1147-20-70 John Hutchens* (hutchensjd@wssu.edu). k-involutions of groups of type E₆.

A symmetric k-variety is defined as the quotient G(k)/H(k), where $H = G^{\theta}$ is the fixed point group of a k-involution $\theta \in \operatorname{Aut}(G)$ and G(k) and H(k) are the k-rational points of G and H. For every isomorphism class of k-involutions we get an isomorphism class of symmetric k-varieties when $\operatorname{char}(k) \neq 2$. Here we classify k-involutions of groups of type E_6 for fields of characteristic not 2 or 3 by considering groups of type E_6 as $\operatorname{Aut}^+(B)$ where B is a Brown algebra. (Received November 27, 2018)