



# MCS-CARRIER-5K-ADAPTER

## Description & Specifications



Part # **MCS-CARRIER-5K-ADAPTER**

### Description

The Carrier 30 HX chiller package comes equipped with embedded 5K thermistors in the motor. There are two (2) thermistors factory installed in each compressor. There are three (3) terminals for the thermistors. (S1, S2 & C) Motor temperature is measured by leads connected to one of the S terminals and the C terminal. If a compressor motor thermistor fails, verify that there is a true short or open circuit at 1 to S2 or S2 to S1.

The thermistor's are not field serviceable. If both motor thermistors fail the compressor needs to be replaced.

### Specifications

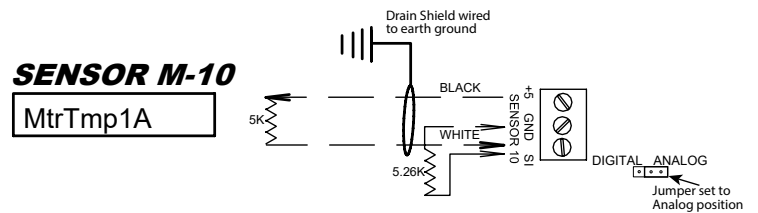
#### Requirements

1. Any compressor motor with 5K  $\Omega$  embedded motor temperature sensors that matches Table 1 on next page.
2. A 5.26K  $\Omega$  resistor, preferred 1% tolerance.
3. A sensor input terminal on MCS controls.
4. An appropriate length of 2 wire shielded cable.
5. MCS Magnum controller with Software Version 6.01 Q or later.
6. MCS-Connect Software Version 6.01 Q or later.
7. MCS-Config Software Version 6.01 X or later.

#### MCS Magnum

The motor thermistor is wired to a sensor input on the Magnum or to a sensor input on a MCS-SI expansion board. The drawing below shows the actual wiring to MCS Sensor input.

See APP-052 FOR WIRING at [mcs-controls.com](http://mcs-controls.com)



Temperature verses ohms  $\Omega$  Table 1.0

Temperature	Resistance	Temperature	Resistance
-22	88,480	113	2,184
-13	65,205	122	1,801
-4	48,536	131	1,493
5	35,476	140	1,244
14	27,663	149	1,041
23	21,163	158	876
32	16,325	167	740
41	12,696	176	628
50	9,950	185	535
59	7,856	194	458
68	6,246	203	393
77	5,000	212	339
86	4,028	221	294
95	3,266	230	255
104	2,663	239	222

### Packaging

Ship Weight ..... .005 lb (approx)  
 Box Dimensions..... 6.75 x 4.25 x 2.25" (approx)

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