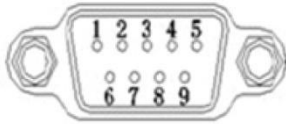


blockmakemachine.com.ptProgram of Kunlun State Touch Screen Controlling ENC Inverter

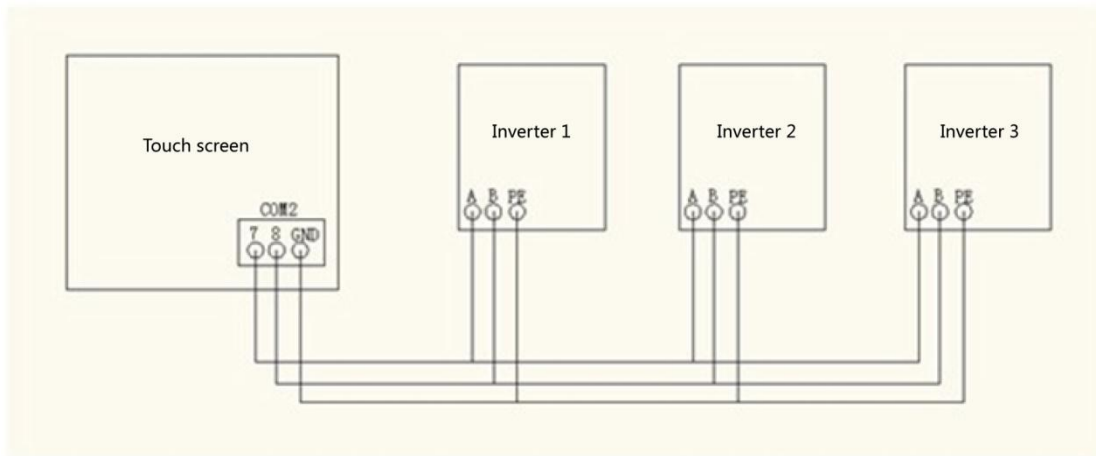
One Kunlun state touch screen controls three ENC EDS1000 series inverter simultaneously. It is required that FWD, REV, Stop, Frequency change, show running frequency, input voltage, motor rotary speed of each inverter can be controlled by touch screen.

COM of MCGS TPC7062KD touch screen supports Modbus RTU protocol, whose port pin definition is as shown below:

2. Definition of serial port pin

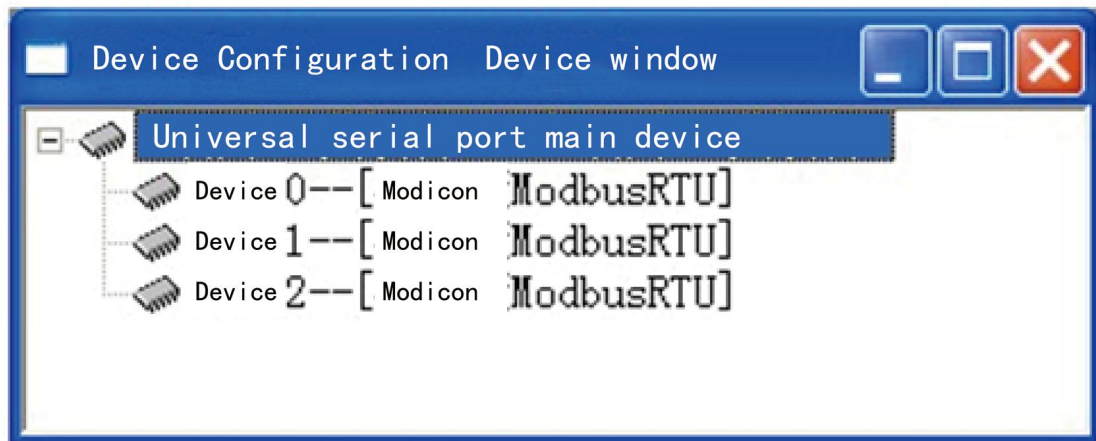


Interface	PIN	Pin definition
COM1	2	RS232 RXD
	3	RS232 TXD
	5	GND
COM2	7	RS485+
	8	RS485-



