

Dataset	25% CS	
	PCCC	PCCC-N2-S
n300-k10-s10	8.8	1.0
n300-k10-s20	10.6	1.1
n300-k10-s30	12.7	1.6
n300-k10-s40	30.7	2.4
n300-k10-s50	49.4	2.5
n300-k20-s10	32.3	1.3
n300-k20-s20	39.2	1.4
n300-k20-s30	38.3	1.5
n300-k20-s40	45.5	1.3
n300-k20-s50	48.2	1.9
n300-k50-s10	53.5	0.7
n300-k50-s20	64.8	1.2
n300-k50-s30	63.5	1.3
n300-k50-s40	71.1	1.1
n300-k50-s50	67.1	1.0
Sum	635.8	21.3

Table W49: Average running times (in seconds) of the PCCC and the PCCC-N2-S algorithms for the constraint sets of size 25% 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.