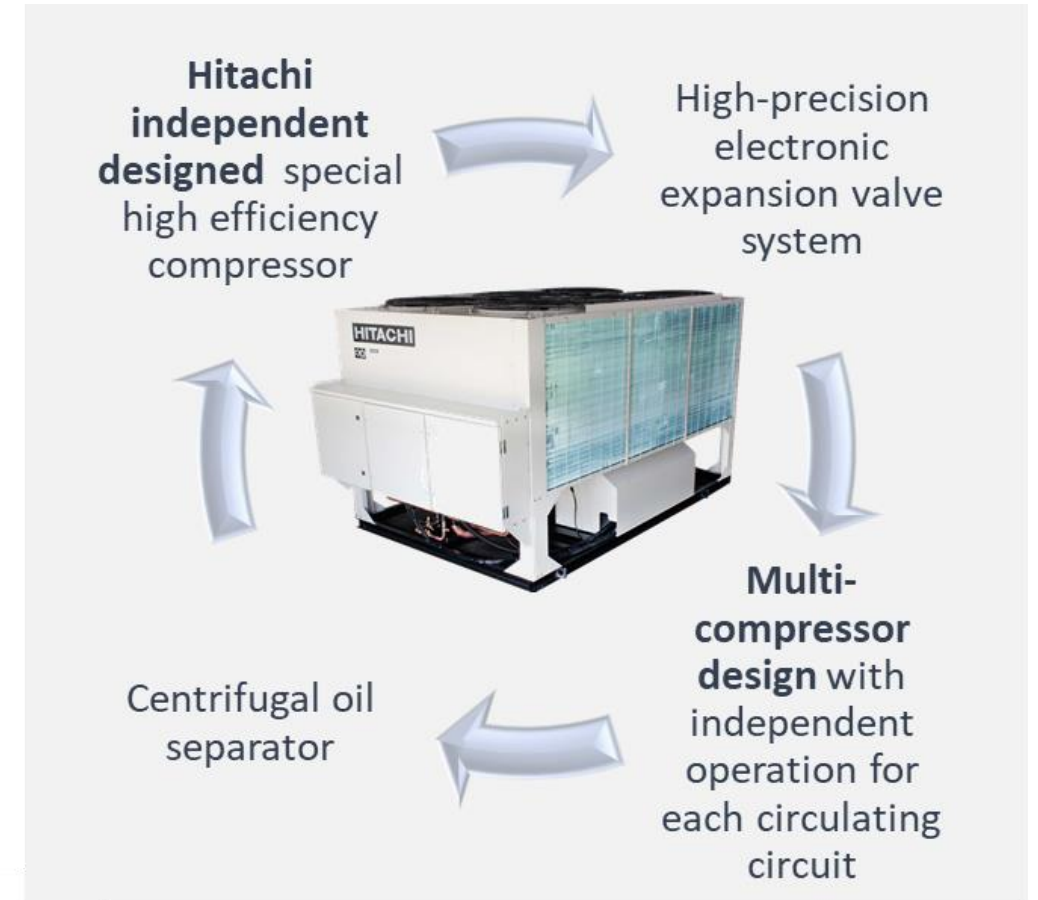
## AZPY/AZY Series

- Cooling Capacity Range: 45 ~ 600RT
- Refrigerant: R134a / R513A
- VFD/ Soft Starter

## Key Benefit

- AZY1 Series: 45 ~ 450RT → Cost-Effective
- AZPY1 Series: 45 ~ 450RT → Higher Efficiency
- AZ(P)Y2 Series: 150 ~ 600RT  
→ Larger Compressor

Simplified installation & operational flexibility



# Air-cooled VSD Screw Chiller



## AVPY Series

- Cooling Capacity Range: 150~600RT
- Refrigerant: R134a / R513A\*



*\*R513A to be launched soon*

**Variable Speed Drive (VSD) on the Screw Compressor**

## Key Benefit

Superior energy efficiency across a wide range of operating conditions, especially at part-load, leading to significant operational cost savings and a reduced environmental footprint.

