

# Model: YH95C7

|                                   |                   |                                               |                  |
|-----------------------------------|-------------------|-----------------------------------------------|------------------|
| Power supply                      | 3Ph/208-230V/60Hz | Total Dimension: Length(L)(mm)                | 239              |
| Refrigerant                       | R410A             | Total Dimension: Width(W)(mm)                 | 239              |
| Nominal Horse Power(HP)           | 3.5               | Total Dimension: Height(H)(mm)                | 418              |
| Rated Cooling Capacity(W)         | 11590             | Grommet Hole (Diameter)                       | 190.5*190.5(8.8) |
| Rated Input Power(W)              | 3836              | Oil Type                                      | POE              |
| Rated COP(W)                      | 3.02              | Initial filling amount of lubricating oil(L)  | 1.4              |
| RLA(A)                            | 12.1              | Refilling amount of lubricating oil(L)        | 1.25             |
| LRA(A)                            | 88                | Maximum working pressure: discharge side(MPa) | 4.3              |
| MOC(A)                            | 15.68             | Maximum working pressure: suction side(MPa)   | 2                |
| Crankcase Heater Power(W)         | 70                | Weight(Kg)                                    | 30               |
| Discharge connection pipe size OD | 1/2               | Displacement(m³/h)                            | 8.09             |
| Suction connection pipe size OD   | 7/8               | Displacement(cc/rev)                          | 38.5             |

# Working conditions

|                                    |           |                                   |           |
|------------------------------------|-----------|-----------------------------------|-----------|
| Refrigerant:                       | R410A     |                                   |           |
| Evaporating dew point temperature: | 5.0 °C    | Condensing dew point temperature: | 50.0 °C   |
| Evaporating Pressure:              | 0.933 MPa | Condensing Pressure:              | 3.063 MPa |
| Useful superheat:                  | 10.0 K    | Subcooling:                       | 0.0 K     |
| Additional superheat:              | 0.0 K     | Additional Subcooling:            | 0.0 K     |
| Return Gas Temperature:            | 15.0 °C   | Total Subcooling:                 | 0.0 K     |
|                                    |           | Liquid temperature:               | 50.0 °C   |
| Rating Conditions:                 | Custom    |                                   |           |
| Required cooling capacity:         | 20.00 kW  |                                   |           |

# Calculation

|                      |               |
|----------------------|---------------|
| Setting Conditions   | 5.0 / 50.0 °C |
| Compressor model     | YH95C7        |
| Cooling Capacity(kW) | 10.355        |
| Cooling EER(W/W)     | 2.963         |
| Heating capacity(kW) | 13.849        |
| Heating COP(W/W)     | 3.963         |
| Power(kW)            | 3.494         |
| Current(A)           | 11.259        |
| Mass flow(kg/h)      | 251.356       |

## Cooling Capacity(kW)

| Tc\Te dew | -25   | -20   | -15   | -10   | -5     | 0      | 5      | 10     |
|-----------|-------|-------|-------|-------|--------|--------|--------|--------|
| 65        | -     | -     | -     | -     | -      | 5.933  | 7.258  | 8.797  |
| 60        | -     | -     | -     | -     | 5.678  | 6.947  | 8.425  | 10.138 |
| 55        | -     | -     | -     | 5.261 | 6.449  | 7.831  | 9.437  | 11.297 |
| 50        | -     | -     | 4.765 | 5.869 | 7.148  | 8.632  | 10.355 | 12.346 |
| 45        | -     | 4.218 | 5.248 | 6.429 | 7.793  | 9.373  | 11.205 | 13.321 |
| 40        | 3.625 | 4.599 | 5.696 | 6.951 | 8.398  | 10.071 | 12.008 | 14.242 |
| 35        | 3.921 | 4.957 | 6.122 | 7.450 | 8.978  | 10.742 | 12.781 | 15.131 |
| 30        | 4.207 | 5.307 | 6.539 | 7.940 | 9.549  | 11.403 | 13.543 | 16.006 |
| 25        | 4.499 | 5.663 | 6.963 | 8.439 | 10.129 | 12.074 | 14.314 | 16.889 |

