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All unit-regular elements of relational hypersubstitutions for algebraic systems^{*}

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Abstract. Relational hypersubstitutions for algebraic systems are mappings which map operation symbols to terms and map relation symbols to relational terms preserving arities. The set of all relational hypersubstitutions for algebraic systems together with a binary operation defined on this set forms a monoid. In this paper, we determine all unit-regular elements on this monoid of type ((m), (n)) for arbitrary natural numbers $m, n \geq 2$.

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