## Specifications for the high-efficient series

Models	Cooling				Heating		
	Capacity kW	Power kW	IPLV(GB)	COP	Capacity kW	Power kW	COP
RHUF*** AVPY			—	—			—
150	502	154.0	4.32	3.26	488	148.8	3.28
180	620	193.1	4.3	3.21	588	182.6	3.22
200	669	208.4	4.3	3.21	650	196.4	3.31
300	1004	308.0	4.32	3.26	976	297.6	3.28
330	1122	347.4	4.3	3.23	1076	331.1	3.25
350	1171	362.5	4.3	3.23	1138	344.8	3.3
380	1289	401.6	4.3	3.21	1238	378.6	3.27
400	1338	416.8	4.3	3.21	1300	392.7	3.31
450	1506	462.0	4.32	3.26	1464	446.3	3.28
500	1673	516.4	4.3	3.24	1626	494.2	3.29
550	1840	571.4	4.3	3.22	1788	541.8	3.3
600	2007	625.2	4.3	3.21	1950	589.1	3.31

# Air-cooled Scroll Chiller

## AVMY/AVSY/ AVEY Series

- Cooling Capacity Range: 65 ~ 150Kw
- Refrigerant: R410a
- Max Combination: 16 units

High reliability &  
quite operation

Inherent design



## Key Benefits

- AVMY Series: 150Kw ➔ 1<sup>st</sup> Generation
- AVSY Series: 65/130Kw ➔ 2<sup>nd</sup> Generation
- AVEY Series: 65/130/150Kw  
➔ Small Footprint

Scroll compressors offer high reliability and quiet operation due to their simple design with fewer moving parts. This makes them a durable, low-noise cooling solution ideal for commercial and industrial settings where dependability matters.

# Air Side Product

## Fan Coil Unit

## Cabinet AHU & Jet flow cabinet AHU (Horizontal & Vertical)

**Delivers precise indoor control, enhancing comfort, air quality, and customer customization.**

- **Air Volume: 340 ~ 2,380m<sup>3</sup>/h**



4-way cassette series



Horizontal concealed series



Horizontal surface-mounted series



Vertical surface-mounted series

## Application

- Elegant, ultra-thin 250 mm unit with three-speed control, optional remote/wire control, and down-air return with front-air outlet.



- Runs smoothly with low noise and strong performance—perfect for large areas like malls, offices, subways, and big workshops.



- Modular design and centralized management enable quick, professional results. Great for hotels, malls, clean rooms, hospitals, labs, and large-scale air systems.



# VRF System Top Flow & Side Flow

The power behind **your mission**

# VRF Product Line Up

Top Flow VRF  
(Up to 120HP)

**air365** Max

**Top Flow** All



**Best for:** Large commercial buildings, hotels, and high-rise offices.

**Benefits:** High capacity & efficiency in large-scale systems

Side Flow VRF  
(Up to 72HP)

SideSmart™



**Best for:** Medium-sized buildings with space limitation

**Benefits:** Easier maintenance & good energy efficiency.

Mini VRF  
(Up to 8HP)

