

Dataset	5% CS		KMEANS
	PCCC	PCCC-N2-S	
n300-k10-s10	0.6	0.3	0.0
n300-k10-s20	1.5	0.6	0.0
n300-k10-s30	2.1	0.4	0.0
n300-k10-s40	1.5	0.4	0.0
n300-k10-s50	1.9	0.6	0.0
n300-k20-s10	1.2	0.3	0.0
n300-k20-s20	3.0	0.5	0.0
n300-k20-s30	2.9	0.8	0.0
n300-k20-s40	1.9	0.2	0.0
n300-k20-s50	2.7	0.4	0.0
n300-k50-s10	2.8	0.2	0.0
n300-k50-s20	4.0	0.4	0.1
n300-k50-s30	2.2	0.5	0.0
n300-k50-s40	2.7	0.5	0.1
n300-k50-s50	4.3	0.5	0.0
Sum	35.2	6.7	0.6

Table W65: Average running times (in seconds) of the PCCC and the PCCC-N2-S algorithms for the constraint sets of size 5% 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.