Relations between Fourier Transform on HK space and L^p

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We study the classical Fourier Transform by means of Henstock-Kurzweil Integral and we obtain new properties of this transform for functions in L^p, with p between one and two. In particular, we get integral representations of the Fourier Transform in Henstock- Kurzweil integral sense. Moreover, we give some relations between the classical spaces L^p, $0 < p \leq \infty$ and the space of Henstock-Kurzweil integrable functions.