MICROCYBER

NCS-TT106H-R HART Din Rail Temperature Transmitter

Date Book

FIELDCOMM GROUP™
Connecting the World of Process Automation

FOUNDATION HART COMMUNICATION PROTOCOL FDI

CERTIFICATE OF MEMBERSHIP

The Board of Directors hereby acknowledges that

Microcyber Corporation

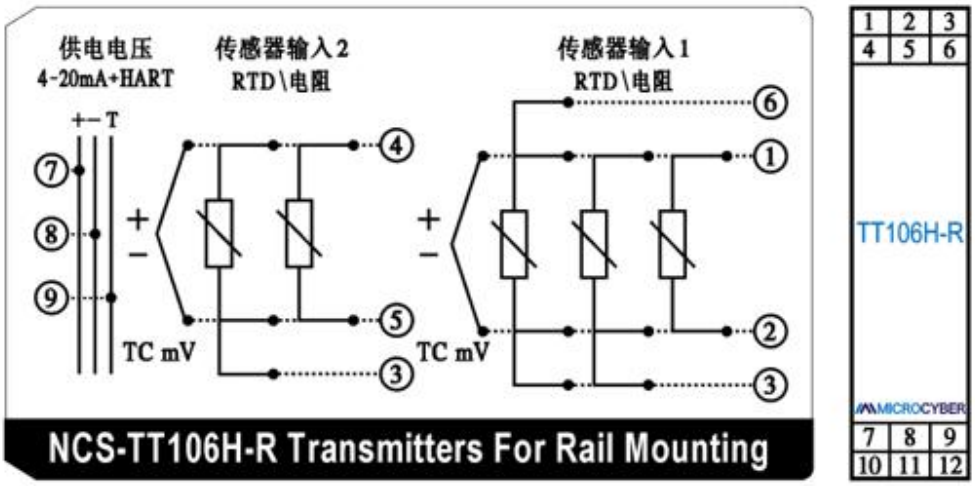
has accepted and fulfilled the requirements of the Bylaws
and all rights and privileges of membership are hereby granted

Membership Term: November 2019 – October 2020

President and CEO

TT106H-R Din rail temperature transmitter with dual channel input. Channel 1 can connect up to 4 lines of RTD, channel 2 can connect up to 3 lines of RTD, and channel 1 and channel 2 can be connected to TC signal at the same time.

1.1 Sensor connection



1.2 Dual sensor input combination

Sensor input 1									
Sensor input 2		The thermal resistance 2 line	The thermal resistance 3 line	The thermal resistance 4 line	Resistance 2 line	Resistance 3 line	Resistance 4 line	Thermocouple	Millivolt
	The thermal resistance 2 line	☑	☑	☑	X	X	X	☑	X
	The thermal resistance 3 line	☑	☑	☑	X	X	X	☑	X
	Resistance 2 line	X	X	X	☑	☑	☑	X	X
	Resistance 3 line	X	X	X	☑	☑	☑	X	X
	Thermocouple	☑	☑	☑	X	X	X	☑	X
	Millivolt	X	X	X	X	X	X	X	☑

1.3 Basic Parameter

Specification	
Input	Pt100, Pt1000, Cu50, Cu100, 0~500Ω, 0~4000Ω B, E, J, N, K, R, S, T There are eight kinds of graduated thermocouples -100mV~+100mV voltage signal
Output	Single 2-wire device, using 4-20ma /HART, has a linear relationship with the input
Power supply	11~35VDC
Number of channels	two-channel
RTD wiring mode	2-wire、3-wire、4-wire
Temperature limit	-40~85℃
Humidity limit	0-95%RH
Starting time	≤5s
Update time	0.8~1.3s It depends on the type of sensor and the wiring
Shell protection level	IP20（terminal IP00）
Isolation voltage	1000VAC
The power influence	±0.005%/V
EMC	GB/T 18268.1-2010
failure warning	linear output：3.8 ≤ I ≤ 20.8 Limit failure：21.75 ≤ I ≤ 23 The lower limit of failure：3.5 ≤ I ≤ 3.75

1.4 Technical specification of thermal resistance

RTD precision index

Signal types	Recommended range of use（℃）	Accuracy（25℃）	temperature excursion（/℃）
Resistance	0 ~ 500Ω	±0.04Ω	±0.001Ω
	0 ~ 4000Ω	±0.35Ω	±0.015Ω
PT100	-200 ~ 850℃	±0.15℃	±0.003℃
PT1000	-200 ~ 850℃	±0.15℃	±0.005℃
Cu50	-50 ~ 150℃	±0.15℃	±0.005℃
Cu100	-50 ~ 150℃	±0.10℃	±0.003℃

Note: the RTD index test condition is 4-wire system. 2-wire and 3-wire system conforms to the above indexes after excluding the wire resistance error.

