What is the kinetic energy of a 740 kg sky diver falling at a terminal velocity of 52 m/s?

Solution.

The formula for kinetic energy in general form is:

$$E = \frac{mv^2}{2},$$

where m is the mass of an object, v is the velocity of an object, E is the kinetic energy of an object.

So we have:

$$E = \frac{mv^2}{2} = \frac{740 \cdot 52^2}{2} = 1000,48 \text{ kJ}.$$

Answer: $1000,48$ kJ.