

### Cooling Only FSV-EX MS3 Series HIGH EFFICIENCY COMBINATION MODEL

|                                     |  |   |           |           |           |                          |                          |                          |                          |
|-------------------------------------|--|---|-----------|-----------|-----------|--------------------------|--------------------------|--------------------------|--------------------------|
| Appearance                          |  |   |           |           |           |                          |                          |                          |                          |
| <b>HP</b>                           | <b>8</b>   | <b>10</b>   | <b>12</b> | <b>14</b> | <b>16</b> | <b>18</b>                | <b>20</b>                | <b>22</b>                | <b>24</b>                |
| <b>Model name</b>                   | U-8MS3H7   | U-10MS3H7   | U-12MS3H7 | U-14MS3H7 | U-16MS3H7 | U-18MS3H7HE<br>U-10MS3H7 | U-20MS3H7HE<br>U-10MS3H7 | U-22MS3H7HE<br>U-12MS3H7 | U-24MS3H7HE<br>U-12MS3H7 |
| Power supply                        | 380/400/415V/3-phase/50Hz<br>380/400V/3-phase/60Hz |   |           |           |           |                          |                          |                          |                          |
| Capacity                            | Cooling  | kW  |           |           |           |                          |                          |                          |                          |
|                                     | BTU/h  | 76,500 95,600 114,300 136,500 153,600 170,600 191,100 209,900 232,100 |           |           |           |                          |                          |                          |                          |
| EER / COP                           | Cooling  | W/W   |           |           |           |                          |                          |                          |                          |
|                                     |  | 5.30 5.03 4.10 4.56 4.13 5.15 5.05 4.49 4.07                          |           |           |           |                          |                          |                          |                          |
| Dimensions                          | H x W x D  | mm  |           |           |           |                          |                          |                          |                          |
| Net weight                          |  | kg  |           |           |           |                          |                          |                          |                          |
| Electrical ratings                  | Running current                                    | A   |           |           |           |                          |                          |                          |                          |
|                                     | Power input  | kW  |           |           |           |                          |                          |                          |                          |
| Starting current                    |  | A   |           |           |           |                          |                          |                          |                          |
| Air flow rate                       |  | m³/h  |           |           |           |                          |                          |                          |                          |
|                                     |  | L/s   |           |           |           |                          |                          |                          |                          |
| Refrigerant amount at shipment      |  | kg  |           |           |           |                          |                          |                          |                          |
| External static pressure            |  | Pa  |           |           |           |                          |                          |                          |                          |
| Piping connections                  | Gas pipe   | mm (inches)   |           |           |           |                          |                          |                          |                          |
|                                     | Liquid pipe  | mm (inches)   |           |           |           |                          |                          |                          |                          |
|                                     | Balance pipe                                       | mm (inches)   |           |           |           |                          |                          |                          |                          |
| Ambient temperature operating range |  | Cooling: 10°C (DB)~ +52°C (DB)  |           |           |           |                          |                          |                          |                          |
| Sound pressure level                | Normal mode  | dB (A)  |           |           |           |                          |                          |                          |                          |
|                                     | Silent mode (2)                                    | dB (A)  |           |           |           |                          |                          |                          |                          |
| Sound power level                   | Normal mode  | dB  |           |           |           |                          |                          |                          |                          |



