$$\forall (x,y,z) \in E^3, \forall (\lambda,\mu) \in \mathbb{K}^2, \quad \begin{aligned} &\langle \lambda x \ + \mu y \,; z\rangle = \lambda\langle x\,;z\rangle + \mu\langle y\,;z\rangle \\ &\langle x\,;\lambda y + \mu z\rangle = \lambda\langle x\,;y\rangle + \mu\langle x\,;z\rangle \end{aligned} \tag{A.2a}$$

$$\forall (x,y) \in E^2, \quad \langle x\,;y\rangle = \langle y\,;x\rangle \tag{A.2b}$$

$$\forall x \in E, \quad \langle x\,;x\rangle \geqslant 0_{\mathbb{K}} \tag{A.2c}$$

$$\forall x \in E, \quad \langle x\,;x\rangle = 0_{\mathbb{K}} \Rightarrow x = 0_E \tag{A.2d}$$