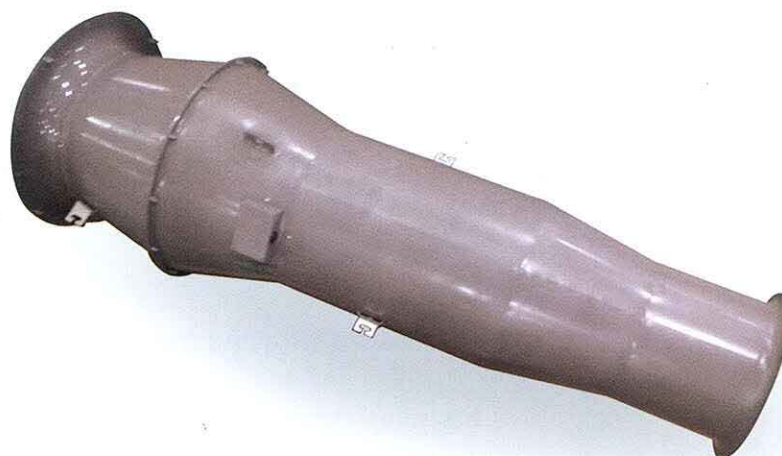


## Fine Factory Fan : Solution for Hot Environment

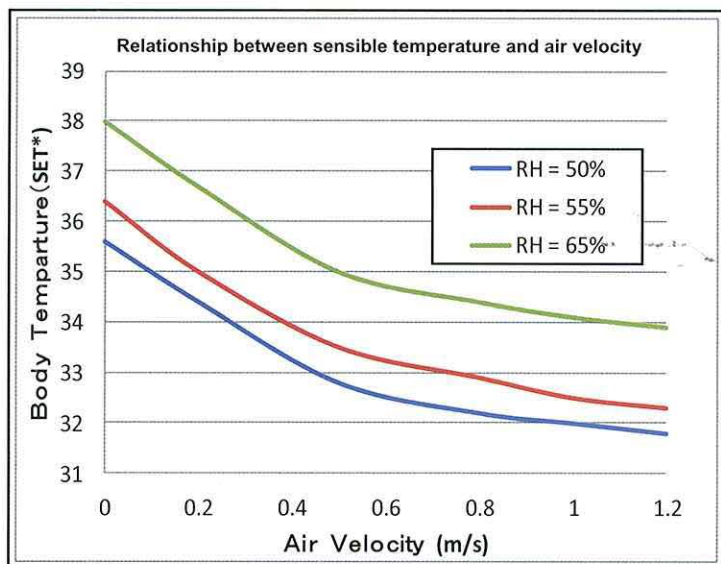


### Features

- **Air Velocity Distribution to Long Distance (up to 30 m. at 1 m/s)**  
Efficiently bring in external air and distribute fresh air to the target area and lower body felt temperature.
- **Energy Saving**  
Without air conditioner usage, it reduces body felt and factory temperature gap by air velocity.
- **Low noise**

The concept of this product is to reduce the Body Temperature (Sensible Temperature) by air velocity.

According to ASHRAE, it explains the Standard Effective Temperature (SET) from temperature, humidity, workload and amount of clothes. The graph and table below show the relationship between Sensible Temperature and Air Velocity at 50-60% of humidity

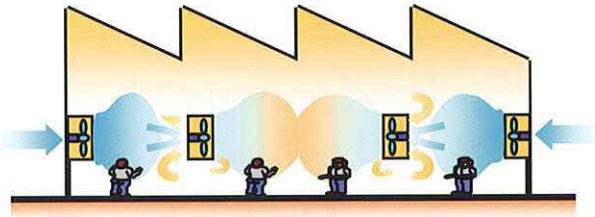


Air Velocity m/s	Room temperature = 35 °C		
	RH = 50%	RH = 55%	RH = 65%
0.0	35.6	36.4	38.0
0.2	34.4	35.0	36.7
0.5	32.8	33.5	35.0
0.8	32.2	32.9	34.4
1.0	32.0	32.5	34.1
1.2	31.8	32.3	33.9