|   |                                       |                                       |                                       |  |  |  |  |  |  |  |  |   |  |
|---|---------------------------------------|---------------------------------------|---------------------------------------|--|--|--|--|--|--|--|--|---|--|
|   |                                       |                                       |                                       |  |  |  |  |  |  |  |  |   |  |
| <b>26</b>   | <b>28</b>                             | <b>30</b>                             | <b>32</b>                             | <b>34</b>  | <b>36</b>  | <b>38</b>  | <b>40</b>  | <b>42</b>  | <b>44</b>  | <b>46</b>  | <b>48</b>  | <b>50</b>   | <b>52</b>  |
| U-26MS3H7HE<br>U-10MS3H7<br>U-16MS3H7   | U-28MS3H7HE<br>U-12MS3H7<br>U-16MS3H7 | U-30MS3H7HE<br>U-14MS3H7<br>U-16MS3H7 | U-32MS3H7HE<br>U-16MS3H7<br>U-16MS3H7 | U-34MS3H7HE<br>U-10MS3H7<br>U-12MS3H7<br>U-12MS3H7 | U-36MS3H7HE<br>U-12MS3H7<br>U-12MS3H7<br>U-16MS3H7 | U-38MS3H7HE<br>U-10MS3H7<br>U-12MS3H7<br>U-16MS3H7 | U-40MS3H7HE<br>U-12MS3H7<br>U-12MS3H7<br>U-16MS3H7 | U-42MS3H7HE<br>U-10MS3H7<br>U-16MS3H7<br>U-16MS3H7 | U-44MS3H7HE<br>U-12MS3H7<br>U-16MS3H7<br>U-16MS3H7 | U-46MS3H7HE<br>U-14MS3H7<br>U-16MS3H7<br>U-16MS3H7 | U-48MS3H7HE<br>U-16MS3H7<br>U-16MS3H7<br>U-16MS3H7 | U-50MS3H7HE<br>U-10MS3H7<br>U-12MS3H7<br>U-12MS3H7<br>U-16MS3H7 | U-52MS3H7HE<br>U-12MS3H7<br>U-12MS3H7<br>U-16MS3H7 |
| 380/400/415V/3-phase/50Hz<br>380/400V/3-phase/60Hz  |                                       |                                       |                                       |  |  |  |  |  |  |  |  |   |  |
| 73.0 78.5 85.0 90.0 96.0 101.0 107.0 113.0 118.0 124.0 130.0 135.0 140.0 145.0  |                                       |                                       |                                       |  |  |  |  |  |  |  |  |   |  |
| 249,100 267,900 290,100 307,200 327,600 344,700 365,200 385,700 402,700 423,200 443,700 460,800 477,800 494,900   |                                       |                                       |                                       |  |  |  |  |  |  |  |  |   |  |
| 4.42 4.11 4.31 4.13 4.30 4.09 4.31 4.09 4.31 4.11 4.25 4.13 4.27 4.12   |                                       |                                       |                                       |  |  |  |  |  |  |  |  |   |  |
| 1,842 x 2,010 x 1,000 1,842 x 2,010 x 1,000 1,842 x 2,420 x 1,000 1,842 x 2,420 x 1,000 1,842 x 2,430 x 1,000 1,842 x 2,430 x 1,000 1,842 x 2,840 x 1,000 1,842 x 2,840 x 1,000 1,842 x 3,250 x 1,000 1,842 x 3,250 x 1,000 1,842 x 3,660 x 1,000 1,842 x 3,660 x 1,000 1,842 x 3,670 x 1,000 1,842 x 3,670 x 1,000 |                                       |                                       |                                       |  |  |  |  |  |  |  |  |   |  |
| 523 523 626 626 630 630 733 733 836 836 939 939 943 943   |                                       |                                       |                                       |  |  |  |  |  |  |  |  |   |  |
| 28.2 / 26.8 / 25.8 32.2 / 30.6 / 29.5 33.6 / 31.9 / 30.8 36.8 / 35.0 / 33.7 37.6 / 35.8 / 34.5 41.2 / 39.2 / 37.8 41.9 / 39.8 / 38.3 46.1 / 43.8 / 42.2 46.3 / 43.9 / 42.4 51.0 / 48.4 / 46.7 52.2 / 49.6 / 47.8 55.2 / 52.4 / 50.5 55.4 / 52.6 / 50.7 58.8 / 55.8 / 53.8   |                                       |                                       |                                       |  |  |  |  |  |  |  |  |   |  |
| 16.5 19.1 19.7 21.8 22.3 24.7 24.8 27.6 27.4 30.2 30.6 32.7 32.8 35.2   |                                       |                                       |                                       |  |  |  |  |  |  |  |  |   |  |
| 3 3 4 4 3 3 4 4 5 5 6 6 5 5   |                                       |                                       |                                       |  |  |  |  |  |  |  |  |   |  |
| 27,360 27,360 27,840 27,840 40,320 40,320 40,800 40,800 41,280 41,280 41,760 41,760 54,240 54,240   |                                       |                                       |                                       |  |  |  |  |  |  |  |  |   |  |
| 7,600 7,600 7,733 7,733 11,200 11,200 11,333 11,333 11,467 11,467 11,600 11,600 15,067 15,067   |                                       |                                       |                                       |  |  |  |  |  |  |  |  |   |  |
| 13.9 13.9 16.6 16.6 16.8 16.8 19.5 19.5 22.2 22.2 24.9 24.9 25.1 25.1   |                                       |                                       |                                       |  |  |  |  |  |  |  |  |   |  |
| 80 80 80 80 80 80 80 80 80 80 80 80 80 80   |                                       |                                       |                                       |  |  |  |  |  |  |  |  |   |  |
| 034.92 (01-3/8) 034.92 (01-3/8) 034.92 (01-3/8) 034.92 (01-3/8) 034.92 (01-3/8) 041.28 (01-5/8) 041.28 (01-5/8) 041.28 (01-5/8) 041.28 (01-5/8) 041.28 (01-5/8) 041.28 (01-5/8) 041.28 (01-5/8) 041.28 (01-5/8)   |                                       |                                       |                                       |  |  |  |  |  |  |  |  |   |  |
| 019.05 (03/4) 019.05 (03/4) 019.05 (03/4) 019.05 (03/4) 019.05 (03/4) 019.05 (03/4) 019.05 (03/4) 019.05 (03/4) 019.05 (03/4) 019.05 (03/4) 019.05 (03/4) 019.05 (03/4) 019.05 (03/4) 019.05 (03/4)   |                                       |                                       |                                       |  |  |  |  |  |  |  |  |   |  |
| 06.35 (01/4) 06.35 (01/4) 06.35 (01/4) 06.35 (01/4) 06.35 (01/4) 06.35 (01/4) 06.35 (01/4) 06.35 (01/4) 06.35 (01/4) 06.35 (01/4) 06.35 (01/4) 06.35 (01/4) 06.35 (01/4) 06.35 (01/4)   |                                       |                                       |                                       |  |  |  |  |  |  |  |  |   |  |
| Cooling: 10°C (DB)~ +52°C (DB)  |                                       |                                       |                                       |  |  |  |  |  |  |  |  |   |  |
| 62.0 63.0 63.0 64.0 63.0 64.0 64.0 65.0 65.0 65.0 65.0 66.0 65.0 66.0   |                                       |                                       |                                       |  |  |  |  |  |  |  |  |   |  |
| 57.0 58.0 58.0 59.0 58.0 59.0 59.0 60.0 60.0 60.0 60.0 61.0 60.0 61.0   |                                       |                                       |                                       |  |  |  |  |  |  |  |  |   |  |
| 83.0 84.0 84.0 85.0 84.0 85.0 85.0 86.0 86.0 86.0 86.0 87.0 86.0 87.0   |                                       |                                       |                                       |  |  |  |  |  |  |  |  |   |  |