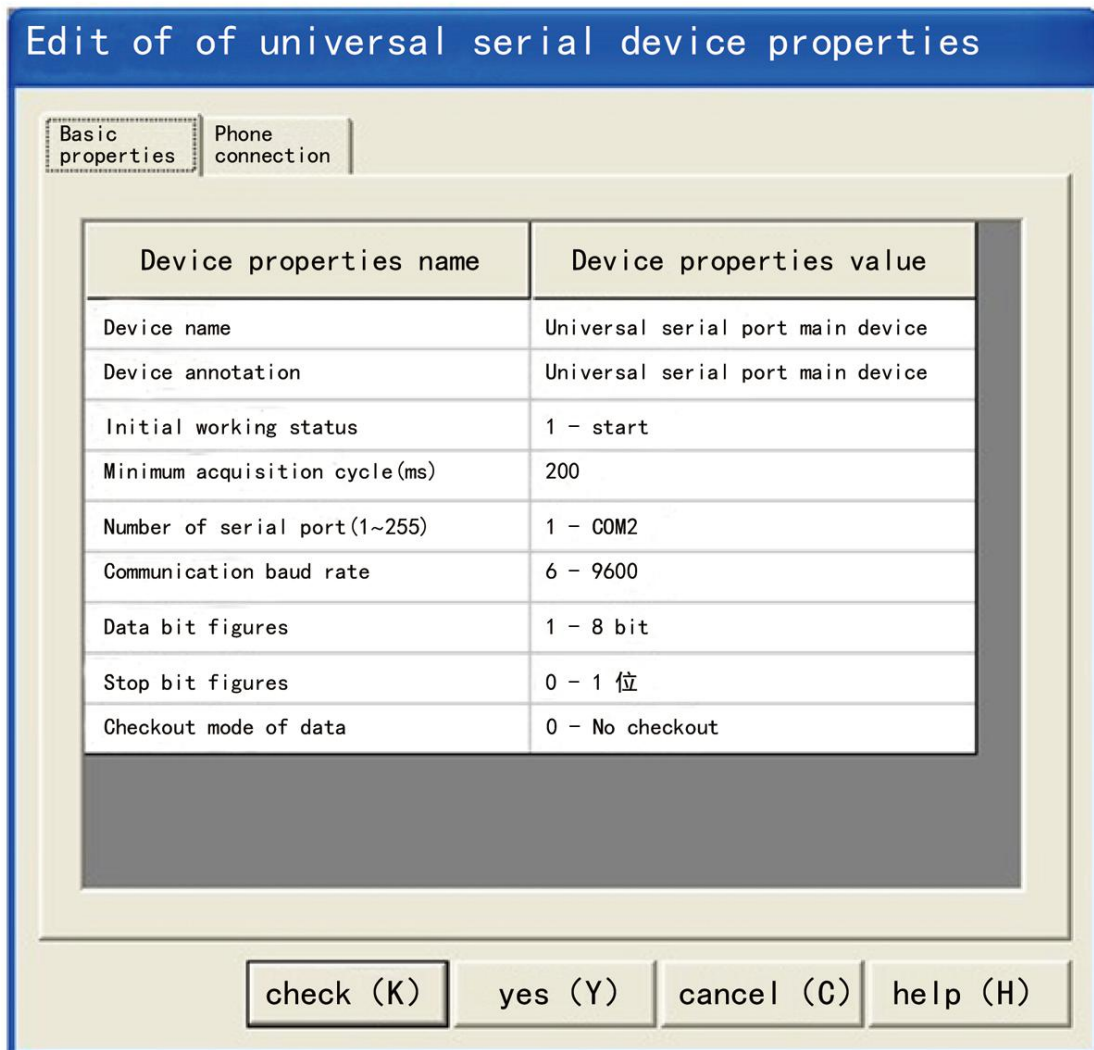
Wiring of touch screen and inverter

Setting touch screen, select general serial port, and establish three Modbus RTU substations;