**air365** Mini

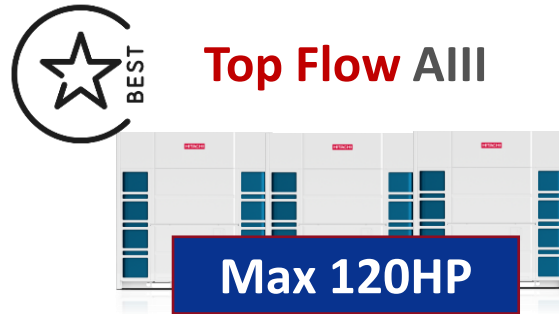


**Best for:** Homes, small shops, and apartments

**Benefits:** Compact and lightweight design

# Small yet large-capacity cabinet by **air365** Max & AIII

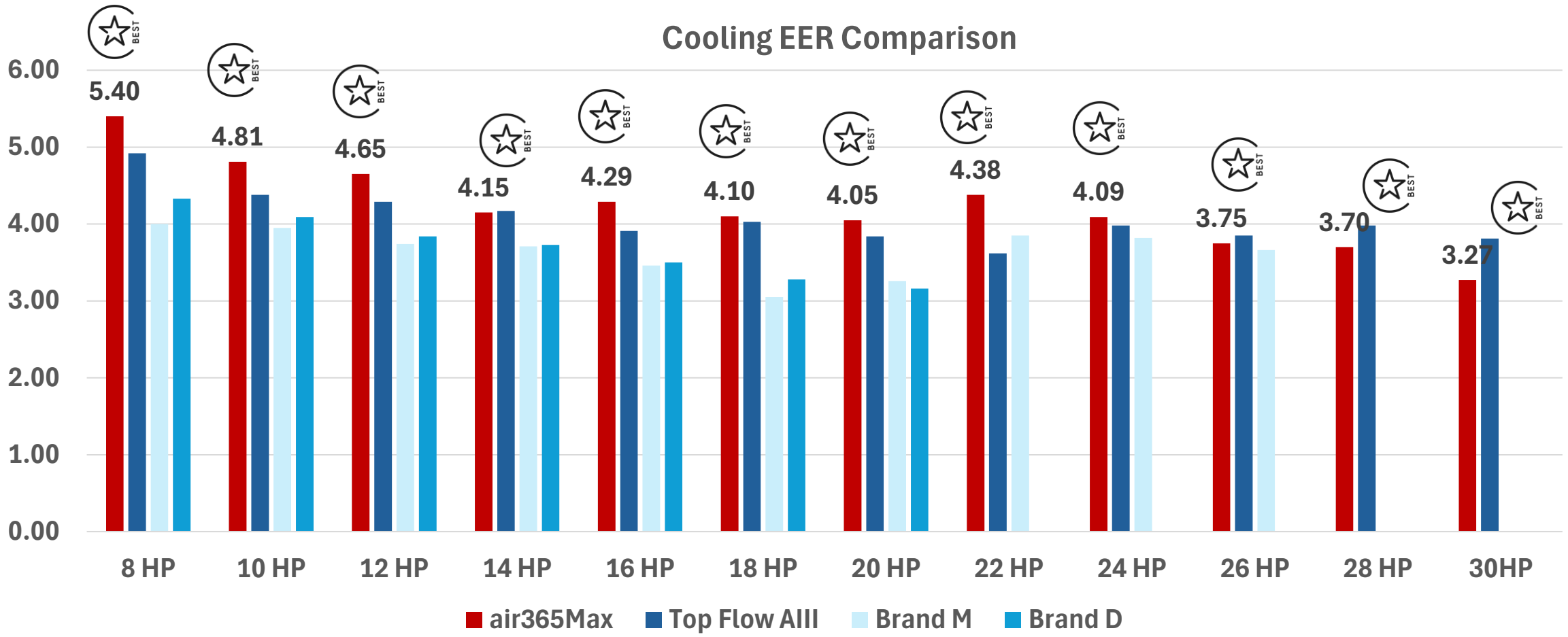
## Largest-in-market capacity Modular Top Flow VRF!



Single module ODU Capacity (HP)	6	8	10	12	14	16	18	20	22	24	26	28	30	...46
<b>air365</b> Max	-	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	-
<b>Top Flow</b> AIII	-	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Brand M	-	Y	Y	Y	Y	Y	Y	Y	-	-	-	-	-	-
Brand D	Y	Y	Y	Y	Y	Y	Y	Y	-	-	-	-	-	-

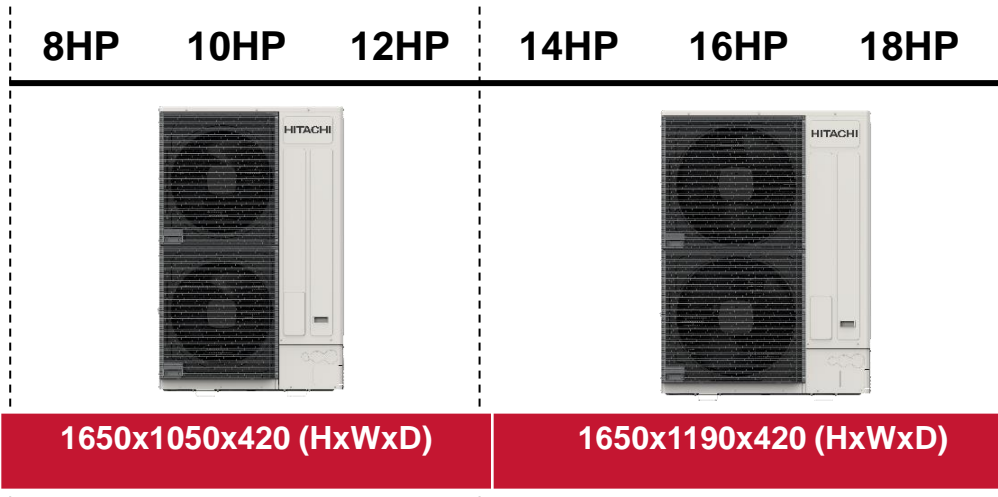
# Best-in-class efficiency with **air365** Max

