What is claimed is:

1. A door operator comprising a control system for a fire door, a motor having a drive shaft, a centrifugal brake, a speed reduction module and a brake disk assembly, the centrifugal brake and the brake disk assembly being disposed at one end of the drive shaft, and the speed reduction module being disposed at the other end of the drive shaft;

the control system for a fire door, comprising:

a fire door actuating module for actuating the fire door;

a first control module electrically connected with the fire door actuating module for controlling the operation of the fire door actuating module; and

a second control module electrically connected with the first control module and the fire door actuating module;

wherein the second control module is configured to monitor operation of the first control module and controls the operation of the fire door actuating module when the operation of the first control module is abnormal;

wherein the fire door actuating module comprises an electromagnetic module secured to a stationary frame, and the brake disk assembly is coupled to the fire door; when the fire door is to be closed, at least one of the first control module and the second control module is controlled to cancel a magnetic attraction force of the electromagnetic module, thereby disengaging the brake disc assembly from the electromagnetic module to release the fire door, so that the fire door is automatically closed.

2. The door operator of claim 1, wherein when the first control module receives an external abnormal signal and the first control module fails to control the fire door actuating module to close the fire door, or when the first control module does not receive the external abnormal signal and the first control module controls the fire door actuating module to close the fire door, the second control module determines that the operation of the first control module is abnormal.

3. The door operator of claim 2, wherein the second control module comprises a relay circuit electrically connected to the fire door actuating module; and a monitoring circuit electrically connected to the first control module and the relay circuit; wherein when the monitoring circuit detects an abnormal operation of the first control module, the relay circuit interrupts power of the fire door actuating module to release the fire door and thereby automatically close the fire door.

4. The door operator of claim 3, wherein the first control module is configured to continuously transmit a monitoring signal to the monitoring circuit of the second control module, and the monitoring circuit is configured to continuously monitor an operating voltage of the first control module; the monitoring circuit resets the first control module when the monitoring circuit fails to receive the monitoring signal or the operating voltage of the first control module is lower than a default value.

5. The door operator of claim 4, wherein when the monitoring circuit fails to reset the first control module, the relay circuit interrupts the power of the fire door actuating module to release the fire door to thereby automatically close the fire door.

6. The door operator of claim 4, wherein when the monitoring circuit fails to reset the first control module, and the first control module receives the external abnormal signal, the relay circuit of the second control module interrupts the power of the fire door actuating module to release the fire door to thereby automatically close the fire door.

7. The door operator of claim 1, further comprising a fusible link module and a temperature switch module connected to the fire door actuating module; and when at least one of the fusible link module and the temperature switch module detects a predetermined high temperature value, the first or second control module interrupts power of the fire door actuating module to thereby automatically close the fire door.

8. The door operator of claim 1, wherein the brake disc assembly comprises a coupling seat coupled to the fire door, an annular spring plate and a brake disc; the annular spring plate is positioned between the coupling seat and the brake

disc, and the annular spring plate has a first portion coupled to the coupling seat, and a second portion coupled to the brake disk.