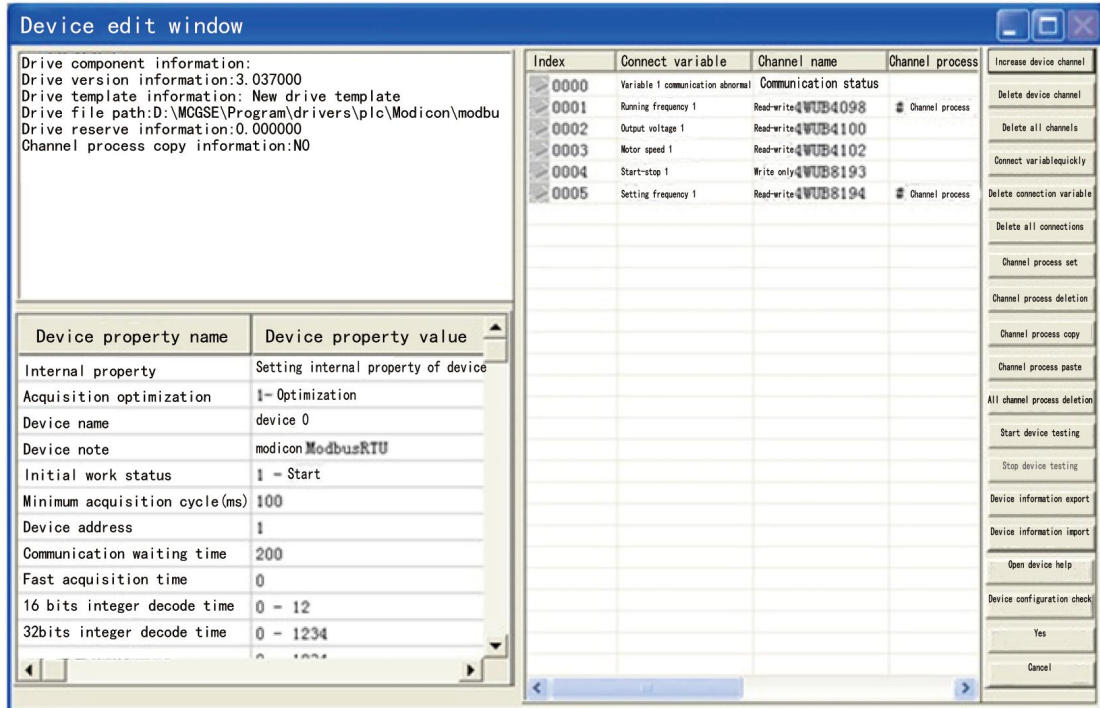
Parameter setup

Set general serial port, baud rate 9600,1-8-1, none. This parameter must be consistent with communication parameter of inverter.