RTD Other technical indicators

Mode of connection	2-wire、3-wire、4-wire
CMRR	≥70dB（50Hz/60Hz）
DMRR	≥70dB（50Hz/60Hz）

1.5 Technical specification of thermocouple

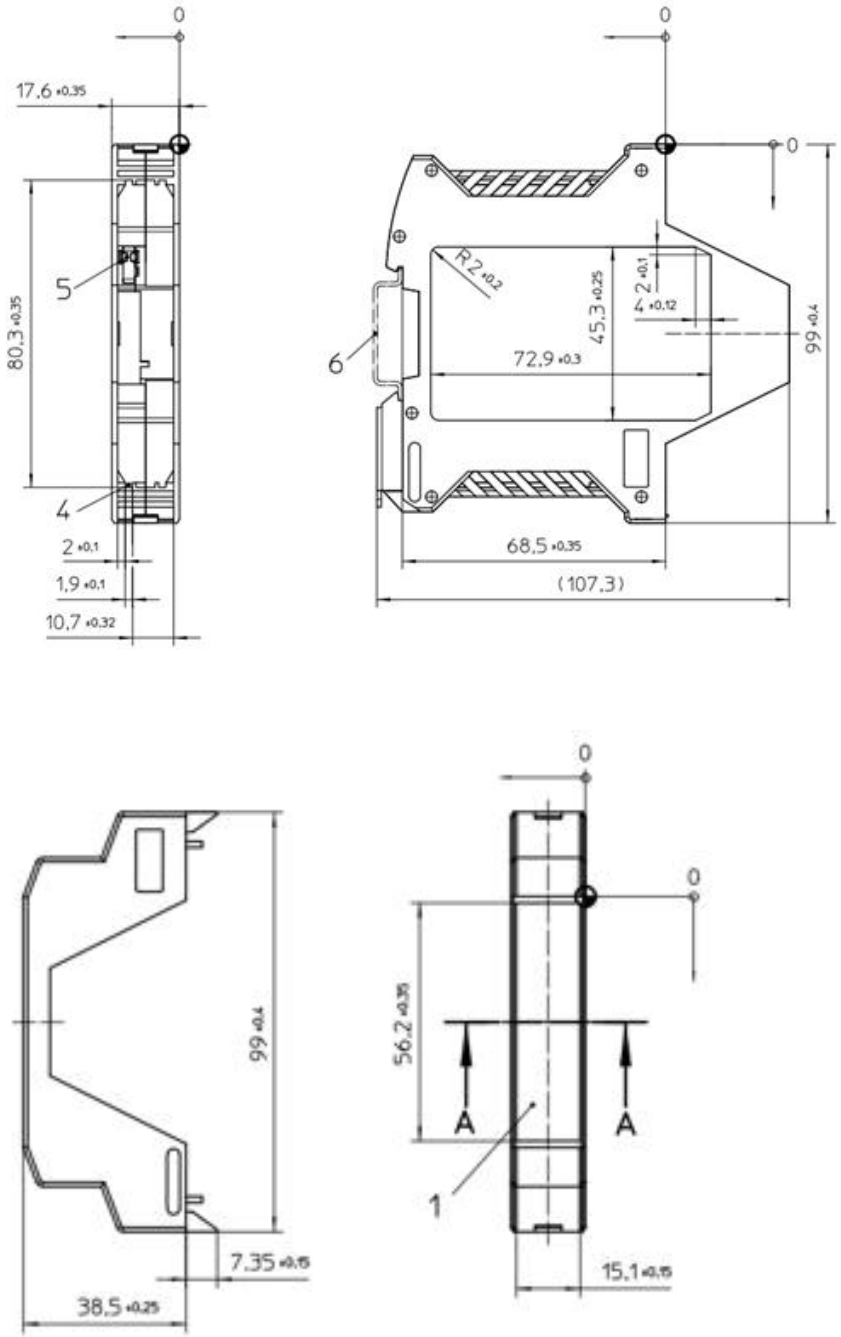
TC Precision index

Signal types	Recommended range of use（℃）	Accuracy（25℃）	temperature excursion（/℃）
Millivolt	-100 ~ +100mV	±0.025mV	±0.001mV
B	500 ~ 1810℃	±0.77℃	±0.050℃
E	-200 ~ 1000℃	±0.20℃	±0.025℃
J	-190 ~ 1200℃	±0.35℃	±0.01℃
K	-200 ~ 1372℃	±0.40℃	±0.025℃
N	-190 ~ 1300℃	±0.50℃	±0.015℃
R	0 ~ 1768℃	±0.75℃	±0.023℃
S	0 ~ 1768℃	±0.70℃	±0.023℃
T	-200 ~ 400℃	±0.35℃	±0.015℃

TC Other technical indicators

Cold end temperature compensation accuracy	±0.5℃（Internal measurement） ±0.15℃（Sensor 2 measure，Pt100）
CMRR	≥70dB（50Hz/60Hz）
DMRR	≥70dB（50Hz/60Hz）

1.6 Mechanical Structure



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