

G2ASMA20

Functions

The Pump-Alternator is sensitive to one (mode B) or two (mode A) digital input signals. Each of the two output relays activates one of the two devices (usually pumps or motors) driven. The two outputs (Rel.1 and Rel. 2), are equally configured and interchangeable. In case of request for operation (Y1-Y3 linked by external contact) one of the output relays energises as long as the signal persists on input (Y1). Next time there is a request for operation the alternate output operates in the same manner. This way both connected devices (pumps or motors) will share load.

The information about, which output has done the first cycle after a power reset, is stored in a non-volatile memory. Next time after a power reset the other output will do the first cycle.

There is no definite delivery status about which of the two outputs will operate at the first occasion.

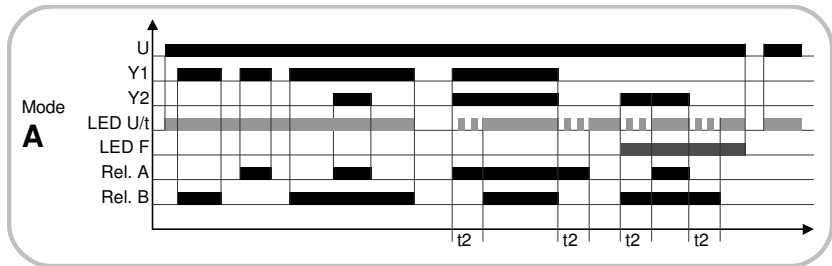
Mode and time setting can be done with a screwdriver at the front of the G2ASMA20.

Mode A (parallel operation triggered by input Y2)

In this mode both outputs are activated in parallel, if the input for parallel operation (Y2-Y3) is engaged in addition to the contact for operation request (Y1-Y3).

If both inputs are activated or deactivated simultaneously, the output relays will be activated or deactivated with a fixed timing offset of 2 seconds to avoid water hammer effects and excessive electrical load peaks.

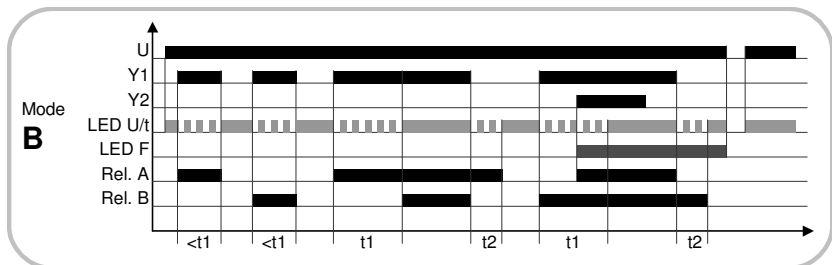
Without activating the input for parallel operation the two outputs are activated one by one only, but never in parallel.



Mode B (parallel operation by timing)

In this mode the timing dial is set to any position unlike the "Function A" setting.

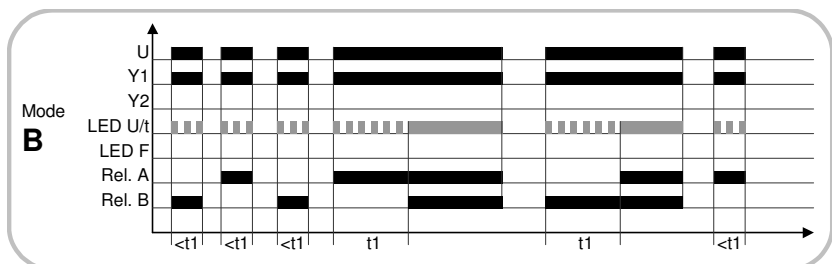
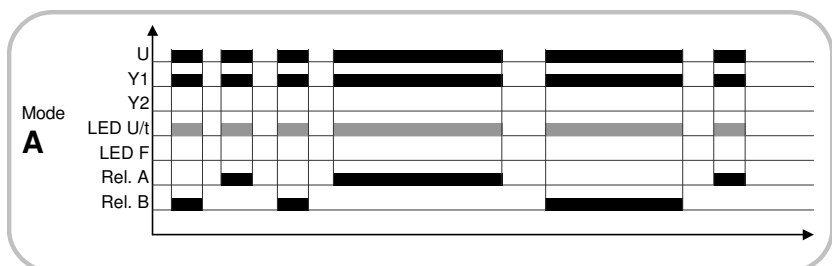
An uninterrupted operation request that is longer request than the adjusted delay t_1 will activate the second output relay for parallel operation. At the end of a period of parallel operation the output added after the delay t_1 will drop immediately. The other relay, active from begin of the request, will drop with offset of the fixed delay t_2 .



