Troubleshooting in VSB Soft-Starters

All VSB Soft-Starters undergo visual, mechanical and electrical tests before leaving the factory. We keep test records of every device. In addition, all VSB Soft-Starters are started up and tested under load with a motor before leaving the factory.

However, if faults still occur, we treat this very seriously and would kindly ask you to report this to us, even if you can repair the fault yourself.

If the VSB Soft-Starter does not work, you could possibly try the following tests. Please act with care because there are potentially dangerous voltages in the device. The following test may only be performed by qualified technicians. The user is responsible for any injuries and damage resulting from unauthorized actions.

1.Visual inspection

Compare the delivery document with the rating plate on the device delivered. Do the details match?

2.Cooling

Is the VSB Soft-Starter positioned in such a way as to allow natural ventilation? The cooling fins should be positioned vertically and the cooler should not be blocked either on the top or the bottom.

3.Connections

Isolate the current and check that all the connections on the device are secure. They may have come loose during transport or in operation?

Are the phase conductors in the VSB Soft-Starter connected in the correct phase? The VSB device monitors the rotary field and inhibits operation if the phase conductors are not connected in the sequence A, B, C.

Are the motor leads connected correctly?

Is there a start signal between pins 2 and 3?

4.Electrical test

Switch on the current and check that the mains voltage to connection terminals L1, L2, and L3 is correct (+/- 10 %).

Perform the same check on the VSB Soft-Starter‘s output terminals to the motor.

The supply voltage for the VSB electronics unit is connected by us at the factory. If this connection is correct, LED 1 / green is illuminated permanently.

Measure the outputs at X1, X2 and X3 on the VSB’s main electronics unit. The connections for the thyristors (I_{out}>300mA) are contained here. Check that the thyristor semiconductor is working in accordance with the description of the Thyristor Check.

If power is supplied via a mains transformer, the nominal power rating of the transformer should be between >1.5 times and < 10 times the nominal power rating of the VSB Soft-Starter.

Relay and contactor coils which are contained in the same circuit must be fitted with overvoltage limiters, if necessary.

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5. Technical support

If you require any further support, don't delay in contacting us directly at:

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