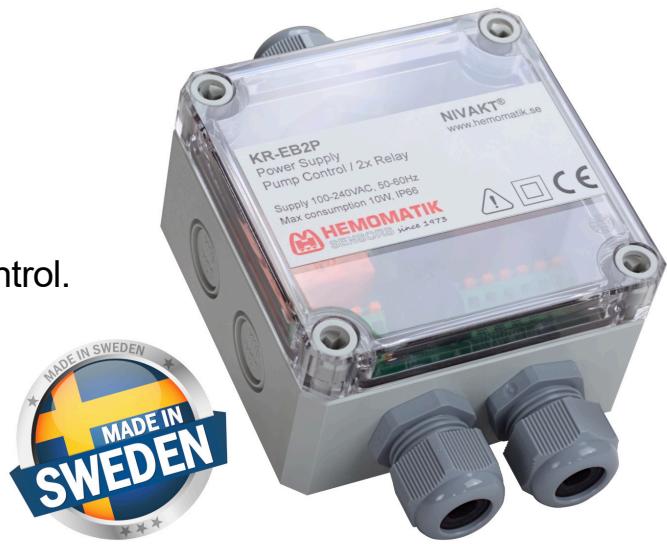


KR-EB2P

Universal relay, 230V

- Built-in sensor supply, 24VDC
- Self-maintaining circuit for pump control.
- 2x Relay, max 250VAC, 500VA
- 4x LED-indication
- Protection class IP66



HM 2308



Read this manual before installation and use!



Double insulated



NIVAKT®
www.hemomatik.se

Universal relay with built-in sensor power supply and two alternating potential-free relay outputs. One of the outputs can be configured for self-holding (pump control). Up to 3 sensor inputs with PNP, NPN or mechanical contact.

Technical data	KR-EB2P
Supply voltage	100-240VAC, 50-60Hz
Consumption	max 10W
2x Relay	max 250VAC, 500VA, 8A res., 2A ind. max 24VDC, 280VA, 8A res., 2A ind.
Sensor supply	24VDC, max 140mA **
Input signal, control relay1	PNP, NPN or mechanical contact
Input signal, control relay2	PNP or mechanical contact
Ambient temperature T _{amb}	-20...+60°C **
Enclosure	94x94x57mm polycarbonate, IP66 *
	For use 0-5,000m above sea level

For installation without cable entry or untightened cable gland, fixed cable installation is required.

* IP66 with tightened/sealed cable glands and lid.

Wiring and connection should only be carried out by a person with the necessary knowledge. Check that everything is attached properly and circuit board firm in place before connecting power supply .

** Max sensor supply 140mA at T_{amb} 45°C, max 55mA at T_{amb} = 60°C.

Relay outputs (REL1 and REL2):

The unit has two relay outputs. Relay1 (REL1) can be configured for simple operation or self-holding. Relay2 (REL2) cannot be configured. PNP signal or closed circuit to 24V switches relay2.

Jumpers (REL1):

The type of input signal for relay1 can be selected via jumpers.

Factory settings

START		PNP-signal or closed circuit to 24V activates START and relay1 is switched.
REL1 STOP		PNP-signal or closed circuit to 24V activates STOP and relay1 is released.
HOLD		No self-holding. Relay1 is switched as long as there is an active signal to START.

Adjustment - one or more jumpers can be moved for desired function.