**Hitachi air365 Max achieved “Best-in-class” efficiency!**



# SideSmart™ Product Line Up

4 modules combination (Up to 72HP)



	Capacity Range	Energy Efficiency	Average Cooling (COP)	Space Saving	Initial Cost
<b>Premium combination</b> The best energy savings	16-48HP	★★★★★	4.32	★★★★★	★★★★★
<b>Standard combination</b> Flexible and versatile	20-72HP	★★★★★	3.93	★★★★★	★★★★★
<b>Economy combination</b> Tiny footprint & smaller budget	20-72HP	★★★★★	3.79	★★★★★	★★★★★



**Optimize your solution by efficient & flexible SideSmart!**

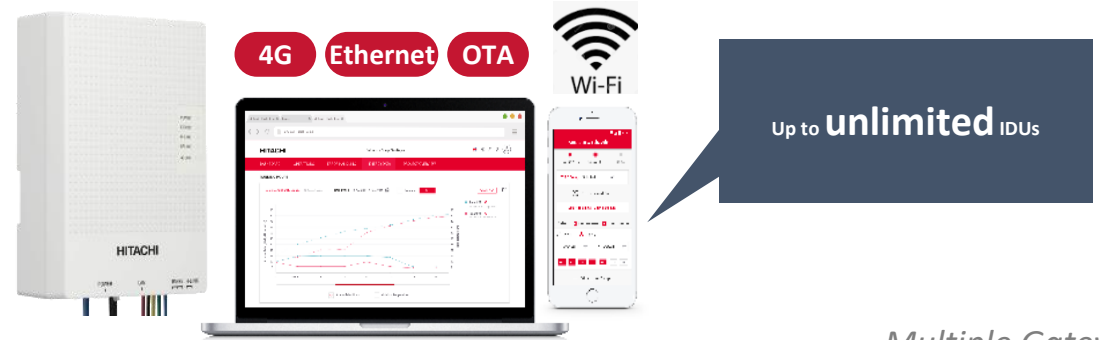
# VRF – Smart Controllers



Find your own suitable solution among Widest-in-class portfolio of Centralized Controllers

## Cloud

- Access anywhere
- Via any device
- Over-the-air updates



Up to **unlimited** IDUs

For small to large VRF projects

**airCloud Pro**

Multiple Gateways

## Wired

- Access via local wired interface



Central Station mini



Central Station EZ



Central Station EX

Max up to **2560** IDUs



**Max connection capacity** (Number of Remote Controllers)

Easy to work with **NFC Technology**

# airCloud Tap



Award-winning app helps technicians configure and maintain **air365** Max via smartphone with NFC



