MAN0938-03-EN Specifications / Installation



SmartRail

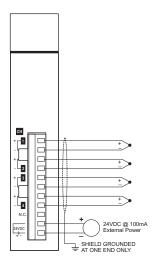
Thermocouple Input Module (Type J, K, T, R) HE599THM100

0.1°C Resolution, typical

1 Specifications

Specifications					
		Орс	THM100		
Number of Channels			4		
Types Supported			J, K, T, R		
Temperature Range		J	-200 to +1200 °C		
		K	-200 to +1300 °C		
		Т	-200 to +400 °C		
		R	0 to +1700 °C		
Resolution		J,K,T	0.1°C		
		R	0.5°C		
	Full-scale		±0.2% full scale @ 25°C		
Accuracy	Cold-Junction		±1°C		
	Temp. Coefficient		±100ppm/°C CJ (0-55°C)		
Warm-up Tim		ne	15 minutes		
Input Impedance		ce	>10MΩ		
Isolation			500V (backplane)		
Dielectric Withstand			400Vac for 1 min (ch-ch)		
Conversion Time			50mS/ch		
Backplane Power Consumed			100mA @ 5V		
External Power Required			100mA @ 24V (+/-10%)		
'			CLASS 2 POWER SUPPLY ONLY		
	rminal Typ		M2 Screw Type, Removable 11-posn		
Optional Spring Clamp Terminal Strip			HE599TRM011, 11-position		
Terminal Torque Rating		Rating	0.22 to 0.25 N-m		
			1.95 to 2.21 in-lb		
	oted Wire		16-28AWG (use copper)		
Wire Stripping Length			7mm		
Storage Temp.			-25° to 70° Celsius		
Operating Temp.			-0° to 55° Celsius		
Relative Humidity			5 to 95% Non-condensing		
Dimensions WxHxD		HxD	20mm x 90mm x 60mm 0.79" x 3.54" x 2.36"		
Weight			63g (2.2 oz.)		
-			CE, UL & C-UL		
CE & UL Compliance		ance	Class I, Div 2 Groups A, B, C & D		

2 Wiring – I/O



THM100 LED Status Indication			
LED	Meaning		
RUN	ON = Normal Operation		
	FLASH = I/O Error		
	OFF = No Power or I/O Error		
ALARM	OFF = Normal Operation		
	FLASH = Open Circuit Detected		

3 Reported Data & Configuration Data

Data is reported to the OCS in signed integer format, with a single implied decimal place. For a temperature of +762.4°C, with a data range configured for °C, the reported data value is 7624 decimal. For a temperature of -12.1°F, with a data range configured for °F, the reported data value is -121 decimal.

The SmartRail THM100 is configured using Cscape (9.1 or later). The following parameters are configurable for the THM100:

Cscape Configuration Data - Selectable per channel			
Parameter	Selections		
Channel Enable	Enable		
Channel Enable	Disable		
	K		
Thermocouple Type	J		
Thermocouple Type	Т		
	R		
Data Danga	°C		
Data Range	°F		

4 Installation / safety

This equipment is suitable for use in Class I, Division 2, Groups A, B, C and D or Non-hazardous locations only

WARNING - EXPLOSION HAZARD -

Do not disconnect equipment unless power has been removed or the area is known to be non-hazardous

WARNING - EXPLOSION HAZARD -

Substitution of any component may impair suitability for Class I, Division 2

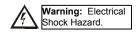
WARNING - POSSIBLE EQUIPMENT DAMAGE

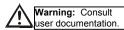
Remove power from the I/O Base and any peripheral equipment connected to this local system before adding or replacing this or any module.

- a. All applicable codes and standards should be followed in the installation of this product.
- b. Shielded, thermocouple extension wiring of the proper type should be used for best performance.
- c. Shields should be terminated at one end only, at the end providing the best noise shunting.

For detailed installation and a <u>handy checklist</u> that covers panel box layout requirements and minimum clearances, refer to the hardware manual of the controller you are using.

When found on the product, the following symbols specify:





5 Technical Support

Technical Support at the following locations:

North America: Europe:

Tel: 317 916-4274 Tel: +353-21-4321266 Fax: 317 639-4279 Fax: +353-21-4321826

Web: http://www.heapg.com
Web: http://www.horner-apg.com
Email: tech.support@horner-apg.com

No part of this publication may be reproduced without the prior agreement and written permission of Horner APG, Inc. Information in this document is subject to change without notice.

11/30/2012 Page 1 of 1