Calculation condition :  
 Quantity of Cloth (CLO = 0.7)  
 Work load (MET = 1.0)  
 Relative humidity (RH = 55%, 65%)  
 Mean Radiant Temperature  
 (MRT = Room temperature)

## Application Sample

1. Large sized area : Difficult for external air distribution to middle area

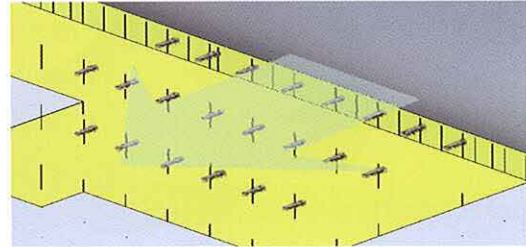
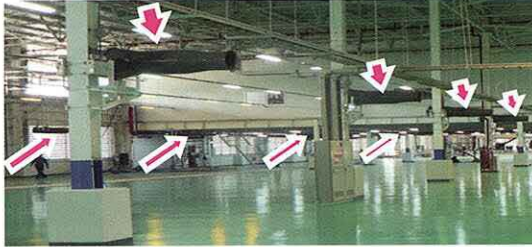


### Installed Sample

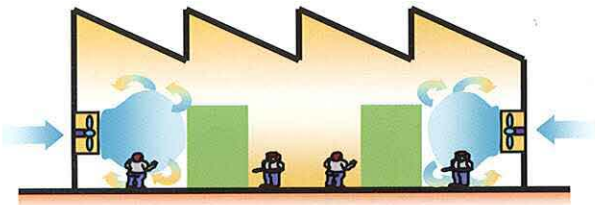
One-direction flow pattern for all internal factory area.

### Result

Air flows all over the factory, no still air.



2. Obstacle from machines : Difficult for air to flow due to obstructed machines.



### Installed Sample

Air distribution to no wind area

### Result

Bring in new fresh air to solve still air problem from obstacle from machine.



3. Heat load : Lot of heat inside the factory.



### Installed Sample

Heat solution by package of Cooling Pad + Fine Factory Fan + Ventilating Fan.

### Result

Create comfortable energy-saving in hot area.



