DC24E

Panel-mounting universal controller

IP65 enclosure, display, power supply 230 VAC, 4 relays, 5 PT 1000 inputs, 1 0-10 V input, 2 digital inputs, bus interface, clock, plug-in terminals.

The DC24E module is a universal controller that performs measurement, monitoring and control functions for the following applications:

- control of cooling cabinets or cold rooms (MT and LT refrigeration) with thermostatic expansion valves,
- compressor control,
- condenser management,
- humidity control,
- management of air conditioning and lighting zones,
- input-output mode.

The module can be mounted in the front of a cabinet or integrated in a display case.

The DC24E module can be programmed using the Teleswin supervision software or directly via the buttons on the front panel. The integrated display shows the values measured by the connected sensors and is used for programming the parameters.

| APPLICATIONS | |
|--|---|
| Medium temperature refrigerated cabinets | yes |
| Low temperature refrigerated cabinets | yes |
| Management of compressors | yes (up to 3 compressors, with a pressure sensor 0-10 V) |
| Hygrometry | yes |
| Programmable inputs-outputs | yes |
| Concentration of gazes | yes |
| Air-conditioning - cooling/heating | yes |
| Management of lighting areas | yes |





DIMENSIONS





| FEATURES | | |
|----------|---------------------------------|--|
| Inputs | | |
| | PT 1000 | 5 (also compatible with the probes: NTC 10K/25°C, L.243, KTY81) |
| | 0-10 V | yes |
| | 4-20 mA | no |
| | Digital | 2 |
| Outputs | | |
| | Relays | 4 |
| | TRIAC (24-230 VAC) | 1 |
| | Analogue | no |
| Others | | |
| | White display | yes |
| | Power supply | 230 VAC |
| | Remote monitoring bus interface | yes |
| | Clock | yes |
| | Electronic expansion valve | no |
| | Local bus for extensions | no |

| TECHNICAL DATA | | |
|-------------------------------------|--|--|
| Power supply | | |
| Supply voltage | 110-250 VAC, 50-60 Hz | |
| Maximum input power | 3 W | |
| Protection rating | 1 | |
| Contamination rating | 2 | |
| Overvoltage category | II | |
| Conditions of use | | |
| Temperature | 0-40° C | |
| Humidity | IP65 enclosure, 0-80 % (without condensation) | |
| Breaking capacity of relays outputs | inductive load 3 A 250 VAC, resistive load 3 A 250 VAC | |
| Clock – reserve operating margin | 4 days | |
| Input 0-10 V | range of measurement: 0-10 V | |

ASSEMBLY DIAGRAMS

DC24E in refrigerated unit control mode



DC24E for the control of two cabinets



DC24E for the control of three cabinets



DC24E for the control of refrigeration units with several evaporators

Each evaporator is controlled by a separate solenoid valve. Defrosting of all evaporators can be carried out simultaneously or separately.



DC24E and weekly calendar

Only available with a DC58 central unit.

This option provides the possibility of modifying the operation of the satellite during periods of reduced activity according to a weekly schedule entered in the DC58 central monitoring unit (e.g. supermarket closing times). Depending on the programming of the "Calendar" menu parameters the satellite can switch off the station or shift the temperature setpoint during closing times.

The standard output for the control of an alarm device can control the light. For this purpose, the parameter function of the alarm output in the schedule menu (TelesWin) must be set to "light control". With an auxiliary relay connected to this output, the light and the closing of the night curtain of a refrigeration unit can be controlled.





DC24E inputs/outputs mode

In this operating mode, inputs 4 to 6 can be used as digital inputs or as analogue inputs for PT1000 temperature sensors.





About us

Digitel provides high-end control, monitoring and remote management solutions for installations requiring a high degree of performance: refrigeration, heat recovery, controlled atmosphere chamber, growth chamber or special and costumized installations. Digitel SA Route de Montheron 12 1053 Cugy, Suisse

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