

Technical Leaflet

Monitoring and Alarm System

Micromon



Introduction



The Micromon has been developed to provide a comprehensive, yet simple-to-use means of monitoring and recording refrigeration temperatures and other aspects of refrigeration plant operation. It is intended for use in small to medium food storage operations (for example a small supermarket) where compliance with the Food Hygiene Regulations is to be demonstrated.

Designed for operational simplicity, the system once configured will display the status of each input point.

Further details on any aspect

of the operation of the installation are available via the key pad. In addition there is the ability for authorised personnel to make adjustments to the monitoring settings. Historical data is stored within the system and may be viewed or printed on a regular basis. The data is accessible both on and off-site via the external modem connection and alarm calls can also be generated if required.

Easy Setup

The **Micromon** has been designed in such a way that programming of the system can easily be performed by untrained personnel, in a matter of minutes. At power up, the programmer is prompted to make a few selections, all driven by easy menu options and icons. For the more advanced programmer, a wide range of additional application-specific setup options are available via the "extended setup menu", which is password protected; the options available in this mode are identical to those of the Danfoss m2 system.

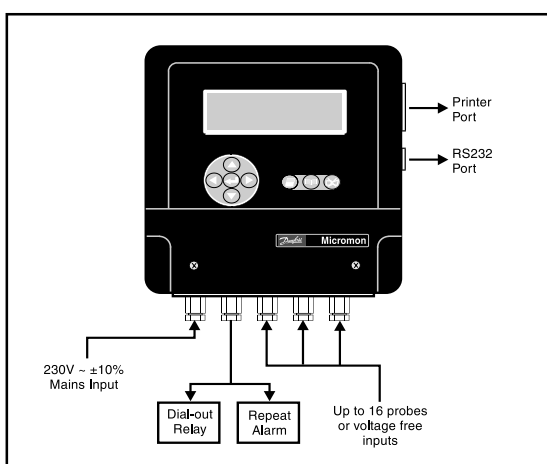
An RS232 serial interface via a 9-way 'D' type connector is provided which allows either a directly connected IBM compatible Personal Computer (PC) for operational and configuration purposes, or to allow connection to a modem.

If a PC is connected either directly or via the modem, the alarms and monitor readings can be read and the set-up details can be changed remotely.

Features

- 16 input monitoring capacity
- Visual and audible alarms with dial-out options for each input
- Printout of logs and/or graphs provides comprehensive historical records
- Clear graphical and numerical indication of values
- Up to one year storage of all data (based on 15 minutes sampling)
- Fail safe operation

System Overview



The Micromon consists of a central monitoring unit which can monitor up to 16 local sensors or inputs which are usually located adjacent to the equipment in question for example specific refrigerated areas (chiller cabinets, freezers, cold rooms or plant rooms). The precise layout and configuration of these sensors are specific to each installation, and it is not necessary for a typical operator to be familiar with the operation of the sensors.

Alarms

The Micromon provides audio and visual alarms whenever an input exceeds its pre-set alarm levels. The system can be pre-set to dial-out using a digital dialler or via a modem whenever an alarm occurs (via "extended setup menu").

Security

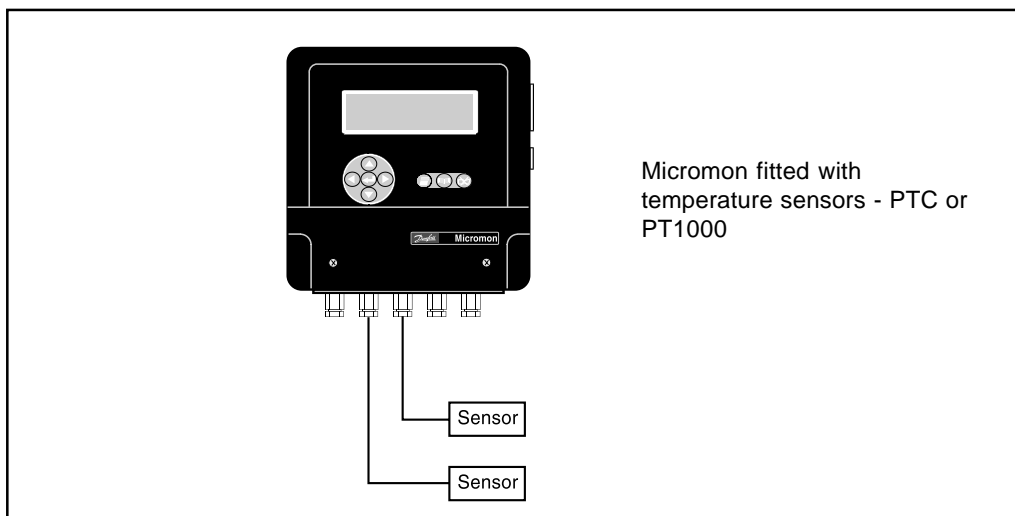
Security is provided by having passcode access to the protected settings. In the case of mains failure, an alarm is triggered after a delay. The system can be pre-set to dial-out to an external telephone number if required.