Top Flow VRF



Individual Controllers

# Easy to work with **airCloud Tap**

## **air365** Max

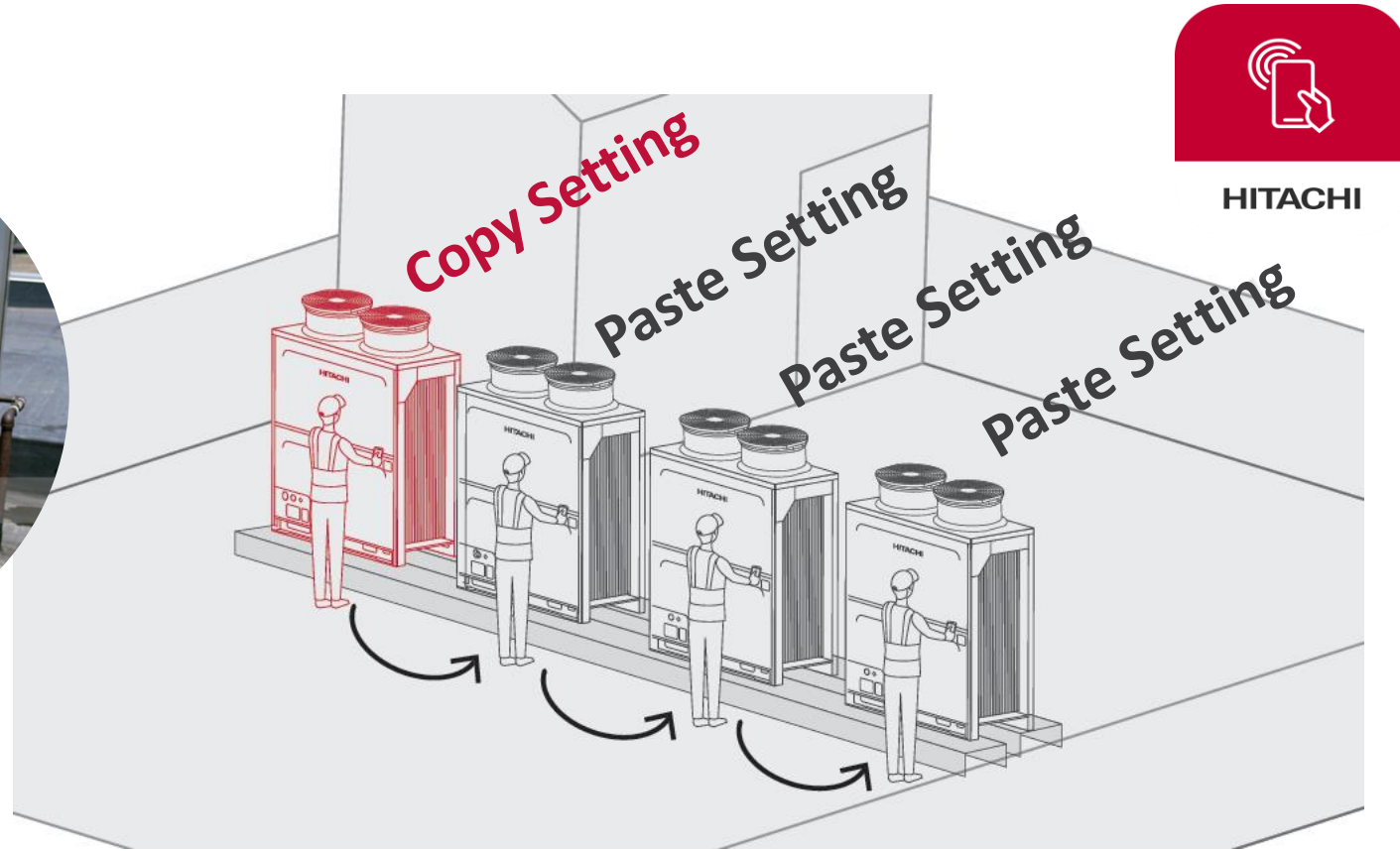
**Outdoor unit configuration 4X faster (76% times reduction)**



**No needs to bring tools!**



**No need to open cabinets!**



[1] Conventional way to open and close the cover and manipulate dip/power switch takes 40min 40sec. By using airCloud Tap without opening the cabinets: takes 9min 40 sec. [Simulation scenario] total 4 ODU initial setting. total 5 items setup; ODU number, Refrigerant cycle number, Higher ESP setting, Power Supply setting, and Compressor manual-off setting.

# Easy to work with **airCloud** Tap

## Eco-Compact WIRED REMOTE CONTROLLER (PC-ARC)



**Functional yet economical  
controller!**

## ADVANCED-COLOR WIRED REMOTE CONTROLLER (PC-ARFG1)



reddot winner 2021



DESIGN  
AWARD  
2021

EUROPEAN  
PRODUCT  
DESIGN  
AWARD



**Awards winning user-friendly controller,  
will help you to operate with ease!**



# VRF System **air**365 Mini

The power behind **your mission**

# VRF – **air365** Mini

- **Smart Comfort for Compact Spaces** (Small to medium-sized) – Supporting up to **8HP**



