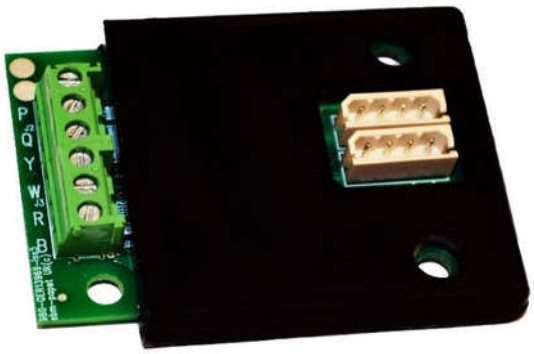
Product Details

Part No	CPCXX2040SC - CPCXX3555SC
Description	DC Fan Controller



Issue	Date	Author	Comments
2	30/09/2019	F.Pagliarini	Second Release

Safety Notice

⚠ **CAUTION – Safety**

- The controller is only suitable for a low voltage (10V to 57V DC) supply
- Electrical installations should only be carried out by qualified personnel
-

⚠ **CAUTION – Electro-Static Discharge**

Many modern electronic components are susceptible to damage from Electro-Static Discharge (Static Electricity). During commissioning and/or programming, avoid unnecessary contact with electronic components on PCB's. PCB's which are sensitive to static discharges should be stored and transported in anti-static packaging until they are required to be used.

⚠ **Warning – Do not operate in an explosive atmosphere**

⚠ **Warning – Fan may start during connection and programming. Secure fan safely before applying power**

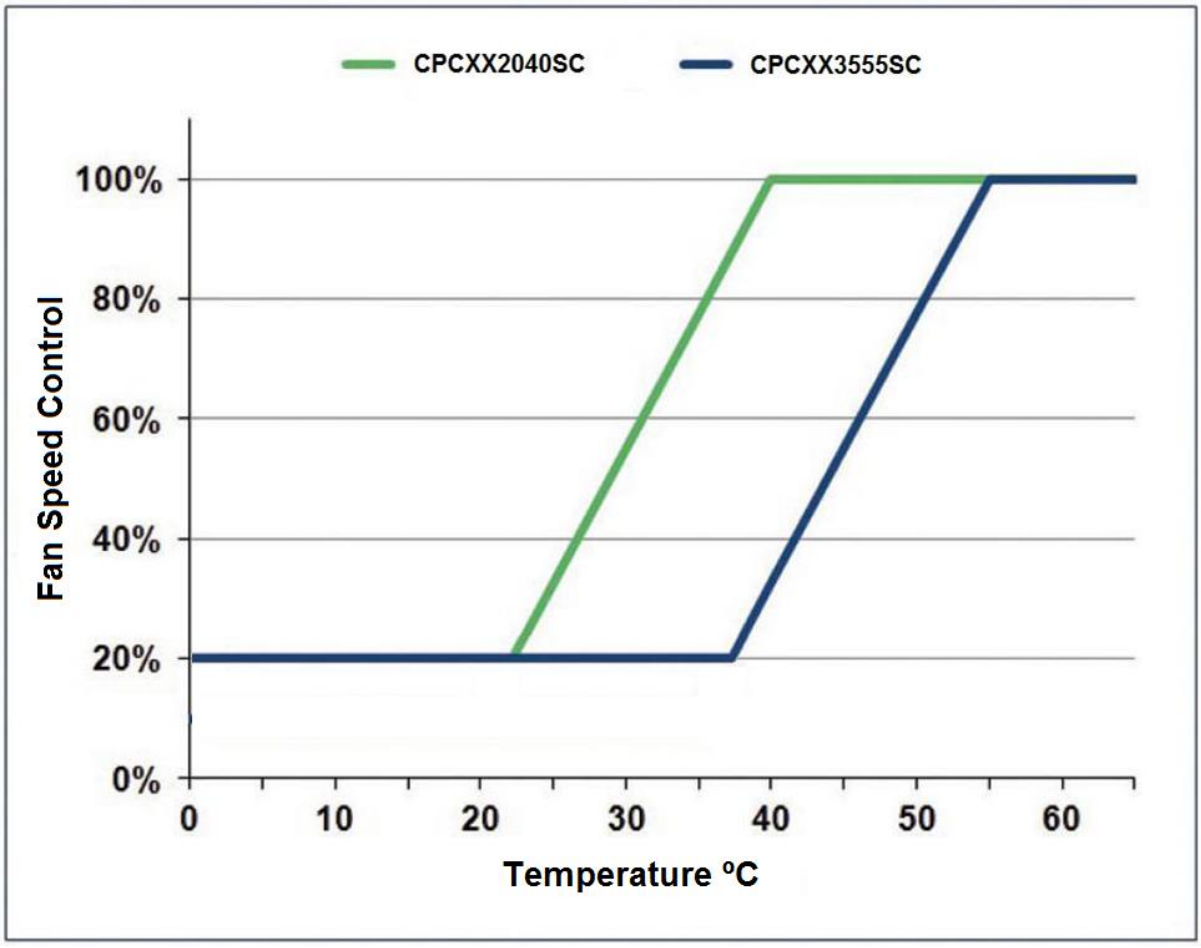
	CPCXX2040SC – CPCXX3555SC
Supply Voltage	10V to 57V DC
Supply Current	Up to 1mA (@10VDC), Up to 4.5mA (@57VDC)
Control Output	Open collector PWM at 8KHz Open Collector Alarm Output maximum sink 60Vdc – 100mA
Control Input	NTC Thermistor Open Collector Tachometer
Maximum Number of Fans	*100 x DC Fans (12-48Vdc supply)
Operating Temperature	-30°C to +60°C

