

Technical Note

RFP™ Mating Connectors for HPDC-450V



PURPOSE

Provide mating connector information for the RFP™ High Power DC, 450V module.

MATING CONNECTOR KIT

Part Number 5380271-02

J1 CONTROL CONNECTOR

External isolated digital and analog control connector.

Connector: Positronic P/N SD9M1000Z, Elgar P/N 856-214-09

Backshell: Positronic P/N D9000Z00, Elgar P/N 856-247-10

Wire size: Recommended wire gauge 20 AWG

Length: maximum 10 meters (can be extended subject to the environment, cable type, and interface circuits).

J1 PINOUT

Pin	Name	Function	Signal Level
1	ENA	Input: module output enable	TTL logic level
6	ENA-RTN	Input: return for ENA signal; connected to Pin-7/8	Signal common
2	TRIG-OUT	Output: trigger output signal	TTL logic level
7	TRIG-OUT-RTN	Output: return for TRIG-OUT; connected to Pin-6/8	Signal common
3	TRIG-IN	Input: trigger input signal	TTL logic level
8	TRIG-IN-RTN	Input: return for TRIG-IN; connected to Pin-6/7	Signal common
4	MOD-IN-H	Input: external modulation signal; differential input with MOD_IN_L	5V/10V analog signal
9	MOD-IN-L	Input: return for external modulation signal, MOD_IN_H	5V/10V analog signal
5	CHAS-GND	Shield ground	Chassis ground

RECOMMENDED TOOLS

Hand crimp Positronic P/N 9507-0-0-0

Pneumatic crimp Positronic P/N 9550-0-2

Insertion/extraction Positronic P/N M81969/1-02

POWER EVOLVED

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J2 DC OUTPUT CONNECTOR

Connector: Positronic P/N CBC21WA4M1000Z, Elgar P/N 856-214-04

Pin: Positronic P/N MS4820D, Elgar P/N 856-745-53

Backshell: Positronic P/N D37000Z00, Elgar P/N 856-247-39

Wire size: Recommended 20 AWG; recommended length (see table)

J2 PINOUT

J2, DC OUTPUT Connector					
Pin	Name	Function	Signal Level	Wire Gauge, AWG	Maximum Wire Length, ft
A1	OUT	Output: module output source; connected to A3	±450V; ±450V, maximum to chassis	20	45, for 1.5V line drop at 15A
A2	OUT-RTN	Output: return for output source, OUT; connected to A4	±450V; ±450V, maximum to chassis	20	45, for 1.5V line drop at 15A
A3	SNS	Input: remote sense connection for OUT	±450V; ±450V, maximum to chassis	20	45
A4	SNS-RTN	Input: remote sense connection for OUT-RTN	±450V; ±450V, maximum to chassis	20	45
9	CHAS-GND	Shield ground	Chassis ground	20	45
1-8, 10-17	-	Reserved	-	-	-

RECOMMENDED TOOLS

Hand crimp Positronic P/N 9507-0-0-0

Pneumatic crimp Positronic P/N 9550-1-0.

Insertion/extraction tool Positronic P/N M81969/1-02

Pins A1 through A4 contact is a solder cup application

Insertion/extraction Positronic P/N 4311-0-0-0

POWER EVOLVED