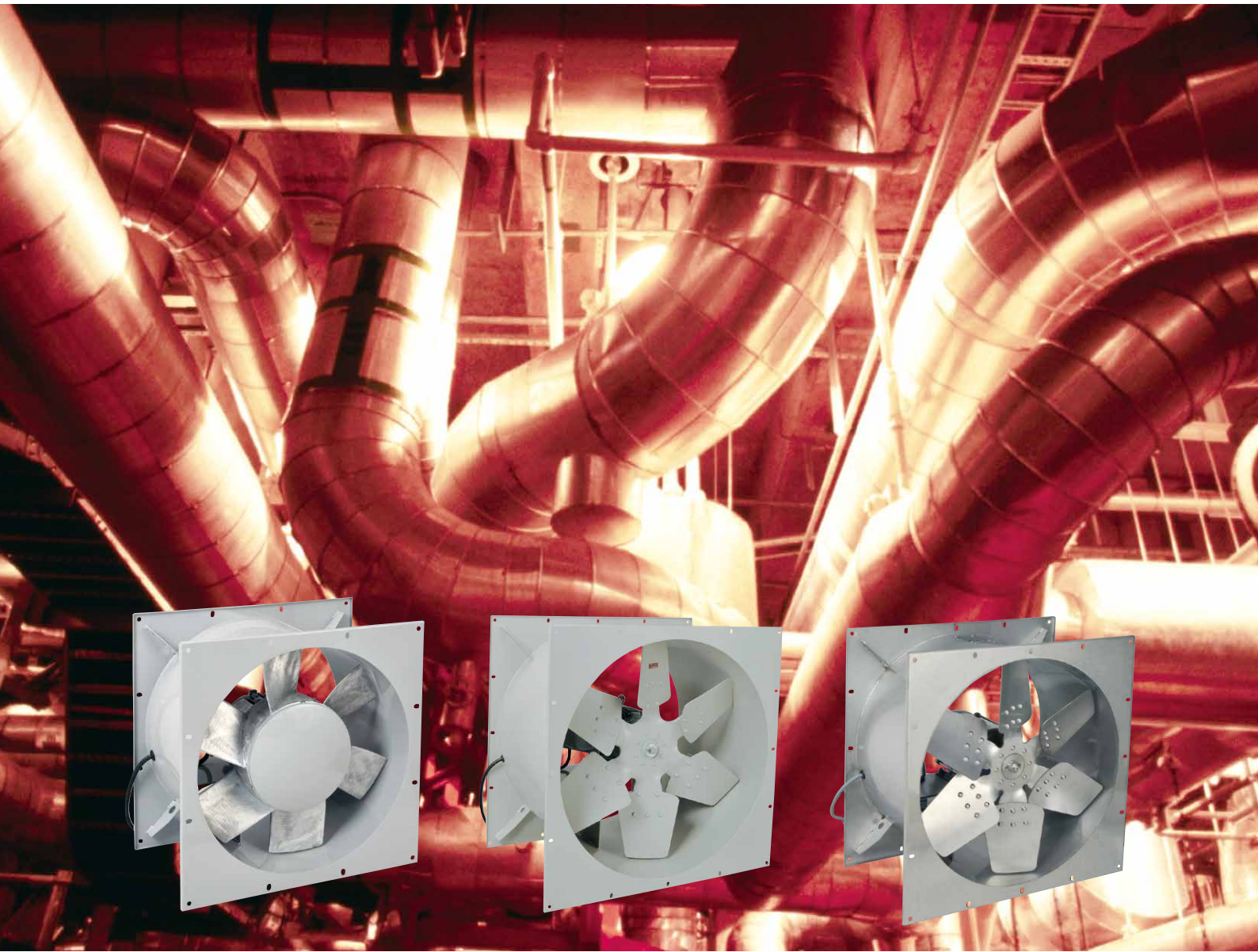


# Axial Flow Fan

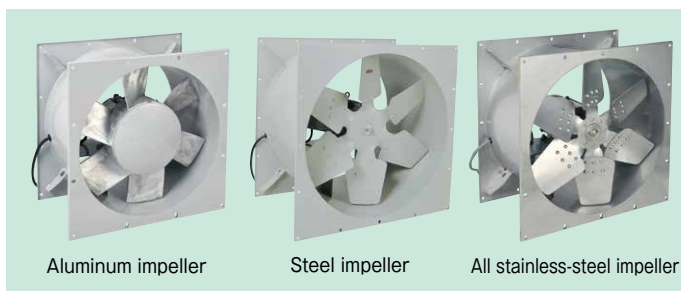
**TERAL**



TERAL INC.

## Applications

- **General air conditioning** . . . For cooling and heating, air conditioning and ventilation
- **Freezing and refrigeration** . . . For blowing, exhausting, and agitating cold air in freezers and refrigerators
- **Drying** . . . . . For drying wood, tobacco, laver, fish, grain, grass, rush, shiitake mushrooms, etc.
- **Equipment cooling** . . . . . For cooling and exhausting heat from dust collectors, transformers, rotating machines, power generators, etc.



\* Keep in mind that the above show typical examples, and may partially differ from actual devices.

## Features

### 1 Adoption of high efficiency motor

Standard specifications include a top runner motor (equivalent to IE3). **We added a lineup equipped with PM motor (permanent magnet motor equivalent to IE4).**

### 2 Adoption of high efficiency impeller

An impeller is one of the most important parts of a fan. The shape, cross-section, curvature, number of blades, etc., are rationally designed based on airfoil theory to exert high-efficiency characteristics.

### 3 Compact, lightweight, and shaped to facilitate installation in ducts

Installation in ducts is facilitated by square-shaped mounting flanges.

### 4 Direct driven type with little power loss

The impeller is directly connected to the motor shaft and power loss is low.

### 5 Extensive lineup

Standard products are available in a blade diameter range of 400 to 1000mm, and larger sizes can also be customized. Motors mounted are prepared for different atmosphere conditions.

## Ambient temperature

|                                            | High-efficiency low-temperature specifications* | Low-temperature specifications | Standard specifications |
|--------------------------------------------|-------------------------------------------------|--------------------------------|-------------------------|
| Aluminum impeller                          | -50°C ~ -10°C                                   | -50°C ~ -10°C                  | -10°C ~ +40°C           |
| Steel impeller                             | -35°C ~ -10°C                                   | -35°C ~ -10°C                  | -10°C ~ +40°C           |
| Stainless steel impeller (AFS series)      | -50°C ~ -10°C                                   | -50°C ~ -10°C                  | -10°C ~ +40°C           |
| All stainless steel impeller (AFSS series) | —                                               | -50°C ~ -10°C                  | —                       |

For low-temperature specifications, provide the working temperature range because motors, etc., are manufactured based on the special specifications.

Please contact us if you are considering a temperature range above 40°C or a product with an increased safety explosion-proof motor.

\* Different voltages, special atmosphere conditions, OE marking are also available. (Contact us for details.)

\* Ceiling suspension type, floor type, and round flange type are available as special specification. (Contact us for details)

### ★High-efficiency low-temperature specifications

High efficiency fan with PM motor (equivalent to IE4) equipped, while following the low temperature specification which can handle gas up to -50°C.



## Mounting position

Standard position is horizontal.

The motor can be mounted by facing up or facing down as custom products. (Contact us for available models.)

## ■ Features of axial flow fan equipped with PM motor

### ● Comparison of AF-7S-P-E(new model) and AF-7S(conventional model)

Annual power consumption reduction (kWh/year)

= (Conventional model IE1(kW)) - New model IE4(kW) x operation time (h)

x Number of working days per year (day/year)

= (3097kW - 2.36kW) x 24h x 365 days

= Approx. 14,103 (kWh/year)

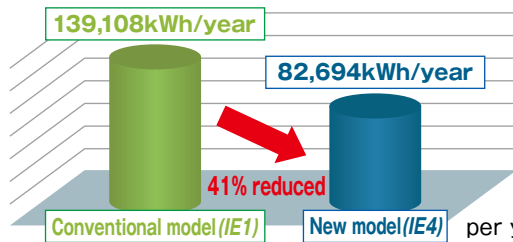
①Energy saving, reduction of annual power consumption  
(41% reduction from standard products with low-temperature specification)

②With a dedicated driver

·Rotation speed can be adjusted.

·The product is available at 50/60 Hz regardless of region.

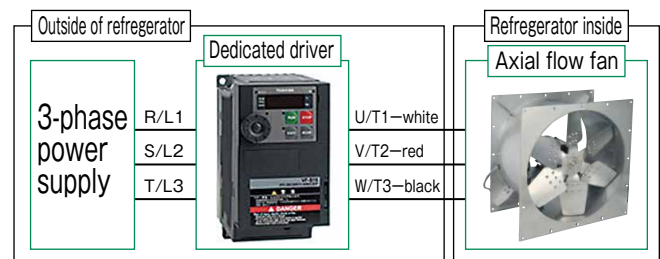
**For example, in case of installing four axial flow fans to the unit cooler.**



Electricity price: Low electricity price by TEPCO Energy Partner, Incorporated (Dec. 2017)

### Notes for axial flow fan with PM motor

- Supply power to the axial flow fan via a dedicated driver.  
Direct application of commercial power may cause malfunction.
- The driver is designed exclusively for our products and cannot be replaced with a commercially available general-purpose inverter.
- One dedicated driver cannot drive more fans than one.
- The dedicated driver cannot be installed inside the refrigerator. Install it in the control panel out of the refrigerator.



## ■ Description of types

### **AF - 50 S - 1 P - E**

① ② ③ ④ ⑤

- ①Direct driven axial flow fan AF:Aluminum impeller, steel impeller (For indoor use)  
WAF:Aluminum impeller, Resin impeller (for outdoor use)  
AFS:Stainless steel impeller (A fan casing is also made of stainless steel.)  
AFSS:Stainless steel impeller (A fan casing and a motor casing are also made of stainless steel.)  
EAF:Equipped with explosion-proof motor (aluminum impeller)
- ②Impeller diameter Aluminum impeller 7:700mm \*When the number changes by 1, the impeller diameter changes 50mm except for 2:400mm.  
Steel and stainless steel impeller 50:500mm  
S:Square R:Round
- ③Flange shape
- ④In-house number (model)
- ⑤Motor efficiency None:Standard efficiency(IE1)  
-E:Top Runner efficiency(equivalent to IE3)  
P-E:IE4 efficiency  
-C-E:Top Runner efficiency low-temperature specifications (equivalent to IE3)

## High-efficiency low-temperature specifications

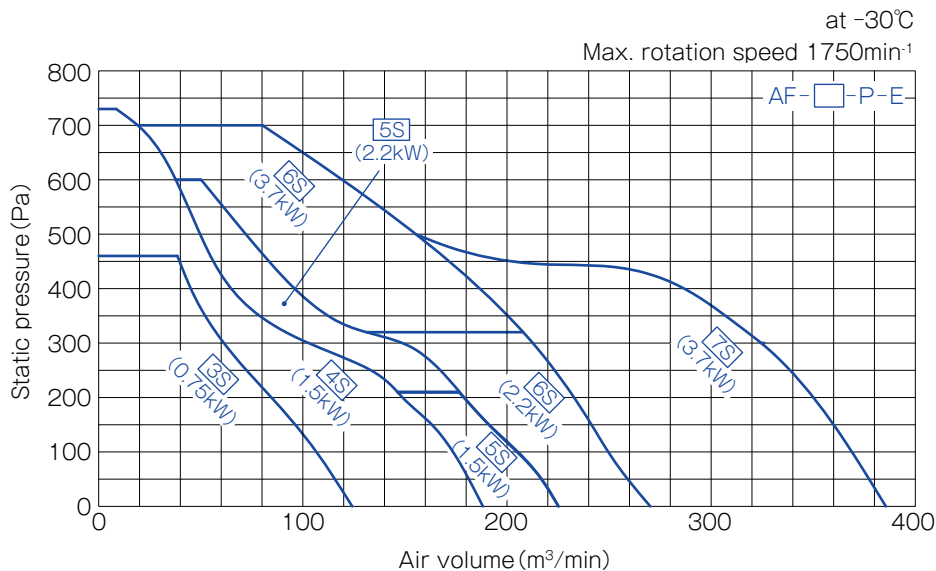
### Specification table

| Type        | Fan diameter (mm) | Motor        |            |                     |                |                       | Air volume (m³/min) | Static pressure (Pa) | Noise (dB(A)) | Approx mass (kg) |    |
|-------------|-------------------|--------------|------------|---------------------|----------------|-----------------------|---------------------|----------------------|---------------|------------------|----|
|             |                   | Power source | Output (W) | Number of poles (P) | Frequency (Hz) | Allowable current (A) |                     |                      |               |                  |    |
| AL impeller | AF-3S-P-E         | 500          | 3φ200V     | 750                 | 6              | 50/60                 | 2.6                 | 95                   | 150           | 80               | 40 |
|             | AF-4S-P-E         | 550          | 3φ200V     | 1500                | 6              | 50/60                 | 5.2                 | 153                  | 200           | 82               | 52 |
|             | AF-5S-P-E         | 600          | 3φ200V     | 1500                | 6              | 50/60                 | 5.2                 | 190                  | 150           | 83               | 66 |
|             | AF-5S-P-E         | 600          | 3φ200V     | 2200                | 6              | 50/60                 | 7.2                 | 177                  | 200           | 83               | 70 |
|             | AF-6S-P-E         | 650          | 3φ200V     | 2200                | 6              | 50/60                 | 7.2                 | 230                  | 200           | 84               | 74 |
|             | AF-6S-P-E         | 650          | 3φ200V     | 3700                | 6              | 50/60                 | 14.4                | 187                  | 400           | 84               | 86 |
|             | AF-7S-P-E         | 700          | 3φ200V     | 3700                | 6              | 50/60                 | 14.4                | 349                  | 200           | 85               | 94 |