*multiple DC fans are not recommended due to the potential negative effect on the speed control in case of fan failure(s)

Accessories	
Thermistor lead	**SN1060 (included with the controller)**

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Control Profile

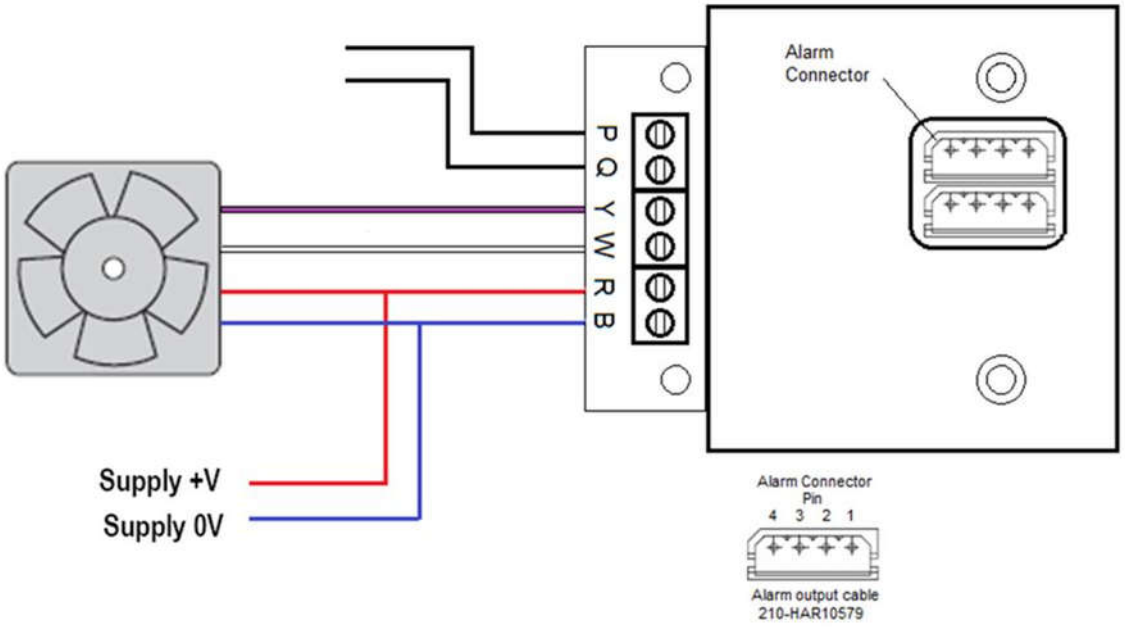


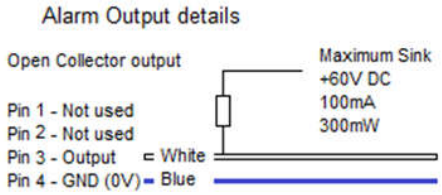
The alarm output will be released if there are no alarms active, it will be pulled low under the following conditions:

- Thermistor open circuit – a break in the thermistor cable will cause an alarm, and the output to the fan will default to run the fan at maximum speed
- Thermistor short circuit – A low resistance across the thermistor input terminals will cause an alarm, and the output to the fan will default to run the fan at maximum speed
- The thermistor readings exceed:
    - 40ºC for CPCXX2040SC
    - 55ºC for CPCXX3555SC
- The tacho signal registers a speed of less than 200 RPM (for one pulse/revolution fans)

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Connections





Terminal	
P	Thermistor +ve
Q	Thermistor GND (0V)
Y	Open-Collector PWM Output at 8Khz
W	Open Collector Tacho Input
R	10V to 57V DC supply
B	GND(0V)

Transport and Storage

- PCBs should be transported in anti-static build-up bag or static dissipative bags.
- Store in a dry environment
- Storage temperature: -30°C to +70°C.

Maintenance and Servicing

There are no user serviceable parts.

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