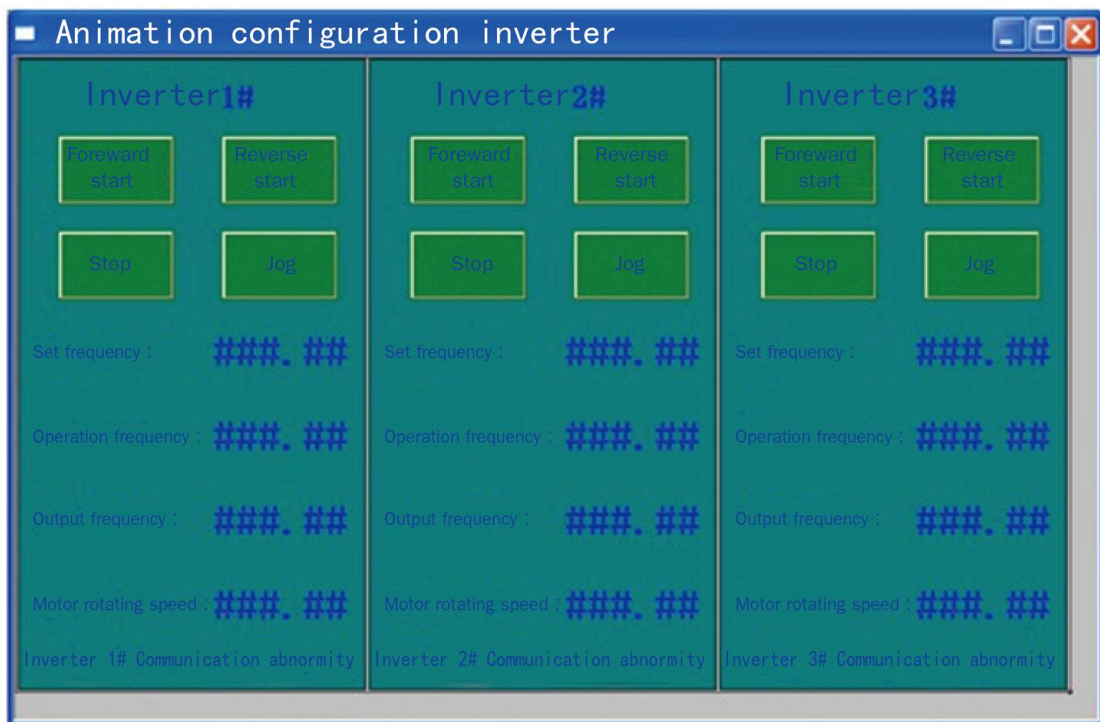


Device properties name	Device properties value
Device name	Universal serial port main device
Device annotation	Universal serial port main device
Initial working status	1 - start
Minimum acquisition cycle(ms)	200
Number of serial port(1~255)	1 - COM2
Communication baud rate	6 - 9600
Data bit figures	1 - 8 bit
Stop bit figures	0 - 1 位
Checkout mode of data	0 - No checkout

In the device editing window, device address=inverter communication address, add the variables which need to be controlled and monitored to connect variables.



Touch screen monitoring screen:



Setting inverter parameters:

Pre-set the following parameters of inverter:

F0.00=3 //serial port input

F0.02=3 // serial port input running command control

F2.14=03 //baud rate 9600, 1-8-1, none

F2.15=01 // inverter address 1/2/3

The control command and status communication address of the inverter are as follows:

Variable name	Communication address	Read-write properties	Command data or response value sense
Operation command word	2000H	Write only	1.Jogrunning
			2.Jog stop
			3.Foreward jogging
			4.Reverse jogging
			5.Running
			6.Stop
			7.Foreward running
			8.Reverse running
			9.Fault resetting
			10.Emergency cut-off
Serial frequency given	2001H	Read-write	Lower limit frequency~ upper limit frequency
Inverter status	2100H	Read only	1. Foreward running 2. Reverse running 3. Stop 4. Alarm status
Alarm code	2180H	Read only	0. No alarm 1~23. E001~E023 alarm

Monitoring parameters	Name	Communication address (Read only)
C-00	Setting frequency	1000H
C-01	Output frequency	1001H
C-02	Output current	1002H
C-03	Output voltage	1003H
C-04	DC bus voltage	1004H
C-05	Load motor speed	1005H
C-06	Module temperature	1006H
C-07	Power on running time	1007H
C-08	Accumulative running time	1008H
C-09	Input terminal status	1009H
C-10	output terminal status	100AH
C-11	Analog input the value of VCI	100BH
C-12	Analog input the value of CCI	100CH
C-13	Analog input the value of YCI	100DH
C-14	External impulse frequency	100EH