

Wyniki - Ogólne

| | |
|------------------|------------------------------|
| Nazwa projektu: | DPS w Tarnówku |
| Lokalizacja....: | Tarnówek |
| Projektant.....: | mgr inż. Paweł Tomaszewski |
| Data obliczeń : | Środa, 31 Grudnia 2008, 8:27 |

Parametry czynnika grzejnego:

| | | | |
|------------------|-------|-----------|-------|
| Tz, [°C].....: | 75.00 | Tp, [°C]: | 60.00 |
| Tprz, [°C].....: | 52.19 | | |
| Rodz. czynnika: | Woda | | |

Parametry źródła ciepła:

| | | | |
|-----------------|---|----------------|---|
| Opór hydr.[Pa]: | 0 | Pojemność [l]: | 0 |
|-----------------|---|----------------|---|

Informacje o typach rur:

| | | | | | | | |
|--------|----------|--------|----------|--------|-------|--------|--|
| Typ A: | PURMOHKS | Typ B: | 74209-01 | Typ C: | MIEDZ | Typ D: | |
| Typ E: | | Typ F: | | Typ G: | | Typ H: | |
| Typ I: | | Typ J: | | Typ K: | | Typ L: | |
| Typ M: | | Typ N: | | Typ O: | | Typ P: | |

| | |
|--|-------|
| Opór hydr. obiegu pierwotnego i źródła ciepła.. dPc, [Pa]: | 106 |
| Minimalny opór działki z grzejnikiem..... dPgmin, [Pa]: | |
| Całkowity strumień wody w instalacji..... Gc, [kg/s]: | 0.531 |
| Całkowita pojemność instalacji..... Vc, [l]: | 682 |
| Obliczeniowa moc cieplna instalacji..... Qo, [W]: | 40922 |
| Moc tracona..... Qtr, [W]: | 9805 |
| Całk. moc przekazywana przez instalację..... Qcał, [W]: | 50707 |

Pomieszczenia ogrzewane:

| | | | |
|-------------------|-------|--------------------------|-------|
| Przegrzewane...: | 0 | Nadmiar mocy, [W]: | 94 |
| Niedogrzewane...: | 58 | Deficyt mocy, [W]: | 58375 |
| Moc grzej.. [W]: | 40859 | Zyski od przewodów, [W]: | 139 |

Pomieszczenia nieogrzewane:

| | | | |
|------------------|---|--------------------------|------|
| Moc grzej.. [W]: | 0 | Zyski od przewodów, [W]: | 6756 |
|------------------|---|--------------------------|------|

Grzejniki:

| | | | |
|-------------------|-------|-----------------------|-------|
| Przegrzewające: | 0 | Nadmiar mocy, [W]: | 101 |
| Niedogrzewające: | 0 | Deficyt mocy, [W]: | 26 |
| Obl. moc, [W]...: | 99278 | Rzeczywista moc, [W]: | 40859 |

Wyniki - Grzejniki

| Pom. | Typ grz. | n | L | Qobl | Qwym | G |
|------|----------|-------|------|------|------|---------|
| | | [el.] | [m] | [W] | [W] | [kg/s] |
| 101 | CV11-60 | 6 | 0.60 | 343 | 341 | 0.00430 |
| 102 | CV11-60 | 8 | 0.80 | 406 | 404 | 0.00397 |
| 103 | CV11-60 | 8 | 0.80 | 451 | 449 | 0.00526 |
| 108 | CV11-60 | 8 | 0.80 | 475 | 473 | 0.00513 |
| 109 | CV11-60 | 10 | 1.00 | 620 | 618 | 0.00707 |
| 111 | CV11-60 | 8 | 0.80 | 467 | 465 | 0.00491 |
| 118 | CV11-60 | 7 | 0.70 | 448 | 446 | 0.00588 |
| 124 | CV11-60 | 5 | 0.50 | 245 | 243 | 0.00306 |
| 202 | CV11-60 | 14 | 1.40 | 807 | 805 | 0.00784 |
| 203 | CV11-60 | 12 | 1.20 | 636 | 634 | 0.00707 |
| 205 | CV11-60 | 10 | 1.00 | 530 | 528 | 0.00542 |
| 213 | CV11-60 | 12 | 1.20 | 821 | 813 | 0.01217 |
| 213 | CV11-60 | 12 | 1.20 | 821 | 813 | 0.01217 |
| 213 | CV11-60 | 12 | 1.20 | 821 | 813 | 0.01217 |
| 213 | CV11-60 | 12 | 1.20 | 821 | 813 | 0.01263 |
| 213 | CV11-60 | 12 | 1.20 | 821 | 813 | 0.01263 |
| 214 | CV11-60 | 10 | 1.00 | 576 | 574 | 0.00622 |
| 215 | CV11-60 | 10 | 1.00 | 582 | 580 | 0.00630 |
| 216 | CV11-60 | 14 | 1.40 | 801 | 799 | 0.01335 |
| 217 | CV11-60 | 6 | 0.60 | 372 | 370 | 0.00488 |
| 303 | CV11-60 | 14 | 1.40 | 898 | 896 | 0.01077 |
| 303 | CV11-60 | 14 | 1.40 | 898 | 896 | 0.01077 |
| 304 | CV11-60 | 10 | 1.00 | 653 | 651 | 0.00857 |
| 308 | CV11-60 | 14 | 1.40 | 820 | 818 | 0.00826 |
| 309 | CV11-60 | 12 | 1.20 | 714 | 712 | 0.00752 |
| 310 | CV11-60 | 12 | 1.20 | 754 | 752 | 0.00904 |
| 311 | CV11-60 | 12 | 1.20 | 754 | 752 | 0.00904 |
| 312 | CV11-60 | 14 | 1.40 | 938 | 936 | 0.01290 |
| 313 | CV11-60 | 14 | 1.40 | 808 | 806 | 0.00805 |
| 314 | CV11-60 | 14 | 1.40 | 803 | 801 | 0.00799 |
| 315 | CV11-60 | 14 | 1.40 | 849 | 847 | 0.00921 |
| 104 | CV22-60 | 5 | 0.50 | 553 | 551 | 0.00746 |
| 114 | CV22-60 | 6 | 0.60 | 538 | 536 | 0.00503 |
| 204 | CV22-60 | 14 | 1.40 | 1107 | 1105 | 0.01008 |
| 301 | CV22-60 | 10 | 1.00 | 974 | 972 | 0.00984 |
| 302 | CV22-60 | 14 | 1.40 | 1144 | 1142 | 0.00885 |
| 316 | CV22-60 | 12 | 1.20 | 1001 | 999 | 0.00793 |
| I201 | CV22-60 | 7 | 0.70 | 912 | 910 | 0.02054 |
| I202 | CV22-60 | 7 | 0.70 | 802 | 800 | 0.01103 |
| I202 | CV22-60 | 7 | 0.70 | 802 | 800 | 0.01103 |
| I204 | CV22-60 | 8 | 0.80 | 878 | 876 | 0.01078 |
| I204 | CV22-60 | 8 | 0.80 | 878 | 876 | 0.01078 |
| I205 | CV22-60 | 7 | 0.70 | 742 | 740 | 0.00848 |