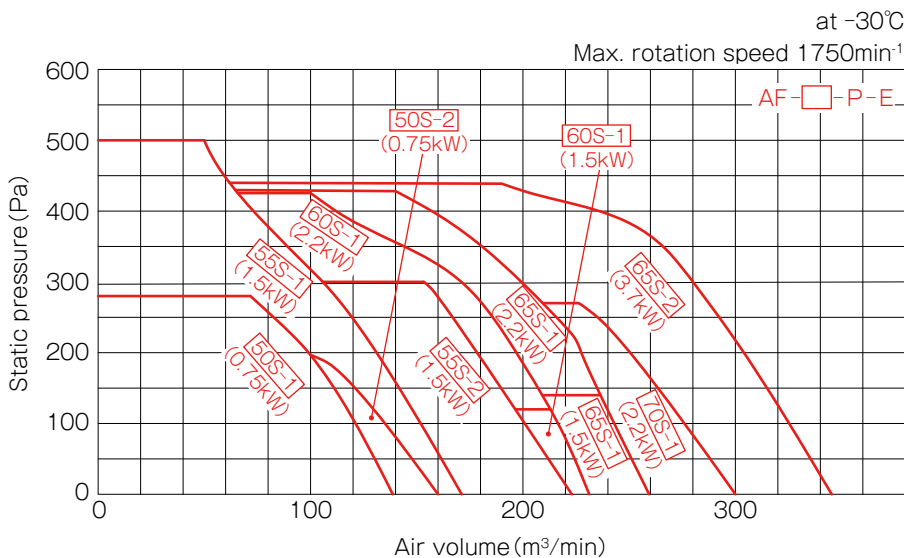
| Type               |             |       | Fan diameter (mm) | Motor        |            |                     |                |                       | Air volume (m³/min) | Static pressure (Pa) | Noise (dB(A)) | Approx. mass (kg) |
|--------------------|-------------|-------|-------------------|--------------|------------|---------------------|----------------|-----------------------|---------------------|----------------------|---------------|-------------------|
|                    |             |       |                   | Power source | Output (W) | Number of poles (P) | Frequency (Hz) | Allowable current (A) |                     |                      |               |                   |
| Steel/SUS Impeller | AF/ AFS-50S | -1P-E | 500               | 3φ200V       | 750        | 6                   | 50/60          | 2.6                   | 122                 | 100                  | 75            | 36                |
|                    |             | -2P-E | 500               | 3φ200V       | 750        | 6                   | 50/60          | 2.6                   | 134                 | 100                  | 76            | 36                |
|                    | AF/ AFS-55S | -1P-E | 550               | 3φ200V       | 1500       | 6                   | 50/60          | 5.2                   | 143                 | 150                  | 78            | 50                |
|                    |             | -2P-E | 550               | 3φ200V       | 1500       | 6                   | 50/60          | 5.2                   | 190                 | 150                  | 78            | 50                |
|                    | AF/ AFS-60S | -1P-E | 600               | 3φ200V       | 1500       | 6                   | 50/60          | 5.2                   | 216                 | 100                  | 74            | 63                |
|                    |             | -1P-E | 600               | 3φ200V       | 2200       | 6                   | 50/60          | 7.2                   | 207                 | 150                  | 74            | 67                |
|                    | AF/ AFS-65S | -1P-E | 650               | 3φ200V       | 1500       | 6                   | 50/60          | 5.2                   | 242                 | 100                  | 77            | 67                |
|                    |             | -1P-E | 650               | 3φ200V       | 2200       | 6                   | 50/60          | 7.2                   | 235                 | 150                  | 77            | 71                |
|                    | AF/ AFS-70S | -2P-E | 650               | 3φ200V       | 3700       | 6                   | 50/60          | 14.4                  | 315                 | 150                  | 79            | 83                |
|                    |             | -1P-E | 700               | 3φ200V       | 2200       | 6                   | 50/60          | 7.2                   | 266                 | 150                  | 83            | 76                |

### Selection chart

#### AL impeller



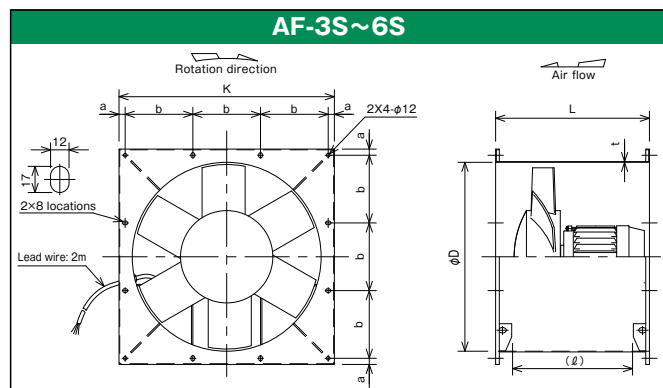
#### Steel/SUS impeller



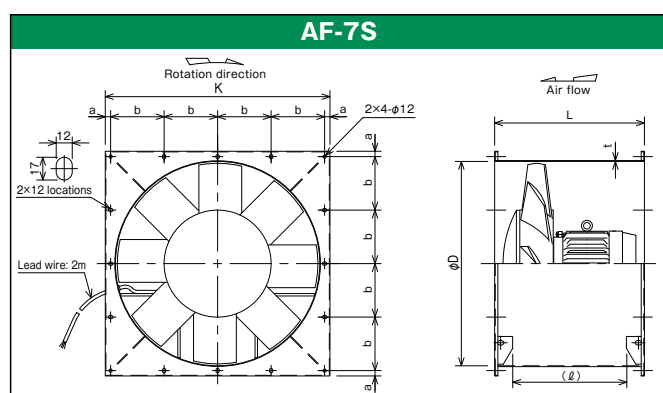


## High-efficiency low-temperature specifications

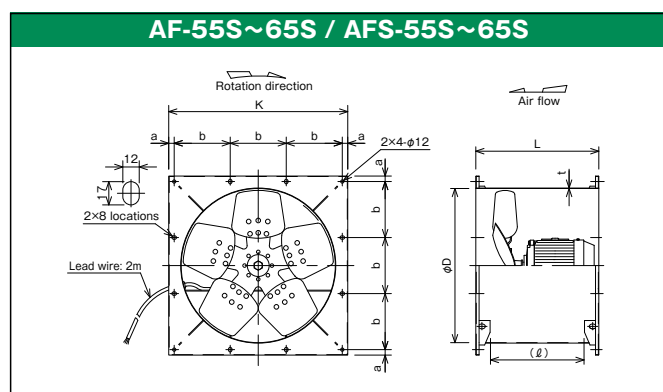
### Assembly drawing



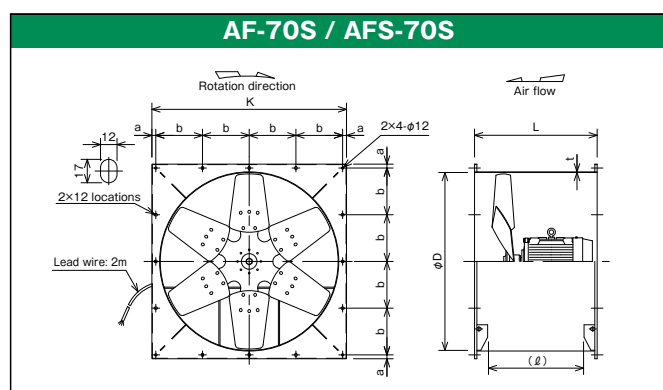
\* Since the number of blades varies depending on the type, refer only to the outline dimensions.



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### Dimensions

(Unit: mm)

| Type           |           | Output<br>(W) | φD   | L   | K   | a   | b   | t   | (ℓ) |     |
|----------------|-----------|---------------|------|-----|-----|-----|-----|-----|-----|-----|
| AL impeller    | AF-3S-P-E | 750           | 514  | 400 | 595 | 20  | 185 | 1.6 | 295 |     |
|                | AF-4S-P-E | 1500          | 564  | 450 | 655 | 20  | 205 | 1.6 | 345 |     |
|                | AF-5S-P-E | 1500          | 614  | 500 | 700 | 20  | 220 | 2.3 | 395 |     |
|                | AF-5S-P-E | 2200          | 614  | 500 | 700 | 20  | 220 | 2.3 | 395 |     |
|                | AF-6S-P-E | 2200          | 664  | 500 | 760 | 20  | 240 | 2.3 | 395 |     |
|                | AF-6S-P-E | 3700          | 664  | 500 | 760 | 20  | 240 | 2.3 | 395 |     |
|                | AF-7S-P-E | 3700          | 714  | 500 | 800 | 20  | 190 | 2.3 | 365 |     |
| Steel impeller | AF-50S    | -1P-E         | 750  | 514 | 400 | 595 | 20  | 185 | 1.6 | 295 |
|                |           | -2P-E         | 750  | 514 | 400 | 595 | 20  | 185 | 1.6 | 295 |
|                | AF-55S    | -1P-E         | 1500 | 564 | 450 | 655 | 20  | 205 | 1.6 | 345 |
|                |           | -2P-E         | 1500 | 564 | 450 | 655 | 20  | 205 | 1.6 | 345 |
|                | AF-60S    | -1P-E         | 1500 | 614 | 500 | 700 | 20  | 220 | 2.3 | 345 |
|                |           | -1P-E         | 2200 | 614 | 500 | 700 | 20  | 220 | 2.3 | 345 |
|                | AF-65S    | -1P-E         | 1500 | 664 | 500 | 760 | 20  | 240 | 2.3 | 395 |
|                |           | -1P-E         | 2200 | 664 | 500 | 760 | 20  | 240 | 2.3 | 395 |
|                | AF-70S    | -1P-E         | 3700 | 664 | 500 | 760 | 20  | 240 | 2.3 | 395 |
|                |           | -1P-E         | 2200 | 714 | 500 | 800 | 20  | 190 | 2.3 | 365 |
| SUS impeller   | AFS-50S   | -1P-E         | 750  | 514 | 400 | 595 | 20  | 185 | 1.5 | 295 |
|                |           | -2P-E         | 750  | 514 | 400 | 595 | 20  | 185 | 1.5 | 295 |
|                | AFS-55S   | -1P-E         | 1500 | 564 | 450 | 655 | 20  | 205 | 1.5 | 345 |
|                |           | -2P-E         | 1500 | 564 | 450 | 655 | 20  | 205 | 1.5 | 345 |
|                | AFS-60S   | -1P-E         | 1500 | 614 | 500 | 700 | 20  | 220 | 2   | 345 |
|                |           | -1P-E         | 2200 | 614 | 500 | 700 | 20  | 220 | 2   | 345 |
|                | AFS-65S   | -1P-E         | 1500 | 664 | 500 | 760 | 20  | 240 | 2   | 395 |
|                |           | -1P-E         | 2200 | 664 | 500 | 760 | 20  | 240 | 2   | 395 |
|                | AFS-70S   | -1P-E         | 3700 | 664 | 500 | 760 | 20  | 240 | 2   | 395 |
|                |           | -1P-E         | 2200 | 714 | 500 | 800 | 20  | 190 | 2   | 365 |

## ■ Specification table

| Type                                          |           | Fan diameter (mm) | Motor        |            |                     |                |                       |                      | Air volume (m³/min) | Static pressure (Pa) | Noise (dB(A)) | Approx mass (kg) |
|-----------------------------------------------|-----------|-------------------|--------------|------------|---------------------|----------------|-----------------------|----------------------|---------------------|----------------------|---------------|------------------|
|                                               |           |                   | Power source | Output (W) | Number of poles (P) | Frequency (Hz) | Allowable current (A) | Starting current (A) |                     |                      |               |                  |
| AL impeller    Standard specifications        | AF-2S     | 400               | 3ø200V       | 400        | 4                   | 50             | 2.2                   | 11.1                 | 52                  | 100                  | 71            | 28               |
|                                               |           | 400               | 3ø200V       | 400        | 4                   | 60             | 2.0                   | 10.7                 | 65                  | 100                  | 72            | 28               |
|                                               | AF-3S-E   | 500               | 3ø200V       | 750        | 4                   | 50             | 3.8                   | 27.3                 | 80                  | 150                  | 76            | 41               |
|                                               |           | 500               | 3ø200V       | 750        | 4                   | 60             | 3.6                   | 23.8                 | 100                 | 150                  | 80            | 46               |
|                                               | AF-4S-E   | 550               | 3ø200V       | 750        | 4                   | 50             | 3.9                   | 27.3                 | 75                  | 150                  | 78            | 46               |
|                                               |           | 550               | 3ø200V       | 1500       | 4                   | 60             | 6.4                   | 41.0                 | 125                 | 200                  | 82            | 57               |
|                                               | AF-5S-E   | 600               | 3ø200V       | 1500       | 4                   | 50             | 6.8                   | 46.6                 | 155                 | 200                  | 83            | 71               |
|                                               |           | 600               | 3ø200V       | 1500       | 4                   | 60             | 7.2                   | 41.0                 | 165                 | 200                  | 83            | 71               |
|                                               | AF-6S-E   | 650               | 3ø200V       | 2200       | 4                   | 50             | 13.0                  | 96.0                 | 195                 | 200                  | 84            | 84               |
|                                               |           | 650               | 3ø200V       | 2200       | 4                   | 60             | 13.0                  | 81.0                 | 180                 | 200                  | 84            | 84               |
|                                               | AF-7S-E   | 700               | 3ø200V       | 2200       | 4                   | 50             | 10.6                  | 96.0                 | 210                 | 200                  | 85            | 87               |
|                                               |           | 700               | 3ø200V       | 3700       | 4                   | 60             | 16.0                  | 118.0                | 310                 | 200                  | 85            | 107              |
|                                               | AF-8S-E   | 750               | 3ø200V       | 3700       | 4                   | 50             | 17.0                  | 134.0                | 320                 | 200                  | 86            | 118              |
|                                               |           | 750               | 3ø200V       | 3700       | 4                   | 60             | 16.0                  | 118.0                | 330                 | 200                  | 86            | 118              |
|                                               | AF-9S-E   | 800               | 3ø200V       | 1500       | 6                   | 50             | 8.0                   | 61.0                 | 200                 | 150                  | 80            | 108              |
|                                               |           | 800               | 3ø200V       | 2200       | 6                   | 60             | 13.0                  | 68.0                 | 240                 | 200                  | 83            | 135              |
|                                               | AF-10S-E  | 850               | 3ø200V       | 2200       | 6                   | 50             | 10.6                  | 84.0                 | 270                 | 150                  | 83            | 143              |
|                                               |           | 850               | 3ø200V       | 3700       | 6                   | 60             | 15.6                  | 102.0                | 330                 | 200                  | 86            | 174              |
|                                               | AF-11S-E  | 900               | 3ø200V       | 3700       | 6                   | 50             | 16.6                  | 123.0                | 370                 | 150                  | 84            | 181              |
|                                               |           | 900               | 3ø200V       | 3700       | 6                   | 60             | 15.6                  | 102.0                | 370                 | 200                  | 86            | 181              |
|                                               | AF-12S-E  | 950               | 3ø200V       | 3700       | 6                   | 50             | 16.6                  | 123.0                | 420                 | 150                  | 84            | 187              |
|                                               |           | 950               | 3ø200V       | 3700       | 6                   | 60             | 15.6                  | 102.0                | 410                 | 200                  | 87            | 187              |
| AF-13S-E                                      | 1000      | 3ø200V            | 3700         | 6          | 50                  | 17.0           | 123.0                 | 450                  | 150                 | 85                   | 200           |                  |
|                                               | 1000      | 3ø200V            | 5500         | 6          | 60                  | 22.2           | 145.0                 | 550                  | 200                 | 85                   | 223           |                  |
| AL impeller    Low-temperature specifications | AF-3S-C-E | 500               | 3ø200V       | 750        | 4                   | 50             | 3.8                   | 27.3                 | 90                  | 150                  | 76            | 42.5             |
|                                               |           | 500               | 3ø200V       | 750        | 4                   | 60             | 4.1                   | 23.8                 | 110                 | 150                  | 80            | 42.5             |
|                                               | AF-4S-C-E | 550               | 3ø200V       | 750        | 4                   | 50             | 3.8                   | 27.3                 | 110                 | 150                  | 78            | 47.5             |
|                                               |           | 550               | 3ø200V       | 1500       | 4                   | 60             | 6.4                   | 41.0                 | 140                 | 200                  | 82            | 55               |
|                                               | AF-5S-C-E | 600               | 3ø200V       | 1500       | 4                   | 50             | 7.0                   | 46.6                 | 165                 | 200                  | 83            | 66               |
|                                               |           | 600               | 3ø200V       | 1500       | 4                   | 60             | 7.7                   | 41.0                 | 173                 | 200                  | 83            | 66               |
|                                               | AF-6S-C-E | 650               | 3ø200V       | 2200       | 4                   | 50             | 12.1                  | 96.0                 | 210                 | 200                  | 84            | 76               |
|                                               |           | 650               | 3ø200V       | 2200       | 4                   | 60             | 13.9                  | 81.0                 | 195                 | 200                  | 84            | 76               |
|                                               | AF-7S-C-E | 700               | 3ø200V       | 2200       | 4                   | 50             | 10.9                  | 96.0                 | 250                 | 200                  | 85            | 79               |
|                                               |           | 700               | 3ø200V       | 3700       | 4                   | 60             | 17.7                  | 118.0                | 320                 | 200                  | 85            | 95               |
|                                               | AF-8S-C-E | 750               | 3ø200V       | 3700       | 4                   | 50             | 17.0                  | 134.0                | 340                 | 200                  | 86            | 106              |
|                                               |           | 750               | 3ø200V       | 3700       | 4                   | 60             | 19.4                  | 118.0                | 360                 | 200                  | 86            | 106              |

