V1.0

变频空压机控制适配卡使用说明

（APA-C302 标准型）

技术参数

变频空压机控制适配卡 APA-C302 拥有的配置如下：

- +24V 辅助电压源；
- 1 路空滤信号输入端子；
- 1 路油滤信号输入端子；
- 1 路油分信号输入端子；
- 1 路数字量输入端子(备用)；
- 1 路排气温度 PT100 检测通道；
- 1 路电机温度 PT100 检测通道；
- 2 路压力信号输入检测通道；
- 1 路 485 通讯接口，与控制面板通讯；
- 1 路 485 通讯接口，预留客户组网用；
- 1 路主机风机接触器控制信号；
- 1 路油冷风机接触器控制信号；
- 1 路加载电磁阀控制信号；
- 1 路 220V AC 电压输出控制信号（备用）；
- 1 路风机变频器控制接口（双变频方案）；
- 1 接地端子。

接线端子

接线端子排列如下：

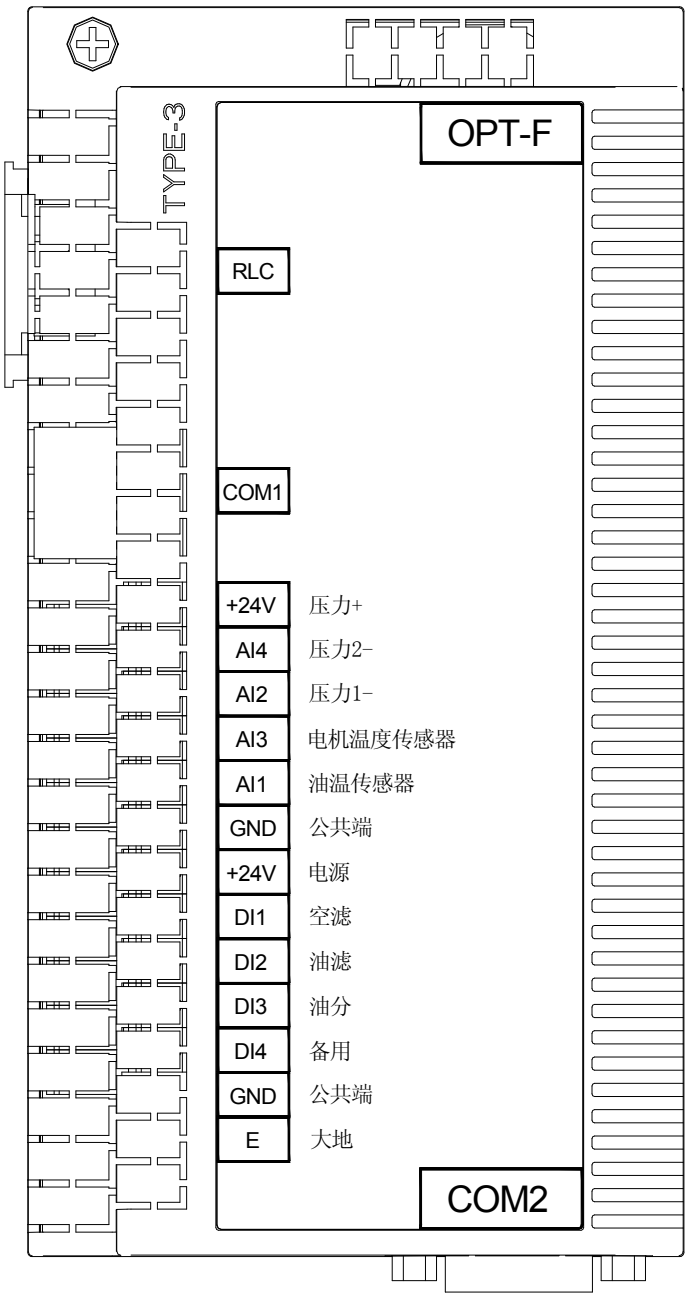

图 1　变频空压机控制适配卡的端子图

端子规格

端子类别	符号	功能说明	规格
继电器 控制信号输出	RLC	4 路继电器 控制信号输出	
油冷变频器 控制输出	COM1	控制油冷变频器启停，频率给定	备用 TS2600 非标配
操作面板 通讯接口	COM2	操作面板通讯	
数字输入 信号端子	DI1—GND	空滤信号输入	光耦隔离输入： 24VDC / 5mA或 无源常开触点
	DI2—GND	油滤信号输入	
	DI3—GND	油分信号输入	
	DI4—GND	保留	
电源	GND	开关量端子 供电电源	最大输出电流： 100mA
	+24V		
PT100 温度传感器 信号输入	GND	公共端	参考图 3 适配卡 接线图
	AI1	排气温度 PT100 检测通道	
	AI3	电机温度 PT100 检测通道	参考图 3 适配卡 接线图
压力信号输入	AI2	压力传感器 输入信号	0~20mA
	AI4	压力传感器 输入信号	0~20mA
	+24V	压力传感器电源	
接地端子	E	接大地	

