

Product Specification SheetModel: MS3920Chassis-Mount CT Transmitter with Isolated Dual Output(RMS Calculation Type)

## DESCRIPTION

The MS3920 is a chassis-mount CT transmitter that measures a load current flowing through power equipment and converts it into mutually isolated dual channel DC output signals.

- $\nabla$  A multi-slot chassis provides ease of maintenance and high-density mounting.
- $\nabla$  Input, output 1, output 2, and power circuits are all isolated from each other.
- $\nabla$  Equipped with a fuse on the DC power line as standard.

### **ORDERING INFORMATION**

Ordering Code

### **SPECIFICATIONS**

# POWER SECTION

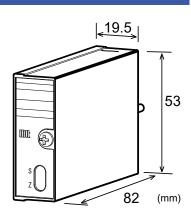
Power	24V DC±10%
Requirement	
Power	Better than $\pm 0.1\%$ of span per 10%
Sensitivity	change in supply voltage
Power Line Fuse	300mA fuse
Current	55mA max. at 24V DC
Consumption	

#### INPUT SECTION

Input	■ 0–1A AC, 50/60Hz ······ M1			
(Specify a code in	■ 0–5A AC, 50/60Hz ······ M2			
the field [1].)				
Input Resistance				
	1A AC input: $25m\Omega$ (shunt resistor)			
Allowable Input	Continuous: 120% of the rated input value			
Current	Instantaneous: 10 times the rated input			
	value (within 3 seconds)			
Crest Factor	3 max.			
	)N			

#### OUTPUT SECTION

Output	Output 1 / Output 2 ······Code
(Specify a code in	■ 1–5V DC / 1–5V DC ······V1
the field [2].)	■ 0–5V DC / 0–5V DC ······V5
	■ 0–10V DC / 0–10V DC ······V6
	$= \pm 5 \text{V DC} / \pm 5 \text{V DC} \cdots \text{W5}$
	$= \pm 10 \text{V DC} / \pm 10 \text{V DC} \cdots \text{W6}$
	■ 1–5V DC / 4–20mA DC ······C1
	Note: Combinations of two outputs are
	only available as shown above.
Allowable	Voltage output: 2mA max.
Output Load	Current output: $300\Omega$ max.



MS3900

Zero Adjustment	Approx. $\pm 2\%$ of span.			
	(Adjustable by front-accessible trimmer)			
Span Adjustment	Approx. ±2% of span.			
	(Adjustable by front-accessible trimmer)			
ADDITIONAL				
Option [3]	■ Polyurethane conformal coating ···· /H			
PERFORMANCE				
Accuracy Rating	Better than $\pm 0.25\%$ of span with at least			
	10% input (at 25°C±5°C).			
Temperature	Better than $\pm 0.2\%$ of span per 10°C			
Effect	change in ambient.			
Response Time	0.4s max. (0 to 90%) with a step input at			
•	100%			
CMRR	100dB min. (500V AC, 50/60Hz)			
Isolation	4-way isolation between input, output 1,			
	output 2, and power.			
Insulation	$100M\Omega$ min. ( $@, 500V$ DC) between			
Resistance	input, output 1, output 2, and power.			
Dielectric	Input / [Output 1, Output 2, Power]:			
Strength	1500V AC for 1 minute (Cutoff current:			
e a en gan	0.5mA)			
	Output 1 / Output 2 / Power: 500V AC for			
	1 minute (Cutoff current: 0.5mA)			
Surge Withstand	Tested as per ANSI/IEEE C37.90.1-1989.			
Capability				
Operating	Ambient temperature: 0 to 55°C			
Environment	Humidity: 5 to 90% RH (non-condensing)			
Storage	-10 to 60°C			
Temperature				
<u></u>				
PHYSICAL				
Installation	Mounted in an optional chassis			
	(RC3900A-□□AI or RS3900-01TB).			
Wiring	Wired to an optional chassis (RC3900A-			
Ū	$\Box \Box AI$ or RS3900-01TB).			
	The supplied shunt resistor should be			
	connected to the terminal block. (The two			
	brackets of the resistor should be fixed to			
	the terminals A and B.)			
External	W19.5 × H53 × D82 mm			
Dimensions				
Weight	70g max.			
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MATERIAL	
Housing	ABS resin
PC Board	Glass fabric, epoxy resin (FR-4: UL 94V-0)

# **PIN ASSIGNMENTS**

	PIN	SIGNAL	PIN	SIGNAL	
	1	N. C.	0	+ OUTPUT 1	
[	2	N. C.	0	- OUTPUT 1	
[	3	N. C.	8	+ OUTPUT 2	
[	4	N. C.	4	- OUTPUT 2	
[	5	N INPUT	6	+ POWER DC24V	
	6	L INPUT	6	- POWER D024V	
[	$\overline{}$		0	N. C.	
[			8	N. C.	
[	$\overline{}$		9	F. G.	
[	$\overline{\ }$		Ð	N. C.	

**BLOCK DIAGRAM** 