| Type                                 |         | Fan diameter (mm) | Motor        |            |                     |                |                       |                      | Air volume (m <sup>3</sup> /min) | Static pressure (Pa) | Noise (dB(A)) | Approx mass (kg) |
|--------------------------------------|---------|-------------------|--------------|------------|---------------------|----------------|-----------------------|----------------------|----------------------------------|----------------------|---------------|------------------|
|                                      |         |                   | Power source | Output (W) | Number of poles (P) | Frequency (Hz) | Allowable current (A) | Starting current (A) |                                  |                      |               |                  |
| Explosion-proof type axial flow fans | EAF-3S  | 500               | 3φ200V       | 750        | 4                   | 50             | 3.8                   | 20.6                 | 80                               | 150                  | 76            | 51               |
|                                      |         | 500               | 3φ200V       | 750        | 4                   | 60             | 3.4                   | 19.7                 | 100                              | 150                  | 80            | 51               |
|                                      | EAF-4S  | 550               | 3φ200V       | 750        | 4                   | 50             | 3.8                   | 20.6                 | 75                               | 150                  | 78            | 56               |
|                                      |         | 550               | 3φ200V       | 1500       | 4                   | 60             | 6.2                   | 42.3                 | 125                              | 200                  | 82            | 69               |
|                                      | EAF-5S  | 600               | 3φ200V       | 1500       | 4                   | 50             | 6.8                   | 45.1                 | 155                              | 200                  | 83            | 83               |
|                                      |         | 600               | 3φ200V       | 1500       | 4                   | 60             | 6.2                   | 42.3                 | 165                              | 200                  | 83            | 83               |
|                                      | EAF-6S  | 650               | 3φ200V       | 2200       | 4                   | 50             | 9.3                   | 63.6                 | 195                              | 200                  | 84            | 93               |
|                                      |         | 650               | 3φ200V       | 2200       | 4                   | 60             | 8.8                   | 59.1                 | 180                              | 200                  | 84            | 93               |
|                                      | EAF-7S  | 700               | 3φ200V       | 2200       | 4                   | 50             | 9.3                   | 63.6                 | 210                              | 200                  | 85            | 96               |
|                                      |         | 700               | 3φ200V       | 3700       | 4                   | 60             | 14.0                  | 102.0                | 310                              | 200                  | 85            | 124              |
|                                      | EAF-8S  | 750               | 3φ200V       | 3700       | 4                   | 50             | 15.0                  | 108.0                | 320                              | 200                  | 86            | 135              |
|                                      |         | 750               | 3φ200V       | 3700       | 4                   | 60             | 14.0                  | 102.0                | 330                              | 200                  | 86            | 135              |
|                                      | EAF-9S  | 800               | 3φ200V       | 1500       | 6                   | 50             | 7.4                   | 42.4                 | 200                              | 150                  | 80            | 114              |
|                                      |         | 800               | 3φ200V       | 2200       | 6                   | 60             | 9.4                   | 59.0                 | 240                              | 200                  | 83            | 144              |
|                                      | EAF-10S | 850               | 3φ200V       | 2200       | 6                   | 50             | 10.0                  | 66.6                 | 270                              | 150                  | 83            | 154              |
|                                      |         | 850               | 3φ200V       | 3700       | 6                   | 60             | 15.4                  | 95.0                 | 330                              | 200                  | 86            | 192              |
|                                      | EAF-11S | 900               | 3φ200V       | 3700       | 6                   | 50             | 16.6                  | 108.0                | 370                              | 150                  | 84            | 199              |
|                                      |         | 900               | 3φ200V       | 3700       | 6                   | 60             | 15.4                  | 95.0                 | 370                              | 200                  | 86            | 199              |
|                                      | EAF-12S | 950               | 3φ200V       | 3700       | 6                   | 50             | 16.6                  | 108.0                | 420                              | 150                  | 84            | 205              |
|                                      |         | 950               | 3φ200V       | 3700       | 6                   | 60             | 15.4                  | 95.0                 | 410                              | 200                  | 87            | 205              |
|                                      | EAF-13S | 1000              | 3φ200V       | 3700       | 6                   | 50             | 16.6                  | 108.0                | 450                              | 150                  | 85            | 218              |
|                                      |         | 1000              | 3φ200V       | 5500       | 6                   | 60             | 22.2                  | 143.0                | 550                              | 200                  | 85            | 250              |

\* Contact us for details of WAF type.

\* Standard specifications are compatible with 400V.

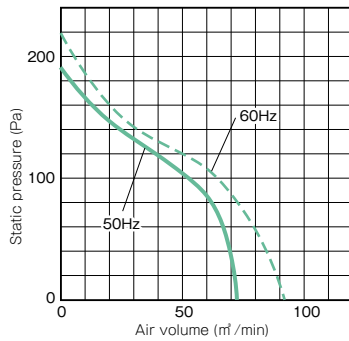
### Selection chart

Characteristics under standard (+20°C) specifications

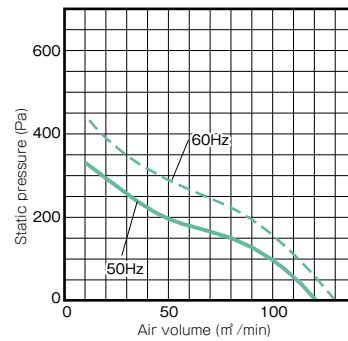
60Hz -----  
50Hz ————

AL impeller: Standard specifications (using Top Runner motor)

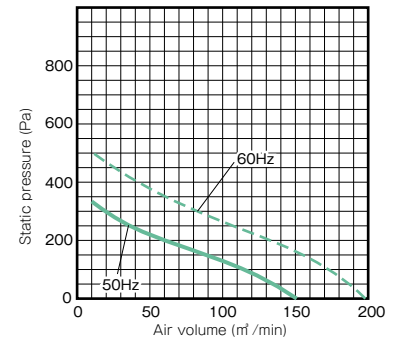
**AF-2S**  
φ400mm 3-phase 0.4kW 4P 200V 50/60Hz



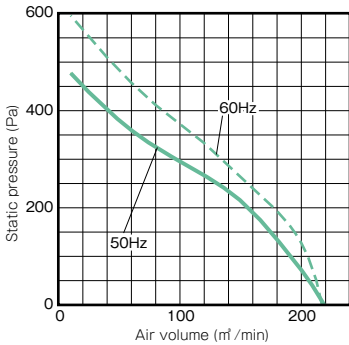
**AF-3S-E AF-3S**  
φ500mm 3-phase 0.75kW 4P 200V 50/60Hz



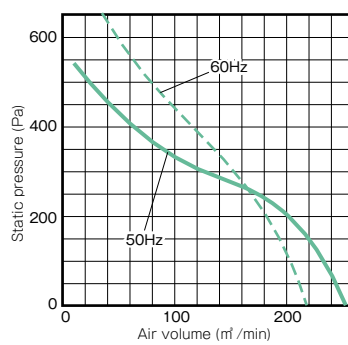
**AF-4S-E AF-4S**  
φ550mm 3-phase 0.75/1.5kW 4P 200V 50/60Hz



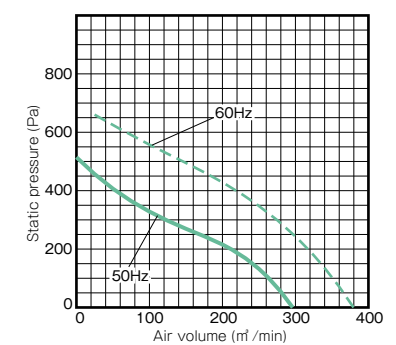
**AF-5S-E AF-5S**  
φ600mm 3-phase 1.5kW 4P 200V 50/60Hz



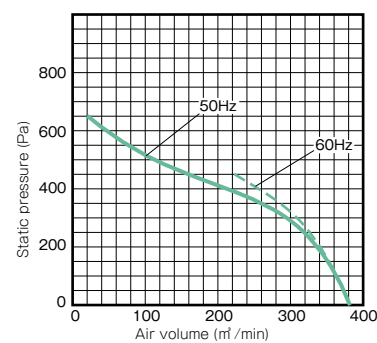
**AF-6S-E AF-6S**  
φ650mm 3-phase 2.2kW 4P 200V 50/60Hz



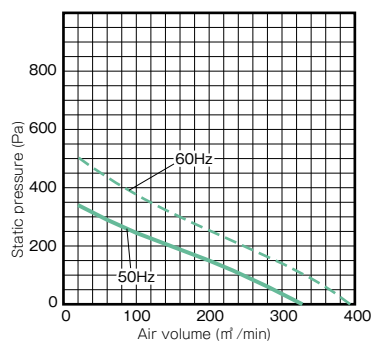
**AF-7S-E AF-7S**  
φ700mm 3-phase 2.2/3.7kW 4P 200V 50/60Hz



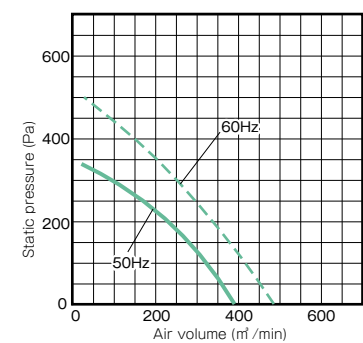
**AF-8S-E AF-8S**  
φ750mm 3-phase 3.7kW 4P 200V 50/60Hz



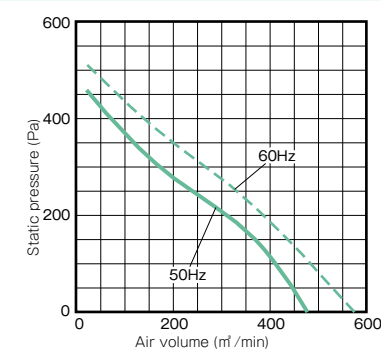
**AF-9S-E AF-9S**  
φ800mm 3-phase 1.5/2.2kW 6P 200V 50/60Hz



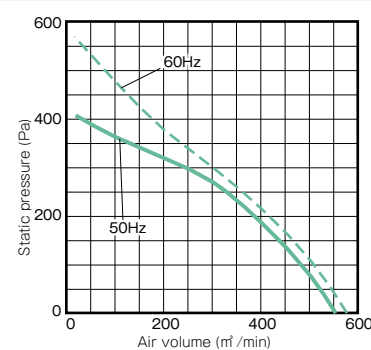
**AF-10S-E AF-10S**  
φ850mm 3-phase 2.2/3.7kW 6P 200V 50/60Hz



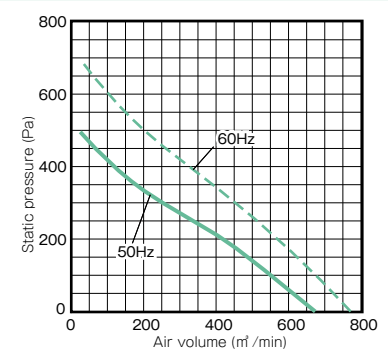
**AF-11S-E AF-11S**  
φ900mm 3-phase 3.7kW 6P 200V 50/60Hz



**AF-12S-E AF-12S**  
φ950mm 3-phase 3.7kW 6P 200V 50/60Hz



**AF-13S-E AF-13S**  
φ1000mm 3-phase 3.7/5.5kW 6P 200V 50/60Hz



## Selection chart

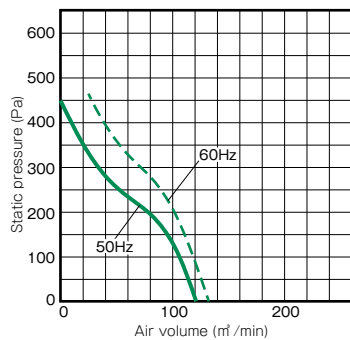
Characteristics under low-temperature (-30°C) specifications

60Hz - - - - -  
50Hz ————

AL impeller: Low-temperature specifications (using Top Runner motor)

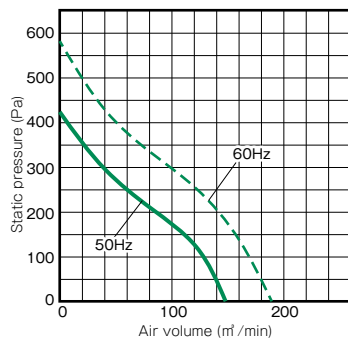
## AF-3S-C-E

φ500mm 3-phase 0.75kW 4P 200V 50/60Hz



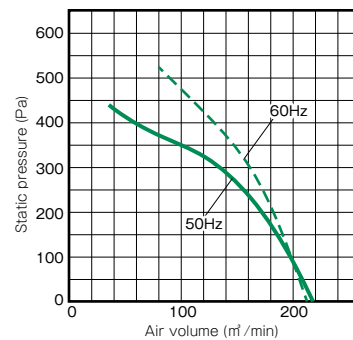
## AF-4S-C-E

φ550mm 3-phase 0.75/1.5kW 4P 200V 50/60Hz



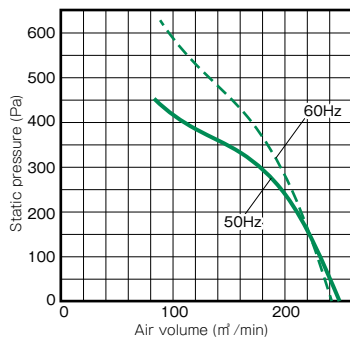
## AF-5S-C-E

φ600mm 3-phase 1.5kW 4P 200V 50/60Hz



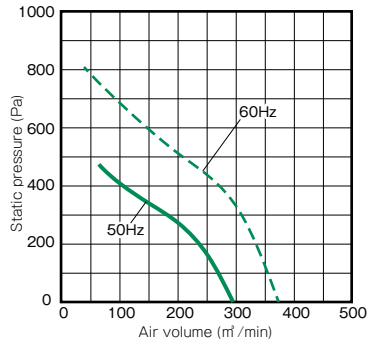
## AF-6S-C-E

φ650mm 3-phase 2.2kW 4P 200V 50/60Hz



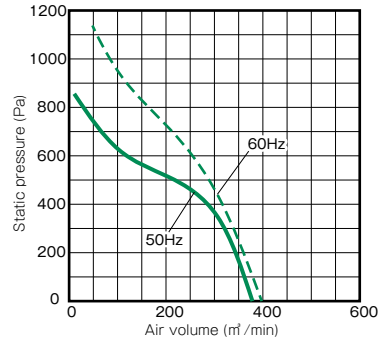
## AF-7S-C-E

φ700mm 3-phase 2.2/3.7kW 4P 200V 50/60Hz



## AF-8S-C-E

φ750mm 3-phase 3.7kW 4P 200V 50/60Hz





### Selection chart

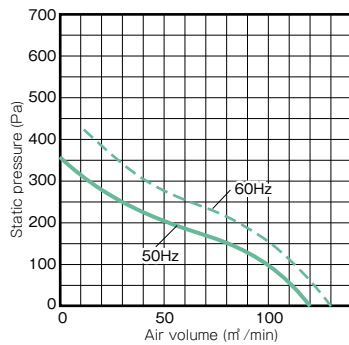
Characteristics under standard (+20°C) specifications

