+ SN 6190930002

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5.3 Connecting the external input and output signals

Please refer to the following example where external units and operation panel are connected.

1) Interface

This interface is used to interlock and control this product.

The connectors for use in connecting the interface to this product is a (D-sub connector 37-pin, male, lock M2.6) photocoupler (H, 24 V; L, 0 V) (the output and input are as viewed from the power supply. The logic and contacts are during operation or in a normal state).

Table 5-1 Pin assignment

Pin	Signal name	Output/ input	Logic/ contacts	Signal description
1	Reset signal	Input	L	External reset signal received
2	ON command	Input	L	Output ON command signal received
3	External protection	Input	L	External protection signal received
4	Voltage control mode	Input	L	Power control mode signal received
5	Power control mode	Input	L	Power control mode signal received
6	Momentous stop signal	Output	L	Signal transmitted at momentous stoppage
7	Output voltage check signal	Output	Close	Signal transmitted when an output in the output-enabled range is produced
8	24 V (strap terminal)	Input		Power voltage strap terminal for external protection
9	Arc signal	Output	L	Signal transmitted when an arc is generated
10	Alarm signal	Output	Close	Signal shut down when an alarm is generated (signal transmitted in a normal state)
11				
12	24 V (internal voltage)	Output		Internal power voltage transmitted
13	Ground	Output		24 V ground
14	Power/voltage setting	Input		Power/voltage setting (10V/13.5kW, 10V/1000V)
15	24 V (internal interlock)	Output		Power voltage for internal interlock
16	Voltage monitor	Output		Output voltage monitor (10V/1000V)
17	Power monitor	Output		Output power monitor (10V/13.5kW)
18	Current monitor	Output		Output current monitor (10V/50A)
19				
20	COM (reset signal)			COM for reset signal
21	COM (ON command)			COM for ON command signal
22	COM (external protection)			COM for external protection signal
23	COM (voltage control mode)			COM for voltage control mode signal
24	COM (power control mode)			COM for power control mode signal
25	COM (momentous stop signal)			COM for momentous stoppage signal
26	COM (output voltage check signal)			COM for output voltage check signal
27	24 V (external protection)	Input		Power voltage for external protection signal
28	COM (arc signal)			COM for arc signal
29	COM (alarm signal)			COM for alarm signal
30				
31	24V (external control input)	Input		External control input (strap terminal for internal control voltage)
32	GND	Input		External control input ground (strap terminal for internal control voltage)
33	COM (power/voltage setting)			COM for power/voltage setting
34	Internal interlock	Output	Close	Interlock signal transmitted for the top plate and the input and output covers
35	COM (voltage monitor)			
36	COM (power monitor)			COM for power monitor
37	COM (current monitor)			COM for current monitor

*1: In the switchover of control modes, priority is given to the digital input and output. When both are at a high level, DIP switches will be used.