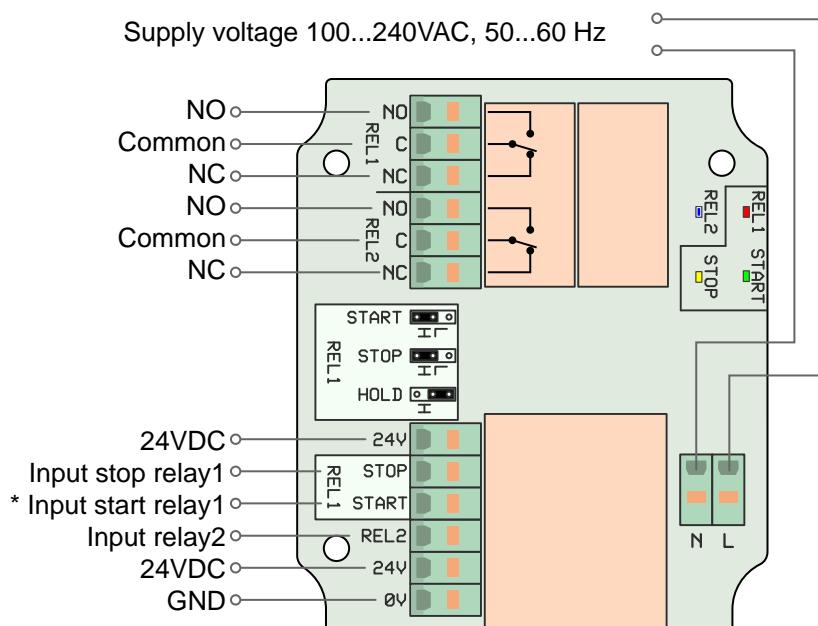
START		NPN-signal or closed circuit to 0V activates START and relay1 is switched.
REL1 STOP		NPN-signal or closed circuit to 0V activates STOP and relay1 is released.
HOLD		Self-holding active. Relay is switched by START and released by STOP.

Self-holding (REL1):

Relay1 is switched when START is activated, and it stays switched even if the signal is deactivated. Active STOP signal releases relay1. It can be used to control, for example, filling or emptying. Self-holding is disabled by default (factory setting).

The STOP-signal has priority over the START-signal, in case both are active at the same time.

Connection:



LED-indication

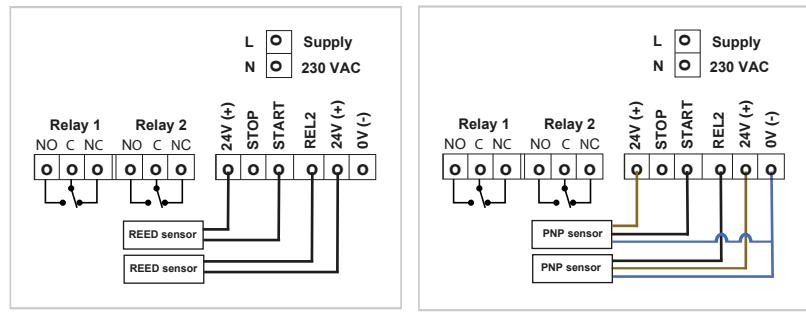
Green: Active signal to START (REL1)
Yellow: Active signal to STOP (REL1)
Red: Relay1 is switched
Blue: Relay2 is switched

* In simple operation (i.e. not self-holding), "input start relay1" is used to control relay1. The relay is switched when there is an active signal and releases when the signal is deactivated.