60Hz ---  
50Hz —

Explosion-proof type axial flow fans

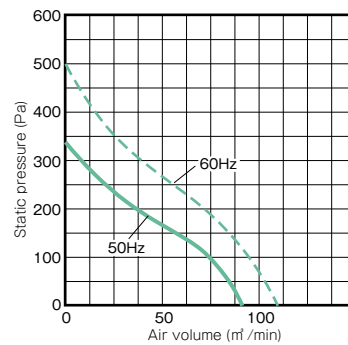
#### EAF-3S

φ500mm 3-phase 0.75kW 4P 200V 50/60Hz



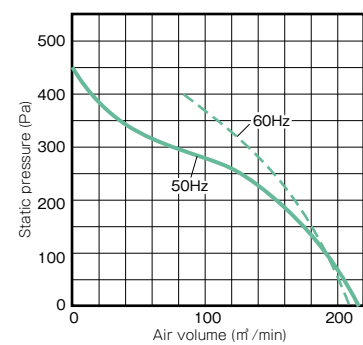
#### EAF-4S

φ550mm 3-phase 0.75/1.5kW 4P 200V 50/60Hz



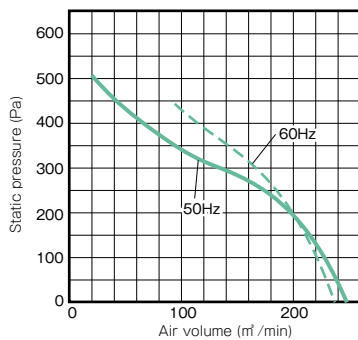
#### EAF-5S

φ600mm 3-phase 1.5kW 4P 200V 50/60Hz



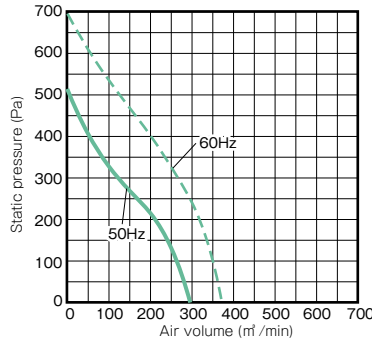
#### EAF-6S

φ650mm 3-phase 2.2kW 4P 200V 50/60Hz



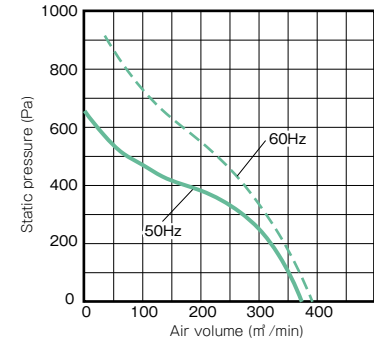
#### EAF-7S

φ700mm 3-phase 2.2/3.7kW 4P 200V 50/60Hz



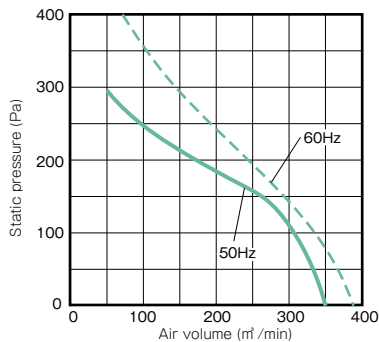
#### EAF-8S

φ750mm 3-phase 3.7kW 4P 200V 50/60Hz



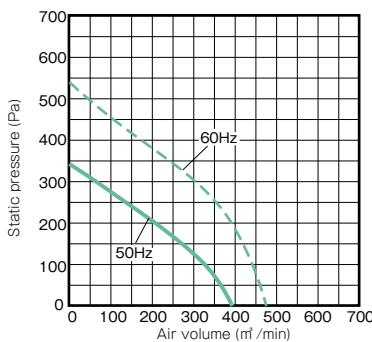
#### EAF-9S

φ800mm 3-phase 1.5/2.2kW 6P 200V 50/60Hz



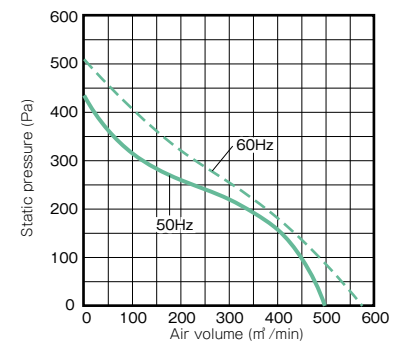
#### EAF-10S

φ850mm 3-phase 2.2/3.7kW 6P 200V 50/60Hz



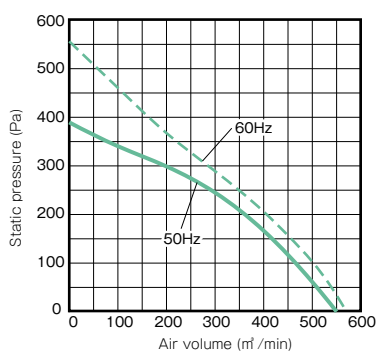
#### EAF-11S

φ900mm 3-phase 3.7/5.5kW 6P 200V 50/60Hz



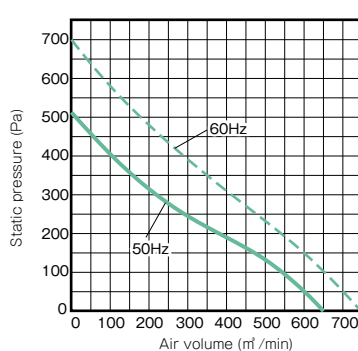
#### EAF-12S

φ950mm 3-phase 3.7kW 6P 200V 50/60Hz

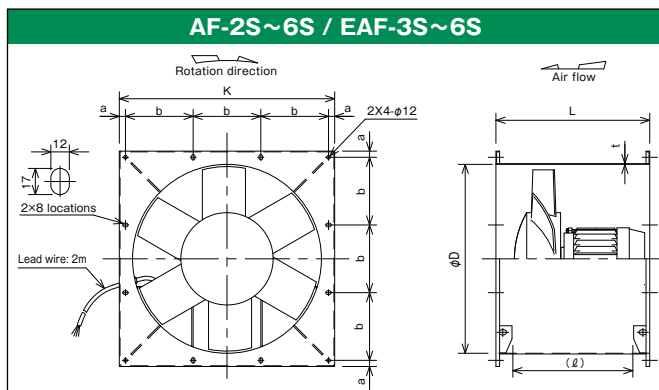


#### EAF-13S

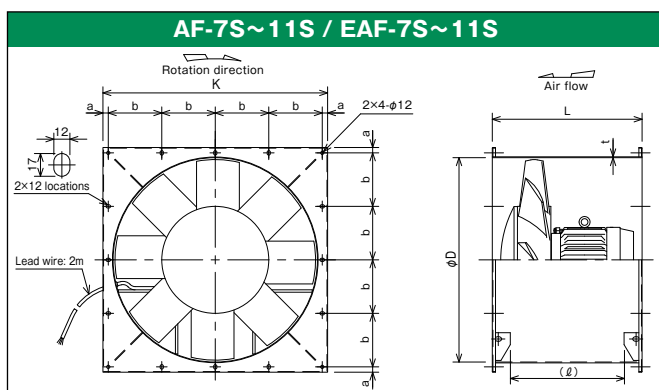
φ1000mm 3-phase 3.7/5.5kW 6P 200V 50/60Hz



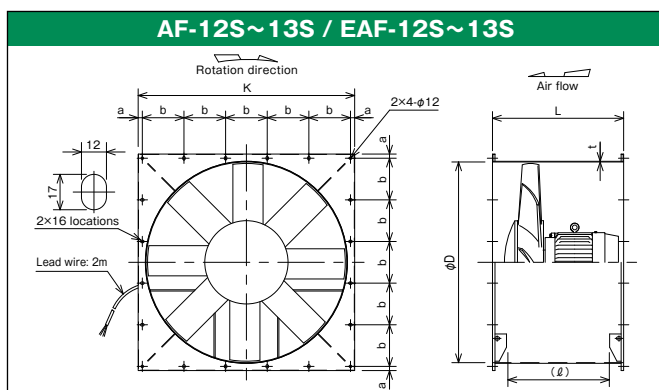
## Assembly drawing



\* Since the number of blades varies depending on the type, refer only to the outline dimensions.



\* Since the number of blades varies depending on the type, refer only to the outline dimensions.



\* Since the number of blades varies depending on the type, refer only to the outline dimensions.

Note for EAF:

- 1) The motor shape changes.
- 2) The lead wires are replaced by a terminal box.

## Dimensions

(Unit: mm)

| Type        |                                | φ D       | L    | K       | a    | b   | t       | (ℓ)     |         |
|-------------|--------------------------------|-----------|------|---------|------|-----|---------|---------|---------|
| AL impeller | Standard specifications        | AF-2S     | 414  | 400     | 490  | 20  | 150     | 1.6     | 295     |
|             |                                | AF-3S-E   | 514  | 400     | 595  | 20  | 185     | 1.6     | 295     |
|             |                                | AF-4S-E   | 564  | 450     | 655  | 20  | 205     | 1.6     | 345     |
|             |                                | AF-5S-E   | 614  | 500     | 700  | 20  | 220     | 2.3     | 395     |
|             |                                | AF-6S-E   | 664  | 500     | 760  | 20  | 240     | 2.3     | 395     |
|             |                                | AF-7S-E   | 714  | 500     | 800  | 20  | 190     | 2.3     | 365     |
|             |                                | AF-8S-E   | 764  | 560     | 840  | 20  | 200     | 2.3     | 425     |
|             |                                | AF-9S-E   | 814  | 560/600 | 900  | 20  | 215     | 2.3     | 425/465 |
|             |                                | AF-10S-E  | 864  | 630     | 960  | 20  | 230     | 2.3/3.2 | 495     |
|             |                                | AF-11S-E  | 914  | 630     | 1000 | 20  | 240     | 3.2     | 495     |
|             |                                | AF-12S-E  | 964  | 630     | 1040 | 20  | 200     | 3.2     | 495     |
|             |                                | AF-13S-E  | 1014 | 630     | 1140 | 20  | 220     | 3.2     | 495     |
|             | Low-temperature specifications | AF-3S-C-E | 514  | 400     | 595  | 20  | 185     | 1.6     | 295     |
|             |                                | AF-4S-C-E | 564  | 450     | 655  | 20  | 205     | 1.6     | 345     |
|             |                                | AF-5S-C-E | 614  | 500     | 700  | 20  | 220     | 2.3     | 395     |
|             |                                | AF-6S-C-E | 664  | 500     | 760  | 20  | 240     | 2.3     | 395     |
|             |                                | AF-7S-C-E | 714  | 500     | 800  | 20  | 190     | 2.3     | 365     |
|             |                                | AF-8S-C-E | 764  | 560     | 840  | 20  | 200     | 2.3     | 425     |
|             | Explosion-proof type           | EAF-3S    | 514  | 400     | 595  | 20  | 185     | 1.6     | 295     |
|             |                                | EAF-4S    | 564  | 500     | 655  | 20  | 205     | 1.6     | 395     |
|             |                                | EAF-5S    | 614  | 500     | 700  | 20  | 220     | 2.3     | 395     |
|             |                                | EAF-6S    | 664  | 560     | 760  | 20  | 240     | 2.3     | 455     |
| EAF-7S      |                                | 714       | 560  | 800     | 20   | 190 | 2.3     | 425     |         |
| EAF-8S      |                                | 764       | 630  | 840     | 20   | 200 | 2.3     | 495     |         |
| EAF-9S      |                                | 814       | 560  | 900     | 20   | 215 | 2.3     | 425     |         |
| EAF-10S     |                                | 864       | 630  | 960     | 20   | 230 | 2.3/3.2 | 495     |         |
| EAF-11S     |                                | 914       | 630  | 1000    | 20   | 240 | 3.2     | 495     |         |
| EAF-12S     |                                | 964       | 630  | 1040    | 20   | 200 | 3.2     | 495     |         |
| EAF-13S     |                                | 1014      | 630  | 1140    | 20   | 220 | 3.2     | 495     |         |

**Specification table**

\* For blanks, please contact us.