|                                     |  |  |  |  |  |  |
|-------------------------------------|--|--|--|--|--|--|
| Appearance                          |  |  |  |  |  |  |
| <b>HP</b>                           | <b>54</b>  | <b>56</b>  | <b>58</b>  | <b>60</b>  | <b>62</b>  | <b>64</b>  |
| <b>Model name</b>                   | U-10MS3H7<br>U-12MS3H7<br>U-16MS3H7<br>U-16MS3H7   | U-12MS3H7<br>U-12MS3H7<br>U-16MS3H7<br>U-16MS3H7 | U-10MS3H7<br>U-16MS3H7<br>U-16MS3H7<br>U-16MS3H7 | U-12MS3H7<br>U-16MS3H7<br>U-16MS3H7<br>U-16MS3H7 | U-14MS3H7<br>U-16MS3H7<br>U-16MS3H7<br>U-16MS3H7 | U-16MS3H7<br>U-16MS3H7<br>U-16MS3H7<br>U-16MS3H7 |
| Power supply                        | 380/400/415V/3-phase/50Hz<br>380/400V/3-phase/60Hz |  |  |  |  |  |
| Capacity                            | Cooling  | kW   |  |  |  |  |
|                                     | BTU/h  | 515,400 532,400 552,900 573,400 593,900 614,300  |  |  |  |  |
| EER / COP                           | Cooling  | W/W  |  |  |  |  |
|                                     |  | 4.27 4.13 4.27 4.13 4.23 4.13                    |  |  |  |  |
| Dimensions                          | H x W x D  | mm   |  |  |  |  |
| Net weight                          |  | kg   |  |  |  |  |
| Electrical ratings                  | Running current                                    | A  |  |  |  |  |
|                                     | Power input  | kW   |  |  |  |  |
| Starting current                    |  | A  |  |  |  |  |
| Air flow rate                       |  | m³/h   |  |  |  |  |
|                                     |  | L/s  |  |  |  |  |
| Refrigerant amount at shipment      |  | kg   |  |  |  |  |
| External static pressure            |  | Pa   |  |  |  |  |
| Piping connections                  | Gas pipe   | mm (inches)                                      |  |  |  |  |
|                                     | Liquid pipe  | mm (inches)                                      |  |  |  |  |
|                                     | Balance pipe                                       | mm (inches)                                      |  |  |  |  |
| Ambient temperature operating range |  | Cooling: 10°C (DB)~ +52°C (DB)                   |  |  |  |  |
| Sound pressure level                | Normal mode  | dB (A)   |  |  |  |  |
|                                     | Silent mode (2)                                    | dB (A)   |  |  |  |  |
| Sound power level                   | Normal mode  | dB   |  |  |  |  |