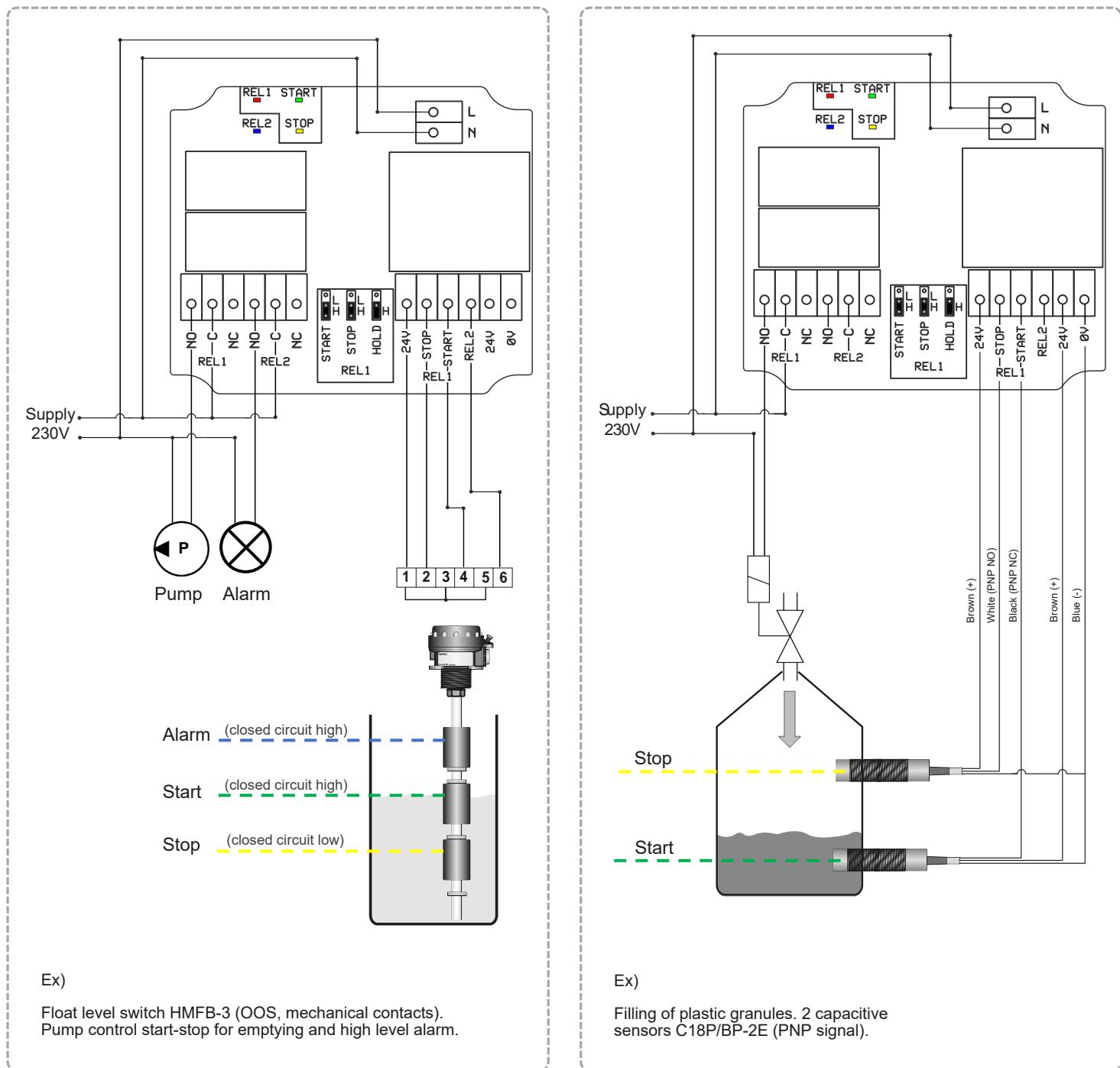
If self-holding is used, "input start relay1" is used to switch relay1. The relay remains switched even when the signal is deactivated. In order to release the relay, an active signal is required on "input stop relay1".

Factory setting

KR-EB2P is supplied with settings for PNP sensor or mechanical contact (REED) and without self-holding.



Connection example with self-holding:



The unit can be used for: 1x relay, 2x relay, start-stop emptying, start-stop filling, start-stop emptying + high alarm, start-stop emptying + low alarm, start-stop filling + high alarm, start-stop filling + low alarm.

Contents KR-EB2P

The unit is delivered with 3 cable glands mounted (M20x1,5 for Ø5-13mm cable).
The gasket consists of two parts in order to handle a wide range of cable diameters.

In addition, 2 pieces of hole gaskets (2xØ6mm) intended for two cables each are included. Up to 5 cables can be connected with the included parts.

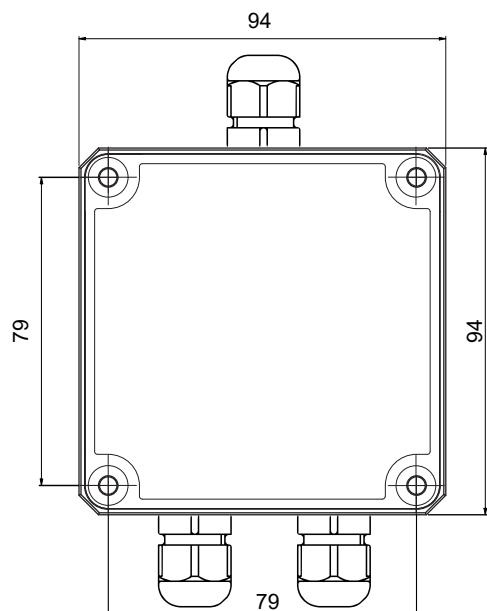


KR-EB2P



2 pieces of hole gaskets 2xØ6mm

Dimensions



Mounting of the box

In each corner of the box there are holes (Ø4.5mm) intended for wall mounting.