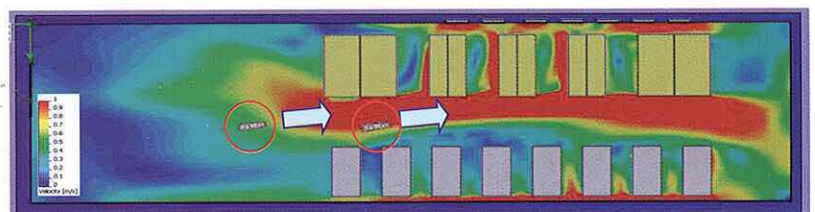
Cooling Pad



Ventilating Fan



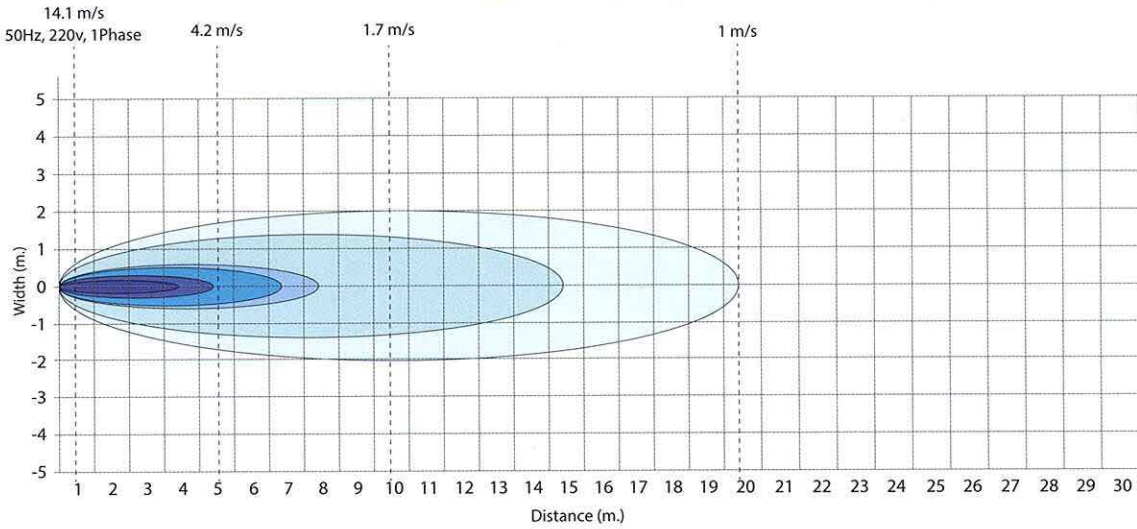
Fine Factory Fan



Installation based on air flow simulation

# Model : FY-45DSL-SP

- Unique nozzle for long distance air distribution
- Narrow distribution, able to distribute strong wind by long distance



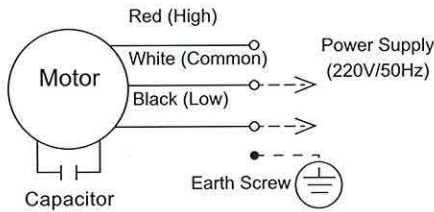
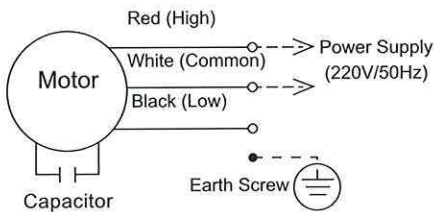
Remark :  
The diameter of  
air velocity at  
1 m/s is 4 m.

Longitudinal Coverage (m.)																
20	17	15	12	10	9	8	7	6	5	4	3	2	1	Attainment velocity of the wind (m/s)	Velocity of Wind	
1	1.2	1.3	1.5	1.7	1.85	2.1	3	3.25	4.2	5.45	6.55	8.28	14.1			Central Portion
	1.51	1.62	2.06	1.86	1.78	1.76	1.72	1.53	1.39	1.21	0.92	0.73	0.47	Velocity of the wind diffusion radius	1 m/s or more	
			0.54	1.02	1.15	1.16	1.3	1.27	1.2	0.96	0.76	0.59	0.37		2 m/s or more	
							0.42	0.61	0.65	0.67	0.41	0.39	0.3		3 m/s or more	
								0.12	0.26	0.44	0.5	0.44	0.32		4 m/s or more	
										0.18	0.36	0.34	0.29		5 m/s or more	
											0.29	0.27	0.26		6 m/s or more	

## Wiring Diagram

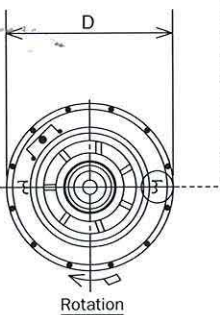
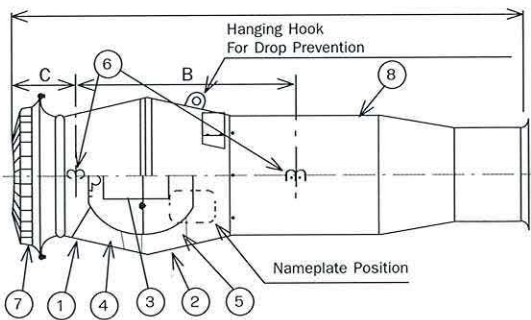
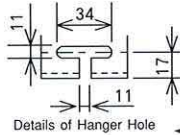
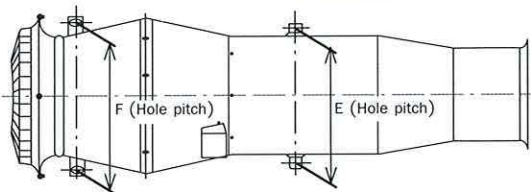
Speed : Hi

