The development of the main phase of 190 magnetic storms with Dst ≤ –50 nT driven by different interplanetary is studied through the comparison an integral electric field sumEy with Dst index value. As result it was shown that Dst index decreased with increasing of integral electric field sumEy on the main phase of all types of magnetic storms. The coefficient of correlation between these parameters was higher for storms initiated by the Sheath before the interplanetary CME than by magnetic clouds MC and CIR. We may suggest that the dynamic pressure increased the efficiency of electric field for 4 types of solar wind sources: Sheath before the Ejecta, total Sheath (ShE+ShMC), CIR and indeterminate type, IND. It is possible that Dst index is not dependent on the magnetic field fluctuation level sB IMF for almost all types of the solar wind streams (the differences are in limits of accuracy) against the background of dependence of Dst index on sumEy at the main phase of storm. The estimations of threshold values of integral electric field sumEy for achievement of intensity level of moderate (Dst = –50 nT) and strong (Dst = – 100 nT) magnetic storms indicate on tendency of its dependence on driver type for magnetic storm. We may suggest that, on average, Sheath before ICME have threshold values of integral electric field sumEy more lower (in 1.5 times) than ICME themselves.