| Type                                       |             |    | Fan diameter (mm) | Motor        |            |                     |                |                       |                      | Air volume (m <sup>3</sup> /min) | Static pressure (Pa) | Noise (dB(A)) | Approx mass (kg) |
|--------------------------------------------|-------------|----|-------------------|--------------|------------|---------------------|----------------|-----------------------|----------------------|----------------------------------|----------------------|---------------|------------------|
|                                            |             |    |                   | Power source | Output (W) | Number of poles (P) | Frequency (Hz) | Allowable current (A) | Starting current (A) |                                  |                      |               |                  |
| Steel/SUS impeller standard specifications | AF/AFS-40S  | -1 | 400               | 3φ200V       | 400        | 4                   | 50             | 2.2                   | 11.1                 | 45                               | 100                  | 66            | 25               |
|                                            |             |    | 400               | 3φ200V       | 400        | 4                   | 60             | 2.0                   | 10.7                 | 60                               | 100                  | 68            | 25               |
|                                            |             | -2 | 400               | 3φ200V       | 400        | 4                   | 50             | 2.2                   | 11.1                 | 45                               | 100                  | 68            | 25               |
|                                            |             |    | 400               | 3φ200V       | 400        | 4                   | 60             | 2.0                   | 10.7                 | 65                               | 100                  | 70            | 25               |
|                                            | AF/AFS-50S  | -1 | 500               | 3φ200V       | 400        | 4                   | 50             | 2.2                   | 11.1                 | 95                               | 100                  | 72            | 30               |
|                                            |             |    | 500               | 3φ200V       | 750        | 4                   | 60             | 3.4                   | 23.8                 | 120                              | 100                  | 75            | 37               |
|                                            |             | -2 | 500               | 3φ200V       | 750        | 4                   | 50             | 3.8                   | 27.3                 | 105                              | 100                  | 72            | 37               |
|                                            |             |    | 500               | 3φ200V       | 750        | 4                   | 60             | 3.4                   | 23.8                 | 135                              | 100                  | 76            | 37               |
|                                            | AF/AFS-55S  | -1 | 550               | 3φ200V       | 750        | 4                   | 50             | 3.8                   | 27.3                 | 100                              | 150                  | 73            | 44               |
|                                            |             |    | 550               | 3φ200V       | 1500       | 4                   | 60             | 6.4                   | 41.0                 | 135                              | 150                  | 78            | 55               |
|                                            |             | -2 | 550               | 3φ200V       | 1500       | 4                   | 50             | 6.8                   | 46.6                 | 135                              | 150                  | 73            | 55               |
|                                            |             |    | 550               | 3φ200V       | 1500       | 4                   | 60             | 6.4                   | 41.0                 | 190                              | 150                  | 78            | 55               |
|                                            | AF/AFS-60S  | -1 | 600               | 3φ200V       | 1500       | 4                   | 50             | 6.8                   | 46.6                 | 140                              | 150                  | 72            | 68               |
|                                            |             |    | 600               | 3φ200V       | 1500       | 4                   | 60             | 6.8                   | 41.0                 | 195                              | 150                  | 74            | 68               |
|                                            |             | -2 | 600               | 3φ200V       | 1500       | 4                   | 50             | 6.8                   | 46.6                 | 190                              | 150                  | 74            | 68               |
|                                            |             |    | 600               | 3φ200V       | 2200       | 4                   | 60             | 11.0                  | 81.0                 | 230                              | 150                  | 78            | 78               |
|                                            | AF/AFS-65S  | -1 | 650               | 3φ200V       | 1500       | 4                   | 50             | 6.8                   | 46.6                 | 160                              | 150                  | 76            | 72               |
|                                            |             |    | 650               | 3φ200V       | 1500       | 4                   | 60             | 6.4                   | 41.0                 | 220                              | 150                  | 77            | 72               |
|                                            |             | -2 | 650               | 3φ200V       | 2200       | 4                   | 50             | 10.6                  | 96.0                 | 240                              | 150                  | 76            | 83               |
|                                            |             |    | 650               | 3φ200V       | 3700       | 4                   | 60             | 14.6                  | 118.0                | 290                              | 150                  | 79            | 97               |
|                                            | AF/AFS-70S  | -1 | 700               | 3φ200V       | 1500       | 4                   | 50             | 6.8                   | 46.6                 | 190                              | 150                  | 79            | 79               |
|                                            |             |    | 700               | 3φ200V       | 2200       | 4                   | 60             | 10.0                  | 81.0                 | 250                              | 150                  | 83            | 86               |
|                                            |             | -2 | 700               | 3φ200V       | 2200       | 4                   | 50             | 10.6                  | 96.0                 | 280                              | 150                  | 82            | 86               |
|                                            |             |    | 700               | 3φ200V       | 3700       | 4                   | 60             | 14.6                  | 118.0                | 350                              | 150                  | 86            | 106              |
|                                            | AF/AFS-75S  | -1 | 750               | 3φ200V       | 3700       | 4                   | 50             | 15.6                  | 134.0                | 280                              | 200                  | 82            | 112              |
|                                            |             |    | 750               | 3φ200V       | 5500       | 4                   | 60             | 21.4                  | 166.0                | 370                              | 200                  | 85            | 150              |
|                                            |             | -2 | 750               | 3φ200V       | 3700       | 4                   | 50             | 15.6                  | 134.0                | 310                              | 200                  | 83            | 112              |
|                                            |             |    | 750               | 3φ200V       | 5500       | 4                   | 60             | 24.0                  | 166.0                | 410                              | 200                  | 87            | 150              |
|                                            | AF/AFS-80S  | -1 | 800               | 3φ200V       | 1500       | 6                   | 50             | 7.8                   | 61.0                 | 150                              | 150                  | 79            | 112              |
|                                            |             |    | 800               | 3φ200V       | 1500       | 6                   | 60             | 7.0                   | 50.0                 | 210                              | 150                  | 79            | 112              |
|                                            |             | -2 | 800               | 3φ200V       | 1500       | 6                   | 50             | 7.8                   | 61.0                 | 220                              | 150                  | 78            | 112              |
|                                            |             |    | 800               | 3φ200V       | 2200       | 6                   | 60             | 10.0                  | 68.0                 | 340                              | 150                  | 81            | 125              |
|                                            | AF/AFS-85S  | -1 | 850               | 3φ200V       | 1500       | 6                   | 50             | 7.8                   | 61.0                 | 270                              | 150                  | 75            | 154              |
|                                            |             |    | 850               | 3φ200V       | 3700       | 6                   | 60             | 15.6                  | 102.0                | 350                              | 150                  | 79            | 181              |
|                                            |             | -2 | 850               | 3φ200V       | 3700       | 6                   | 50             | 16.6                  | 123.0                | 380                              | 150                  | 79            | 181              |
|                                            |             |    | 850               | 3φ200V       | 3700       | 6                   | 60             | 15.6                  | 102.0                | 470                              | 150                  | 83            | 181              |
|                                            | AF/AFS-90S  | -1 | 900               | 3φ200V       | 2200       | 6                   | 50             | 11.0                  | 84.0                 | 350                              | 150                  | 77            | 157              |
|                                            |             |    | 900               | 3φ200V       | 3700       | 6                   | 60             | 15.6                  | 102.0                | 470                              | 150                  | 80            | 171              |
|                                            |             | -2 | 900               | 3φ200V       | 3700       | 6                   | 50             | 16.6                  | 123.0                | 440                              | 150                  | 78            | 171              |
|                                            |             |    | 900               | 3φ200V       | 5500       | 6                   | 60             | 22.2                  | 145.0                | 550                              | 150                  | 81            | 174              |
|                                            | AF/AFS-95S  | -1 | 950               | 3φ200V       | 3700       | 6                   | 50             | 16.6                  | 123.0                | 410                              | 150                  | 78            | 190              |
|                                            |             |    | 950               | 3φ200V       | 5500       | 6                   | 60             | 22.2                  | 145.0                | 520                              | 150                  | 82            | 219              |
|                                            |             | -2 | 950               | 3φ200V       | 3700       | 6                   | 50             | 19.0                  | 123.0                | 520                              | 150                  | 80            | 190              |
|                                            |             |    | 950               | 3φ200V       | 7500       | 6                   | 60             | 30.0                  | 172.0                | 650                              | 150                  | 83            | 253              |
|                                            | AF/AFS-100S | -1 | 1000              | 3φ200V       | 3700       | 6                   | 50             | 16.6                  | 123.0                | 550                              | 150                  | 84            | 204              |
|                                            |             |    | 1000              | 3φ200V       | 5500       | 6                   | 60             | 22.2                  | 145.0                | 700                              | 150                  | 87            | 219              |
|                                            |             | -2 | 1000              | 3φ200V       | 5500       | 6                   | 50             | 23.8                  | 176.0                | 600                              | 150                  | 84            | 219              |
|                                            |             |    | 1100              | 3φ200V       | 7500       | 6                   | 50             | 31.2                  | 204.0                |                                  | 150                  |               | 266              |

| Type                                              |             |        | Fan diameter (mm) | Motor        |            |                     |                |                       |                      | Air volume (m³/min) | Static pressure (Pa) | Noise (dB(A)) | Approx mass (kg) |
|---------------------------------------------------|-------------|--------|-------------------|--------------|------------|---------------------|----------------|-----------------------|----------------------|---------------------|----------------------|---------------|------------------|
|                                                   |             |        |                   | Power source | Output (W) | Number of poles (P) | Frequency (Hz) | Allowable current (A) | Starting current (A) |                     |                      |               |                  |
| Steel/SUS impeller low-temperature specifications | AF(AFS)-40S | -1     | 400               | 3φ200V       | 400        | 4                   | 50             | 2.2                   | 11.1                 | 52                  | 100                  | 66            | 25               |
|                                                   |             |        | 400               | 3φ200V       | 400        | 4                   | 60             | 2.0                   | 10.7                 | 65                  | 100                  | 68            | 25               |
|                                                   |             | -2     | 400               | 3φ200V       | 400        | 4                   | 50             | 2.2                   | 11.1                 | 55                  | 100                  | 68            | 25               |
|                                                   |             |        | 400               | 3φ200V       | 400        | 4                   | 60             | 2.0                   | 10.7                 | 70                  | 100                  | 70            | 25               |
|                                                   | AF(AFS)-50S | -1     | 500               | 3φ200V       | 400        | 4                   | 50             | 2.2                   | 11.1                 | 95                  | 100                  | 72            | 30               |
|                                                   |             |        | 500               | 3φ200V       | 750        | 4                   | 60             | 3.4                   | 23.8                 | 122                 | 100                  | 75            | 38.5             |
|                                                   |             | -2-C-E | 500               | 3φ200V       | 750        | 4                   | 50             | 3.8                   | 27.3                 | 110                 | 100                  | 72            | 38.5             |
|                                                   |             |        | 500               | 3φ200V       | 750        | 4                   | 60             | 3.9                   | 23.8                 | 140                 | 100                  | 76            | 38.5             |
|                                                   | AF(AFS)-55S | -1-C-E | 550               | 3φ200V       | 750        | 4                   | 50             | 3.8                   | 27.3                 | 105                 | 150                  | 73            | 45.5             |
|                                                   |             |        | 550               | 3φ200V       | 1500       | 4                   | 60             | 6.4                   | 41.0                 | 140                 | 150                  | 78            | 53               |
|                                                   |             | -2-C-E | 550               | 3φ200V       | 1500       | 4                   | 50             | 6.8                   | 46.6                 | 140                 | 150                  | 73            | 53               |
|                                                   |             |        | 550               | 3φ200V       | 1500       | 4                   | 60             | 6.6                   | 41.0                 | 190                 | 150                  | 78            | 53               |
|                                                   | AF(AFS)-60S | -1-C-E | 600               | 3φ200V       | 1500       | 4                   | 50             | 6.8                   | 46.6                 | 145                 | 150                  | 72            | 66               |
|                                                   |             |        | 600               | 3φ200V       | 1500       | 4                   | 60             | 7.5                   | 41.0                 | 200                 | 150                  | 74            | 66               |
|                                                   |             | -2-C-E | 600               | 3φ200V       | 1500       | 4                   | 50             | 7.2                   | 46.6                 | 195                 | 150                  | 74            | 66               |
|                                                   |             |        | 600               | 3φ200V       | 2200       | 4                   | 60             | 11.5                  | 81.0                 | 245                 | 150                  | 78            | 79               |
|                                                   | AF(AFS)-65S | -1-C-E | 650               | 3φ200V       | 1500       | 4                   | 50             | 6.8                   | 46.6                 | 165                 | 150                  | 76            | 70               |
|                                                   |             |        | 650               | 3φ200V       | 1500       | 4                   | 60             | 7.7                   | 41.0                 | 230                 | 150                  | 77            | 70               |
|                                                   |             | -2-C-E | 650               | 3φ200V       | 2200       | 4                   | 50             | 10.6                  | 96.0                 | 245                 | 150                  | 76            | 84               |
|                                                   |             |        | 650               | 3φ200V       | 3700       | 4                   | 60             | 14.6                  | 118.0                | 295                 | 150                  | 79            | 95               |
|                                                   | AF(AFS)-70S | -1-C-E | 700               | 3φ200V       | 1500       | 4                   | 50             | 7.4                   | 46.6                 | 210                 | 150                  | 79            | 77               |
|                                                   |             |        | 700               | 3φ200V       | 2200       | 4                   | 60             | 11.5                  | 81.0                 | 255                 | 150                  | 83            | 87               |
|                                                   |             | -2-C-E | 700               | 3φ200V       | 2200       | 4                   | 50             | 13.3                  | 96.0                 | 285                 | 150                  | 82            | 87               |
|                                                   |             |        | 700               | 3φ200V       | 3700       | 4                   | 60             | 17.3                  | 118.0                | 350                 | 150                  | 86            | 104              |
|                                                   | AF(AFS)-75S | -1-C-E | 750               | 3φ200V       | 3700       | 4                   | 50             | 16.7                  | 134.0                | 290                 | 200                  | 82            | 110              |
|                                                   |             | -2-C-E | 750               | 3φ200V       | 3700       | 4                   | 50             | 16.5                  | 134.0                | 330                 | 200                  | 83            | 110              |

\* Contact us for details of WAF type.

\* Standard specifications are compatible with 400V.

## Selection chart

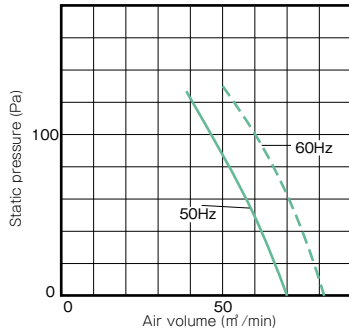
Characteristics under standard (+20°C) specifications

60Hz -----  
50Hz —————

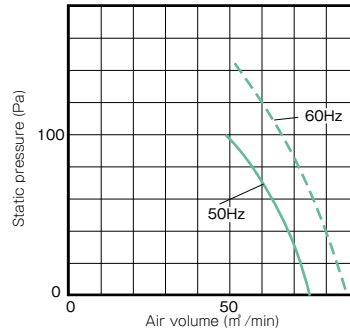
Steel impeller: Standard specifications (using Top Runner motor)

SUS impeller: Standard specifications (using Top Runner motor)

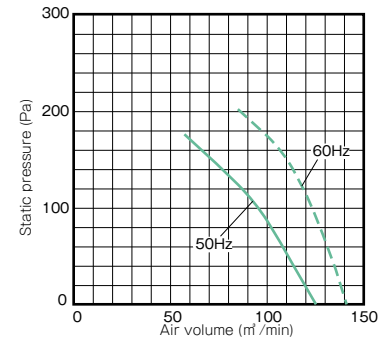
**AF-40S-1 AFS-40S-1**  
φ400mm 3-phase 400W 4P 200V 50/60Hz



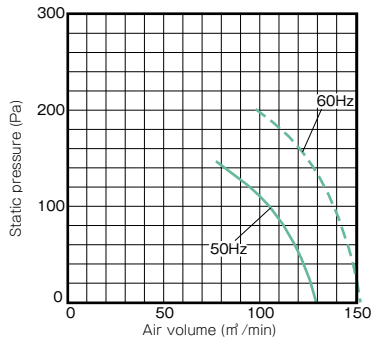
**AF-40S-2 AFS-40S-2**  
φ400mm 3-phase 400W 4P 200V 50/60Hz



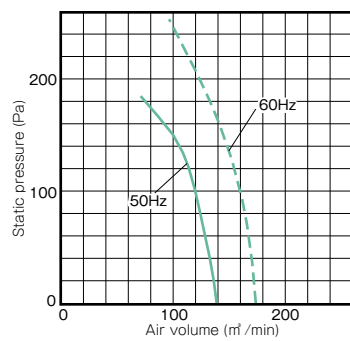
**AF-50S-1-E AF-50S-1 AFS-50S-1-E AFS-50S-1**  
φ500mm 3-phase 400/750W 4P 200V 50/60Hz



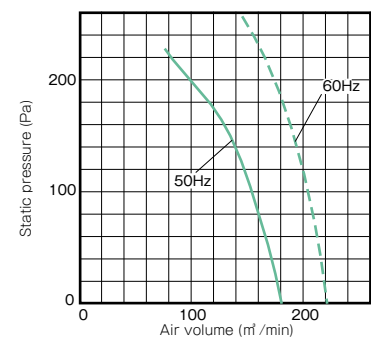
**AF-50S-2-E AF-50S-2 AFS-50S-2-E AFS-50S-2**  
φ500mm 3-phase 750W 4P 200V 50/60Hz



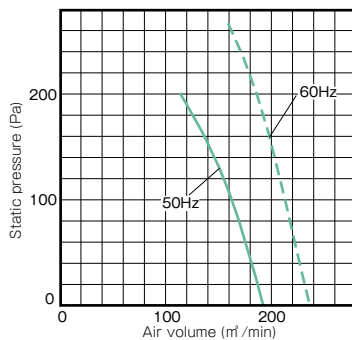
**AF-55S-1-E AF-55S-1 AFS-55S-1-E AFS-55S-1**  
φ550mm 3-phase 750W/1.5kW 4P 200V 50/60Hz



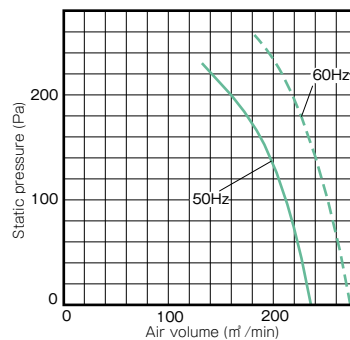
**AF-55S-2-E AF-55S-2 AFS-55S-2-E AFS-55S-2**  
φ550mm 3-phase 1.5kW 4P 200V 50/60Hz



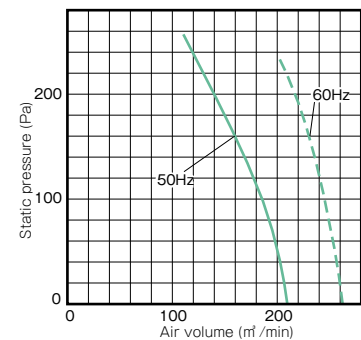
**AF-60S-1-E AF-60S-1 AFS-60S-1-E AFS-60S-1**  
φ600mm 3-phase 1.5kW 4P 200V 50/60Hz



