MICRO CONTROL SYSTEMS

5877 Enterprise Parkway, Fort Myers, FL 33905
Office: 239-694-0089 Fax: 239-694-0031

The MCS-T300-H Specifications & Description

Physical Characteristics

Std. Temp. Range.....32º to 250º F
Std. Temp. Accuracy.....± 2.5º F
Resistance Range.....1,180 to 24,771 ohms
Response (32°F to 212°F) .....40 sec. (in liquid)
Input Voltage.....5 Vdc
Output Resistance.....4,659 ohms @ 140º F
Overall Length.....1.750"
Diameter (outside).....0.275"
Cable
Length.....20' (40' optional)
Wire .....3 cond. 20 awg stranded
Shield.....foil shield w 25% overlap
Drain .....stranded tinned copper drain
Part Number Description when ordering
xx .....20' or 40' wire length

Product Description

An extremely accurate thermistor packaged in a water tight thin walled nickel plated brass Deep Drawn Tube. The sensor is potted with a thermal transfer epoxy to guarantee durability and response. The accuracy of the sensor is ±2.5º F which allows the units to be inter-changed in the field.

The unit is a double thermister providing a linear responce over the range. The unit input is 5.00 vdc. The voltage output over the range is .668 to 3.820. At 140°F the voltage output is 2.252 vdc. The table below provides a cross reference between °F, ohms and Vdc

Product Specifications

(Partial temperature conversion chart)

Temp. (° F)	(ohms)	(Vdc)	Temp. (° F)	(ohms)	(Vdc)	Temp. (° F)	(ohms)	(Vdc)
32	24.771	0.668	113	6.470	1.856	194	2.404	3.068
41	20.317	0.791	122	5.790	1.987	203	2.146	3.201
50	16.918	0.921	131	5.191	2.119	212	1.914	3.331
59	14.290	1.054	140	4.659	2.252	221	1.706	3.456
68	12.230	1.190	149	4.181	2.387	230	1.521	3.575
77	10.591	1.325	158	3.751	2.522	239	1.357	3.689
86	9.264	1.459	167	3.361	2.659	248	1.210	3.797
95	8.170	1.593	176	3.009	2.796	250	1.180	3.820
104	7.253	1.724	185	2.691	2.933			