



# The **ETM** Analyser

30 minutes is all it takes to make a complete evaluation of any refrigeration, air conditioning or heat pump installation.



## **CUTS ENERGY COSTS** \_\_\_\_\_ **SERVICING COSTS** \_\_\_\_\_ **AND DOWN TIME** \_\_\_\_\_

The high accuracy electronic ETM 2000 Analyser can be used for practically any type of compressor cooling system.

It measures all the operating values and coefficients,

### **THEN PROCESSES THE DATA AND DISPLAYS THE CALCULATED RESULTS,**

enabling the system efficiency to be accurately assessed. All in half an hour.

### **FAST AND EASY TO USE**

No previous experience of computerised measuring techniques is necessary. Any service engineer can use this electronic Analyser. Its use has achieved proven improved running economy through lower energy consumption and less down time.

Because the Analyser is constantly calculating and displaying the system's performance from the input data (as against simply monitoring/logging) it enables instant system tuning. The result of any adjustment to the system is displayed immediately.

### **FLOW MEASUREMENT NOT NECESSARY**

The Analyser works without measuring flow or without entering or disturbing the system flow in any way.

The method measures cooling and heat capacity with an accuracy difficult to achieve with fixed installed flow measurement. The equipment not only gives power data but also all other *ready-calculated values* necessary to evaluate and adjust the installation.

The Analyser's special menus, shown on its display screen, facilitate fast correction of the expansion valve and the filling of refrigerant or any other necessary servicing operations.

## WELL-PROVEN

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The ETM 2000 has been tested and approved by Sweden's Central Test Establishment as well as in thousands of field tests on all types of different installations.

### ADVANTAGES FOR ALL APPLICATIONS

- Plant Commissioning
- Final and Warranty inspection
- Capacity checks
- Trouble shooting
- Regular servicing with documentation of power consumption and general condition
- R & D and QA - Manufacturers of systems, equipment and components

### MEASUREMENT PARAMETERS

The Analyser measures Temperatures, Pressures and active Electrical Power, then calculates the inputs and displays the following at intervals as required:

- Cooling/Heating Capacity
- Heat Factor/Cooling Factor
- Evaporating Temperature
- Discharge Temperature
- Subcooling
- Electrical Power
- Compressor Efficiency
- Condensing Temperature
- Superheat
- Entering Evaporation
- Leaving Cond.

The performance figures also can be printed out as hard copy on a portable printer.

### BRIEF TECHNICAL DATA

#### Measuring Accuracy:

COP	5%
Electrical Power	2%
Cooling/Heating Capacity	10%
Temperature	±0.2°C
Pressure	±1%

#### Dimensions

Size: 310 × 135 × 70mm

Weight: 1.1kg (excl. batteries, transducers, printer)

#### Temperature Sensors

-50°C to +85°C and -50°C to +150°C

#### Pressure Transducers

100psi, 0-7 bar and 500psi, 0-35 bar

#### Power Transducers

3-phase and single phase.

Current transformers 100 and 500A



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