## Heating capacity(kW)

| Tc\Te dew | -25   | -20   | -15   | -10    | -5     | 0      | 5      | 10     |
|-----------|-------|-------|-------|--------|--------|--------|--------|--------|
| 65        | -     | -     | -     | -      | -      | 11.149 | 12.392 | 13.857 |
| 60        | -     | -     | -     | -      | 10.250 | 11.469 | 12.897 | 14.573 |
| 55        | -     | -     | -     | 9.262  | 10.432 | 11.787 | 13.371 | 15.227 |
| 50        | -     | -     | 8.263 | 9.377  | 10.649 | 12.125 | 13.849 | 15.866 |
| 45        | -     | 7.271 | 8.338 | 9.531  | 10.897 | 12.482 | 14.335 | 16.501 |
| 40        | 6.285 | 7.319 | 8.446 | 9.712  | 11.164 | 12.852 | 14.825 | 17.130 |
| 35        | 6.314 | 7.394 | 8.576 | 9.909  | 11.443 | 13.227 | 15.312 | 17.749 |
| 30        | 6.362 | 7.484 | 8.718 | 10.114 | 11.724 | 13.599 | 15.791 | 18.354 |
| 25        | 6.421 | 7.582 | 8.865 | 10.320 | 12.002 | 13.964 | 16.259 | 18.942 |

### Input power(kW)

| Tc\Te dew | -25   | -20   | -15   | -10   | -5    | 0     | 5     | 10    |
|-----------|-------|-------|-------|-------|-------|-------|-------|-------|
| 65        | -     | -     | -     | -     | -     | 5.217 | 5.134 | 5.060 |
| 60        | -     | -     | -     | -     | 4.572 | 4.522 | 4.473 | 4.436 |
| 55        | -     | -     | -     | 4.001 | 3.983 | 3.956 | 3.934 | 3.930 |
| 50        | -     | -     | 3.498 | 3.508 | 3.501 | 3.493 | 3.494 | 3.520 |
| 45        | -     | 3.053 | 3.089 | 3.102 | 3.104 | 3.109 | 3.130 | 3.180 |
| 40        | 2.660 | 2.720 | 2.750 | 2.761 | 2.767 | 2.781 | 2.817 | 2.888 |
| 35        | 2.393 | 2.437 | 2.454 | 2.459 | 2.465 | 2.484 | 2.531 | 2.618 |
| 30        | 2.155 | 2.178 | 2.180 | 2.174 | 2.175 | 2.196 | 2.249 | 2.348 |
| 25        | 1.922 | 1.919 | 1.901 | 1.882 | 1.874 | 1.890 | 1.945 | 2.052 |

