PROGRAMMABLE SETPOINT DETECTOR

frequency input

DSF

version with display

DSCF

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DSCF

- Frequency measurement input :
  - Connection to npn,pnp, logic, namur, contact or alternating up to 500V type sensors (without external components) possible.
- Logic input
- Programming by PC via the software SuperVision, with a possibility of configuration with the micro-console. The micro-console is automatically delivered with a DSCF.
- Self-diagnosis
- Insulation input / output / power supply
- Relay output : 2 inverting relays (8A/250 VAC on resistive load).
- Function simulation of the measure input.

- Programming by the µconsole

This µconsole clipped on the front face allows measure visualising on a 4 digit alphanumerical electroluminescent display, or quick programme modifications thanks to a 4-key keyboard.
It also allows teleloading of a programming file to other products of the range.

- Configuration software

Each configuration is kept as a file stored on hard or floppy disk. These files can then be consulted, modified, duplicated or loaded into the detectors. The files can be created with or without device connected. This software also allows saving of existing configurations from the instruments already in service. All files can be edited on any type of printer.

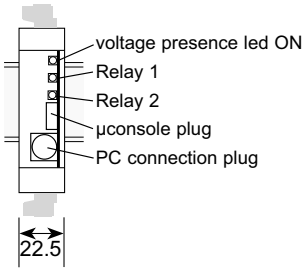
Functions

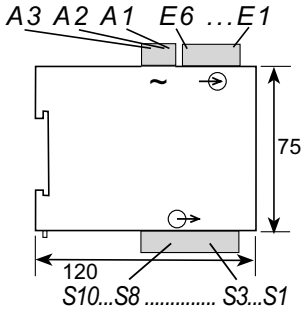
- Frequency measurement input
  - Measurement of a signal ranging from 0.01 Hz to 200kHz (according to the input type), with an accuracy of 0.025% of the measure.
  - Special linearisation in 20 points.
  - Enlarging effect
- Logic input
  - Type of sensor : potential free contact, or logic (0-5V)
  - Not insulated from the measure input
  - Programmable functions : Display hold, zero reset of the min. and max.
- Self-diagnosis

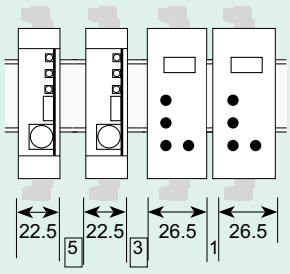
The instrument permanently watches some of its parameters.
If an error is detected, it can be reported on the 2 relays.

Dimensions

Self-extinguishing case of black UL 94VO ABS
Mounting in switchbox : latching on symmetrical DIN rail.
Rack version : consult







Dimensions : 22.5x75x120 mm
With µconsole : 26.5x80x130 mm

To insert the µconsole : mount the instruments vertically (horizontal DIN rail) and provide a 5mm spacement.

Operating T° : -10° to 50°C

Storage T° : -20 to 70°C

Features

Frequency measurement input

- Types of sensors : npn, pnp, logic, namur, contact, alternating.
- Logic : voltage up to 18V
  Low level ≤ 1.2 V
  High level ≥ 2.1 V
- Npn or contact :
  Pull up resistor to +26Vdc of 5KΩ
- Pnp :
  Pull up resistor to the GND of 7.5 kΩ
- Namur :
  Power supply 8.2 V (10 mA max.)
  Input resistance : 1 KΩ
  Low level ≤ 1.2 mA
  High level ≥ 2.1 mA
- Alternating :
  Signal can range from 5 to 500 Veff.
  Input resistance : 800 KΩ
- Measurable frequency : from 0.01 Hz to 200 KHz, according to the type of sensor.
- Accuracy : 0.025% of the measure
- Programmble scale factor
- Enlarging effect
- Linearisation :
- Linear input, or special linearisation in 20 points (in x and in y)
- Cut off programmable
- Filtering :
  Programmable analog filter : allows deleting of any parasite noises.
  Digital filtering, coefficient and action range programmable in order to stabilise the display in case of unsteady input.
- Sampling time : 100ms + 1 period of the mesured signal (programming of the minimum measurable frequency).

Output

Type of **OUTPUT**	Features
2 Inverting relays	2 Setpoint relays, configurable on the whole measure range. Hysteresis programmable from 0 to 100%. Time delay programmable from 0 to 25 sec. (8A/250 VAC on resistive load). Mode alarm (setpoint or window)

Galvanic partition : 2kV-50Hz-1min. between supply, input and relay outputs.

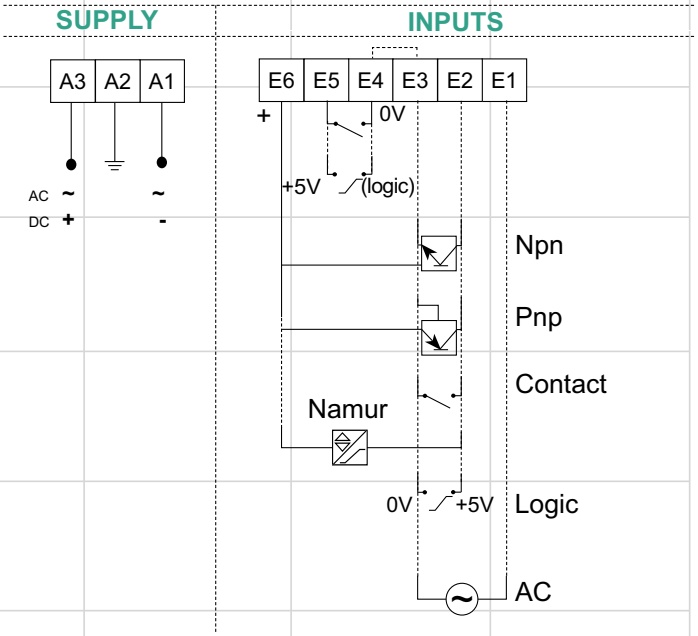
Power supply

Code	Type of **SUPPLY**	Max. operating range	Power draw	Dielectric withstanding
3	Low Voltage	20-40 VAC & 20-64 VDC	4 W max. 7 VA max.	2KV-50Hz-1min.
2	High Voltage	90-270 VAC & 88-350 VDC		

Standards : Complies with standards EN 50081-2 on emissions and EN 50082-2; immunity (in industrial environment)
EN 61000-4-2 level 3, EN 61000-4-3 level 3,
EN 61000-4-4 level 4, EN 61000-4-6 level 3
CE marking according to the Directive EMC 89-336.

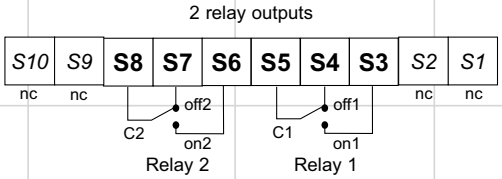
Wiring

Upper connectors



Lower connector

OUTPUT



nc : not connected - do not connect anything to these terminals.

Coding

Type DSF - 2

Power supply :
3 Low voltage
2 High voltage

Versions :

DSF	Version frequency input
DSCF	Version frequency input with display

Ordering example : For a setpoint detector with display, in 230 Vac power supply, request reference :
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