Wyniki - Grzejniki

| Pom. | Typ grz. | n | L | Qobl | Qwym | G |
|------|----------|-------|------|------|------|---------|
| | | [el.] | [m] | [W] | [W] | [kg/s] |
| I205 | CV22-60 | 7 | 0.70 | 742 | 740 | 0.00848 |
| 112 | SAA11 04 | 1 | 0.40 | 252 | 249 | 0.00430 |
| 306 | SAC11 04 | 1 | 0.40 | 242 | 239 | 0.00484 |
| 307 | SAC11 04 | 1 | 0.40 | 222 | 219 | 0.00443 |
| 110 | SAC11 05 | 1 | 0.50 | 348 | 345 | 0.00805 |
| 207 | SAC11 05 | 1 | 0.50 | 242 | 239 | 0.00415 |
| 208 | SAC11 05 | 1 | 0.50 | 226 | 223 | 0.00333 |
| I301 | SAC11 05 | 1 | 0.50 | 230 | 227 | 0.00292 |
| I302 | SAC11 05 | 1 | 0.50 | 297 | 294 | 0.00439 |
| 117 | SAC11 06 | 1 | 0.60 | 350 | 343 | 0.00513 |
| 115 | T-1 | 10 | 0.82 | 755 | 755 | 0.01706 |
| 115 | T-1 | 10 | 0.82 | 733 | 733 | 0.01480 |
| 115 | T-1 | 10 | 0.82 | 733 | 733 | 0.01480 |
| 116 | T-1 | 10 | 0.82 | 366 | 366 | 0.00247 |
| 119B | T-1 | 5 | 0.41 | 300 | 300 | 0.00448 |
| 125 | T-1 | 15 | 1.23 | 1020 | 1020 | 0.01585 |
| 206 | T-1 | 15 | 1.23 | 451 | 451 | 0.00392 |
| 211 | T-1 | 8 | 0.66 | 437 | 437 | 0.00832 |
| 305 | T-1 | 15 | 1.23 | 447 | 447 | 0.00380 |
| I303 | T-1 | 10 | 0.82 | 724 | 724 | 0.00952 |
| I303 | T-1 | 10 | 0.82 | 724 | 724 | 0.00952 |

Materiały - Rury

| dn | Numer katalogowy | L | V | M | Cena | Uwagi |
|---|------------------|--------|-----|------|------|-------|
| [mm] | | [m] | [l] | [kg] | [zł] | |
| Symbol: 74209-01 Producent: | | | | | | |
| Rury stalowe bez szwu przewodowe wg. PN-74/H-74209. Chropowatość k = 0.1 mm (czyste rury). | | | | | | |
| 40 | | 44.1 | 61 | 157 | | |
| Razem | | 44.1 | 61 | 157 | | |
| Symbol: MIEDZ Producent: | | | | | | |
| Rury miedziane wg. DIN 1786 (05.80), do kapilarnych połączeń lutowanych. | | | | | | |
| 22×1 | | 113.7 | 36 | 67 | | |
| 28×1.5 | | 9.8 | 5 | 11 | | |
| 35×1.5 | | 62.7 | 50 | 89 | | |
| Razem | | 186.3 | 91 | 167 | | |
| Symbol: PURMOHKS Producent: PURMO | | | | | | |
| Rury wielowarstwowe PEX/Al/PEX systemu PURMO HKS do instalacji grzewczych i wodociągowych z polietylenu sieciowanego z wkładką aluminiową, Tmax = 90 °C Pmax = 1.0 MPa. | | | | | | |
| 16×2 | CSY 0053000 | 1480.5 | 167 | 124 | | |
| Razem | | 1480.5 | 167 | 124 | | |
| Razem | | 1710.9 | 319 | 448 | | |