

Faults - Causes - Remedies

Speed controller does not start, no fault displayed

- The assignment of the "Fast stop" or "Freewheel stop" functions will prevent the controller from starting if the corresponding logic inputs are not powered up. The ATV-28 then displays "nSt" in freewheel stop mode and "FSt" in fast stop mode. This is normal since these functions are active at zero so that the controller will be stopped safely if there is a wire break
- On power-up or a manual fault reset or after a stop command, the motor cannot be powered up until the "forward", "reverse" and "DC injection stop" commands have been reset. If they have not been reset, the speed controller will display "rdY" but will not start. If the automatic restart function is configured (parameter Atr in the drC menu), these commands are taken into account without a reset being necessary

Faults which cannot be reset automatically

The cause of the fault must be corrected before resetting by powering down and then powering up.

Fault	Probable cause	Remedy
- OC F overcurrent	<ul style="list-style-type: none"> - ramp too short - inertia or load too high - mechanical blocking - motor phase short-circuit 	<ul style="list-style-type: none"> - Check the settings - Check the motor/speed controller/load sizing - Check the state of the mechanism - Check the cables connecting the drive to the motor
- SC F motor short-circuit	<ul style="list-style-type: none"> - short-circuit or earthing at the speed controller output - significant earth leakage current at the drive output if several motors are connected in parallel 	<ul style="list-style-type: none"> - Check the cables connecting the speed controller to the motor, and the insulation of the motor - Adjust the switching frequency - Add motor chokes
- INF internal fault	<ul style="list-style-type: none"> - internal fault 	<ul style="list-style-type: none"> - Check the environment (electromagnetic compatibility) - Check that the "local control" option has not been connected or disconnected with the controller powered up - Send the speed controller to be checked/repared
- EN F auto-tuning fault	<ul style="list-style-type: none"> - special motor or motor whose power is not suitable for the speed controller - motor not connected to the drive 	<ul style="list-style-type: none"> - Use the L or the P ratio - Check the presence of the motor during auto-tuning - If a downstream contactor is being used, close it during auto-tuning
- EE F internal fault (EEPROM)	<ul style="list-style-type: none"> - internal fault 	<ul style="list-style-type: none"> - Send the speed controller to be checked/repared - Polluted environment, ensure the installation guidelines contained in the manuals have been respected

ENGLISH

Fault	Probable cause	Remedy
- O H F speed controller overload	- I ² t too high: > 1,85 In drv - 2s > 1,50 In drv - 60s - speed controller temperature too high	- Check the motor load - Check the drive ventilation and the environment Wait for the controller to cool before restarting
- O L F motor overload	- tripped by I ² t motor being too high	- Check the setting of the motor thermal protection, check the motor load. Wait for the controller to cool before restarting
- O S F overvoltage in steady state or during acceleration	- line voltage too high - disturbed line supply	- Check the line voltage
- U S F undervoltage	- line supply too low - transient voltage dip - damaged load resistor	- Check the voltage and the voltage parameter - Reset - Send the speed controller to be checked/repared
- O b F overvoltage during operation or deceleration	- braking too sudden or driving load - line voltage too high - disturbed line supply	- Increase the deceleration time - Install a braking resistor if necessary - Activate the brA function if it is compatible with the application - Reduce the frequency loop gain FLG if brA is active - Check the line voltage
- P H F phase failure under load conditions	- speed controller incorrectly sup- plied or a fuse blown - transient phase fault - 3-phase ATV28 used on a single phase line supply - supply transformer too small - mains ripple - load instability	- Check the power connection and the fuses - Reset - Use a 3-phase line supply - Check the supply transformer power - Adjust the voltage loop gain UFr

Faults - Causes - Remedies

Faults which can be reset with the automatic restart function, after the cause has disappeared (continued)

Fault	Probable cause	Remedy
- <i>OPF</i> motor phase failure	<ul style="list-style-type: none"> - loss of a phase at the speed controller output - downstream contactor open - motor not connected or motor power too low - instantaneous instability in the motor current 	<ul style="list-style-type: none"> - Check the connections from the speed controller to the motor - If a downstream contactor is being used, set OPL to OAC - Test on a low power motor or without a motor: In factory settings mode, motor phase loss detection is active (OPL = YES) To check the drive in a test or maintenance environment without having to switch to a motor with the same rating as the drive (particularly useful in the case of high power drives), deactivate motor phase loss detection (OPL = no) - Optimize the drive settings via lth, UnS, UFr and auto-tuning
- <i>SLF</i> serial link failure	<ul style="list-style-type: none"> - incorrect connection on the speed controller connector - disconnection of communication in local control mode 	<ul style="list-style-type: none"> - Check the serial link connection on the speed controller connector - Restore the connection

Malfunction with no fault display

Display	Probable cause	Remedy
no code, LED not illuminated	- no power supply	- Check power supply to drive
- <i>rdY</i> red LED illuminated	- an LI input is assigned to "freewheel stop" or "fast stop" and this input is not switched on. These stops are controlled by loss of the input	- Connect the input to 24 V to disable the stop
- <i>rdY</i> or <i>n5t</i> non-following of deceleration ramp	- high inertia or driving load	- Reset dEC and FLG