

ADDING TRANSDUCER

ADTP1 -

Use

Adds two DC signals and outputs a DC signal equivalent to the sum.

Features

1. Constant voltage/current output.
2. Withstand voltage between input/output and auxiliary supply, and between input and output are AC1, 500V (50/60Hz) for 1 minute, or between electric circuit and outer case is AC2, 000V (50/60Hz) for 1 minute.
3. ⊖ of Input 1 and 2 are conducted inside the device.
4. Plus/minus input is manufacturable.
5. Impulse withstands voltage 5kV, 1.2/50μs (between electric circuit and outer case), and positive/negative polarity 3 times each is guaranteed.

Specification

Input (input resistance or voltage drop)		Output (load resistance)	Auxiliary supply	Common specification
A1 : DC0-10mV (approx.500Ω)	C1 : DC0-10 μA (100mV) *1	1 : DC0-100mV (200)	1 : AC100V±10%, 50/60Hz	Tolerance: ±0.25% *2 Response time: 0.1sec./99% Consumption VA: AC power source:4VA DC power source:4W Weight: AC power source:500g DC power source:350g
A2 : DC0-50mV (approx.2.5kΩ)	C2 : DC0-100 μA (100Ω)	2 : DC0-1V (200)	2 : AC110V±10%, 50/60Hz	
A3 : DC0-60mV (approx.3kΩ)	C3 : DC0-1mA (approx.100Ω)	3 : DC0-5V (1k)	3 : AC200V±10%, 50/60Hz	
A4 : DC0-100mV (approx.5kΩ)	C4 : DC0-5mA (approx.100Ω)	4 : DC 0-10V (2k)	4 : AC220V±10%, 50/60Hz	
A5 : DC0-1V (approx.50kΩ)	C5 : DC0-16mA (approx.100Ω)	5 : DC1-5V (1k)	5 : DC24V±10%	
A6 : DC0-5V (approx.50kΩ)	C6 : DC0-20mA (approx.100Ω)	A : DC0-1mA (10k)	6 : DC48V±10%	
A7 : DC0-10V (approx.50kΩ)	C7 : DC4-20mA (approx.100Ω)	B : DC0-5mA (2k)	0 : other than those above	
A8 : DC1-5V (approx.50kΩ)	00 : other than those above	C : DC0-10mA (1k)		
		D : DC0-16mA (600)		
		E : DC1-5mA (3k)		
		F : DC4-20mA (750)		
		0 : other than those above		

- *1. Circuit voltage 15V for an input of 10 μA. *2. Tolerance becomes ±0.5% when input voltage is less than 50mV; input current is less than 100μA.
 Open of current output: even if the current output terminal is used in a state of regular open, there is no problem. Also, a voltage of approx. 25V occurs on the output terminal.
 *3. Please specify the identical input 1 and 2. Even if the input circuit is broken as 4-20mA input or 1-5V input becomes 0mA (0V), it is processed a signal as 4mA (1V) input equivalency.

Item to be specified

(1) Addition ratio standard 1: 1= 2

Example: electric power
 Input 1 (1kW) 5V
 Input 2 (1kW) 5V
 Output (2kW) 5V

(2) Addition ratio special 1: 1= 1

Input 1 (1kW) 5V
 Input 2 (1kW) 5V
 Output (1kW) 5V

However, the 5V output saturates at about 150% (7.5V).

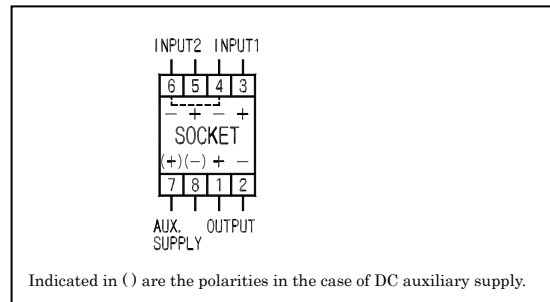
(3) Addition ratio special 1: 2 = 3

Input 1 (1kW) 5V
 Input 2 (2kW) 5V
 Output (3kW) 5V

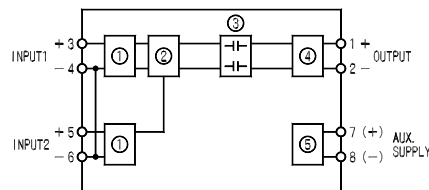


ADTP1-C7F5
 (80 × 50 × 121mm/350g)

Connection diagram



Block diagram



- Input circuit
- Adding circuit
- Capacitively coupled isolation amplifier
- Output circuit
- Insulated power source circuit

Purchase specifications

