



Control Unit EZH-B

- **Switching on time controlled - two channel switch**
- **Switching off over lubrication monitoring. One delayed and one non delayed input.**
- **Monitoring of the working time (over two channels)**
- **Monitoring of the distribution circuits during rest period**
- **Internal monitoring function**

Application:

The unit EZH-B is designed for equipments, which have to meet high requirements regarding their reliability.

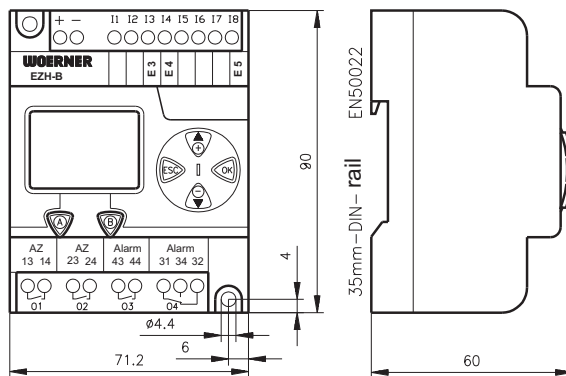
This unit is used in centralized lubrication equipments, which are time controlled connected and disconnected over the acknowledge message of a lubrication monitoring element. The main operational area are progressive- and single-line systems.

Technical data:

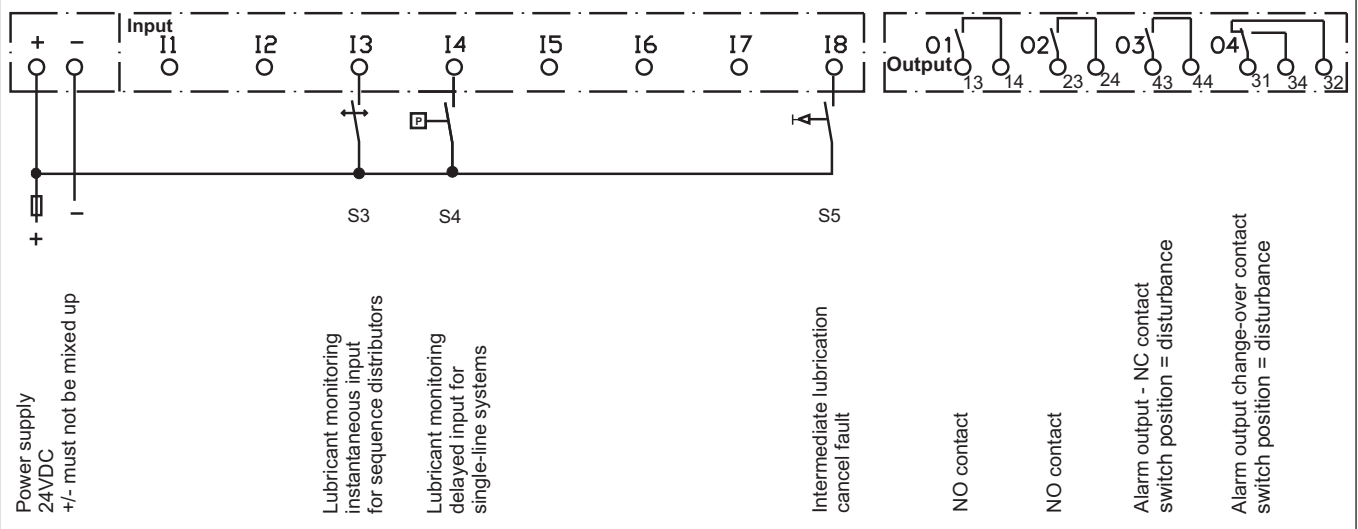
Power consumption max:	3,5 W
Supply voltage:	24 V DC
	-15% ... +20%
	(Incl.residual ripple)
Voltage at input:	24 V DC
Response time of inputs:	5 msec
Input resistance of inputs:	6,8 kR
Temperature range:	0 ... 50°C
Protection type:	IP 20
Outputs contact data:	max. 250 V AC
	30 V DC; 5 A
Data protection:	10 years
Approval:	CE;UL;CSA

- Subject to modifications -

Dimension



Connection diagram



1. Switch-ON-conditions

1.1 Control supply ON -Prelubrication:

When the control supply is energized, the prelubrication is initiated. (If the control power supply is temporarily interrupted it must remain interrupted for more than 1 sec.)

