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We prove that if a compact smooth polarized complex manifold admits in the corresponding Hodge Kähler class a conformally Kähler, Einstein–Maxwell metric, or more generally, a Kähler metric of constant (ξ, a, p) -scalar curvature, then this metric minimizes the (ξ, a, p) -Mabuchi functional. Our method of proof extends the approach introduced by Donaldson and developed by Li and Sano–Tipler, via finite dimensional approximations and generalized balanced metrics. As an application of our result and the recent construction of Koca–Tønnesen–Friedman, we describe the Kähler classes on a geometrically ruled complex surface of genus greater than 2, which admit conformally Kähler, Einstein–Maxwell metrics. (Received February 12, 2018)