**8 / 10 / 12 HP**

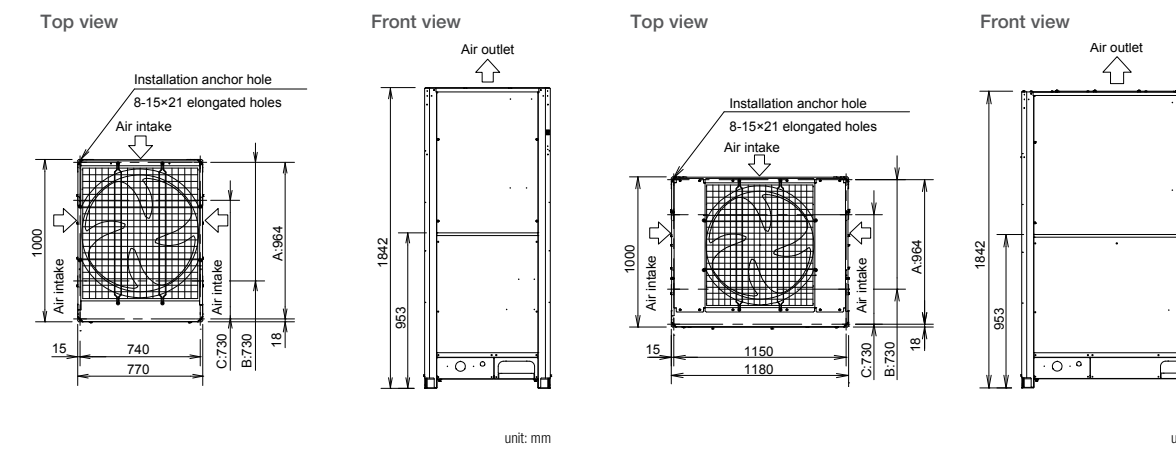
According to the installation site, you may choose the setting position in the depth direction of the anchor bolt from A, B or C.

A: (Installation hole pitch) For removing tube forward  
B: (Installation hole pitch) For removing the downward  
C: (Installation hole pitch)

**14 / 16 HP**

According to the installation site, you may choose the setting position in the depth direction of the anchor bolt from A, B or C.

A: (Installation hole pitch) For removing tube forward  
B: (Installation hole pitch) For removing the downward  
C: (Installation hole pitch)



**GLOBALREMARKS**

|                         |                   |
|-------------------------|-------------------|
| Rated conditions:       | Cooling           |
| Indoor air temperature  | 27°C DB / 19°C WB |
| Outdoor air temperature | 35°C DB           |

These specifications are subject to change without notice.



