

Models

STC8-11 (10K Ω)
STC8-13 (3.3K Ω)

Features

- High accuracy
- Fast thermal response
- Epoxy encapsulated sensor
- High stability and long life
- Resistor/Temperature Curve “G” matched (STC8-11, 10 K Ω)
- Resistor/Temperature Curve “A” matched (STC8-13, 3.3 K Ω)



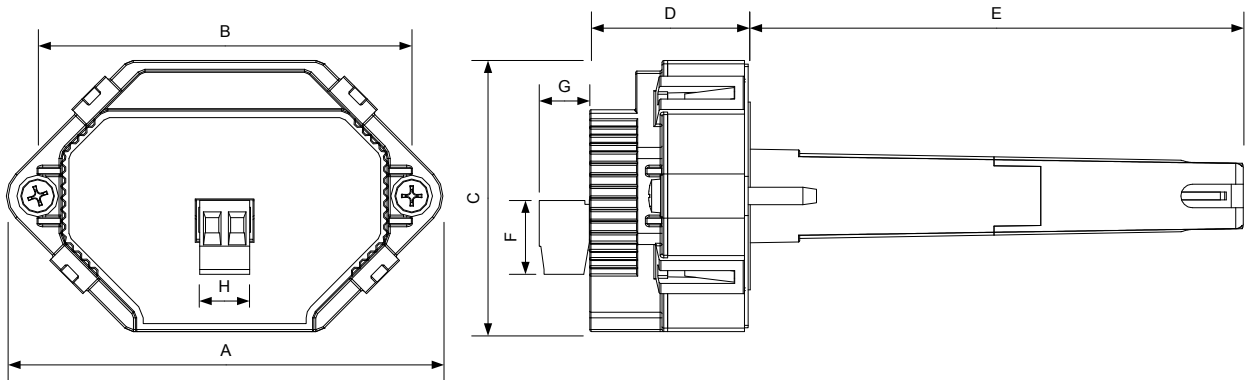
Duct Temperature Sensor

Technical Data

Specification	STC8-11	STC8-13																																																																																																								
Description	Duct sensor for remote temperature reading. Can be used with a temperature controller TRO, TFC, TFH, TFP, EFC or EVC from Neptronic®	Duct sensor for remote temperature reading. Can be used with TR5404 and electric heaters.																																																																																																								
Sensor	Negative Temperature Coefficient (NTC)																																																																																																									
Resistor @ 25°C	10 K Ω (β 0-50 = 3575)	3.3 K Ω																																																																																																								
Dissipation Constant	1 mW/°C	-																																																																																																								
Maximum Power Rating	30 mW @ 25°C (77°F) derated to 1 mW @ 125°C (257°F)	-																																																																																																								
Tolerance	$\pm 0.2^\circ\text{C}$ from 0°C to 70°C (32°F to 158°F)	$\pm 2^\circ\text{C}$ from 2°C to 35°C (35°F to 95°F)																																																																																																								
Operating Temperature	-40°C to 80°C (-40°F to 176°F)																																																																																																									
Sensor Information	<table border="1"> <thead> <tr> <th>Temperature</th> <th>Resistor KΩ</th> </tr> </thead> <tbody> <tr><td>-40°C [-40°F]</td><td>239.700</td></tr> <tr><td>-35°C [-31°F]</td><td>179.200</td></tr> <tr><td>-30°C [-22°F]</td><td>135.200</td></tr> <tr><td>-25°C [-13°F]</td><td>102.900</td></tr> <tr><td>-20°C [-4°F]</td><td>78.910</td></tr> <tr><td>-15°C [5°F]</td><td>61.020</td></tr> <tr><td>-10°C [14°F]</td><td>47.540</td></tr> <tr><td>-5°C [23°F]</td><td>37.310</td></tr> <tr><td>0°C [32°F]</td><td>29.490</td></tr> <tr><td>5°C [41°F]</td><td>23.460</td></tr> <tr><td>10°C [50°F]</td><td>18.780</td></tr> <tr><td>15°C [59°F]</td><td>15.130</td></tr> <tr><td>20°C [68°F]</td><td>12.260</td></tr> <tr><td>25°C [77°F]</td><td>10.0</td></tr> <tr><td>30°C [86°F]</td><td>8.194</td></tr> <tr><td>35°C [95°F]</td><td>6.752</td></tr> <tr><td>40°C [104°F]</td><td>5.592</td></tr> <tr><td>45°C [113°F]</td><td>4.655</td></tr> <tr><td>50°C [122°F]</td><td>3.893</td></tr> <tr><td>55°C [131°F]</td><td>3.271</td></tr> <tr><td>60°C [140°F]</td><td>2.760</td></tr> <tr><td>65°C [149°F]</td><td>2.339</td></tr> <tr><td>70°C [158°F]</td><td>1.990</td></tr> <tr><td>75°C [167°F]</td><td>1.700</td></tr> <tr><td>80°C [176°F]</td><td>1.458</td></tr> </tbody> </table>	Temperature	Resistor K Ω	-40°C [-40°F]	239.700	-35°C [-31°F]	179.200	-30°C [-22°F]	135.200	-25°C [-13°F]	102.900	-20°C [-4°F]	78.910	-15°C [5°F]	61.020	-10°C [14°F]	47.540	-5°C [23°F]	37.310	0°C [32°F]	29.490	5°C [41°F]	23.460	10°C [50°F]	18.780	15°C [59°F]	15.130	20°C [68°F]	12.260	25°C [77°F]	10.0	30°C [86°F]	8.194	35°C [95°F]	6.752	40°C [104°F]	5.592	45°C [113°F]	4.655	50°C [122°F]	3.893	55°C [131°F]	3.271	60°C [140°F]	2.760	65°C [149°F]	2.339	70°C [158°F]	1.990	75°C [167°F]	1.700	80°C [176°F]	1.458	<table border="1"> <thead> <tr> <th>Temperature</th> <th>Resistor KΩ</th> </tr> </thead> <tbody> <tr><td>-40°C [-40°F]</td><td>110.914</td></tr> <tr><td>-35°C [-31°F]</td><td>80.036</td></tr> <tr><td>-30°C [-22°F]</td><td>58.384</td></tr> <tr><td>-25°C [-13°F]</td><td>43.034</td></tr> <tr><td>-20°C [-4°F]</td><td>32.037</td></tr> <tr><td>-15°C [5°F]</td><td>24.078</td></tr> <tr><td>-10°C [14°F]</td><td>18.262</td></tr> <tr><td>-5°C [23°F]</td><td>13.972</td></tr> <tr><td>0°C [32°F]</td><td>10.779</td></tr> <tr><td>5°C [41°F]</td><td>8.383</td></tr> <tr><td>10°C [50°F]</td><td>6.569</td></tr> <tr><td>15°C [59°F]</td><td>5.186</td></tr> <tr><td>20°C [68°F]</td><td>4.123</td></tr> <tr><td>25°C [77°F]</td><td>3.3</td></tr> <tr><td>30°C [86°F]</td><td>2.658</td></tr> <tr><td>35°C [95°F]</td><td>2.154</td></tr> <tr><td>40°C [104°F]</td><td>1.757</td></tr> <tr><td>45°C [113°F]</td><td>1.441</td></tr> <tr><td>50°C [122°F]</td><td>1.188</td></tr> <tr><td>55°C [131°F]</td><td>0.985</td></tr> <tr><td>60°C [140°F]</td><td>0.820</td></tr> <tr><td>65°C [149°F]</td><td>0.687</td></tr> <tr><td>70°C [158°F]</td><td>0.578</td></tr> <tr><td>75°C [167°F]</td><td>0.488</td></tr> <tr><td>80°C [176°F]</td><td>0.414</td></tr> </tbody> </table>	Temperature	Resistor K Ω	-40°C [-40°F]	110.914	-35°C [-31°F]	80.036	-30°C [-22°F]	58.384	-25°C [-13°F]	43.034	-20°C [-4°F]	32.037	-15°C [5°F]	24.078	-10°C [14°F]	18.262	-5°C [23°F]	13.972	0°C [32°F]	10.779	5°C [41°F]	8.383	10°C [50°F]	6.569	15°C [59°F]	5.186	20°C [68°F]	4.123	25°C [77°F]	3.3	30°C [86°F]	2.658	35°C [95°F]	2.154	40°C [104°F]	1.757	45°C [113°F]	1.441	50°C [122°F]	1.188	55°C [131°F]	0.985	60°C [140°F]	0.820	65°C [149°F]	0.687	70°C [158°F]	0.578	75°C [167°F]	0.488	80°C [176°F]	0.414
Temperature	Resistor K Ω																																																																																																									
-40°C [-40°F]	239.700																																																																																																									
-35°C [-31°F]	179.200																																																																																																									
-30°C [-22°F]	135.200																																																																																																									
-25°C [-13°F]	102.900																																																																																																									
-20°C [-4°F]	78.910																																																																																																									
-15°C [5°F]	61.020																																																																																																									
-10°C [14°F]	47.540																																																																																																									
-5°C [23°F]	37.310																																																																																																									
0°C [32°F]	29.490																																																																																																									
5°C [41°F]	23.460																																																																																																									
10°C [50°F]	18.780																																																																																																									
15°C [59°F]	15.130																																																																																																									
20°C [68°F]	12.260																																																																																																									
25°C [77°F]	10.0																																																																																																									
30°C [86°F]	8.194																																																																																																									
35°C [95°F]	6.752																																																																																																									
40°C [104°F]	5.592																																																																																																									
45°C [113°F]	4.655																																																																																																									
50°C [122°F]	3.893																																																																																																									
55°C [131°F]	3.271																																																																																																									
60°C [140°F]	2.760																																																																																																									
