



# HANBELL Compressor Performance Report

## INPUT

Model : RC2-620B  
 Refrigerant : R22  
 Operating mode : Standard  
 Power supply : 380V-3-50Hz  
 Liquid subcooling(Only 5 deg. C) : 5  
 Suct. gas superheat(Only 5 deg. C) : 5  
 Useful superheat(Only 5 deg. C) : 5  
 Partial capacity load only 100%

## OUTPUT

| tc(deg. C) | to(deg. C)  | -20    | -15    | -10    | -5     | 0       | 5       | 10      |
|------------|-------------|--------|--------|--------|--------|---------|---------|---------|
| 40         | Qo(kW)      | 239,2  | 296,2  | 363,9  | 443,5  | 536,4   | 643,9   | 767,3   |
|            | P(kW)       | 113,3  | 118,1  | 122,8  | 127,3  | 131,5   | 135,0   | 137,9   |
|            | I(A)        | 192,3  | 199,8  | 207,3  | 214,4  | 221,0   | 226,7   | 231,3   |
|            | COP         | 2,111  | 2,508  | 2,962  | 3,483  | 4,080   | 4,768   | 5,564   |
|            | mLP(kg/h)   | 5473,7 | 6685,7 | 8105,2 | 9957,6 | 11656,9 | 13833,9 | 16307,7 |
|            | mHP(kg/h)   | 5473,7 | 6685,7 | 8105,2 | 9957,6 | 11656,9 | 13833,9 | 16307,7 |
|            | tcu(deg. C) | 35,0   | 35,0   | 35,0   | 35,0   | 35,0    | 35,0    | 35,0    |
|            | Qsc(kW)     |        |        |        |        |         |         |         |
| 45         | pm(bar)     |        |        |        |        |         |         |         |
|            | Qac(kW)     | 34,76  | 26,20  | 16,12  | 0,00   | 0,00    | 0,00    | 0,00    |
|            | Qo(kW)      | 221,4  | 274,8  | 338,4  | 413,5  | 501,5   | 603,7   | 721,4   |
|            | P(kW)       | 123,7  | 129,0  | 134,2  | 139,3  | 144,0   | 148,1   | 151,7   |
|            | I(A)        | 208,7  | 217,0  | 225,4  | 233,5  | 241,1   | 247,9   | 253,6   |
|            | COP         | 1,789  | 2,130  | 2,521  | 2,969  | 3,484   | 4,075   | 4,757   |
|            | mLP(kg/h)   | 5286,7 | 6467,6 | 7855,8 | 9680,4 | 11348,5 | 13499,3 | 15950,1 |
|            | mHP(kg/h)   | 5286,7 | 6467,6 | 7855,8 | 9680,4 | 11348,5 | 13499,3 | 15950,1 |
| 50         | tcu(deg. C) | 40,0   | 40,0   | 40,0   | 40,0   | 40,0    | 40,0    | 40,0    |
|            | Qsc(kW)     |        |        |        |        |         |         |         |
|            | pm(bar)     |        |        |        |        |         |         |         |
|            | Qac(kW)     | 51,43  | 44,37  | 36,09  | 14,93  | 15,06   | 1,93    | 0,00    |
|            | Qo(kW)      | 202,5  | 252,0  | 311,4  | 381,9  | 464,8   | 561,5   | 673,3   |
|            | P(kW)       | 135,0  | 140,8  | 146,6  | 152,3  | 157,6   | 162,5   | 166,7   |
|            | I(A)        | 226,6  | 236,0  | 245,4  | 254,6  | 263,3   | 271,3   | 278,3   |
|            | COP         | 1,500  | 1,790  | 2,124  | 2,508  | 2,949   | 3,456   | 4,038   |
|            | mLP(kg/h)   | 5053,2 | 6195,7 | 7545,7 | 9334,3 | 10966,0 | 13084,3 | 15506,2 |
|            | mHP(kg/h)   | 5053,2 | 6195,7 | 7545,7 | 9334,3 | 10966,0 | 13084,3 | 15506,2 |
|            | tcu(deg. C) | 45,0   | 45,0   | 45,0   | 45,0   | 45,0    | 45,0    | 45,0    |
|            | Qsc(kW)     |        |        |        |        |         |         |         |
|            | pm(bar)     |        |        |        |        |         |         |         |
|            | Qac(kW)     | 69,74  | 64,53  | 58,18  | 39,48  | 41,31   | 30,64   | 18,63   |

## Coefficients

|         | c1      | c2       | c3       | c4       | c5       | c6       | c7         | c8         | c9         | c10        |
|---------|---------|----------|----------|----------|----------|----------|------------|------------|------------|------------|
| Qo(W)   | 742101  | 26638,44 | -3473,31 | 357,291  | -133,149 | -42,645  | 1,7524     | -1,6389    | -0,8224    | 0,0244     |
| P(W)    | 74431   | 374,86   | 427,50   | -16,959  | -2,261   | 25,905   | -0,2142    | 0,1512     | 0,3063     | -0,0238    |
| F(kg/h) | 12290,1 | 417,6771 | 22,7397  | 5,44031  | 0,59962  | -0,81910 | 0,0272542  | -0,0030738 | -0,0219609 | -0,0028230 |
| I(A)    | 133,26  | 0,4656   | 0,6087   | -0,02657 | -0,00133 | 0,03836  | -0,0003320 | 0,0002613  | 0,0005192  | 0,0000297  |