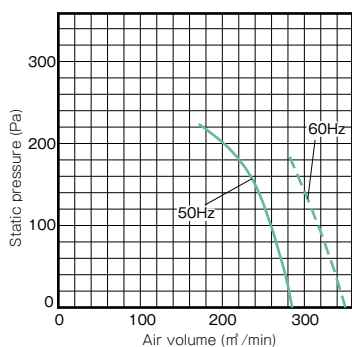
**AF-60S-2-E AF-60S-2 AFS-60S-2-E AFS-60S-2**  
φ600mm 3-phase 1.5/2.2kW 4P 200V 50/60Hz



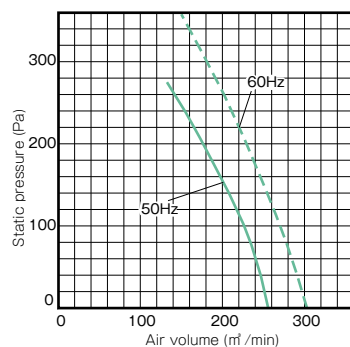
**AF-65S-1-E AF-65S-1 AFS-65S-1-E AFS-65S-1**  
φ650mm 3-phase 1.5kW 4P 200V 50/60Hz



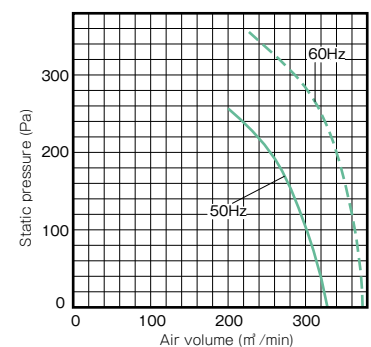
**AF-65S-2-E AF-65S-2 AFS-65S-2-E AFS-65S-2**  
φ650mm 3-phase 2.2/3.7kW 4P 200V 50/60Hz



**AF-70S-1-E AF-70S-1 AFS-70S-1-E AFS-70S-1**  
φ700mm 3-phase 1.5/2.2kW 4P 200V 50/60Hz



**AF-70S-2-E AF-70S-2 AFS-70S-2-E AFS-70S-2**  
φ700mm 3-phase 2.2/3.7kW 4P 200V 50/60Hz



### Selection chart

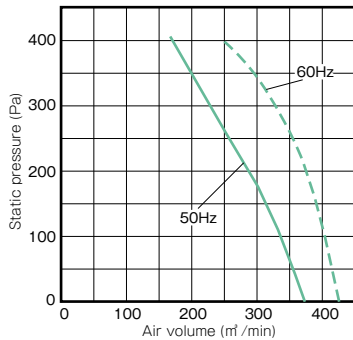
Characteristics under standard (+20°C) specifications

60Hz -----  
50Hz ————

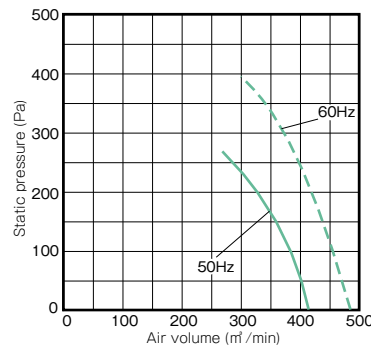
Steel impeller: Standard specifications (using Top Runner motor)

SUS impeller: Standard specifications (using Top Runner motor)

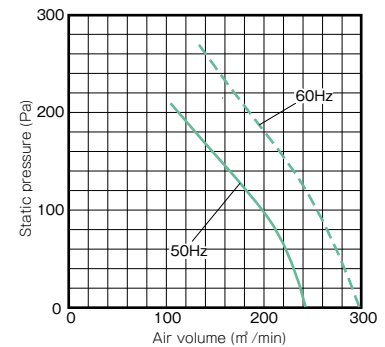
**AF-75S-1-E AF-75S-1 AFS-75S-1-E AFS-75S-1**  
φ750mm 3-phase 3.7/5.5kW 4P 200V 50/60Hz



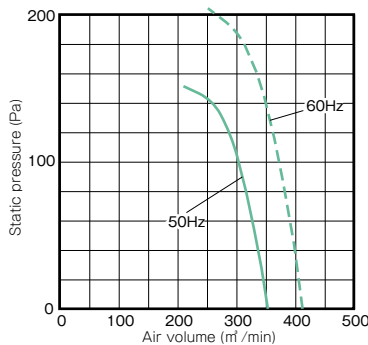
**AF-75S-2-E AF-75S-2 AFS-75S-2-E AFS-75S-2**  
φ750mm 3-phase 3.7/5.5kW 4P 200V 50/60Hz



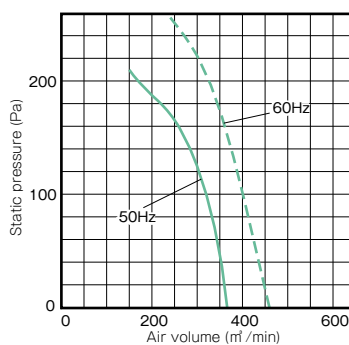
**AF-80S-1-E AF-80S-1 AFS-80S-1-E AFS-80S-1**  
φ800mm 3-phase 1.5kW 6P 200V 50/60Hz



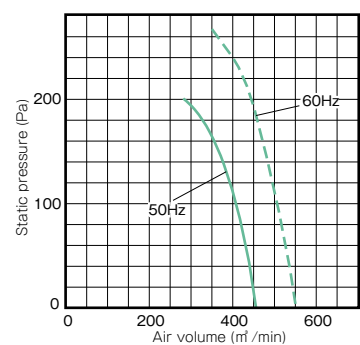
**AF-80S-2-E AF-80S-2 AFS-80S-2-E AFS-80S-2**  
φ800mm 3-phase 1.5/2.2kW 6P 200V 50/60Hz



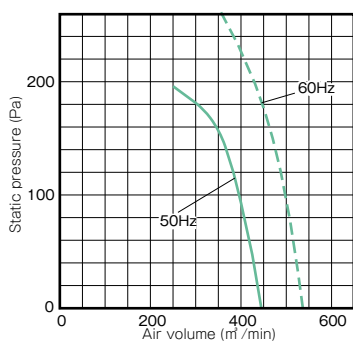
**AF-85S-1-E AF-85S-1 AFS-85S-1-E AFS-85S-1**  
φ850mm 3-phase 1.5/3.7kW 6P 200V 50/60Hz



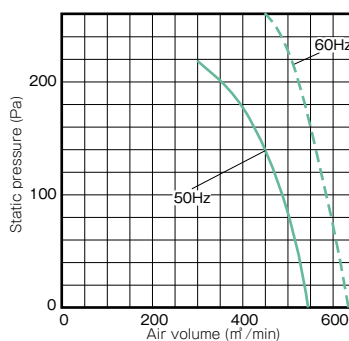
**AF-85S-2-E AF-85S-2 AFS-85S-2-E AFS-85S-2**  
φ850mm 3-phase 3.7kW 6P 200V 50/60Hz



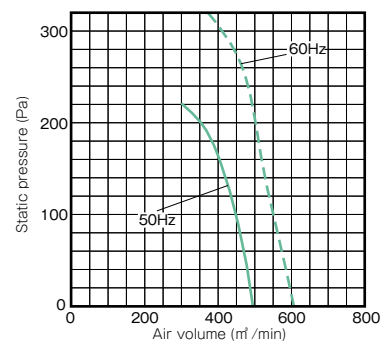
**AF-90S-1-E AF-90S-1 AFS-90S-1-E AFS-90S-1**  
φ900mm 3-phase 2.2/3.7kW 6P 200V 50/60Hz



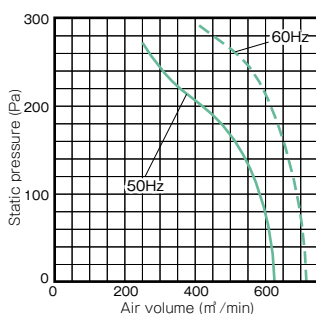
**AF-90S-2-E AF-90S-2 AFS-90S-2-E AFS-90S-2**  
φ900mm 3-phase 3.7/5.5kW 6P 200V 50/60Hz



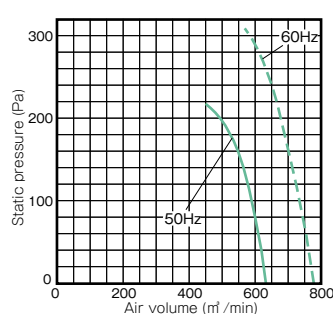
**AF-95S-1-E AF-95S-1 AFS-95S-1-E AFS-95S-1**  
φ950mm 3-phase 3.7/5.5kW 6P 200V 50/60Hz



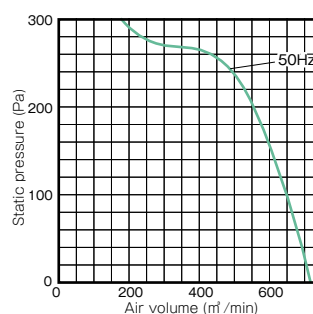
**AF-95S-2-E AF-95S-2 AFS-95S-2-E AFS-95S-2**  
φ950mm 3-phase 3.7/7.5kW 6P 200V 50/60Hz



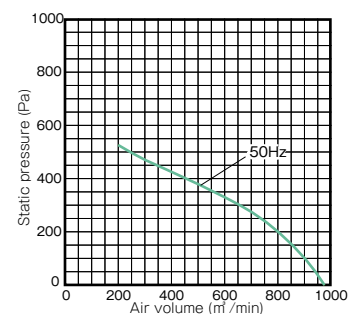
**AF-100S-1-E AF-100S-1 AFS-100S-1-E AFS-100S-1**  
φ1000mm 3-phase 3.7/5.5kW 6P 200V 50/60Hz



**AF-100S-2-E AF-100S-2 AFS-100S-2-E AFS-100S-2**  
φ1000mm 3-phase 5.5kW 6P 200V 50Hz



**AF-110S-2-E AF-110S-2 AFS-110S-2-E AFS-110S-2**  
φ1100mm 3-phase 7.5kW 6P 200V 50Hz





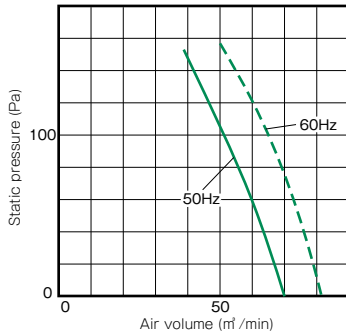
## Selection chart

Characteristics under low-temperature (-30°C) specifications 60Hz ----- 50Hz ———

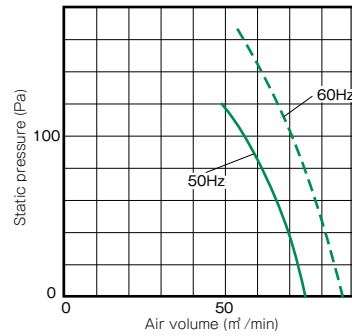
Steel impeller: Low-temperature specifications (using Top Runner motor)

SUS impeller: Low-temperature specifications (using Top Runner motor)

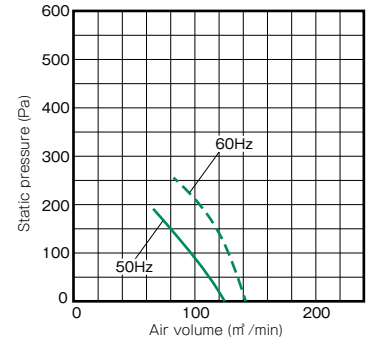
**AF-40S-1 AFS-40S-1**  
φ400mm 3-phase 400W 4P 200V 50/60Hz



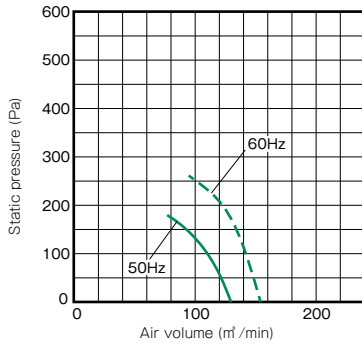
**AF-40S-2 AFS-40S-2**  
φ400mm 3-phase 400W 4P 200V 50/60Hz



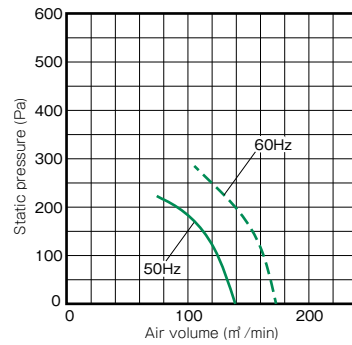
**AF-50S-1/AF-50S-1-C-E AFS-50S-1/AFS-50S-1-C-E**  
φ500mm 3-phase 400/750W 4P 200V 50/60Hz



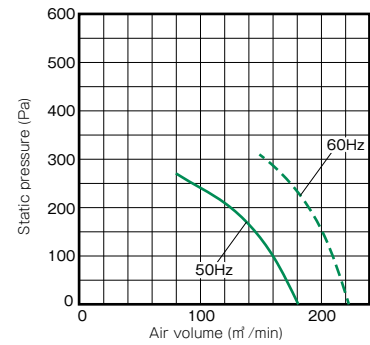
**AF-50S-2-C-E AFS-50S-2-C-E**  
φ500mm 3-phase 750W 4P 200V 50/60Hz



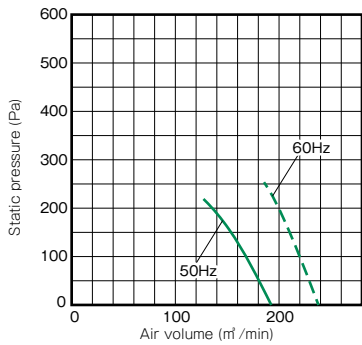
**AF-55S-1-C-E AFS-55S-1-C-E**  
φ550mm 3-phase 750W/1.5kW 4P 200V 50/60Hz



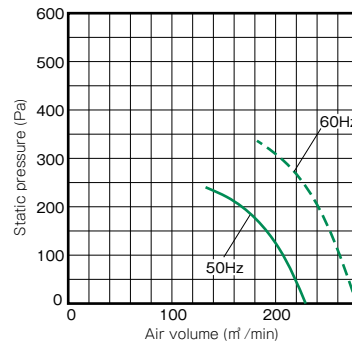
**AF-55S-2-C-E AFS-55S-2-C-E**  
φ550mm 3-phase 1.5kW 4P 200V 50/60Hz



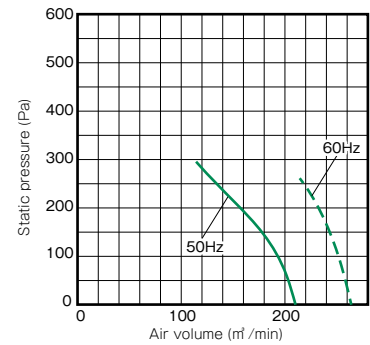
**AF-60S-1-C-E AFS-60S-1-C-E**  
φ600mm 3-phase 1.5kW 4P 200V 50/60Hz



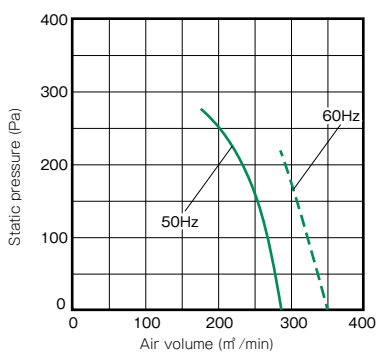
**AF-60S-2-C-E AFS-60S-2-C-E**  
φ600mm 3-phase 1.5/2.2kW 4P 200V 50/60Hz