65°C [149°F]	2.339																																																																																																									
70°C [158°F]	1.990																																																																																																									
75°C [167°F]	1.700																																																																																																									
80°C [176°F]	1.458																																																																																																									
Temperature	Resistor K Ω																																																																																																									
-40°C [-40°F]	110.914																																																																																																									
-35°C [-31°F]	80.036																																																																																																									
-30°C [-22°F]	58.384																																																																																																									
-25°C [-13°F]	43.034																																																																																																									
-20°C [-4°F]	32.037																																																																																																									
-15°C [5°F]	24.078																																																																																																									
-10°C [14°F]	18.262																																																																																																									
-5°C [23°F]	13.972																																																																																																									
0°C [32°F]	10.779																																																																																																									
5°C [41°F]	8.383																																																																																																									
10°C [50°F]	6.569																																																																																																									
15°C [59°F]	5.186																																																																																																									
20°C [68°F]	4.123																																																																																																									
25°C [77°F]	3.3																																																																																																									
30°C [86°F]	2.658																																																																																																									
35°C [95°F]	2.154																																																																																																									
40°C [104°F]	1.757																																																																																																									
45°C [113°F]	1.441																																																																																																									
50°C [122°F]	1.188																																																																																																									
55°C [131°F]	0.985																																																																																																									
60°C [140°F]	0.820																																																																																																									
65°C [149°F]	0.687																																																																																																									
70°C [158°F]	0.578																																																																																																									
75°C [167°F]	0.488																																																																																																									
80°C [176°F]	0.414																																																																																																									



Dimensions



- A = 3.50" | 89mm
- B = 3.00" | 76mm
- C = 2.16" | 55mm
- D = 1.30" | 33mm
- E = 3.95" | 100mm
- F = 0.60" | 15mm
- G = 0.37" | 9.5mm
- H = 0.40" | 10mm



Recycling at end of life: please return this product to your Neptronic local distributor for recycling. If you need to find the nearest Neptronic authorized distributor, please consult www.neptronic.com.