



# HANBELL Compressor Performance Report

## INPUT

Model : RC2-1020A  
 Refrigerant : R134a  
 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)  | -10    | -5      | 0       | 5       | 10      | 15 | 20 |
|------------|-------------|--------|---------|---------|---------|---------|----|----|
| 40         | Qo(kW)      | 405,4  | 506,9   | 625,7   | 765,2   | 928,9   | -- | -- |
|            | P(kW)       | 140,3  | 144,4   | 148,0   | 151,0   | 153,5   |    |    |
|            | I(A)        | 248,7  | 255,0   | 260,3   | 264,8   | 268,7   |    |    |
|            | COP         | 2,890  | 3,510   | 4,229   | 5,069   | 6,051   |    |    |
|            | mLP(kg/h)   | 9869,0 | 12086,3 | 14622,3 | 17552,2 | 20903,8 |    |    |
|            | mHP(kg/h)   | 9869,0 | 12086,3 | 14622,3 | 17552,2 | 20903,8 |    |    |
|            | tcu(deg. C) | 35,0   | 35,0    | 35,0    | 35,0    | 35,0    |    |    |
|            | Qsc(kW)     |        |         |         |         |         |    |    |
|            | pm(bar)     |        |         |         |         |         |    |    |
|            | Qac(kW)     | 0,00   | 0,00    | 0,00    | 0,00    | 0,00    |    |    |
| 45         | Qo(kW)      | 375,9  | 472,8   | 585,9   | 718,6   | 874,4   | -- | -- |
|            | P(kW)       | 155,4  | 160,0   | 163,9   | 167,2   | 169,9   |    |    |
|            | I(A)        | 271,5  | 278,5   | 284,5   | 289,6   | 293,9   |    |    |
|            | COP         | 2,419  | 2,956   | 3,575   | 4,299   | 5,145   |    |    |
|            | mLP(kg/h)   | 9629,5 | 11852,4 | 14381,9 | 17297,6 | 20629,4 |    |    |
|            | mHP(kg/h)   | 9629,5 | 11852,4 | 14381,9 | 17297,6 | 20629,4 |    |    |
|            | tcu(deg. C) | 40,0   | 40,0    | 40,0    | 40,0    | 40,0    |    |    |
|            | Qsc(kW)     |        |         |         |         |         |    |    |
|            | pm(bar)     |        |         |         |         |         |    |    |
|            | Qac(kW)     | 0,00   | 0,00    | 0,00    | 0,00    | 0,00    |    |    |
| 50         | Qo(kW)      | 343,5  | 435,9   | 543,3   | 669,1   | 816,9   | -- | -- |
|            | P(kW)       | 172,8  | 177,9   | 182,2   | 185,9   | 189,0   |    |    |
|            | I(A)        | 298,2  | 306,1   | 312,9   | 318,6   | 323,3   |    |    |
|            | COP         | 1,988  | 2,451   | 2,981   | 3,600   | 4,323   |    |    |
|            | mLP(kg/h)   | 9297,3 | 11529,4 | 14054,9 | 16958,1 | 20271,6 |    |    |
|            | mHP(kg/h)   | 9297,3 | 11529,4 | 14054,9 | 16958,1 | 20271,6 |    |    |
|            | tcu(deg. C) | 45,0   | 45,0    | 45,0    | 45,0    | 45,0    |    |    |
|            | Qsc(kW)     |        |         |         |         |         |    |    |
|            | pm(bar)     |        |         |         |         |         |    |    |
|            | Qac(kW)     | 16,05  | 0,00    | 0,00    | 0,00    | 0,00    |    |    |

## Coefficients

|         | c1      | c2       | c3       | c4       | c5       | c6      | c7        | c8         | c9        | c10        |
|---------|---------|----------|----------|----------|----------|---------|-----------|------------|-----------|------------|
| Qo(W)   | 865156  | 35298,34 | -4757,00 | 595,877  | -231,366 | -19,267 | 4,5914    | -4,5273    | -0,2072   | -0,2871    |
| P(W)    | 106127  | 607,61   | -806,02  | 0,343    | -9,893   | 45,278  | 0,0988    | -0,2790    | 0,2749    | 0,0255     |
| F(kg/h) | 15776,6 | 569,0042 | -66,5789 | 8,95782  | -1,16089 | 2,12713 | 0,0898758 | -0,0341686 | 0,0116512 | -0,0296256 |
| I(A)    | 214,07  | 0,2210   | -2,4563  | -0,00217 | 0,01360  | 0,09721 | 0,0001501 | -0,0003792 | 0,0001322 | -0,0001682 |