1.2 Intermediate lubrication

Intermediate lubrication can be initiated by closing a contact at E5/24V.

1.3 Time ON:

The unit is provided with two time standards, which are independent from each other. Every time standard a set value is allocated to. Both set values (channel 1 and channel 2) must always be set to the same value. When the set time is concurrent, the working memory associated with the channel is set. When both working memories are set, the working relay will be triggered. Time range: 1 to 32,767 seconds.

2. Switch - off conditions:

The signal from a lubricant monitoring device ends the operating time. The inputs E3/E4 are dynamic, i.e. the unit only detects the positive change in signal.

2.1 Input E3 instantaneous

Input E3 must be used for progressive systems.

2.2 Input E4 delayed

Input E4 must be used for single-line systems. The switch-off signal is delayed by 0,5 to 1 sec.

3. Monitoring

3.1 Operating time, channel 1

The setting of the main store for channel 1 causes the monitoring time for channel 1 to start running in the unit. The main store must be reset within the preset monitoring time so that no fault alarm is given. The fault store is reset if there is a fault alarm. The alarm relay drops out. The monitoring time can be 60 or 300 sec. (see order designation)

3.2 Operating time, channel 2

The monitoring for channel 2 runs separately from channel 1 but has the same function.

3.3 Distributor cycles during idle time

During idle time the pulses at E3 are counted and a fault alarm is given if 8 are received.

3.4 Counter monitoring

The separation of the two channels 1 and 2 combined with the monitoring time for each channel allows the counters to be monitored.

Example:

Channel 1 is working without any faults. the main store of channel 1 is set. The monitoring time is started. If the second main store is not set due to a fault in channel 2, the operating relay is not energized and so there is no reset pulse from the lubrication system. Channel 1 signals a fault.

Since the operating time monitoring also incorporates monitoring of the counters, it is possible that the two counters do not have to work exactly in synchronism and a small difference is allowed.

3.5 Fault Memory

There are three fault memories available. When switching the unit on, the alarm relay is energised. In the presence of any failure the relevant fault memory is reset, whilst the alarm relay drops out.

3.6 Fault alarm cancel

The fault alarm can be cancelled via input E5/24V and a new lubrication cycle is initiated at the same time.

4. Outputs

4.1 Operating relay contacts:

There are two floating NO contacts for triggering the solenoid valve or pump. Terminals. 13/14; 23/24.

4.2 Alarm output:

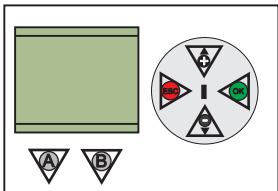
For the alarm outputs a potential-free N/O contact and a changeover contact are available. In flawless operation, the alarm relay is pulled in.

5. Monitoring devices

Both floating contacts and proximity sensors can be used as monitoring devices. The proximity sensors should be suitable for 24VDC and possess a PNP output.

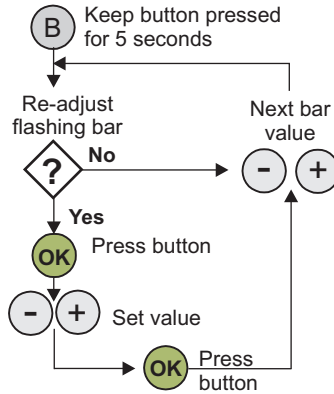
- Subject to modifications -

Operation



Desired value adjustment

The desired values can be adjusted as follows:



Setting mode will be finished automatically after 1 minute, when re-adjustment was completed by pressing **OK** (flashing bar)

Esc Can be used to cancel the operation.

Caution: Do not set any zero or negative value!

Order designation:	
Control unit	
EZH-B/060/24VDC	453.904-60
EZH-B/300/24VDC	453.905-60

Indication:	
Use power pack in case of 230VAC operating voltage!!!	
Power pack purchase designation:	
100-240VAC/24VDC 1,2A	974.101-30