Speed : Low



## Dimension

Top View



Side View

Front View

## Specification

Model	FY-45DSL-SP	
Installation Place	Indoor	
Electricity Supply	220/1/50	
Air Volume	4,653 m <sup>3</sup> /h	
Input	523 W	
Current	2.38 A	
Max. distance at 1m/s	20 m.	
Weight	51 kg.	
Noise Value	Side	62 dB(A)
	Intake Side	68 dB(A)
	Exhaust Side	68 dB(A)

## Dimension

Unit : mm.

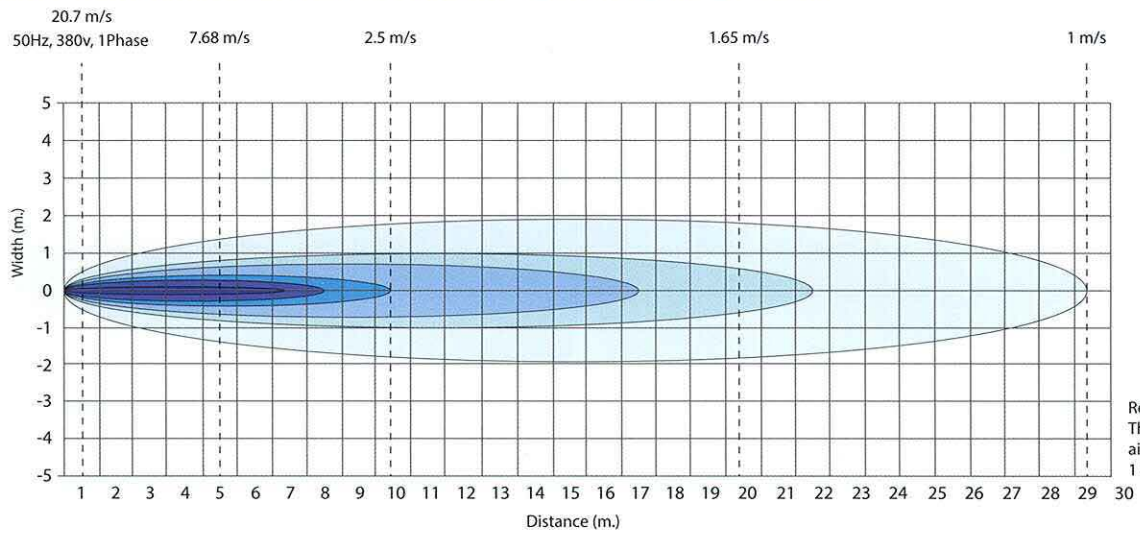
Model	A	B	C	D	E	F
FY-45DSL-SP	1766	630	351	542	467	520

## List of Part Name

- ① Casing A
- ② Casing B
- ③ Motor
- ④ Fan
- ⑤ Guide Vane
- ⑥ Hanger Fittings
- ⑦ Guard
- ⑧ Duct

# Model : FY-55DTH-SP

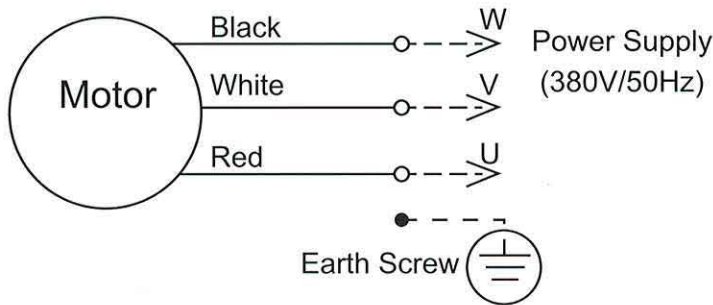
- Unique nozzle for long distance air distribution
- Narrow distribution, able to distribute strong wind by long distance



Remark:  
The diameter of  
air velocity at  
1 m/s is 4 m.

