



Control Unit 463.298 for Three Spraying Devices Type SBD-B at Maximum

Use:

The control unit serves to control a spraying lubrication system comprising three spraying devices at maximum.

Technical Data:

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|-----------------------------|--|
| Power consumption: | 4 W |
| Supply voltage: | 24VDC -15% to +20% (Incl. residual ripple) |
| Voltage at inputs: | 24 VDC |
| Response time of inputs: | 10 msec |
| Input resistance of inputs: | 6,8 kR |
| Temperature range: | -5...50°C |
| Protection type: | IP 20 |
| Outputs contact data: | 250VAC at max. 30 VDC; 5A |
| Data protection: | 10 years |

Function:

After control voltage switch-on, the unit is ready for operation.

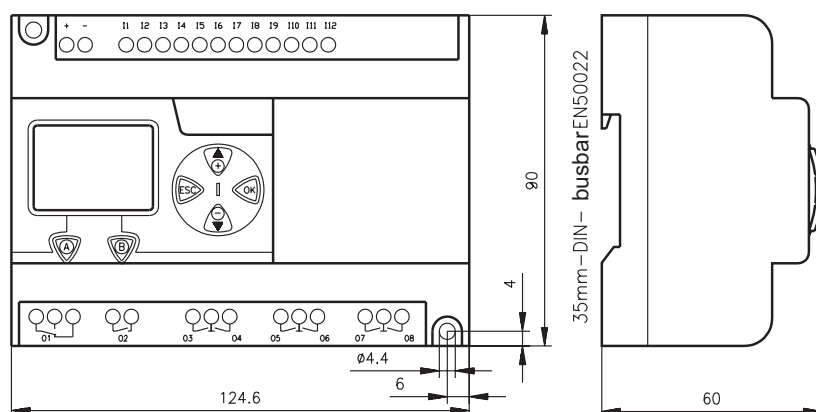
System ON I1 Input

Upon making of contact "I1" (system ON), pre-lubrication is carried out. At the same time, the lubrication system's auto-matic mode of operation is activated. In conjunction with automatic operation, a cycle time lapses. After reaching the preset cycle time, lubrication is carried out. Cycle time is set to 0 and starts to lapse again. With every opening of the "system ON" contact, the cycle time is set to 0.

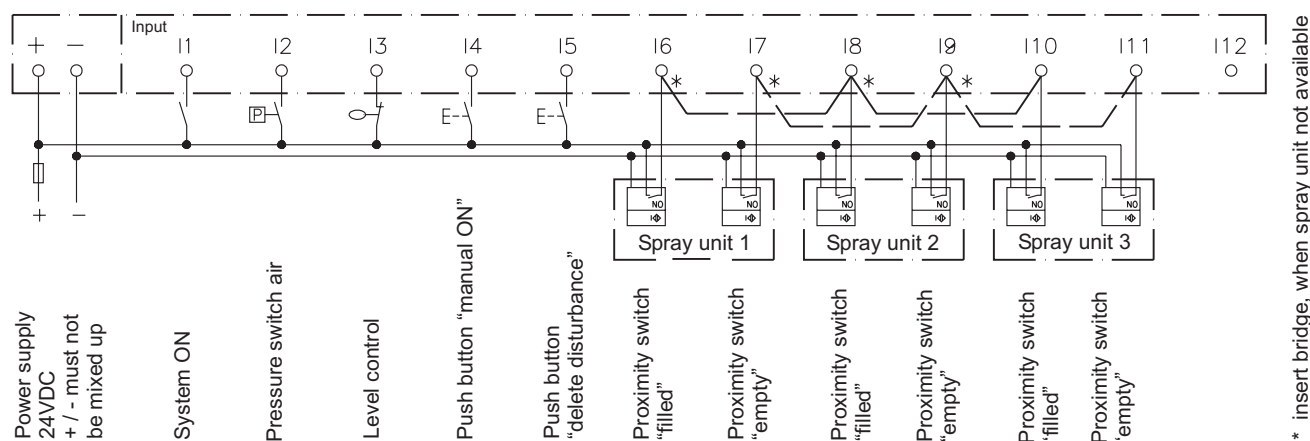
Hand ON Input I4:

