

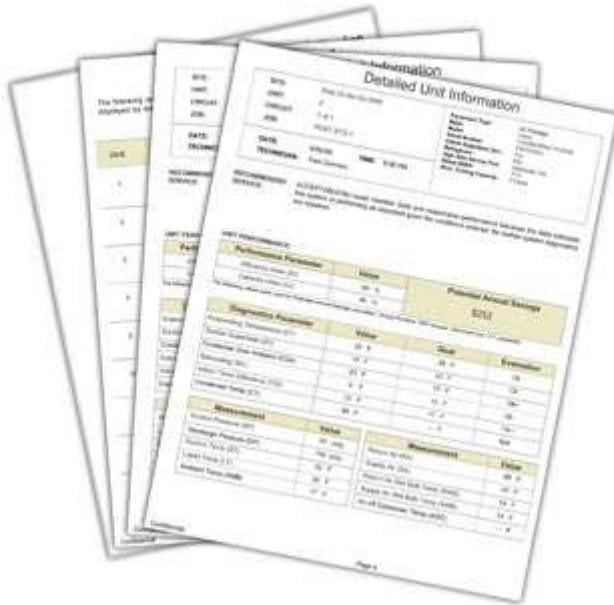
Test Now and Save Later

In a time of rising energy prices we need to lower energy consumption while maintaining comfort in our facilities.

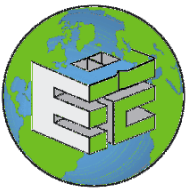
The **HVAC Service Assistant™** collects all necessary data to detect every fault and degradation found in air conditioning refrigeration cycles and then informs the service technician of the existence of these conditions, the impact of these faults on energy consumption and the available savings potential.

It also suggests effective ways to mitigate these problems. When data collected by the HVAC Service Assistant™ is synchronized to servers, custom reporting permits technicians, facility owners and service managers to document the operating conditions of every unit and every circuit both before and after service measures are performed.

Here is how it is done. While connected to a packaged unit, the **HVAC Service Assistant™** records 6 key measurements from the units



- Suction pressure
- Liquid pressure
- Suction temperature
- Liquid temperature
- Ambient temperature
- Return air dry-bulb and wet-bulb temperature
- Supply air dry-bulb and wet-bulb temperature



Calculated performance indices are used to identify faults in the unit. From the resulting diagnostic messages, technicians are able to produce better running equipment. The result is:

Efficiency and Capacity (i)

EI 90	Power	9.50 kW
CI 85	Runtime	2117 hr
	Savings	\$362

Nominal Operating Parameters

Cap 10.0	Runtime	1800
SEER 10.0	Ecost	14.0

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- Enhanced reliability
- Additional cooling capacity
- Energy efficiency

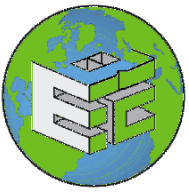
The measurements also enable the **HVAC Service Assistant™** to calculate the Efficiency Index (EI) and Capacity Index (CI) providing a snapshot of the overall health of a unit. With the EI and CI recorded we are able to quantify the energy cost of operating at reduced efficiency or capacity.

Elemco processes, protocols and reporting build feedback into every step of the maintenance and repair process. Using the **HVAC Service Assistant™** provides objective information to technicians on the rooftop, to their service managers monitoring the work that is being performed, and to end users and facility owners who want to know the true status of their equipment. Reports are generated to address:

- How efficiently units are running
- How to prioritize retro-commissioning or tune-up measures
- How much lower the electric usage will be when the tune-up is completed

The result is that managers can measure the impact of their service and maintenance expenditures and feel comfortable they are making good decisions. At the same time, technicians will know that they are doing the right things for their employers and customers and that the facts will be known to the decision maker.

sustainability



sustainability