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| Table 1. *Variables in the model of the adenine nucleotide-creatine-phosphate module* | | |
| .  Variable | .  Description | Start Value  At 135 beats/min |
| *Concentrations* | | |
|  | ATP concentration in cytosol  ADP concentration in cytosol  PCr concentration in cytosol  Cr concentration in cytosol  Pi concentration in cytosol  ATP concentration in IMS  ADP concentration in IMS  PCr concentration in IMS  Cr concentration in IMS  Pi concentration in IMS | 5,601 M  64 M  5,710 M  9,790 M  912 M  5,626 M  39 M  5,711 M  9,789 M  910 M |
| *Chemical conversions (expressed per unit volume of total*  *intracellular water)* | | |
|  | ATP hydrolysis in cytosol  ATP production, i.e., ﬂux of ATP entering the IMS from the mitochondrial matrix via the adenine nucleotide translocator  rate of PCr production via muscle isoform of CK in cytosol  rate of PCr production via mitochondrial  isoform of CK in IMS |  |
| *Transport ﬂuxes (expressed per unit volume of total intracellular water)* | | |
|  | diffusion ﬂux of ATP from IMS to cytosol  diffusion ﬂux of ADP from IMS to cytosol  diffusion ﬂux of PCr from IMS to cytosol  diffusion ﬂux of Cr from IMS to cytosol  diffusion ﬂux of P i from IMS to cytosol |  |
| Start value refers to ATP hydrolysis rate = 486.5 M/s. These values are time averaged over the cardiac cycle. For the rabbit heart parameter set, see Table 2. Cyt, Cytosol; ims, intermembrane space. | | |