Function control by supplied power

With a link wired at the input for operation request (Y1-Y3) alternate operation is activated by supplying the auxiliary voltage to the unit.

Using the Mode B setting on the dial (any time setting) the second relay will activate after the set delay for parallel operation (t_1). When supply is disconnected, both relays drop immediately. There is no parallel operation in mode A as it is not recommended to use the contact Y2 in case of control by supplied power.

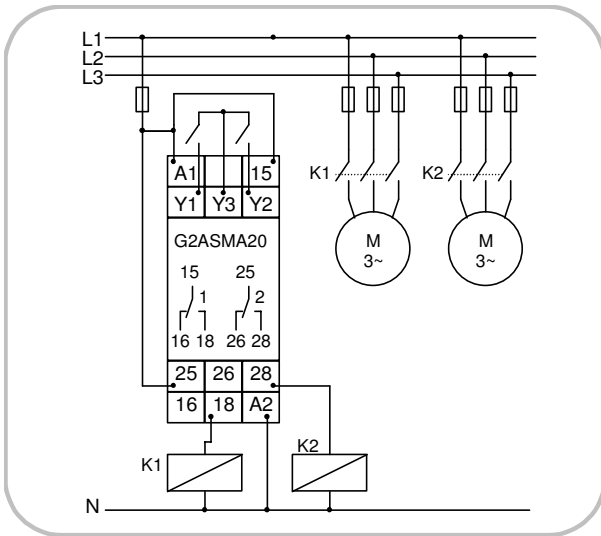


The highest priority is on the input for parallel operation (link Y2-Y3). If activated it will cause operation of both outputs anyway, with the fixed offset delay t_2 only. The error indication on the unit will be illuminated if this input is active, unless there is a signal for the operation request input (Y1-Y2). (A defect sensor is assumed in this case) The input parallel operation (Y2-Y3) activated when the unit is set up for mode B will cause an error indication in any case.

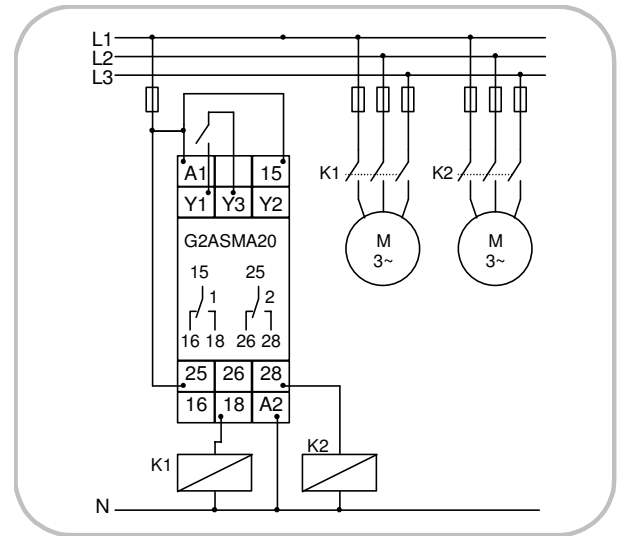
The error indication will stay visible even if the proper correlation of operation request (Y1-Y2) and request for parallel operation (Y2-Y3) is re-established. (The unit falls back to normal operation in this case.) The error message is cleared by interrupting supply voltage.

Connections

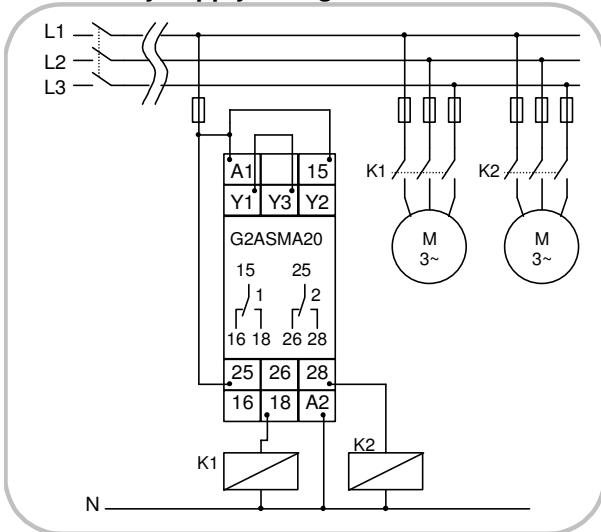
Mode A



Mode B



Control by supply voltage



Subject to alternations and errors

Dimensions