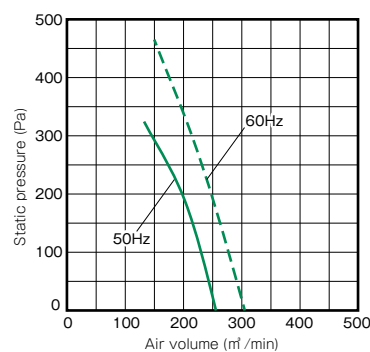
**AF-65S-1-C-E AFS-65S-1-C-E**  
φ650mm 3-phase 1.5kW 4P 200V 50/60Hz



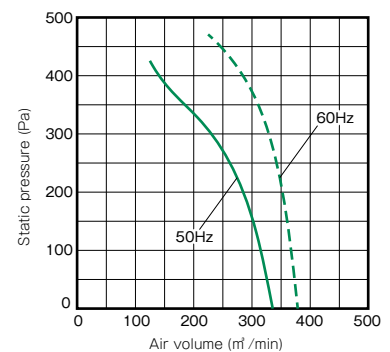
**AF-65S-2-C-E AFS-65S-2-C-E**  
φ650mm 3-phase 2.2/3.7kW 4P 200V 50/60Hz



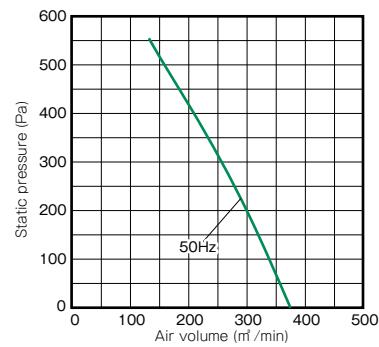
**AF-70S-1-C-E AFS-70S-1-C-E**  
φ700mm 3-phase 1.5/2.2kW 4P 200V 50/60Hz



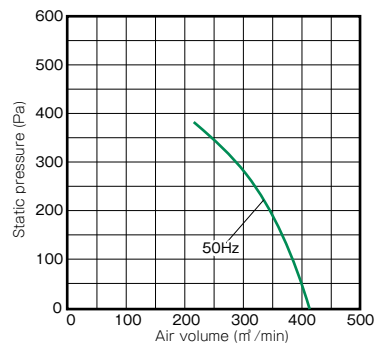
**AF-70S-2-C-E AFS-70S-2-C-E**  
φ700mm 3-phase 2.2/3.7kW 4P 200V 50/60Hz



AF-75S-1-C-E      AFS-75S-1-C-E  
ø750mm 3-phase 3.7kW 4P 200V 50Hz

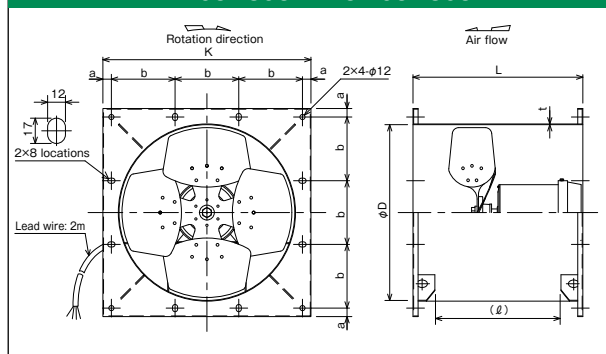


AF-75S-2-C-E      AFS-75S-2-C-E  
ø750mm 3-phase 3.7kW 4P 200V 50Hz



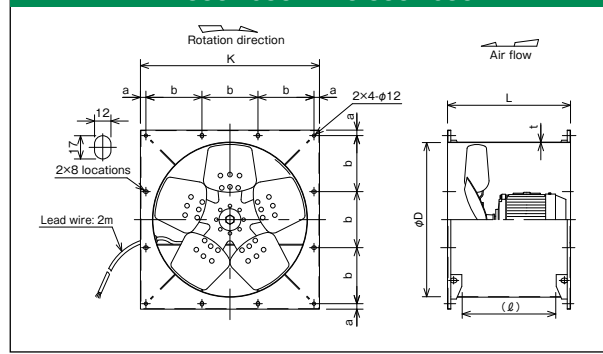
## Assembly drawing

AF-40S~50S / AFS-40S~50S



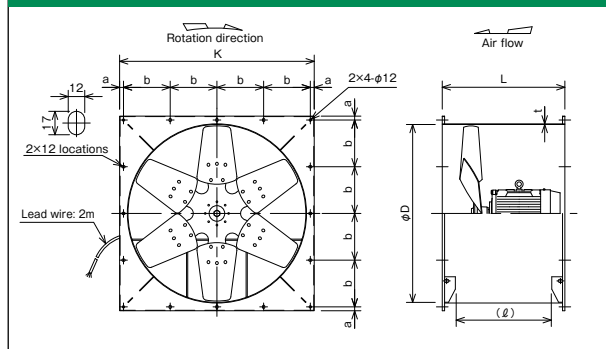
\* Since the number of blades varies depending on the type, refer only to the outline dimensions.

AF-55S~65S / AFS-55S~65S



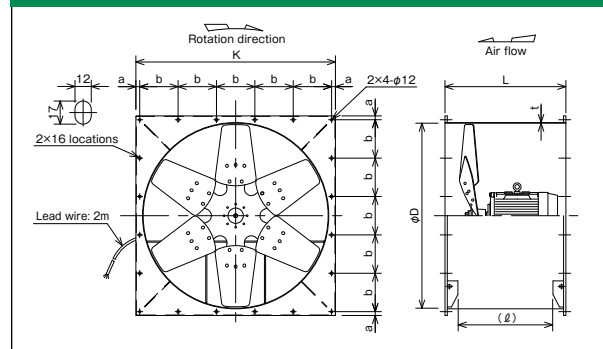
\* Since the number of blades varies depending on the type, refer only to the outline dimensions.

AF-70S~90S / AFS-70S~90S



\* Since the number of blades varies depending on the type, refer only to the outline dimensions.

AF-95S~110S / AFS-95S~110S



\* Since the number of blades varies depending on the type, refer only to the outline dimensions.

■ Dimensions

(Unit: mm)

| Type           |                                | φ D                                      | L    | K       | a    | b  | t   | (ℓ)     |         |
|----------------|--------------------------------|------------------------------------------|------|---------|------|----|-----|---------|---------|
| Steel impeller | Standard specifications        | AF-40S-1<br>AF-40S-2                     | 414  | 400     | 490  | 20 | 150 | 1.6     | 295     |
|                |                                | AF-50S-1<br>AF-50S-1-E<br>AF-50S-2-E     | 514  | 400     | 595  | 20 | 185 | 1.6     | 295     |
|                |                                | AF-55S-1-E<br>AF-55S-2-E                 | 564  | 450     | 655  | 20 | 205 | 1.6     | 345     |
|                |                                | AF-60S-1-E<br>AF-60S-2-E                 | 614  | 500     | 700  | 20 | 220 | 2.3     | 345     |
|                |                                | AF-65S-1-E<br>AF-65S-2-E                 | 664  | 500     | 760  | 20 | 240 | 2.3     | 395     |
|                |                                | AF-70S-1-E<br>AF-70S-2-E                 | 714  | 500     | 800  | 20 | 190 | 2.3     | 365     |
|                |                                | AF-75S-1-E<br>AF-75S-2-E                 | 764  | 560     | 840  | 20 | 200 | 2.3/3.2 | 425     |
|                |                                | AF-80S-1-E<br>AF-80S-2-E                 | 814  | 560     | 900  | 20 | 215 | 2.3     | 425     |
|                |                                | AF-85S-1-E<br>AF-85S-2-E                 | 864  | 630     | 960  | 20 | 230 | 3.2     | 495     |
|                |                                | AF-90S-1-E<br>AF-90S-2-E                 | 914  | 630     | 1000 | 20 | 240 | 3.2     | 495     |
|                |                                | AF-95S-1-E                               | 964  | 630     | 1040 | 20 | 200 | 3.2     | 495     |
|                |                                | AF-95S-2-E                               | 964  | 630/710 | 1040 | 20 | 200 | 3.2     | 495/575 |
|                |                                | AF-100S-1-E<br>AF-100S-2-E               | 1014 | 630     | 1140 | 20 | 220 | 3.2     | 495     |
|                |                                | AF-110S-2-E                              | 1114 | 750     | 1240 | 20 | 240 | 3.2     | —       |
|                | Low-temperature specifications | AF-40S-1<br>AF-40S-2                     | 414  | 400     | 490  | 20 | 150 | 1.6     | 295     |
|                |                                | AF-50S-1<br>AF-50S-1-C-E<br>AF-50S-2-C-E | 514  | 400     | 595  | 20 | 185 | 1.6     | 295     |
|                |                                | AF-55S-1-C-E<br>AF-55S-2-C-E             | 564  | 450     | 655  | 20 | 205 | 1.6     | 345     |
|                |                                | AF-60S-1-C-E<br>AF-60S-2-C-E             | 614  | 500     | 700  | 20 | 220 | 2.3     | 345     |
|                |                                | AF-65S-1-C-E<br>AF-65S-2-C-E             | 664  | 500     | 760  | 20 | 240 | 2.3     | 395     |
|                |                                | AF-70S-1-C-E<br>AF-70S-2-C-E             | 714  | 500     | 800  | 20 | 190 | 2.3     | 365     |
|                |                                | AF-75S-1-C-E<br>AF-75S-2-C-E             | 764  | 560     | 840  | 20 | 200 | 2.3/3.2 | 425     |

|              |                                             | Type                                    | φ D                    | L       | K    | a   | b   | t   | (ℓ)     |
|--------------|---------------------------------------------|-----------------------------------------|------------------------|---------|------|-----|-----|-----|---------|
| SUS Impeller | Standard specifications                     | AFS-40S-1<br>AFS-40S-2                  | 414                    | 400     | 490  | 20  | 150 | 1.5 | 295     |
|              |                                             | AFS-50S-1<br>AFS-50S-1-E<br>AFS-50S-2-E | 514                    | 400     | 595  | 20  | 185 | 1.5 | 295     |
|              |                                             | AFS-55S-1-E<br>AFS-55S-2-E              | 564                    | 450     | 655  | 20  | 205 | 1.5 | 345     |
|              |                                             | AFS-60S-1-E<br>AFS-60S-2-E              | 614                    | 500     | 700  | 20  | 220 | 2   | 345     |
|              |                                             | AFS-65S-1-E<br>AFS-65S-2-E              | 664                    | 500     | 760  | 20  | 240 | 2   | 395     |
|              |                                             | AFS-70S-1-E<br>AFS-70S-2-E              | 714                    | 500     | 800  | 20  | 190 | 2   | 365     |
|              |                                             | AFS-75S-1-E<br>AFS-75S-2-E              | 764                    | 560     | 840  | 20  | 200 | 2/3 | 425     |
|              |                                             | AFS-80S-1-E<br>AFS-80S-2-E              | 814                    | 560     | 900  | 20  | 215 | 2   | 425     |
|              |                                             | AFS-85S-1-E<br>AFS-85S-2-E              | 864                    | 630     | 960  | 20  | 230 | 3   | 495     |
|              |                                             | AFS-90S-1-E<br>AFS-90S-2-E              | 914                    | 630     | 1000 | 20  | 240 | 3   | 495     |
|              |                                             | AFS-95S-1-E                             | 964                    | 630     | 1040 | 20  | 200 | 3   | 495     |
|              |                                             | AFS-95S-2-E                             | 964                    | 630/710 | 1040 | 20  | 200 | 3   | 495/575 |
|              |                                             | AFS-100S-1-E<br>AFS-100S-2-E            | 1014                   | 630     | 1140 | 20  | 220 | 3   | 495     |
|              |                                             | AFS-110S-2-E                            | 1114                   | 750     | 1240 | 20  | 240 | 3   | —       |
|              |                                             | Low-temperature specifications          | AFS-40S-1<br>AFS-40S-2 | 414     | 400  | 490 | 20  | 150 | 1.5     |
|              | AFS-50S-1<br>AFS-50S-1-C-E<br>AFS-50S-2-C-E |                                         | 514                    | 400     | 595  | 20  | 185 | 1.5 | 295     |
|              | AFS-55S-1-C-E<br>AFS-55S-2-C-E              |                                         | 564                    | 450     | 655  | 20  | 205 | 1.5 | 345     |
|              | AFS-60S-1-C-E<br>AFS-60S-2-C-E              |                                         | 614                    | 500     | 700  | 20  | 220 | 2   | 345     |
|              | AFS-65S-1-C-E<br>AFS-65S-2-C-E              |                                         | 664                    | 500     | 760  | 20  | 240 | 2   | 395     |
|              | AFS-70S-1-C-E<br>AFS-70S-2-C-E              |                                         | 714                    | 500     | 800  | 20  | 190 | 2   | 365     |
|              | AFS-75S-1-C-E<br>AFS-75S-2-C-E              |                                         | 764                    | 560     | 840  | 20  | 200 | 2/3 | 425     |

## ■ Specification table

| Type                      |          | Fan diameter (mm) | Motor        |            |                     |                |                       |                      | Air volume (m³/min) | Static pressure (Pa) | Noise (dB(A)) | Approx mass (kg) |
|---------------------------|----------|-------------------|--------------|------------|---------------------|----------------|-----------------------|----------------------|---------------------|----------------------|---------------|------------------|
|                           |          |                   | Power source | Output (W) | Number of poles (P) | Frequency (Hz) | Allowable current (A) | Starting current (A) |                     |                      |               |                  |
| ALL SUS (Low-temperature) | AFSS-50S | -1                | 500 3φ200V   | 1500       | 4                   | 50             |                       | 114                  | 95                  | 100                  | 72            | 57               |
|                           |          |                   | 500 3φ200V   | 1500       | 4                   | 60             | 8                     | 107                  | 122                 | 100                  | 75            | 57               |
|                           |          | -2                | 500 3φ200V   | 1500       | 4                   | 50             | 11                    | 114                  | 110                 | 100                  | 72            | 57               |
|                           |          |                   | 500 3φ200V   | 1500       | 4                   | 60             | 10                    | 107                  | 140                 | 100                  | 76            | 57               |
|                           | AFSS-55S | -1                | 550 3φ200V   | 1500       | 4                   | 50             | 11                    | 114                  | 105                 | 150                  | 73            | 65               |
|                           |          |                   | 550 3φ200V   | 1500       | 4                   | 60             | 8.8                   | 107                  | 140                 | 150                  | 78            | 65               |
|                           |          | -2                | 550 3φ200V   | 1500       | 4                   | 50             | 11                    | 114                  | 140                 | 150                  | 73            | 65               |
|                           |          |                   | 550 3φ200V   | 1500       | 4                   | 60             | 10                    | 107                  | 190                 | 150                  | 78            | 65               |
|                           | AFSS-60S | -1                | 600 3φ200V   | 1500       | 4                   | 50             | 9.5                   | 114                  | 145                 | 150                  | 72            | 75               |
|                           |          |                   | 600 3φ200V   | 1500       | 4                   | 60             | 11                    | 107                  | 200                 | 150                  | 74            | 75               |
|                           |          | -2                | 600 3φ200V   | 2200       | 4                   | 50             | 9.3                   | 114                  | 195                 | 150                  | 74            | 75               |
|                           |          |                   | 600 3φ200V   | 2200       | 4                   | 60             | 10.4                  | 107                  | 245                 | 150                  | 78            | 75               |
|                           | AFSS-65S | -1                | 650 3φ200V   | 1500       | 4                   | 50             |                       | 114                  | 165                 | 150                  | 76            | 79               |
|                           |          |                   | 650 3φ200V   | 1500       | 4                   | 60             |                       | 107                  | 230                 | 150                  | 77            | 79               |
|                           |          | -2                | 650 3φ200V   | 3700       | 4                   | 50             | 13                    | 114                  | 245                 | 150                  | 76            | 79               |
|                           |          |                   | 650 3φ200V   | 3700       | 4                   | 60             |                       | 107                  | 295                 | 150                  | 79            | 79               |
|                           | AFSS-70S | -1                | 700 3φ200V   | 2200       | 4                   | 50             | 10.5                  | 114                  | 210                 | 150                  | 79            | 89               |
|                           |          |                   | 700 3φ200V   | 2200       | 4                   | 60             | 11                    | 107                  | 255                 | 150                  | 83            | 89               |
|                           |          | -2                | 700 3φ200V   | 3700       | 4                   | 50             | 13                    | 114                  | 285                 | 150                  | 82            | 89               |
|                           |          |                   | 700 3φ200V   | 3700       | 4                   | 60             | 16                    | 107                  | 350                 | 150                  | 86            | 89               |
|                           | AFSS-75S | -1                | 750 3φ200V   | 3700       | 4                   | 50             | 15                    | 114                  | 290                 | 200                  | 82            | 98               |
|                           |          |                   | 750 3φ200V   | 3700       | 4                   | 60             | 17                    | 107                  | 380                 | 200                  | 85            | 98               |
|                           |          | -2                | 750 3φ200V   | 3700       | 4                   | 50             | 15                    | 114                  | 330                 | 200                  | 83            | 98               |

\*Since this is a custom-designed product, the values in the blank will be determined based on the initial product inspection result.

