

On tricyclic graphs with minimal energy

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Abstract. The energy of a graph is defined as the sum of the absolute values of all the eigenvalues of the graph. Let \mathcal{G}_n be the class of tricyclic graphs G on n vertices and containing no disjoint odd cycles C_p, C_q of lengths p and q with $p+q \equiv 2 \pmod{4}$. In this paper, we obtain the minimal and second-minimal values on the energies of the graphs in \mathcal{G}_n and determine the corresponding graphs.