## How to connect Powermax65\&85 with Tube-S\&Tube-mini

The Powermax65\&85 connect to Tube-S\&Tube-mini, 4 wires need to be connected.
The Machine connect terminal:

| Machine | Aviation plug | Terminal No. |  |
| :---: | :--- | :--- | :--- |
| Tube-S\&Tube- <br> mini connect <br> terminal | 2-core | START | Description |
|  |  | START |  |
|  |  |  |  |
|  |  |  |  |
|  | 2-core CNC plasma arc initiation signal | ARC+ |  |
|  |  | ARC- |  |



POWERMAX65\&85 connect terminal:
Note: The customer needs to connect the power cable according to the actual plasma models.


## Plasma interface signals:

## Machine interface cable signals

Refer to the following table for the cable signal details when connecting the power supply to a torch height controller or CNC controller with a machine interface cable.

| Signal | Type | Notes | Connector sockets | External cable wires | Internal cable wires |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Start (start plasma) | Input | Normally open. <br> 15 VDC open circuit voltage at START terminals. Requires dry contact closure to activate. | 3 | Green | Black |
|  |  |  | 4 | Black | Red |
| Transfer (start machine motion) | Output | Normally open. Dry contact closure when the arc transfers. 120 VAC / 1 A maximum at the machine interface relay. | 12 | Red | White |
|  |  |  | 14 | Black | Green |
| Voltage divider | Output | Divided arc signal of 20:1, 21.1:1, 30:1, 40:1, 50:1 (provides a maximum of 16 V ). | 5 (-) | Black (-) | Black (-) |
|  |  |  | $6(+)$ | White (+) | Red (+) |
| Ground | Ground |  | 13 |  | Green/yellow |

The original arc voltage position of the plasma power supply:

Interior, power board side (380/400V CE)


NOTES 1：Positive electrode（work－－J27）of Plasma power is connected the ground wire．and check it by multimeter．If 【work】is not connected the ground wire，please find the other port．

Negative electrode（J29）of Plasma power is connected the plasma torch．and check it by multimeter；If 【J29】 is not connected the ground wire，please find the other port．
－Cable connecting method：

|  | Terminal No． | Corresponding interface of POWERMAX65\＆85 | The interface position |
| :---: | :---: | :---: | :---: |
| Tube－S\＆Tube－ mini connect terminal | START | 3 Input Start | POWERMAX65 <br> \＆85 Interface |
|  | START | 4 Input Start |  |
|  | TRANS／FEEDBACK | 12 Output Transfer |  |
|  | TRANS／FEEDBACK | 14 Output Transfer |  |
|  | ARC＋ | Positive electrode（ work－－J27） |  |
|  | ARC－ | Negative electrode（－－J29 ） |  |

Connect the machine to the plasma signal with terminal blocks：