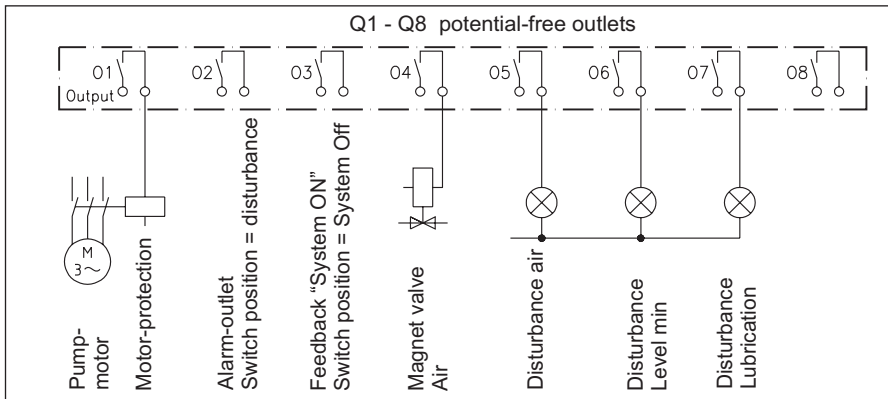
When contact "I4" (hand ON) is made, lubrication can be initiated.

Dimension drawing



Connection diagram





Spraying Device Initiators Inputs I6-I11:

Lubrication is controlled via inputs "I6-I11". Three spraying devices can be connected at maximum. Every spraying device is fitted with two initiators for enquiring the filling conditions "FULL" or "EMPTY". If one or two spraying devices are connected only, the non-assigned inputs should be bridged in accordance with the switching diagram.

Lubrication:

The lubrication causes the potential-free contacts "O1" (pump motor) and "O4" (spraying air valve) to close. As a result, the spraying devices deliver lubricant. The projected positions of the delivery pistons (spraying devices empty) are tapped by means of initiators. When all "EMPTY" signals "I7", "I9", and "I11" are available, the potential-free output "O4" opens at a delay of 3 seconds. Lubrication is finished then. The delivery pistons move back into their home positions (spraying devices full).

This position is also tapped. When all "FULL" signals "I6", "I8", and "I10" are available, the potential-free output "O1" opens at a delay of 3 seconds.

Air Pressure Switch Input I2:

Input "I2" is used to monitor the spraying air. When air pressure is available, the pressure switch contact needs to be closed. In the presence of any fault, the contacts "O1" (pump motor) and "O4" (spraying air solenoid valve) are opened. Both the "alarm output" and "air fault message output" will switch. The fault will be stored.

Filling Level Control Input I3:

The filling level is monitored via input "I3". In go-condition, the contact must be closed. The signal is evaluated upon lubrication switch-on at a delay of 15 seconds. During lubrication, evaluation is six seconds delayed.

In case of fault, the contacts "O1" (pump motor) and "O4" (spraying air solenoid valve) are opened. Both the "alarm output" and "level min. fault message output" will switch. The fault will be stored.

Lubrication Monitoring

The duration of any lubrication is monitored internally. If lubrication is not finished within the preset monitoring time, a fault message will be released. The contacts "O1" (pump motor) and "O4" (spraying air solenoid valve) open. Both the "alarm output" and "lubrication fault message output" will switch. The fault will be stored.

Monitoring time setting = cycle time + 10 seconds.

System ON Feedback Output O3:

The "System ON" input signal causes contact "O3" to close. If "System ON" is off, the contact is open.

Alarm Output O2:

Upon release, the potential-free contact is closed. In case of fault (air, level, lubrication) as well as in the absence of supply voltage, the reversed switching condition is given.

Air Fault Output O5:

Without any fault applying, the potential-free contact is open, whereas in case of fault it is closed.

Minimum Filling Level Fault Output O6:

Without any fault applying, the potential-free contact is open, whereas in case of fault it is closed.

Lubrication Fault Output O7:

Without any fault applying, the potential-free contact is open, whereas in case of fault it is closed.

Delete Fault Input I5:

The "O5" air, "O6" filling level at minimum, and "O7" lubrication faults will be stored. Storage can be cancelled by switching the control voltage off or by means of a pulse applied to input "I5".

Display Information:

In case of automatic mode OFF:
System OFF.

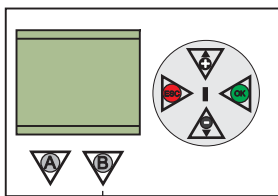
In case of automatic mode ON:
Cycle time/actual value/XXXX.X sec.

In case of desired value adjustment:
Cycle time/XXXX.X sec./monitoring XXXX.X sec.

Purchase Designation:

| | |
|-----------------------------|------------|
| Control and monitoring unit | |
| Text display: D 24VDC | 463.298-60 |
| Text display: GB 24VDC | 463.298-61 |

Operation



Adjustment

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

Desired value adjustment

The desired values for the cycle time or monitoring time can be adjusted as follows:

