

# CCS2 80A~400A Vehicle Inlet Technical Specification (Conform to IEC62196)

## Electronic lock technical data

Zhengzhou Saichuan Electronic Technology Co., Ltd

2023-04

## 8 Control of Electronic lock

### 8.1 24V Electronic lock

#### 8.1.1 Electrical connection instructions

The actuator adopts a motor-driven method, and uses a micro switch as a position signal feedback device. It is connected with an external control circuit through PIN1, PIN2, PIN3, PIN4, to realize the electronic lock's locking, unlocking and signal feedback.

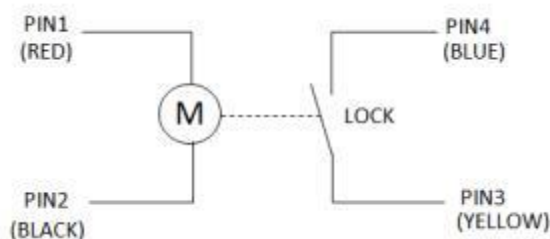


Table 1 Actuator working status table (four lines)

Motor power terminal status		Signal feedback switch status	Actuator status
PIN1	PIN2	PIN3-PIN4	
+24VDC	0VDC	Conduction	Locked
0VDC	+24VDC	disconnect	Unlock

#### 8.1.2 Technical Parameters

No.	Items	Parameter
1	Operating temperature	-40℃~85℃
2	Rated voltage	24VDC
3	Operating Voltage	18VDC~32VDC
4	Rated current	Rated current: ≤0.5A; Signal switch current: ≤50mA
5	Locked-rotor current	≤1A
6	Insulation resistance	500V.dc , 1min , Insulation resistance≥100MΩ
7	Pressure resistance	500V.ac , 1min , Leakage current≤10mA
8	Driving time (normal temperature)	500-600ms
9	OBC lock strategy (recommend)	OBC drive actuator lock/unlock: If the lock/unlock feedback signal is detected within 300ms, the drive will be delayed for 150ms and the current drive will end. It shows actuator is ok and finish this drive. If the lock/unlock feedback signal is not detected within 300ms, go on driving 150ms, if the feedback signal is detected within 150ms, the drive will be delayed for 150ms and the current drive will end. It shows actuator is ok and finish this drive; if still not detected within 150ms, go on driving 150ms, if the feedback signal is detected within 150ms, the drive will be delayed for 150ms and the current drive will end. It shows actuator is ok and finish this drive, if still not detected within 150ms, stop this drive and send error message to control unit

10	Push-pull force of lock pin	≥35N (24VDC , Room temperature)
----	-----------------------------	---------------------------------

11	Protection level	IP65
12	life	≥10000 cycles (24VDC Normal temperature, power-on time 600ms, interval time ≥10s)
13	Wires spec	FLRY-B 0.5 square

## 8.2 12V Electronic lock (switch type)

### 8.2.1 Electrical connection instructions

The actuator adopts a motor-driven method, and uses a micro switch as a position signal feedback device. It is connected with an external control circuit through PIN1, PIN2, PIN3, PIN4, to realize the electronic lock's locking, unlocking and signal feedback.

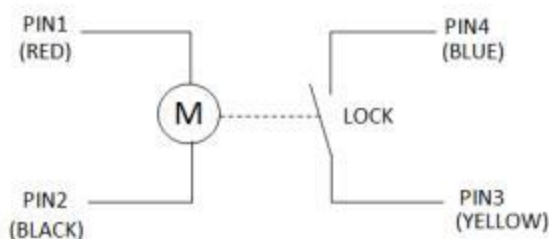


Table 1 Actuator working status table (four lines)

Motor power terminal status		Signal feedback switch status	Actuator status
PIN1	PIN2	PIN3-PIN4	
+12VDC	0VDC	Conduction	Locked
0VDC	+12VDC	disconnect	Unlock

### 8.2.2 Technical Parameters

No.	Items	Parameter
1	Operating temperature	-40℃~85℃
2	Rated voltage	12VDC
3	Operating Voltage	9VDC~16VDC
4	Rated current	Rated current: ≤0.5A; Signal switch current: ≤50mA
5	Locked-rotor current	≤1A
6	Insulation resistance	500V.dc , 1min , Insulation resistance≥100MΩ
7	Pressure resistance	500V.ac , 1min , Leakage current≤10mA
8	Driving time (normal temperature)	500-600ms
9	OBC lock strategy (recommend)	OBC drive actuator lock/unlock: If the lock/unlock feedback signal is detected within 300ms, the drive will be delayed for 150ms and the current drive will end. It shows actuator is ok and finish this drive. If the lock/unlock feedback signal is not detected within 300ms,go on driving 150ms,if the feedback signal is

		detected within 150ms, the drive will be delayed for 150ms and the current drive will end. It shows actuator is ok and finish this drive; if still not detected within 150ms, go on driving 150ms, if the feedback signal is detected within 150ms, the drive will be delayed for 150ms and the current drive will end. It shows actuator is ok and finish this drive, if still not detected within 150ms, stop this drive and send error message to control unit
10	Push-pull force of lock pin	≥35N (12VDC , Room temperature)
11	Protection level	IP65
12	life	≥10000 cycles (12VDC Normal temperature, power-on time 600ms, interval time ≥10s)
13	Wires spec	FLRY-B 0.5 square

### 8.3 12V Electronic lock (resistance type)

#### 8.3.1 Electrical connection instructions

The actuator adopts a motor-driven method, and uses a micro switch as a position signal feedback device. It is connected with an external control circuit through PIN1, PIN2, PIN3, PIN4, to realize the electronic lock's locking, unlocking and signal feedback.

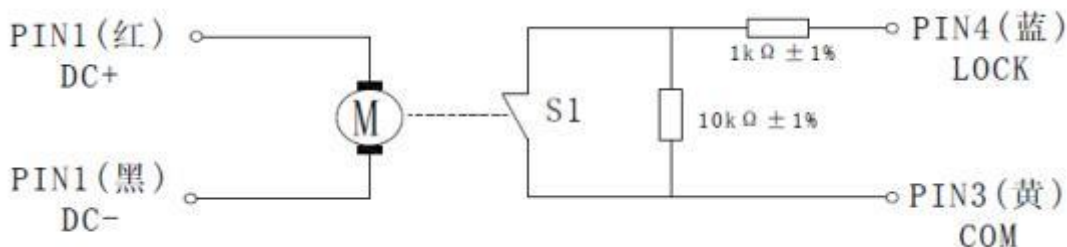


Table 1 Actuator working status table (four lines)

Motor power terminal status		Signal feedback switch status	Actuator status
PIN1	PIN2	PIN3-PIN4	
+12VDC	0VDC	S1 Disconnect, R=11K	Locked
0VDC	+12VDC	S1 Connect, R=1K	Unlock

#### 8.3.2 Technical Parameters

No.	Items	Parameter
1	Operating temperature	-40℃~85℃
2	Rated voltage	12VDC
3	Operating Voltage	9VDC~16VDC
4	Rated current	Rated current: ≤0.5A; Signal switch current: ≤50mA
5	Locked-rotor current	≤1A
6	Insulation resistance	500V.dc , 1min , Insulation resistance≥100MΩ
7	Pressure resistance	500V.ac , 1min , Leakage current≤10mA

8	Driving time (normal temperature)	500-600ms
9	OBC lock strategy (recommend)	<p>OBC drive actuator lock/unlock:            If the lock/unlock feedback signal is detected within 300ms, the drive will be delayed for 150ms and the current drive will end. It shows actuator is ok and finish this drive.            If the lock/unlock feedback signal is not detected within 300ms, go on driving 150ms, if the feedback signal is detected within 150ms, the drive will be delayed for 150ms and the current drive will end. It shows actuator is ok and finish this drive; if still not detected within 150ms, go on driving 150ms, if the feedback signal is detected within 150ms, the drive will be delayed for 150ms and the current drive will end. It shows actuator is ok and finish this drive, if still not detected within 150ms, stop this drive and send error message to control unit</p>
10	Push-pull force of lock pin	≥35N (12VDC , Room temperature)
11	Protection level	IP65
12	life	≥10000 cycles (12VDC Normal temperature, power-on time 600ms, interval time ≥10s)
13	Wires spec	FLRY-B 0.5 square