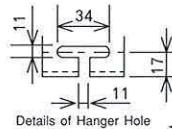
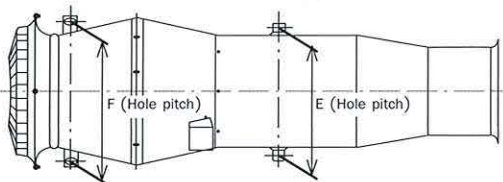
Longitudinal Coverage (m.)																			
30	25	22	20	17	15	12	10	9	8	7	6	5	4	3	2	1	Attainment velocity of the wind (m/s)	Central Portion	
1	1.42	1.53	1.65	1.84	2.15	2.32	2.53	3.21	4.78	5.76	6.22	7.68	10.6	12.5	16.6	20.7		Velocity of Wind	
																	Velocity of the wind diffusion radius (m.)	1 m/s or more	
0.5	1.5	1.65	1.84	1.83	1.8	1.52	1.39	1.34	1.31	1.17	1.06	0.96	0.8	0.64	0.48	0.37		2 m/s or more	
			0.74	0.75	0.82	0.85	0.91	0.93	1.01	1.02	0.86	0.8	0.76	0.62	0.45	0.35		3 m/s or more	
					0.54	0.65	0.69	0.73	0.74	0.84	0.72	0.68	0.64	0.6	0.42	0.34		4 m/s or more	
								0.4	0.46	0.49	0.52	0.51	0.5	0.49	0.4	0.29		5 m/s or more	
										0.31	0.34	0.36	0.38	0.42	0.38	0.24	6 m/s or more		
											0.16	0.26	0.31	0.39	0.24	0.22			

### Wiring Diagram

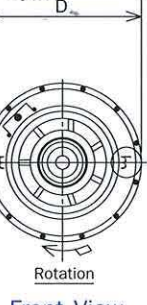
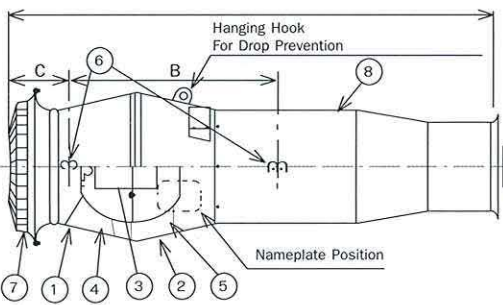


### Dimension

#### Top View



#### Side View



### Specification

Model		FY-55DTH-SP
Installation Place		Indoor
Electricity Supply		380/3/50
Air Volume		8,100 m <sup>3</sup> /h
Input		1240 W
Current		3.05 A
Max. distance at 1m/s		30 m.
Weight		68 kg.
Noise Value	Side	69 dB(A)
	Intake Side	78 dB(A)
	Exhaust Side	78 dB(A)