The Micromon will always FAIL SAFE (except for modem dailout).

Printing

If hard copy details of the monitor readings are required, a parallel printer port is provided which can be connected to an Epson compatible parallel printer.

Application Overview



Technical data

Supply voltage

230 V + 10/-15% a.c. 50-60 Hz

Alarm relay

2 - Load: 24 v a.c. 1A

Display

Graphic LCD, 240 x 64

Printer connection

Parallel (Epson compatible)

Operation

Push buttons on front panel

Data communication

RS 232

Signal inputs

Up to 16 inputs total, consisting of any combination of:

- PTC temperature sensor
- PT1000 temperature sensor
- Digital contact On/Off
- 4-20mA

Languages¹

English, German, French, Dutch, Italian, Spanish, Norwegian, Danish, Icelandic, Finnish, Hungarian, Polish, Czech, Swedish, Portuguese.

Ambient temperature

Transport: -20 to +70°C
 Operation: 0 to +50 °C
 Humidity: 20-80%RH

Measuring accuracy with PT1000 sensor

Refer to EKC 201/301 data.

Enclosure

IP 20

Data collection

2 Mb Capacity

1. At time of printing the following languages are yet to be completed: Slovenian & Malaysian.

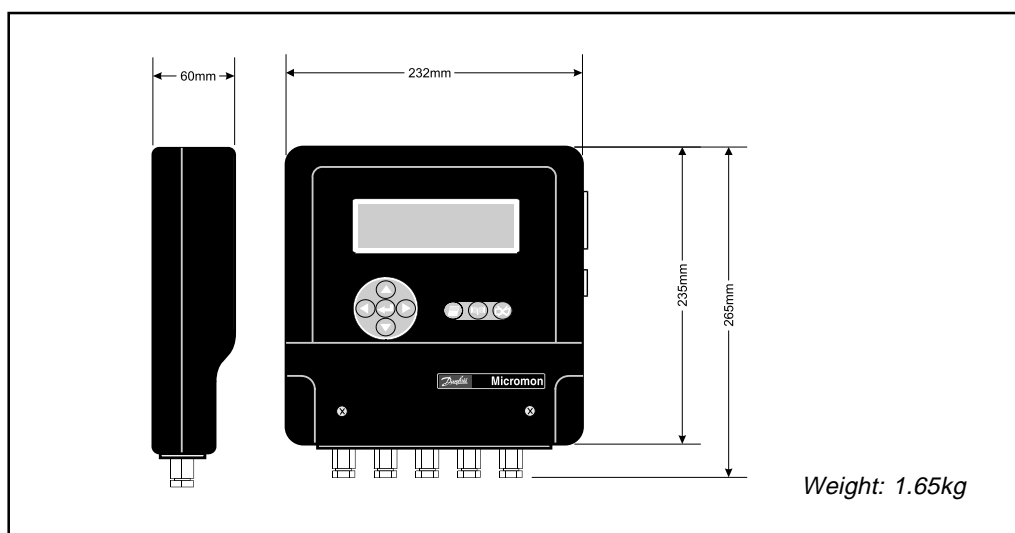
Ordering

Model Description	Code no.	
	Supplied With AKS12 Sensors	Supplied Without AKS12 Sensors
Micromon (8 Input)	080Z8164	080Z8171
Micromon (16 Input)	080Z8165	080Z8172

Accessories

Description	Code no.
AKS12 sensor 1.5m cable	084N0035
AKS12 sensor 3.5m cable	084N0039
AKS12 sensor 5.5m cable	084N0038
EKS 111 PTC sensor 3.5m Cable	084N1163
m2 to Parallel Printer cable 3m (Suitable for Micromon)	080N8401
m2 to PC or Modem cable 3m 9-way 'D' (Suitable for Micromon)	080N8400
Central Station Software	OCSWR5030

Dimensions and weights



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