Time Control I – DIN

Time Server with clock control

The Controller I forms a combination of a controlling unit of secondary clocks, an NTP Time Server and a yearly programmer with 2 outputs for controlling different energy consumers such as electrical striking plates, buzzers for pause signalling etc.

All parameters such as type of time system, impulse type and length, network parameters etc. can be configured by the user. It is also equipped with an automatic measurement function which measures the impulse voltage and current.

The programmer has fixed public holidays and summer/wintertime changing pre-programmed. The unit offers full flexibility regarding programming working days between holidays, public holidays to weekdays, holiday periods etc.

- Linux based OS
- Easy to program
- Graphical TFT 1,9”
- Fully automatic correction of summer/wintertime and preprogrammed calendar.
- To achieve absolute accuracy, radio synchronization with the transmitters of time code signals type GNSS (GPS, Galileo, GLONASS and BeiDou) or DCF77 (Germany) is available as option.
- Electronic short-circuiting protection which resets automatically, transient protection, as well as protection against overload.
- In case of short circuiting on the clock output, resetting of the connected clocks are automatically made.
- LED-indication of Power On, Impulse Output, alarm and receipt of external time synchronization.
- 72-hour impulse memory. After a power failure the connected secondary clocks are automatically reset by rapid impulses.
- Built in serial communication port type RS485.

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Technical data

Accuracy:	+/-0.1 sec./24h (at +20°C, without external synchronization)
External synchronization:	GPS, NTP, DCF-77 (Germany), Minute impulse and Time Code (TC). Programmable alarm limits.
Running reserve:	Real time clock with 72 hours memory
Protocols supported:	NTP version 3 and 4, SNTPv4 and NTS
(For time distribution)	Daytime Protocol (RFC867), Time Protocol (RFC 868)
Other supported protocols:	SNMP v1, v2 and v3, MIB II (RFC1155, RFC1157, RFC1213), HTTP, HTTPS Remote Syslog and SSH
Transport protocol:	TCP, UDP/IP, ICMP
Internet Protocol:	IPv4 / IPv6
NTP requests:	+ 10000/sec.
IP-address assignment:	Dynamic, using DHCP, or fixed IP-address
Compatibility:	Ethernet version 2/IEEE 802.3
Ethernet:	Supports 10/100BASE-T (RJ45) connections
Device Management:	Web-Based via HTTP/HTTPS
Connection voltage:	24VDC -5% +10% or 100 - 240V 50 Hz (depending on version)
Power consumption:	30 W (max)

Clock output

Max. load clock output:	1A (equipped with short circuit protection which resets automatically)
Clock output:	Selectable 1/1-minute, 1/2-minute, second impulses, Time Code (TC) or NTP. Programmable alarm limits.
Type of time:	Local time, Normal time and UTC (Coordinated Universal Time)
Impulse length:	Minute impulse: 2 sec. selectable 0.1 to 9.9 sec. Second impulse: 0.5 sec. selectable 0.1 to 1 sec.

Relay outputs

Number of outputs:	2 Closing potential-free contacts.
Max load/relay output:	230 V 10A
Program memory:	100 year (EEPROM)

Enclosure / Environmental conditions

Housing:	DIN or with enclosure for surface wall mounting.
Dim (HxWxD):	DIN: 90x108x62mm, Power supply 90x36x62mm: With standard housing: 198x228x95mm
Weight:	DIN: 0.2 Kgs incl. Power supply: 0.12 Kgs With standard housing: 1.8 Kgs
Temperature range:	0°C to +50°C
Relative humidity:	Max. 85% non condensing
CE-approval EMC	Emission: EN 50121-4:2016, EN 61000-6-3:2007, EN61000-6-4, Immunity: EN 50121-4:2016, EN 61000-6-2:2005, EN 61000-4-2, -3, -4, -5, -6, -11

Accessories/options

- Signal receiver GNSS 122980-60
- Signal receiver DCF-77 122984-40
- External running reserve (UPS)

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