ADDING/SUBTRACTING TRANSDUSER

CADTP1 - ☐ ☐ ☐

CADTP1-C7H1
(80× 50× 133mm/500g)

Use

A transducer does adding and subtracting of 3 inputs. By a programming unit (CCM-1), it is possible to change a parameter or output a simulated output for a loop test.

Features

1. Constant voltage/current output.
2. Withstand voltage between electric circuit and outer case AC2, 000V (50/60Hz), AC1, 500V (50/60Hz) for 1 minute between input/output and auxiliary supply, or AC1, 500V (50/60Hz) for 1 minute between input and output.
3. Plus/minus input/output is not manufacturable.
4. Impulse withstands voltage 5kV, 1.2/50μs (between electric circuit and outer case), and positive/ negative polarity 3 times each is guaranteed.

Connection diagram

Specification

Input (input resistance)	Output (load resistance)	Auxiliary supply	Common specification
A8 : DC1-5V (approx.1M) C7 : DC4-20mA (approx.100) 00 : other than those above	1 : DC0-100mV (200) 2 : DC0-1V (200) 3 : DC0-5V (1k) 4 : DC 0-10V (2k) 5 : DC1-5V (1k) A : DC0-1mA (12k) B : DC0-5mA (2.4k) C : DC0-10mA (1.2k) D : DC0-16mA (750) E : DC1-5mA (3k) F : DC4-20mA (750) H : DC4-20mA (800) DC1-5V (250k) SW switching 0 : other than those above	1 : AC100V(+10%, -15%),50/60Hz 2 : AC110V(+10%, -15%),50/60Hz 3 : AC200V(+10%, -15%) 50/60Hz 4 : AC220V(+10%, -15%), 50/60Hz 5 : DC24V(+10%, -15%) 0 : other than those above	Tolerance (when gain is 1) : ± 0.25% Consumption VA: AC power source:2.5VA DC power source:3.0W Weight: AC power source:500g DC power source:400g

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.

Operational expression

Input:　X_1-X_3 (0-100%)

Output:　X_0 (0-100%)

Operational expression:

$X_0 = K_0 \{ K_1 (X_1 + A_1) + K_2 (X_2 + A_2) + K_3 (X_3 + A_3) \} + A_0$

Gain:　K_0-K_3 (±29.999)

Bias:　A_0-A_3 (±299.99%)

Factory preset

Products are shipped in the following setting.
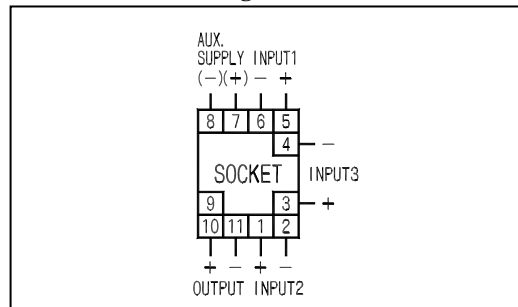(Can be changed by specification)

PARAMETER	
NO.	DATA
A_1	0.0%
A_2	0.0%
A_3	0.0%
A_0	0.0%
K_1	0.5
K_2	0.3
K_3	0.2
K_0	1.0

Block diagram

Modular jack
Input circuit
Analog multi-flexor
CPU operational circuit
Pulse width demodulation circuit
Output circuit
Insulated power source circuit
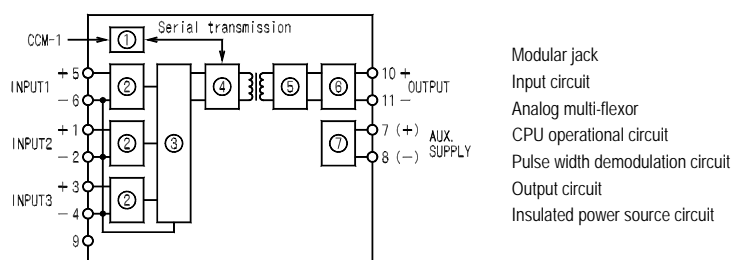
Purchase specifications

Item to specify

Type

CADTP1 - C7 H 1

Input　Output　Auxiliary supply