The volumetric thermal expansion coefficient is 0.00360 /K

The Rayleigh Number is 1.54e+07

The convection coefficient for horizontal length is 5.62 W/(sq.m.K)

The heat transferred from the horizontal length of 4 m is 476 W

The convection coefficient for vertical length is 2.89 W/(sq.m.K)

The heat transferred from the vertical length of 4 m is 245 W

The total heat lost from the pipe is 722 W