### Dimension

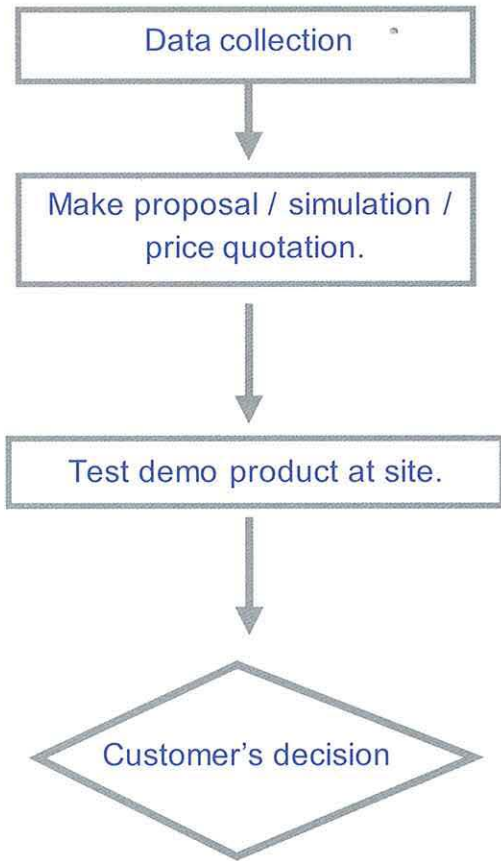
Unit : mm.

Model	A	B	C	D	E	F
FY-55DTH-SP	1951	830	246	631	515	563

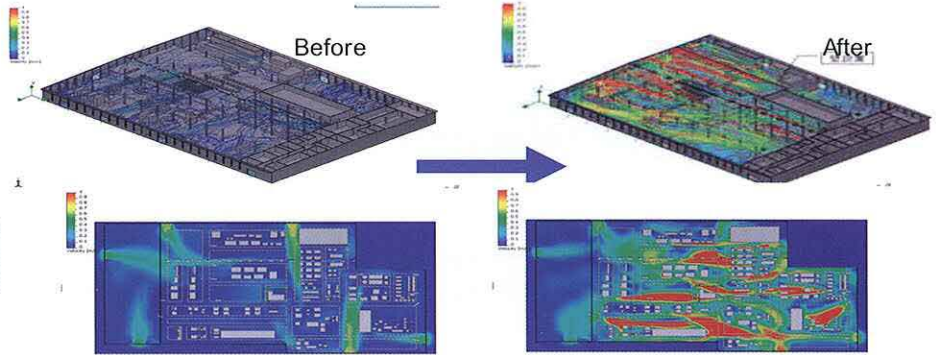
### List of Part Name

- ① Casing A
- ② Casing B
- ③ Motor
- ④ Fan
- ⑤ Guide Vane
- ⑥ Hanger Fittings
- ⑦ Guard
- ⑧ Duct

## Process of Product Selection



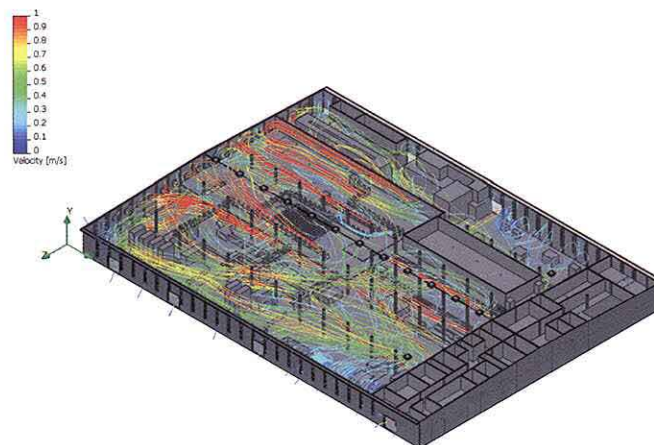
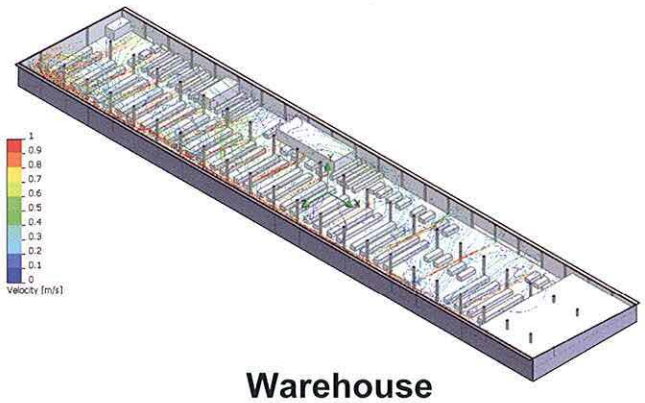
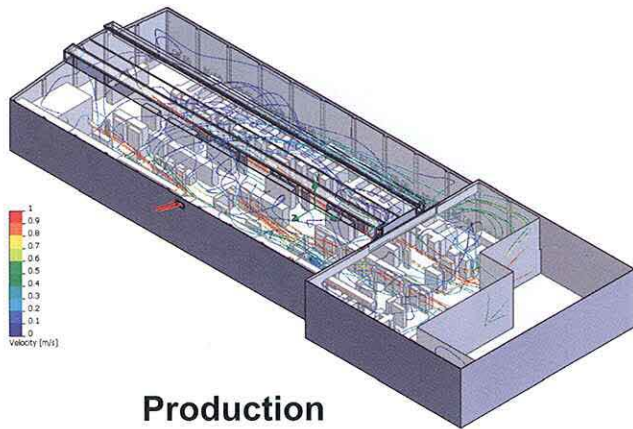
- Check layout of building and specific area. Then, identify installed area and installation points with customer.
- Make proposal, simulation based on data from customer together with price quotation.



