V&T

EX-CA06

Profibus-DP Adapter

User Manual

V&T

EX-CA06

1   Description

This Profibus-DP adapter meets the rule of Siemens Profibus fieldbus rule.

2   Profibus-DP EX−CA06 components

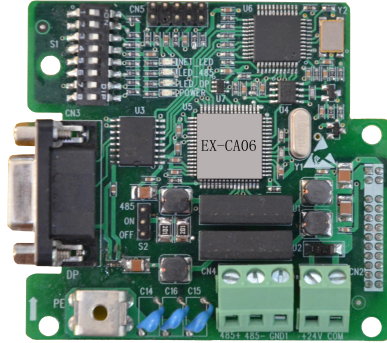## 2.1 Shape of adapter & components
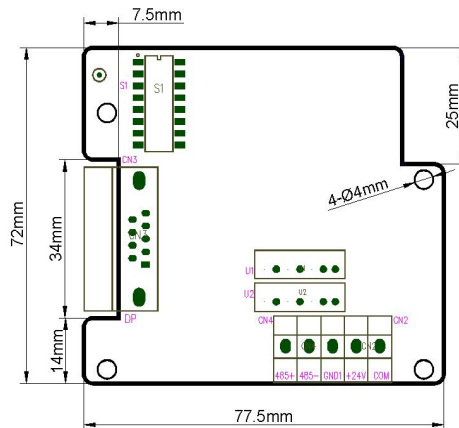

Figure 2−1 (Profibus-DP shape)

Figure 2−2 (Profibus-DP shape & size)

2.2 Profibus DP connector & terminals

EX-CA06 connect with Profibus-DP network, can use the connector provided by the company or the one in the market.

● Connecting Profibus-DP fieldbus

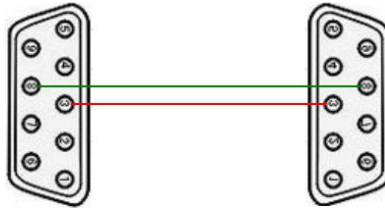The diagram show the connection of EX-CA06 with Profibus-DP fieldbus:

Figure 2−3 (wiring of connection)
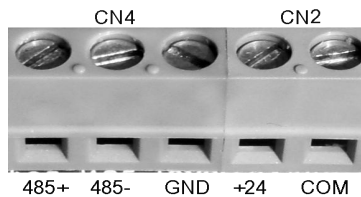
● Connecting the communication terminals of V&T inverter:

Figure 2−4 (EX−CA06 wiring terminals)

Name	Signal of terminal	description
CN4	485+	TX+\RX+ signal positive，connecting the terminal of inverters485+
	485-	TX−\RX−signal negative，connecting the drive terminal 485-
	GND	Signal earth，GND signal earth, connecting drive communication terminal
CN2	+24	+24VDC power
	COM	Power earth

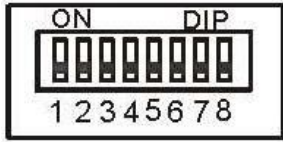# 2.3 jump & DIP switch configuration

Figure 2−5 (S1)

figure 2−6 (S2 terminal resistor)

- Set EX-CA06 address in Profibus-DP network through DIP switch on board, DIP switch 1 ~ 7 valid; 0 – ON, 1 – OFF, on Figure 2-5 (S1). The range of setting is

Value(7MSB~1LSB)	Address (ID)
0000001	1
0000010	2
…	…
1111101	125

- Jump of RS485 terminal resistor (Figure 2−6 (S2 terminal resistor)), according the exact environment: ON −→ resistor valid, OFF → resistor invalid。

3　Guide of usage

3.1 hardware installation：

- Power supply

EX−CA06 power supply is +24VDC, can plug directly into CN3 plot on control board of V&T inverter, or introduce +24VDC from the terminal, that means +24V to "+24V" terminal, earth of +24V is connected to "COM" terminal。

- connect the signal of drive with the adapter

use twisted pair to connect 485+、485−、GND1 of the adapter with 485+、485−、GND on control board of V&t drive.

- Connection is serial connection, 485 connector of the network just connect A1，B1，the terminal resistor is OK. Terminal resistor of medium-point of network is OFF, there are wiring of all A1，B1，A2，B2.

Figure 3−1 Profibus-DP interface of PLC

Figure 3−2 EX−CA06 onnection diagram

● Basic parameters setting of communication：

Set the address of EX-CA06, set the communication address of Profibus-DP network through DIP switch on board. DIP switch 1 is OFF, others are ON.

DIP switch value(7MSB~1LSB)	address (ID)
0000001	1
0000010	2
…	…
1111101	125

3.2 programming：

- Set PC.00 = 8，PC.02 = 001 after the drive is powered on.
- PLC configuration，import GSD file into Profibus-DP configuration，configurate. After configuration，PLC can communicate with EX-CA06 normally，then can program in PLC。

4 Indicator light

- POWER：

Power supply indicator. This LED light is ON after powered on。

- STATUS:

Status indicator，After EX-CA06 initialized successfully and powered on, begin to flash regularly. If the light is on or off, that means there's failure of the adapter。

- NET_LED:

Network indicator，if EX-CA06 is not connected to the network, or configuration is wrong, the light is off.If the light is flashing, that means the network is not stable. If it's normal, the light is ON.