### Current(A)

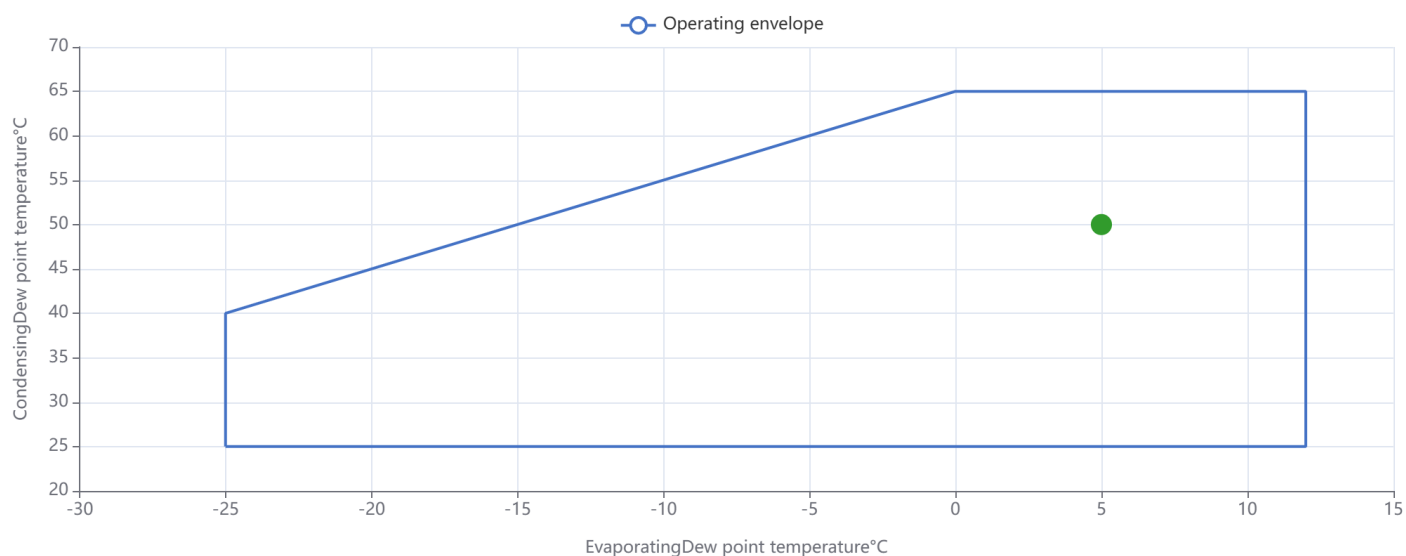
| Tc\Te dew | -25   | -20    | -15    | -10    | -5     | 0      | 5      | 10     |
|-----------|-------|--------|--------|--------|--------|--------|--------|--------|
| 65        | -     | -      | -      | -      | -      | 15.878 | 15.670 | 15.474 |
| 60        | -     | -      | -      | -      | 14.105 | 13.986 | 13.862 | 13.764 |
| 55        | -     | -      | -      | 12.565 | 12.528 | 12.467 | 12.414 | 12.402 |
| 50        | -     | -      | 11.238 | 11.274 | 11.268 | 11.253 | 11.259 | 11.319 |
| 45        | -     | 10.103 | 10.204 | 10.244 | 10.258 | 10.275 | 10.329 | 10.449 |
| 40        | 9.140 | 9.296  | 9.375  | 9.409  | 9.429  | 9.467  | 9.554  | 9.722  |
| 35        | 8.531 | 8.640  | 8.685  | 8.700  | 8.714  | 8.759  | 8.868  | 9.071  |
| 30        | 8.017 | 8.066  | 8.066  | 8.048  | 8.043  | 8.084  | 8.202  | 8.427  |
| 25        | 7.530 | 7.507  | 7.449  | 7.386  | 7.350  | 7.373  | 7.487  | 7.723  |

### Mass flow(kg/h)

| Tc\Te dew | -25    | -20     | -15     | -10     | -5      | 0       | 5       | 10      |
|-----------|--------|---------|---------|---------|---------|---------|---------|---------|
| 65        | -      | -       | -       | -       | -       | 194.368 | 233.890 | 279.304 |
| 60        | -      | -       | -       | -       | 167.615 | 201.838 | 241.217 | 286.459 |
| 55        | -      | -       | -       | 143.795 | 173.517 | 207.661 | 246.932 | 292.040 |
| 50        | -      | -       | 122.332 | 148.349 | 178.055 | 212.156 | 251.356 | 296.365 |
| 45        | -      | 102.651 | 125.756 | 151.821 | 181.548 | 215.641 | 254.807 | 299.754 |
| 40        | 84.176 | 105.162 | 128.379 | 154.529 | 184.313 | 218.436 | 257.604 | 302.525 |
| 35        | 85.994 | 107.156 | 130.522 | 156.793 | 186.671 | 220.860 | 260.066 | 304.998 |
| 30        | 87.576 | 108.951 | 132.503 | 158.931 | 188.939 | 223.231 | 262.512 | 307.492 |
| 25        | 89.241 | 110.866 | 134.639 | 161.262 | 191.438 | 225.868 | 265.261 | 310.325 |

The above performance parameters are obtained through limited compressor tests and data fitting, for reference of compress or selection only. The performance data of the user's unit shall be subject to the test results of the standard laboratory.

### Operating Envelope



Website: <https://www.invotechselector.cn>

SoftwareVersion: v2.0.0