VibeDefenseTM Automated Vibration Monitoring Kit

CTC introduces its innovative VibeDefense[™] Automated Vibration Monitoring Solution which integrates the advanced features of the SCD Series signal conditioner relay and display enclosure with the stack light feature. This comprehensive solution harnesses the power of CTC's accelerometers or dual output vibration and temperature accelerometers to convert the data into a 4-20 mA output signal that can be displayed and alarmed for automated vibration monitoring.

Kit Components



SCD Series Signal Conditioner Enclosure with Stack Light Factory configurable for 1 to 4 signal conditioners. With optional red light stack light.

SC310 or SC150 Series Signal Conditioners

Factory installed in your SCD enclosure for easy installation. CTC's SC310 Series signal conditioners are a premium offering which can accept inputs from accelerometers, velocity sensors, or dual output vibration and temperature sensors in a wide range of sensitivities. CTC's SC150 signal conditioner is a cost effective, standard solution which is compatible with 100 mV/g single output accelerometers only.



AC, VE, TA, or VT Series Accelerometers

Select from a wide variety of CTC accelerometers, velocity sensors, or dual output vibration and temperature sensors in a wide range of sensitivities.

(SC150s are compatible with AC Series 100 mV/g options only)



CTC Cabling of Your Choice

Fully customize the cabling that is right for your application using CTC's custom cable wizard! Suggested: CB102-A2A-020-Z for single output sensors CB105-A3A-020-Z for dual output sensors (Please note, length is fully customer configurable)

VibeDefense[™] with Single Output Vibration Sensors

An SCD Series enclosure with stack light can accommodate up to four single output vibration sensors. If utilizing CTC's premium SC300 Series signal conditioners, a wide range of CTC sensor options can be utilized. Select from a diverse set of accelerometers with sensitivity values ranging from 10 mV/g to 1000 mV/g or velocity sensors in 100 mV/in/sec or 500 mV/ in/sec options. If utilizing an SC150, select from CTC's 100 mV/g accelerometer options, available in standard, compact and miniature sizes in both top and side exit configurations. CTC signal conditions are customer configurable to focus on the frequency band that is most important for your application!

Sensor cabling from installed vibration sensors can be terminated in a SCD Series enclosure with stack light. Once cabling is connected, the relays on the front of the SCD Series enclosure will display the overall values from sensor inputs and can be programmed to alarm the machine if the machine's vibration exceeds preset values.



Diagram showing four single output sensors mounted on bearing housings, attached to connectors with cabling running into the bottom of the SCD enclosure.

VibeDefense[™] with Dual Output Temperature and Vibration Sensors

An SCD Series enclosure with stack light can accommodate up to two dual output vibration sensors. Each sensor requires two displays - one for the vibration output and one for the temperature output. SC300 Series signal conditioners must be used with this system due to their built-in temperature output feature. CTC offers dual output accelerometers in 100 or 500 mV/g options with 10 mV/°C temperature output. CTC also offers 100 mV/in/sec velocity sensors with 10 mV/°C temperature output. Only one SC300 is required per sensor. CTC will factory install the signal conditioners into the SCD enclosure and wire vibration and temperature outputs to independent relay. Once cabling is connected, the relays on the front of the SCD Series enclosure will display the overall values from sensor inputs and can be programmed to alarm the machine if the vibration or temperature exceeds preset values.



Diagram showing two dual output sensors mounted on bearing housings, attached to connectors with cabling running into the bottom of the SCD enclosure.