- Install demo kit at site.



## Simulation Samples



## Project Reference

### Car Industry (341 sets)

- AGC Automotive (Thailand) Co.,Ltd. [Amata Nakorn Industrial Estate]
- Bridgestone NCR Co.,Ltd. [Rayong]
- Bridgestone Tire Manufacturing (Thailand) Co.,Ltd. [Amata Nakorn Industrial Estate]
- Denso (Thailand) Co.,Ltd. [Wellgrow Industrial Estate]
- Exedy (Thailand) Co.,Ltd. [Amata Nakorn Industrial Estate]
- JATCO (Thailand) Co.,Ltd. [Amata Nakorn Industrial Estate]
- Kayaba [Amata Nakorn Industrial Estate]
- Kitagawa (Thailand) Co.,Ltd. [Hemaraj Industrial Estate]
- Mitsubishi Motors (Thailand) Co.,Ltd.
- Siam Denso Manufacturing Co.,Ltd. [Amata Nakorn Industrial Estate]
- Siam NGK Spark Plugs Co.,Ltd. [Amata Nakorn Industrial Estate]
- Sumiden Hyosung (Thailand) Co.,Ltd. [Amata City Industrial Estate]
- Thai GMB Industry Co.,Ltd. [304 Industrial Estate]
- Thai Marujun Co.,Ltd. [Nongkae Industrial Estate]
- Toyota Gosei (Thailand) Co.,Ltd. [Amata Nakorn Industrial Estate]
- YS TECH (Thailand) Co.,Ltd. [304 Industrial Estate]

### Electric Industry (181 sets)

- Canon Hi-Tech (Thailand) Co.,Ltd. [Navanakorn 2 Industrial Estate]
- Daikin Industries (Thailand) Ltd. [Amata Nakorn Industrial Estate]
- Delta Electronics (Thailand) PCL. [Bangpoo & Wellgrow Industrial Estate]
- Hitachi Consumer Products (Thailand) Co.,Ltd. [304 Industrial Park]
- Panasonic Appliances Motor (Thailand) Co.,Ltd. [Bangplee, Samutprakarn]
- Panasonic Appliances (Thailand) Co.,Ltd. [Wellgrow Industrial Estate]
- Sharp Thai Co.,Ltd. [Bangna km. 37]
- Sony Technology (Thailand) Co.,Ltd. [Hi-Tech Industrial Estate]

### Electrical Wiring Industry (106 sets)

- Thai Arrow Co.,Ltd. [Chachoengsao]
- Yazaki [Indonesia]

Specifications are subjected to change without prior notice.

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