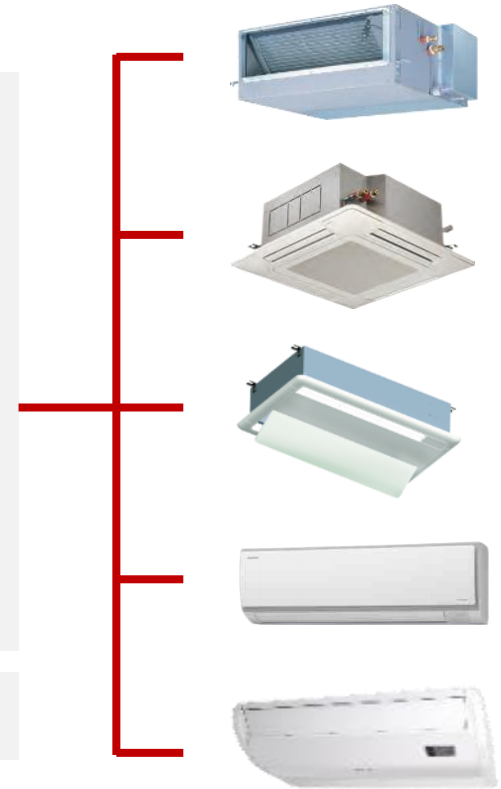
**3/3.5HP** 670×900×320



**4/5/6HP** 770×980×360



**6.5/7/8HP** 1080×980×360

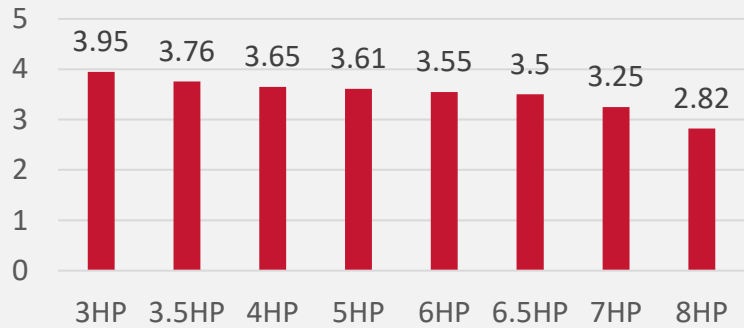


**High (Efficiency + Reliability + Comfort + Flexibility) = **air365** Mini**

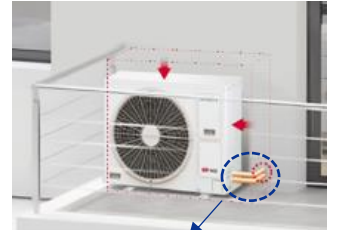
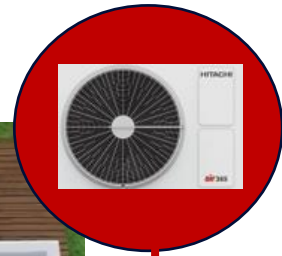
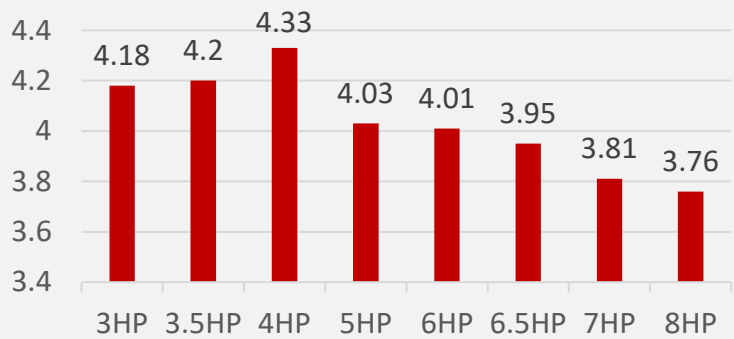
# VRF – air365 Mini

## High Efficiency

ENER



COOP



One pipe pair connects multiple units

**Compact and Lightweight Design**

## Self-cleaning Technology



Fan automatically reverses for 1 min to **remove dust**

Stable comfort with 15Hz low-load operation, **reduced noise**, and **smoother temperature transitions**.



**Step up frequency & Small load operation**

# Partnering for Sustainability

# How we collaborate: Solutions we offer to Various Industries ...

**HVAC solutions supporting various industries - customized for comfort, efficiency, and occupants' satisfaction**

- With deep industry expertise and end-to-end solutions, we're the trusted partner for various sectors—driving innovation in occupants experience, health, well-being, and sustainable growth for long-term success.