安装与拆卸

适配卡的安装与拆卸参照图 2。

安装：① 将适配卡按如图示方向水平放置，使卡上的插座对准扩展卡托盘上的插座 3，下压直至适配卡紧贴托盘并听到“嗒”的响声；

② 将适配卡左上角的 M3 固定螺钉锁紧。

拆卸：① 将适配卡左上角的 M3 固定螺钉拧松；

② 将适配卡从扩展卡托盘里向上拔出。

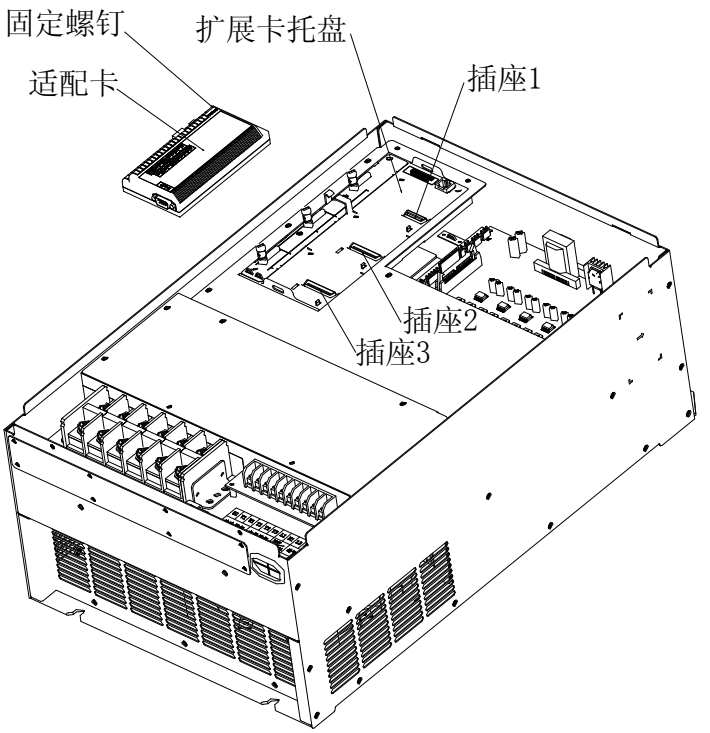

图 2　适配卡安装与拆卸的拆卸安装示意图

配线

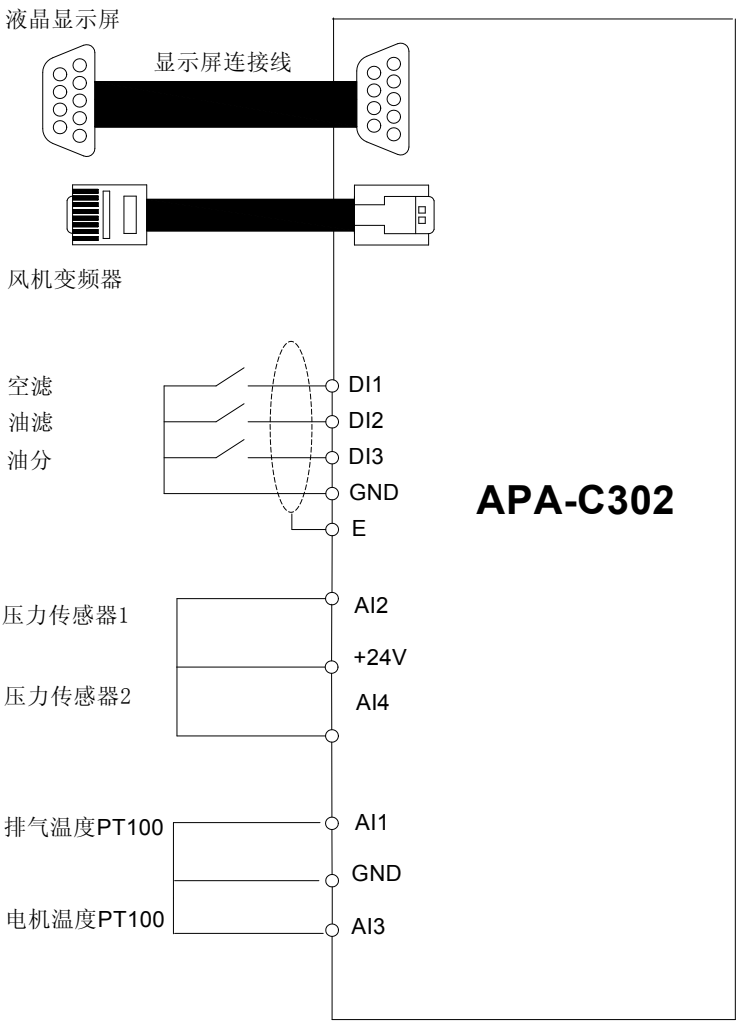

图 3　变频空压机控制适配卡的配线图

USER MANUAL FOR VARIABLE FREQUENCY AIR COMPRESSOR CONTROL ADAPTER CARD

(APA-C302 Standard)

Technical Parameter

Variable frequency air compressor control adapter card DEAP510TSA has following configurations:

- +24V auxiliary voltage power supply;
- 1-circult air filter signal input terminal;
- 1-circult oil filter signal input terminal;
- 1-circult oil-gas separator signal input terminal;
- 1-circuit digital quantity input terminal (standby);
- 1-circuit exhaust temperature PT100 inspection channel;
- 1-circuit motor temperature PT100 inspection channel;
- 2-circuit pressure signal input inspection channel;
- 1-circuit 485 telecommunication interface, communicating with control panel;
- 1-circuit 485 telecommunication interface, used for reserved client network;
- 1 circuit host machine fan contact control signal;
- 1 circuit oil cooling fan contact control signal
- 1-circuit loading solenoid valve control signal;
- 2-circuit 220V AC voltage output control signal.
- I-circuit fan frequency inverter control interface(Double variable frequency scheme);
- 1-circuit ground terminal.

Terminals

Wiring terminals are arranged as follows:

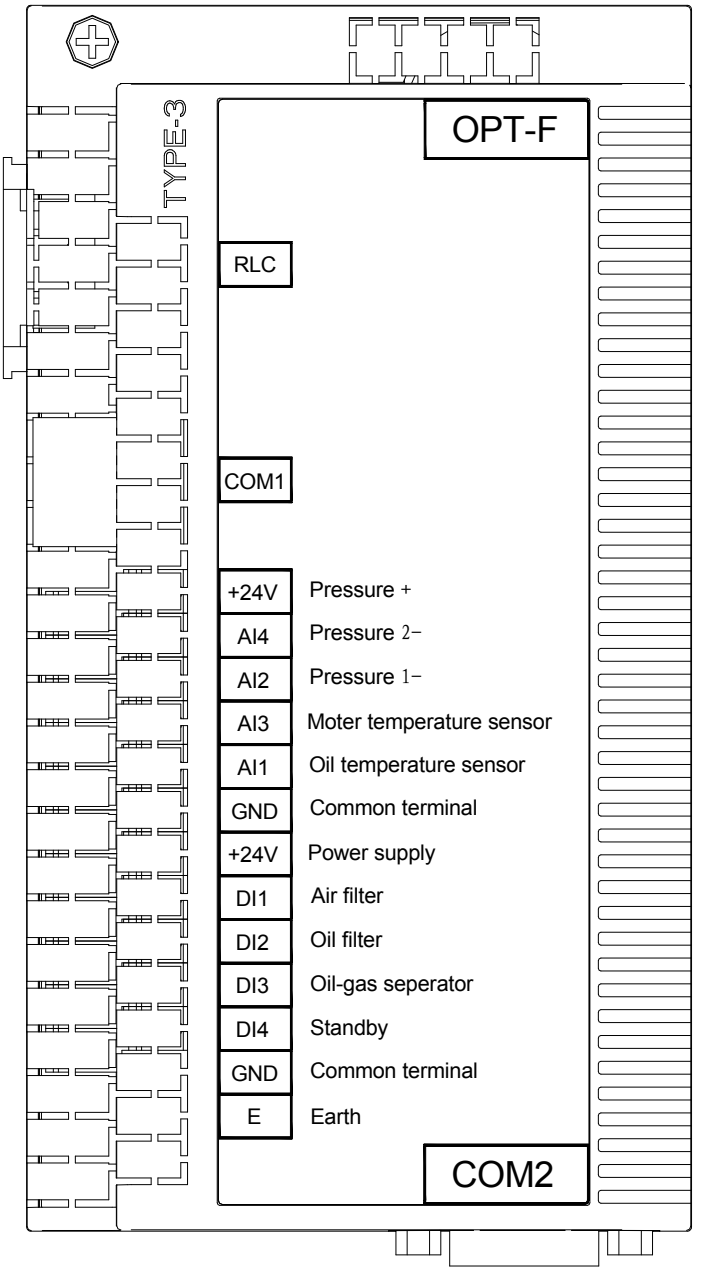

Figure-1 Terminal Diagram Of Adapter Card

Terminal Specification

Terminals Type	Symbol	Terminal function	Specification
Relay Control signal output	RLC	4circuit relay control signal output	
oil cooling inverter control output	COM1	Control the start，frequency setting	Reversed（nonstandard configuration forTS2600）
Panel Conmmunication interface	COM2	Communication for panel	
Digital input Signal terminal	DI1-GND	Air filter singal input	optically - isolated input: 24VDC / 5mA or passive normally open contact
	DI2-GND	Oil filter signal input	
	DI3-GND	Oil-gas separator signal input	
	DI4-GND	Reserved	
Power supply	GND	Power supply for switch quantity terminal	Maxium output current: 100mA
	+24V		
PT100 Temperature sensor Signal input	GND	Common port	Refer to Figure 3 – Wiring Diagram of Adapter Card
	AI1	Exhaust temperature PT100 inspection channel	
	AI3	Motor temperature PT100 inspection channel	Refer to Figure 3 – Wiring Diagram of Adapter Card
Pressure signal input	AI2	Pressure sensor input signal	0 ~ 20mA
	AI4	Pressure sensor input signal	0 ~ 20mA

Terminals Type	Symbol	Terminal function	Specification
Relay Control signal output	RLC	4circuit relay control signal output	
oil cooling inverter control output	COM1	Control the start，frequency setting	Reversed（nonstandard configuration forTS2600）
Panel Conmmunication interface	COM2	Communication for panel	
	+24V	Pressure sensor power supply	
Ground terminal	E	Connect to the earth	

Assembly & Disassembly

Refer to Figure-2 for assembly and disassembly of adapter card.

- Assembly

① Place adapter card horizontally in direction “socket 3 ”as shown in the figure 2, to aligned the socket on the card holder with the socket on the base of the card, and then press down until the adapter card sticks tightly to the base with a “click” sound;

② Tighten the fastening screw M3 fixing bolt at the left upper corner of the adapter card.

- Disassembly

① Loosen M3 fixing bolt at the left upper corner of the adapter card;

② Pull the adapter card up out from the expansioncard pallet.

