| | 10% CS | | | | | |
|------------|---------|---------------------|-----------|-------------|-------------|-------------|
| | PCCC | PCCC-N2-S-RD | COPKM | CSC | DILS | LCC |
| Dataset | | | | | | |
| n1000-k10 | 14.6 | 3.0 | _ | 27.6 | 3,629.8 | 299.7 |
| n1000-k100 | 313.8 | 5.1 | 39.0 | 31.4 | 3,628.5 | 708.9 |
| n1000-k2 | 0.1 | 0.3 | 201.5 | 24.6 | 3,649.8 | $2,\!158.6$ |
| n1000-k20 | 115.3 | 9.1 | _ | 27.6 | 3,638.4 | 270.8 |
| n1000-k5 | 1.0 | 1.4 | 28.9 | 25.8 | 3,623.0 | $1,\!160.5$ |
| n1000-k50 | 281.7 | 8.2 | 7.7 | 27.5 | 3,645.3 | 381.8 |
| n2000-k10 | 14.4 | 4.3 | _ | 218.2 | 3,656.9 | 3,792.7 |
| n2000-k100 | 333.2 | 17.9 | 157.9 | 219.8 | 3,651.1 | 1,916.3 |
| n2000-k2 | 0.3 | 0.4 | 3,742.6 | 238.8 | 3,701.4 | 35.8 |
| n2000-k20 | 208.7 | 25.1 | _ | 218.8 | 3,639.1 | 3,547.9 |
| n2000-k5 | 0.8 | 1.4 | 870.3 | 232.5 | 3,755.0 | 3,434.3 |
| n2000-k50 | 747.1 | 24.1 | 35.2 | 222.8 | 3,661.9 | 1,238.0 |
| n5000-k10 | 4.7 | 3.3 | _ | 2,682.4 | 3,888.9 | _ |
| n5000-k100 | 2,050.3 | $\boldsymbol{49.2}$ | 417.0 | $2,\!598.4$ | 3,995.0 | 3,705.7 |
| n5000-k2 | 1.0 | 1.2 | _ | 2,832.7 | 3,763.4 | _ |
| n5000-k20 | 73.1 | 49.3 | _ | 2,619.7 | 3,886.3 | _ |
| n5000-k5 | 1.0 | 1.0 | _ | 2,854.0 | 3,877.6 | _ |
| n5000-k50 | 813.4 | 67.0 | _ | 2,663.6 | 4,056.7 | 4,121.8 |
| n500-k10 | 5.0 | 1.6 | 4.3 | 4.4 | 2,884.1 | 45.9 |
| n500-k100 | 70.6 | 1.8 | 19.6 | 3.6 | 2,892.1 | 306.4 |
| n500-k2 | 0.1 | 0.3 | 7.8 | 4.2 | $3,\!370.1$ | 197.6 |
| n500-k20 | 21.0 | 4.8 | 3.0 | 6.3 | 3,003.3 | 79.4 |
| n500-k5 | 2.0 | 3.1 | _ | 6.0 | 3,088.7 | 40.0 |
| n500-k50 | 52.9 | 2.8 | 2.9 | 4.6 | 2,765.2 | 157.5 |
| Sum | 5,126.4 | 285.5 | 41,537.8* | 17,795.1 | 85,351.6 | 41,999.4* |

^{*}Nan values (-) are replaced with 3,600 before computing the sum.

Table W96: Average running times (in seconds) of the PCCC and the PCCC-N2-S algorithms for the constraint sets of size 10% CS. The lowest values are stated in bold. The column KMEANS reports the average running time of the unconstrained k-means algorithm. The hyphen indicates that the respective algorithm returned no solution within the time limit of 3,600 seconds.