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Coker, Gary D.; **Gardner, Robert B.** [**Gardner, Robert Bentley**] (1-ETNS);
Johnson, Robin [**Johnson, Robin Dale**]

Decompositions of the complete digraph and the complete graph which admit certain automorphisms. (English summary)

Proceedings of the Twenty-sixth Southeastern International Conference on Combinatorics, Graph Theory and Computing (Boca Raton, FL, 1995).

Congr. Numer. **108** (1995), 65–84.

Summary: “Decompositions of the complete digraph into isomorphic copies of orientations of 4-cycles and 5-cycles are considered. Necessary and sufficient conditions for such decompositions admitting cyclic or rotational automorphisms are given. Some new decompositions of the complete digraph into certain (non-self-converse) orientations of the 6-cycle are also given. The spectrum of 4-, 6-, and 8-cycle systems admitting either a reverse automorphism or a k -rotational automorphism for any k are determined.”

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