### Cooling Only FSV-EX MS3 Series

### SPACE SAVING COMBINATION MODEL



|                                     |                 |   |  |  |  |
|-------------------------------------|-----------------|---|--|--|--|
| Appearance                          |                 |   |  |  |  |
| HP                                  |                 | 92  | 94   | 96   |  |
|                                     |                 | U-92MS3H7SP   | U-94MS3H7SP                                      | U-96MS3H7SP                                      |  |
| Model name                          |                 | U-20MS3H7<br>U-24MS3H7<br>U-24MS3H7<br>U-24MS3H7                            | U-22MS3H7<br>U-24MS3H7<br>U-24MS3H7<br>U-24MS3H7 | U-24MS3H7<br>U-24MS3H7<br>U-24MS3H7<br>U-24MS3H7 |  |
| Power supply                        |                 | 380/400/415V/3-phase/50Hz<br>380/400/3-phase/60Hz                           |  |  |  |
| Capacity                            | Cooling         | kW<br>BTU/h   | 260.0<br>887,400                                 | 266.0<br>907,800                                 | 272.0<br>928,300                                 |
| EER / COP                           | Cooling         | W/W   | 3.49   | 3.45   | 3.42   |
| Dimensions                          | H x W x D       | mm  | 1,842 x 6,340 x 1,000                            | 1,842 x 6,340 x 1,000                            | 1,842 x 6,340 x 1,000                            |
| Net weight                          |                 | kg  | 1,464  | 1,464  | 1,464  |
| Electrical ratings                  | Cooling         | Running current A<br>Power input kW   | 123.0 / 116.9 / 112.7<br>74.5                    | 127.2 / 120.8 / 116.4<br>77.0                    | 131.3 / 124.7 / 120.2<br>79.5                    |
| Starting current                    |                 | A   | 8  | 8  | 8  |
| Air flow rate                       |                 | m³/h<br>L/s   | 97,200<br>27,000                                 | 97,200<br>27,000                                 | 97,200<br>27,000                                 |
| Refrigerant amount at shipment      |                 | kg  | 38.0   | 38.0   | 38.0   |
| External static pressure            |                 | Pa  | 80   | 80   | 80   |
| Piping connections                  |                 | Gas pipe mm (inches)<br>Liquid pipe mm (inches)<br>Balance pipe mm (inches) | Ø53.98 (Ø2-1/8)<br>Ø22.22 (Ø7/8)<br>Ø6.35 (Ø1/4) | Ø53.98 (Ø2-1/8)<br>Ø22.22 (Ø7/8)<br>Ø6.35 (Ø1/4) | Ø53.98 (Ø2-1/8)<br>Ø22.22 (Ø7/8)<br>Ø6.35 (Ø1/4) |
| Ambient temperature operating range |                 | Cooling:  | 10°C (DB)~ +52°C (DB)                            |  |  |
| Sound pressure level                | Normal mode     | dB (A)  | 67.0   | 68.0   | 68.0   |
|                                     | Silent mode (2) | dB (A)  | 62.0   | 63.0   | 63.0   |
| Sound power level                   | Normal mode     | dB  | 88.0   | 89.0   | 89.0   |

GLOBALREMARKS

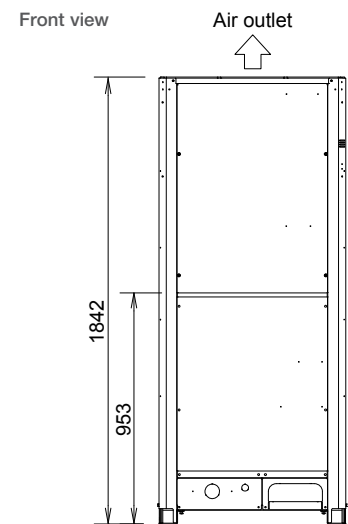
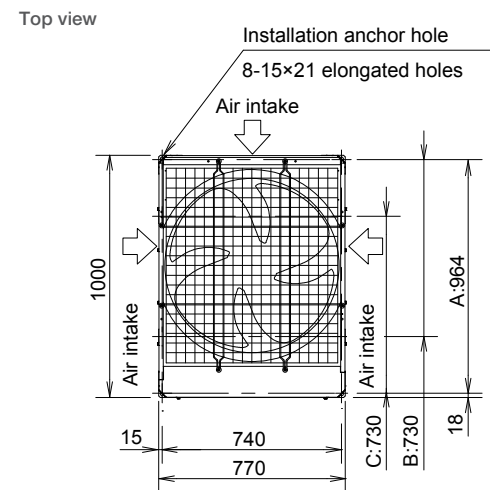
|                         |                   |
|-------------------------|-------------------|
| Rated conditions:       | Cooling           |
| Indoor air temperature  | 27°C DB / 19°C WB |
| Outdoor air temperature | 35°C DB           |

These specifications are subject to change without notice.

#### 8 / 10 / 12 HP

According to the installation site, you may choose the setting position in the depth direction of the anchor bolt from A, B or C.

