DHB-224

DHB-224, Digital indicator

Code: M22024.   DESCATALOGADO

> Communications: RS-485
> N° relays: 4
> Analog output: 1
> Measure: ± 100...500 Vdc ± 1/5 Adc
> Paramètre: Voltmeter or ammeter ± 100...500 Vdc ± 1/5 Adc
> Mounting: Pannel

Description

Panel mounted digital devices designed to display on-screen the value of a electrical variable measured or proportional value of a process signal, depending on the model. Essential for regulation purposes, programming the analogue output available in some models, and for control purposes, if the relay outputs are used as alarms.
DHB units are fully programmable and the following can be programmed: scale, transformation ratios, alarm setpoints to activate relays, communications, colour of the numbers displayed on screen, etc. Depending on the model, you can measure the electrical parameters of a single-phase installation such as voltage, current, frequency, power, cos φ, etc., the direct voltage or current of an installation, impulses, frequency, circular speed, periods, time, temperature and also other voltage and current process variables. AC models calculate the true root mean square measure (TRMS).

The models include the following common features:

- IP 65 front panel
- High measurement accuracy
- Programmable measurement input
- Delay and latching alarms
- 24 Vdc output for supply external transducers (DHB 1xx and DHB 4xx models)
- Galvanic insulation between external circuits
- Adjustment of non-linear equations with 21 straight points (2 in the DHB 3xx model).
- Change in colour of the display depending on the value shown.
- Maximum and minimum values
- Clock with current time
- Self-configurable decimal point
- Compatible with Power Studio (model with communications)
- Installation on 96 x 48 mm panel

Application

These digital instruments have multiple applications. Thanks to their very bright 5-digit and 3-colour screen, you can simply view a numerical value and an alarm or prealarm status of a measured variable. Depending on the model selected, displayed on-screen are the electrical parameters of a single-phase installation as a power analyzer (voltage, current, power, frequency, etc.).
Other models allow to visualize the value of an analogue signal, show impulses received through an input, temperature, time, circular speed and many other variables that depends on the device and the configuration. The indicators also let you operate any external element, using the panel unit outputs as alarms depending on the value of a variable or as a transducer of the measured variable to an analogue signal, which is subsequently sent to another unit, such as a PLC.
Apart from displaying the values, units with communications also allow you to send data via the RS-485 communication bus for software or PLC integration.

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Specifications

AC power supply

Installation category	CAT III 300V
Consumption	1,3...6,5 VA
Frequency	40...400 Hz
Nominal voltage	85...253 Vc.a.

DC power supply

Installation category	CAT III 300 V
Consumption	1,3...3,7 W
Nominal voltage	85...253 Vdc

Mechanical characteristics

Size (mm) width x height x depth	96 x 48 x 93 (mm)
Envelope	Self-extinguishing V0 plastic
Weight (kg)	0,26

Environmental characteristics

Protection class	IP 65 (Front), IP 10 (rear)
Relative humidity (without condensation)	25...95 %
Storage temperature	-33...+70 °C
Operating temperature	-25...+55 °C

Standards

Electrical safety, Maximum height (m)	2000

User interface

LED	7
Keyboard	4 keys
Display type	7 segments (5 digits) LED

DHB
Digital instrument

CODE	TYPE	Nº relays	Measure	Paramètre	Communications	Analog output
M22021.	DHB-102	1	imp., Hz.	Impulses, frequency, circular speed, periods, worktime, encoder position		
M22022.	DHB-124	3	imp., Hz.	Impulses, frequency, circular speed, periods, worktime, encoder position	RS-485	1 (0/4...20 mA) |1(0...10V)

Circutor

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CODE	TYPE	N° relays	Measure	Paramètre	Communications	Analog output
M22023.	DHB-2022		± 100...500 Vdc ± 1/5 Adc	Voltmeter or ammeter ± 100...500 Vdc ± 1/5 Adc		
M22024.	DHB-224 4		± 100...500 Vdc ± 1/5 Adc	Voltmeter or ammeter ± 100...500 Vdc ± 1/5 Adc	RS-485	1
M22025.	DHB-3022		± 100/400 Vac ± 1/5 Aac	Single-phase analyzer		
M22026.	DHB-324 4		± 100/400 Vac ± 1/5 Aac	Single-phase analyzer	RS-485	1 (0/4...20 mA) |1(0...10V)
M22027.	DHB-4022		Pt100/500/1000 Thermocouple J,K,N,E,R,S, ±20 mA, ±10 V, 60 mV	Process / Resistance/ Temperature		
M22028.	DHB-424 4		Pt100/500/1000 Thermocouple J,K,N,E,R,S, ±20 mA, ±10 V, 60 mV	Process / Resistance/ Temperature	RS-485	1 (0/4...20 mA) |1(0...10V)

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Dimensions