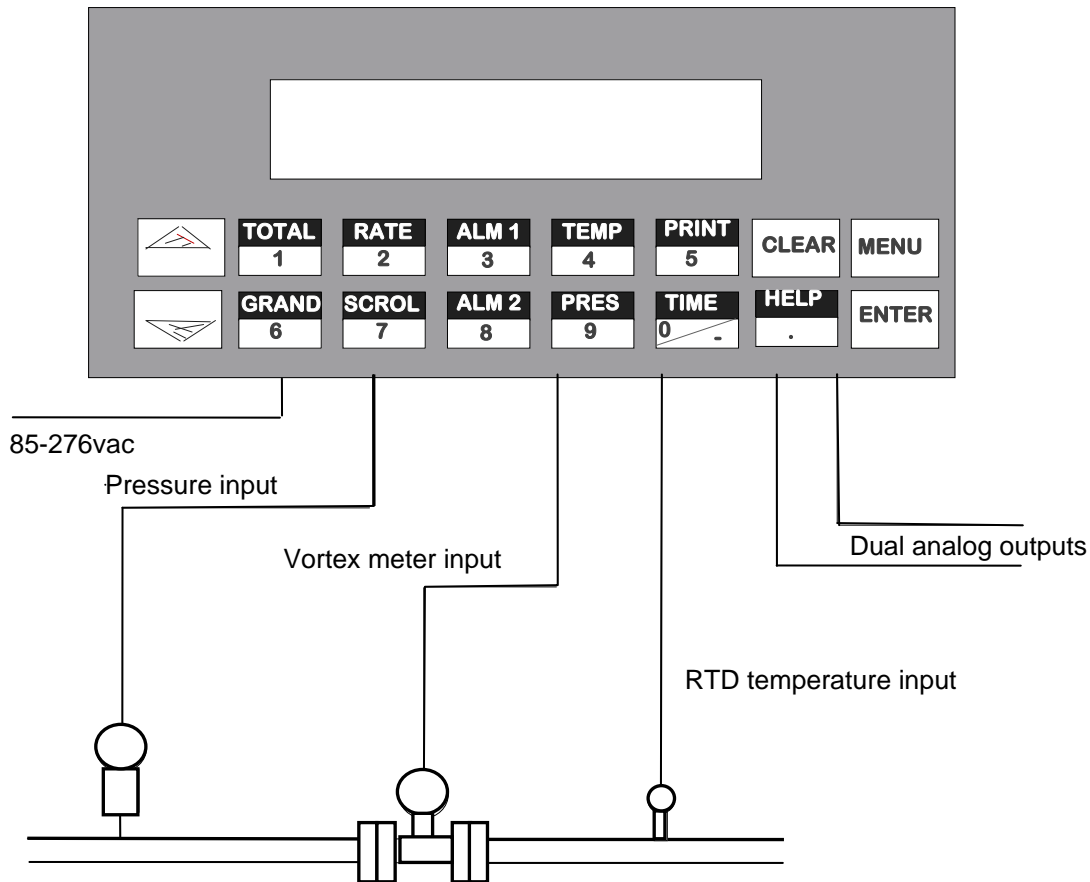




Kessler-Ellis Application Note F006

ES-749 Mass/Heat Flow Computer Monitoring Steam Mass Flow



The ES-749 utilizes the pressure and/or temperature signals as an entry point to its internally held steam tables, the density of the steam is then computed. The signal from the Vortex meter, which is proportional to volumetric steam flow, is then multiplied by the density in order to yield the mass flow of steam.

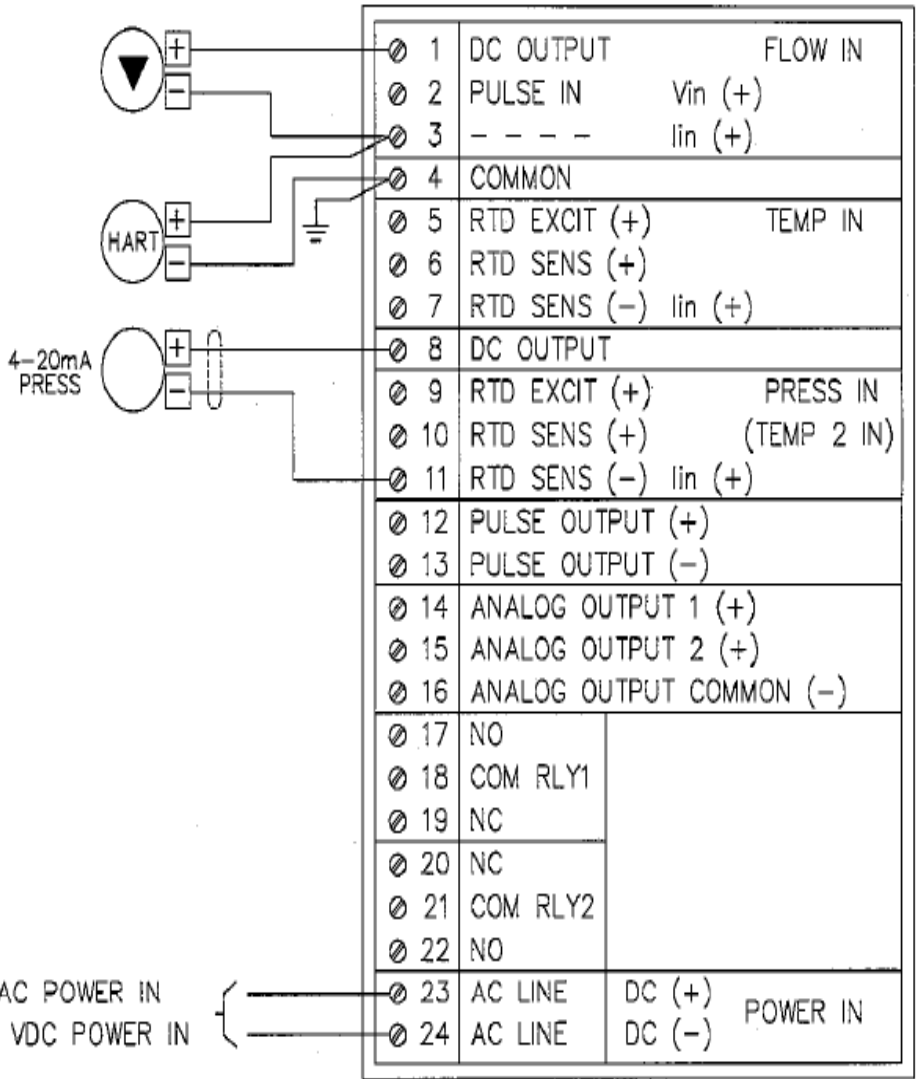
The ES-749 can be programmed to calculate the heat energy of steam utilizing the same inputs.

The ES-749 provides displays of mass flow, heat flow, mass total, heat total, pressure, temperature, specific volume and specific enthalpy.

Pulse output, two analog outputs, relay and RS232 outputs are provided as well as a 24 vdc 100 mA power supply for powering all process transmitters.

Application Terminal Connections

ES-749 MASS/HEAT FLOW COMPUTER WITH ROSEMOUNT VORTEX METER



See application notes 20 and 21 for an explanation of the equations relevant to this application.