# Commercial Spaces with Mixed Development

## Event Space

Air-cooled scroll chiller for high efficiency in large spaces



## Restaurants & Wellness Centre

Topflow VRF One comprehensive solution delivers comfort and efficiency



## Indoor Swimming Pool

Water cooled screw chiller for removing humidity



## Amphitheatre

IDU for rooms  
Ducted or Concealed units  
Controllers  
Wired remote controls with attractive design and easy to use



## Remote Service Centre

Primary large single split  
Easy to maintain and change if building usage changes



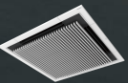
## HVAC management solution

- H-LINK wiring network connecting all HVAC systems
- Connect to BACnet BMS system via adapter
- Touch screen central controller
- airCloud Pro IoT app and SW for remote maintenance



## Wellness Centre including spa & gym

IDUs  
4-way Ceiling Cassette with Silent-Ionic panel for seamless design integration and intelligent sensors for advanced comfort features  
Ultra-quiet Ducted units  
IAQ  
ViroSense Z2 filter for cassettes  
ViroSense AQtiv-Ion Kit for Ducted units  
Total Heat Exchanger for ventilation



# HOSPITAL SOLUTIONS

## Patient Room & Operation Theatre



**IDU**  
Ducted Concealed units

**IAQ**  
Total Heat Exchanger for ventilation

**Controllers**  
Wired remote controls with attractive design and easy to use



## Hospital HVAC management solution

- H-LINK wiring network connecting all HVAC systems
- Touch screen central controller
- airCloud Pro IoT app and SW for remote maintenance



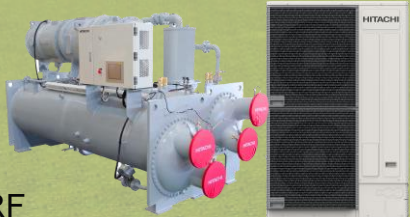
## Independent Shop

**Primary** large single split  
Reliable, easy to maintain and inexpensive



## Outdoor Units Chillers

High efficiency, reliable with stable operations  
**SideSmart VRF**  
One comprehensive solution  
Requires less outdoor space than traditional VRF



## Restaurant, Retail Outlet & Lobby

**IDUs**  
4-way Ceiling Cassette  
Ultra-quiet Ducted units



**IAQ**  
ViroSense Z2 filter for cassettes  
ViroSense AQtiv-Ion Kit for Ducted units  
Total Heat Exchanger for ventilation

# LARGE CONFERENCE HOTEL

## Guestrooms

### IDU

Ducted or Floor Concealed units



### IAQ

ViroSense AQtiv-Ion Kit  
Total Heat Exchanger for ventilation

### Controllers

Wired remote controls with attractive design and easy to use



## Guestrooms, Restaurants & Gym

### Topflow VRF

One comprehensive solution delivers comfort and efficiency



## Independent Coffee Shop

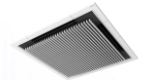
**Primary** large single split  
Reliable, easy to maintain and inexpensive



## Conference Rooms

### IDU

4-way Ceiling Cassette with Silent-Iconic panel for seamless design integration



### IAQ

ViroSense Z2 filter  
Total Heat Exchanger for ventilation

### Controllers

Wired remote controls with attractive design and easy to use

## Hotel HVAC management solution

- H-LINK wiring network connecting all HVAC systems
- Connect to BACnet BMS system via adapter
- Touch screen central controller
- airCloud Pro IoT app and SW for remote maintenance



# Contact Us

## West Area

(Sumatra until West Java)



WhatsApp

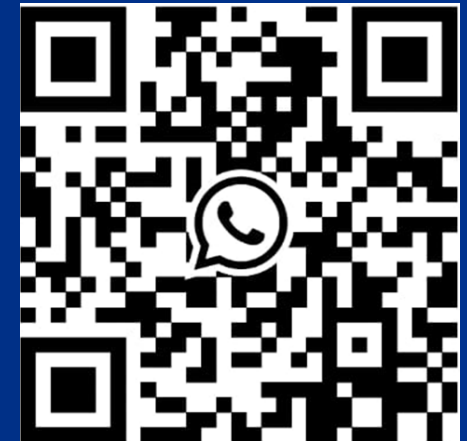


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## East Area



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