- A: (Installation hole pitch) For removing tube forward
- B: (Installation hole pitch) For removing the downward
- C: (Installation hole pitch)

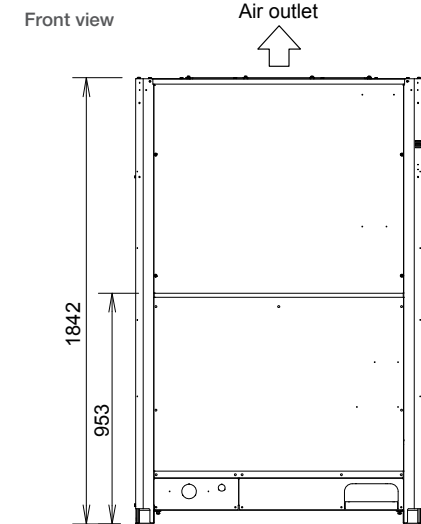
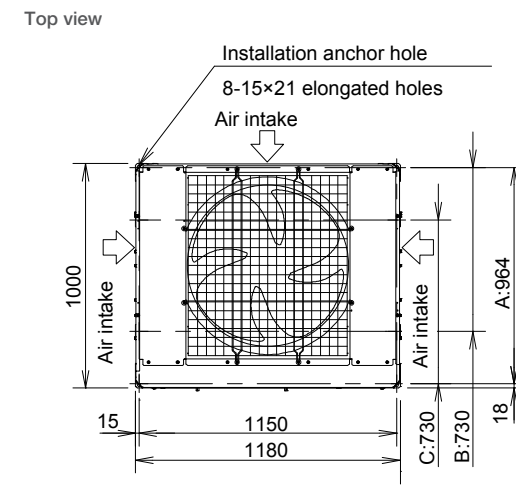


unit: mm

#### 14 / 16 / 18 HP

According to the installation site, you may choose the setting position in the depth direction of the anchor bolt from A, B or C.

- A: (Installation hole pitch) For removing tube forward
- B: (Installation hole pitch) For removing the downward
- C: (Installation hole pitch)

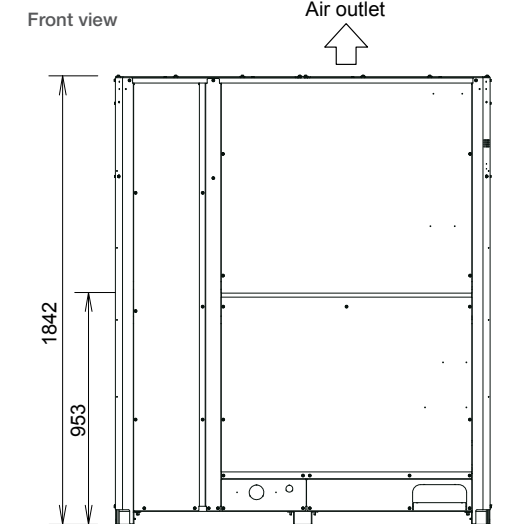
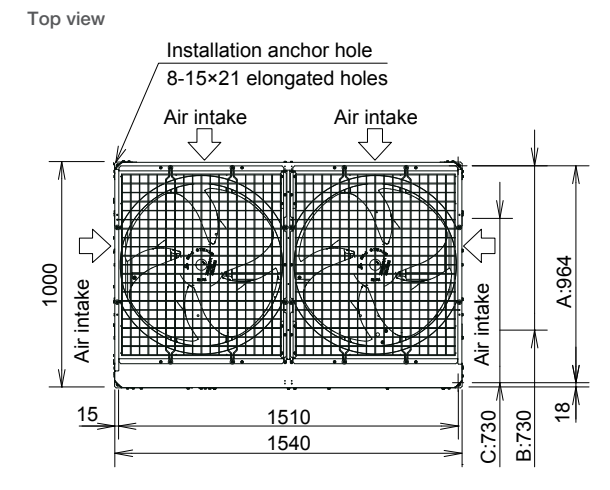


unit: mm

#### 20 / 22 / 24 HP

According to the installation site, you may choose the setting position in the depth direction of the anchor bolt from A, B or C.

- A: (Installation hole pitch) For removing tube forward
- B: (Installation hole pitch) For removing the downward
- C: (Installation hole pitch)



unit: mm