19 An ideal gas undergoes an expansion in volume from 1.3×10^{-4} m^3 to 3.6×10^{-4} m^3 at a constant pressure of 1.3×10^5 Pa. During the expansion, 24 J of heat is supplied to the gas.

What is the overall change in the internal energy of the gas?

A decrease of 54 J

B decrease of 6 J

C increase of 6 J

D increase of 54 J