### Selection chart

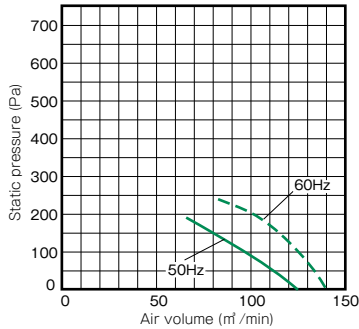
Characteristics under low-temperature (-30°C) specifications

60Hz -----  
50Hz ————

ALL SUS(Low-temperature)

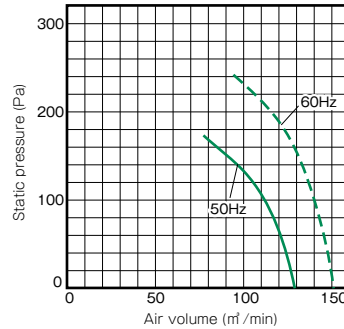
#### AFSS-50S-1

φ500mm 3-phase 1.5kW 4P 200V 50/60Hz



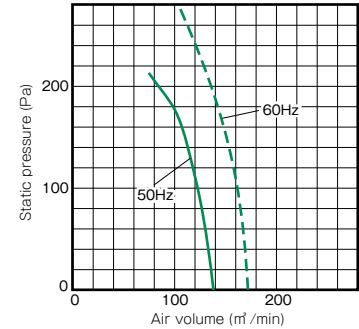
#### AFSS-50S-2

φ500mm 3-phase 1.5kW 4P 200V 50/60Hz



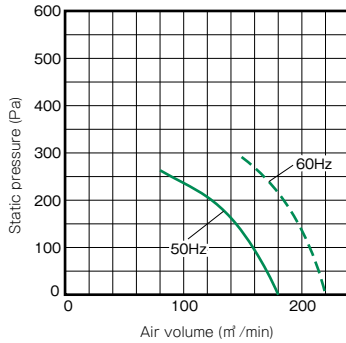
#### AFSS-55S-1

φ550mm 3-phase 1.5kW 4P 200V 50/60Hz



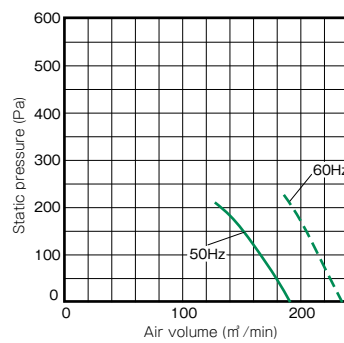
#### AFSS-55S-2

φ550mm 3-phase 1.5kW 4P 200V 50/60Hz



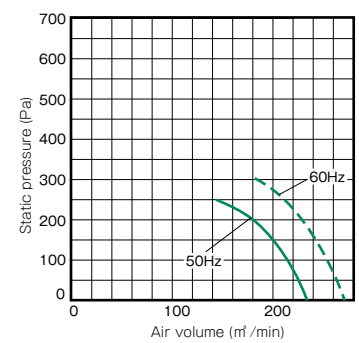
#### AFSS-60S-1

φ600mm 3-phase 1.5kW 4P 200V 50/60Hz



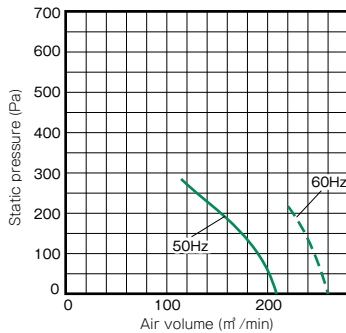
#### AFSS-60S-2

φ600mm 3-phase 2.2kW 4P 200V 50/60Hz



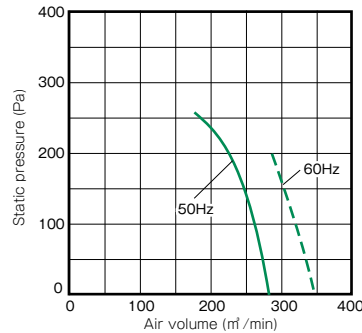
#### AFSS-65S-1

φ650mm 3-phase 1.5kW 4P 200V 50/60Hz



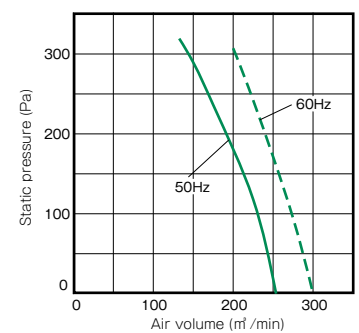
#### AFSS-65S-2

φ650mm 3-phase 3.7kW 4P 200V 50/60Hz



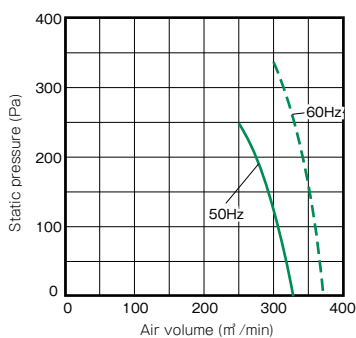
#### AFSS-70S-1

φ700mm 3-phase 2.2kW 4P 200V 50/60Hz



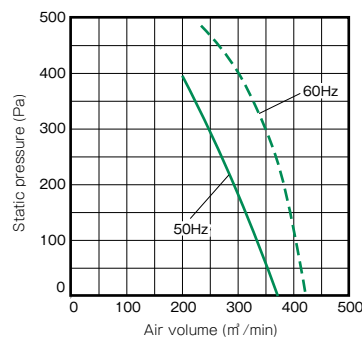
#### AFSS-70S-2

φ700mm 3-phase 3.7kW 4P 200V 50/60Hz



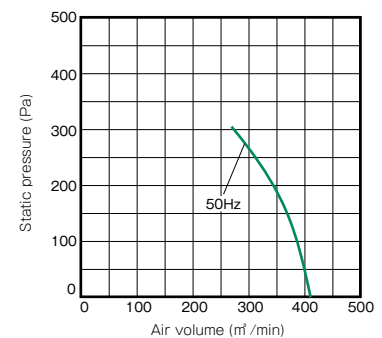
#### AFSS-75S-1

φ750mm 3-phase 3.7kW 4P 200V 50/60Hz



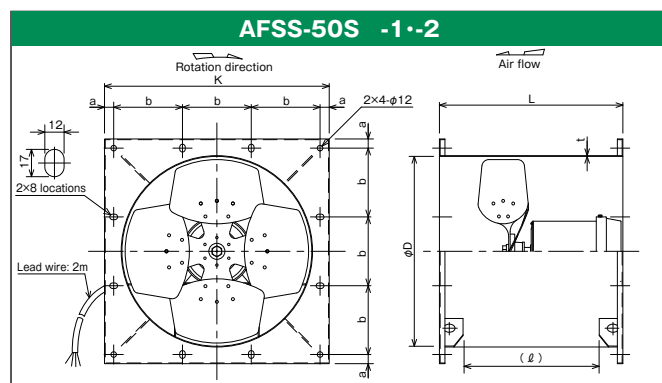
#### AFSS-75S-2

φ750mm 3-phase 3.7kW 4P 200V 50Hz

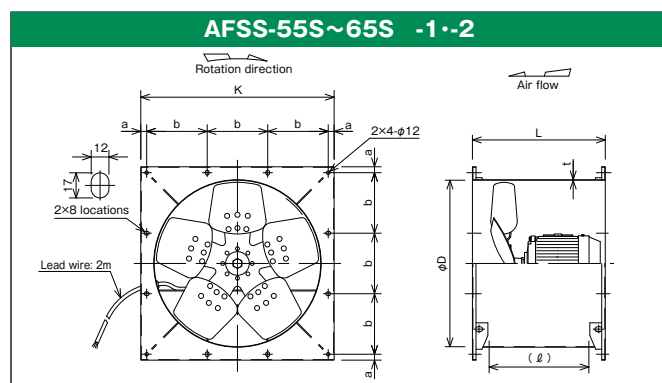




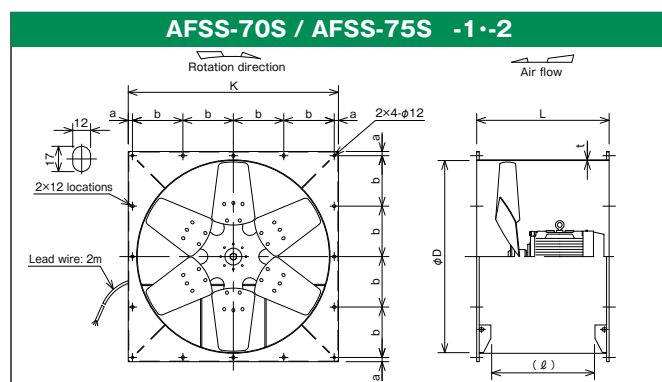
## Assembly drawing



\* Since the number of blades varies depending on the type, refer only to the outline dimensions.



\* Since the number of blades varies depending on the type, refer only to the outline dimensions.



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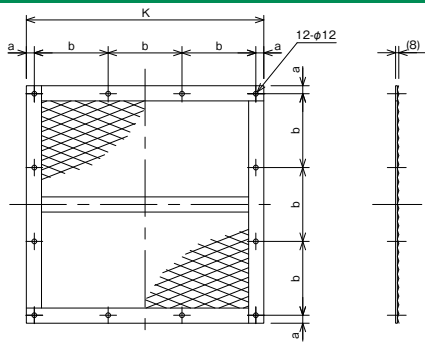
## Dimensions

\* For blanks, please contact us. (Unit: mm)

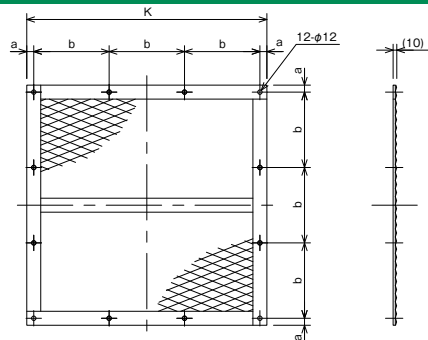
| Type          | φD  | L   | K   | a  | b   | t   | (L) |
|---------------|-----|-----|-----|----|-----|-----|-----|
| AFSS-50S -1~2 | 514 | 450 | 595 | 20 | 185 | 1.5 | 295 |
| AFSS-55S -1~2 | 564 | 450 | 655 | 20 | 205 | 1.5 | 345 |
| AFSS-60S -1~2 | 614 | 500 | 700 | 20 | 220 | 2.0 | 345 |
| AFSS-65S -1~2 | 664 | 500 | 760 | 20 | 240 | 2.0 | 395 |
| AFSS-70S -1~2 | 714 | 500 | 800 | 20 | 190 | 2.0 | 365 |
| AFSS-75S -1~2 | 764 | 560 | 840 | 20 | 200 | 2.0 | 425 |

## Assembly drawing

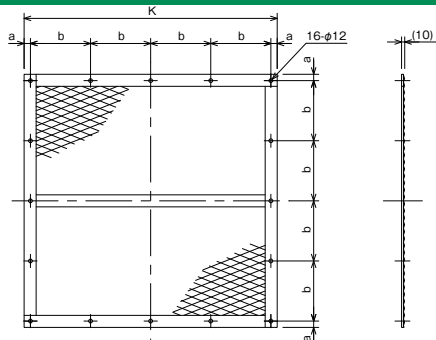
FGN-40~50 / FGNS-40~50



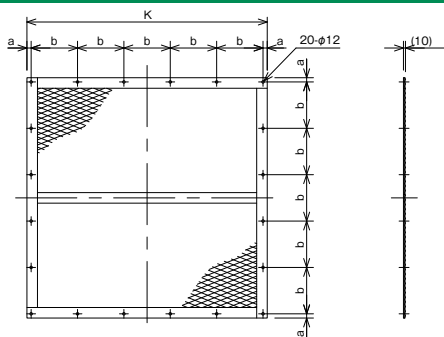
FGN-55~65 / FGNS-55~65



FGN-70~90 / FGNS-70~90



FGN-95~110 / FGNS-95~110



## Dimensions

(Unit: mm)

|       | Type     | K    | a  | b   |
|-------|----------|------|----|-----|
| Steel | FGN-40   | 490  | 20 | 150 |
|       | FGN-50   | 595  | 20 | 185 |
|       | FGN-55   | 653  | 19 | 205 |
|       | FGN-60   | 698  | 19 | 220 |
|       | FGN-65   | 758  | 19 | 240 |
|       | FGN-70   | 800  | 20 | 190 |
|       | FGN-75   | 840  | 20 | 200 |
|       | FGN-80   | 900  | 20 | 215 |
|       | FGN-85   | 960  | 20 | 230 |
|       | FGN-90   | 1000 | 20 | 240 |
|       | FGN-95   | 1040 | 20 | 200 |
| SUS   | FGN-100  | 1140 | 20 | 220 |
|       | FGN-110  | 1240 | 20 | 240 |
|       | FGNS-40  | 490  | 20 | 150 |
|       | FGNS-50  | 595  | 20 | 185 |
|       | FGNS-55  | 653  | 19 | 205 |
|       | FGNS-60  | 700  | 20 | 220 |
|       | FGNS-65  | 758  | 19 | 240 |
|       | FGNS-70  | 800  | 20 | 190 |
|       | FGNS-75  | 840  | 20 | 200 |
|       | FGNS-80  | 900  | 20 | 215 |
|       | FGNS-85  | 960  | 20 | 230 |
|       | FGNS-90  | 1000 | 20 | 240 |
|       | FGNS-95  | 1040 | 20 | 200 |
|       | FGNS-100 | 1140 | 20 | 220 |
|       | FGNS-110 | 1240 | 20 | 240 |

[illegible]





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