

Prevention of Unexpected Start

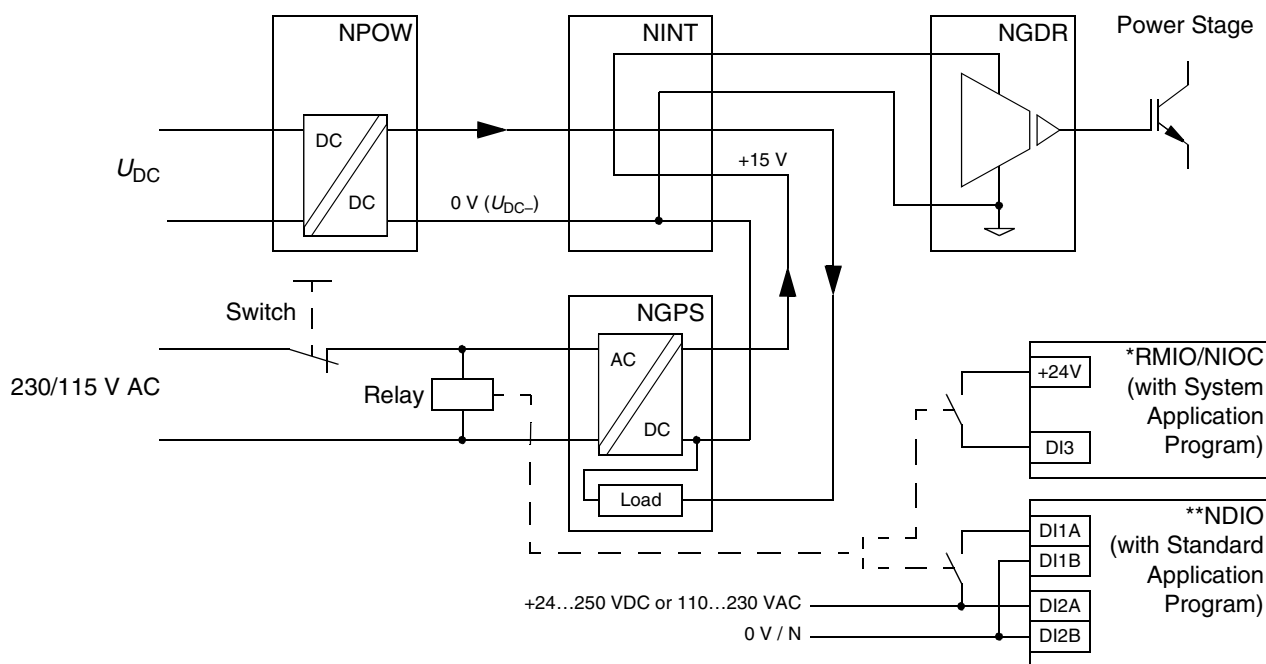
This function makes it possible to prevent an inadvertent starting of the drive so that maintenance work on the machinery can be carried out.



WARNING! The Prevention of Unexpected Start function does not disconnect the voltage from the main and auxiliary circuits. Therefore, maintenance work on electrical parts can only be carried out after switching off the main supply of the drive system.

Inverter modules equipped with the Prevention of Unexpected Start option have an additional board (NGPS) fitted. This board provides the control voltage for the output stage of the inverter module. The NGPS board in turn is powered from the 230/115 V AC auxiliary power circuit via a normally-closed switch installed by the customer in a suitable location (for example, a control desk). By opening this switch, the operator can block the control voltage to the inverter power stage, so the voltage needed to rotate the motor cannot be generated.

In addition to the switch, a relay is to be connected in parallel with the power input of the NGPS board. A normally-open contact of this relay is wired to a digital input of the inverter unit. (This is to prevent erroneous control of the power stage and possible damage in case the switch is opened while the inverter is running.) See the wiring diagram below.



*DI3 is reserved for this function by default.
 **Additional RDIO/NDIO or fieldbus adapter module required.

Figure 3-5 Wiring of the Prevention of Unexpected Start function.