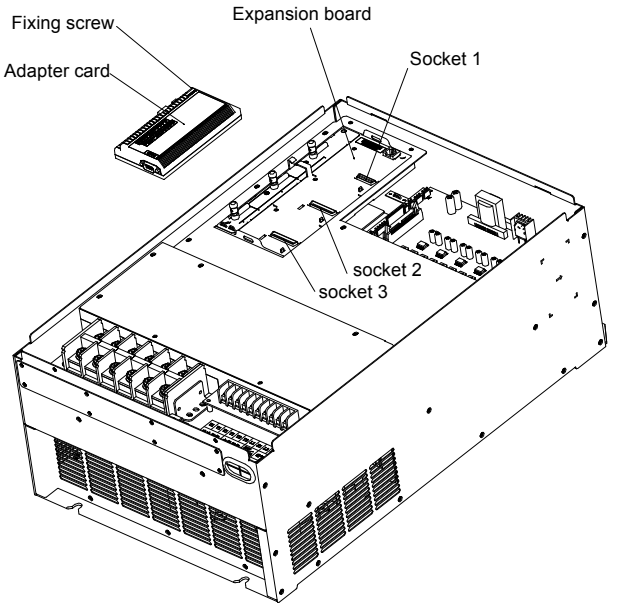

Figure-2　Assembly and disassembly of Adapter Card

Figure 2　Assembly and Disassembly of Adapter Card

Wiring

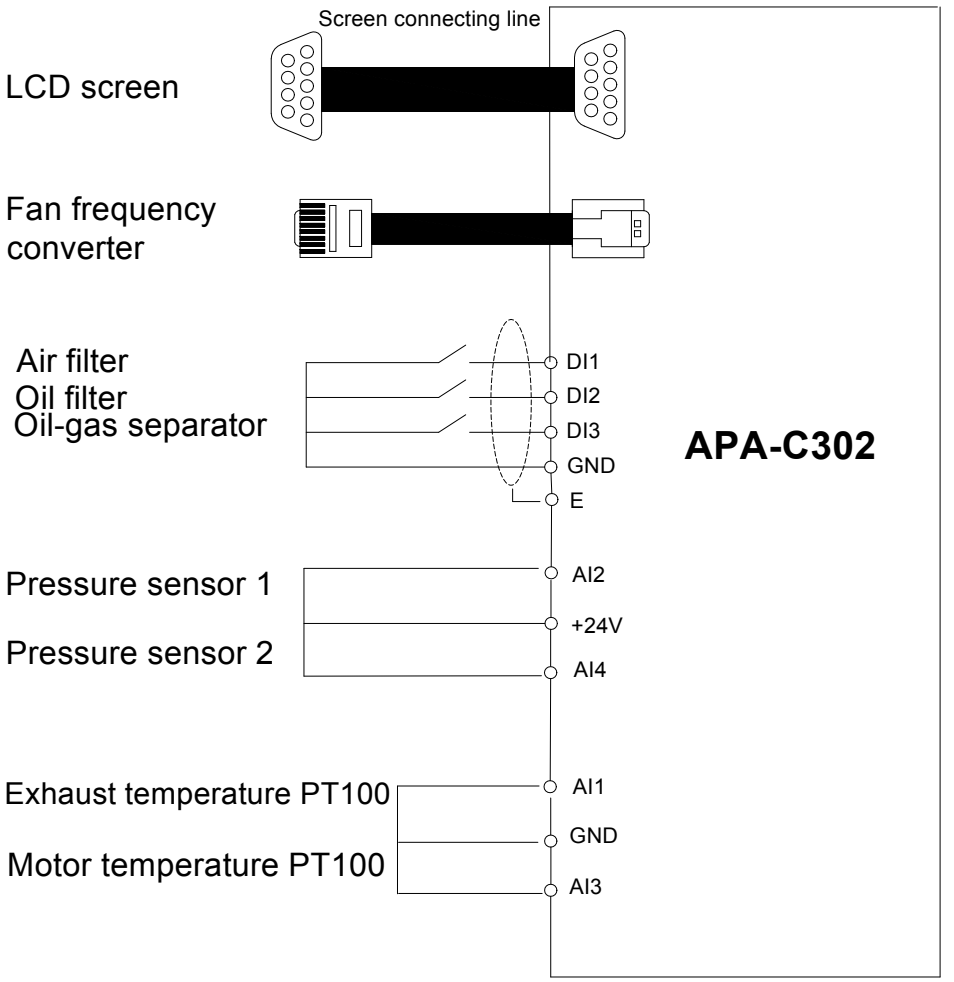

Figure-3 Wiring Diagram of Adapter Card