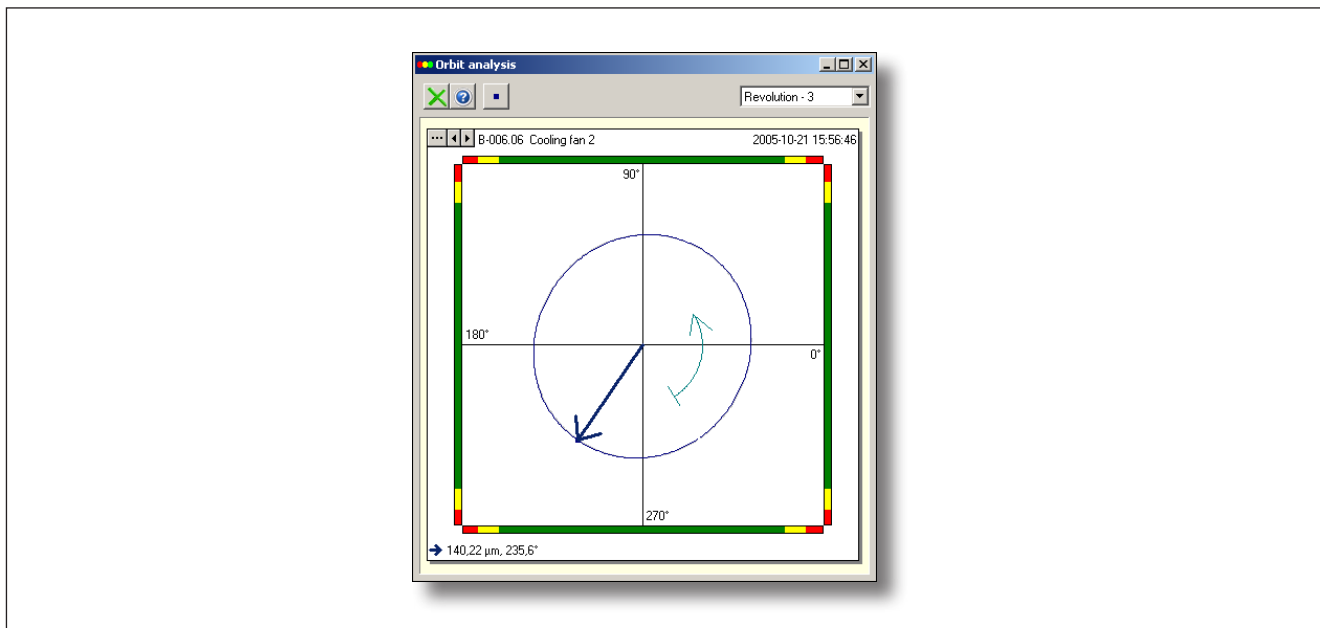


Condmaster® Nova - Orbit Analysis



Orbit analysis is a vibration measurement function offered with Condmaster® Nova, for either unlimited (MOD138) or limited use (MOD238). The resulting orbit graph shows the movement of the shaft's centerline and is used to detect failures like rubs, unbalance, misalignment or oil whip on machinery with journal bearings.

The measurements are normally made with Leonova Infinity or Intellinova on the buffered outputs of a machine protection system via the Orbit Interface 15315. Measurements can also be made with e. g. accelerometers to get a two dimensional graph of machine movement. Required are two channel simultaneous vibration measurement and two transducers placed at an angle of 90° to each other, plus a trigger signal from a tachometer probe.

Settings include transducer type, signal unit and filter type, either bandpass (default) or lowpass. Orders is set to 1 by default, but the user can select from 1 to 5 orders. The number of revolutions parameter, max. 25, specifies the number of shaft revolutions to acquire and display in the orbit graph.

The orbit graph shows an overlay of the graphs for each measured revolution plus their average. The user can select each individual revolution as well as the average of all revolutions.

The selected graph is marked blue, with a blue arrow showing the angle and the x/y values at that angle. The user can move the arrow on the screen with the mouse in the orbit graph.

When the orbit assignment is set up in Condmaster® Nova, alarm limits can be set on the X and Y axis, resulting in an evaluated measurement (green - yellow- red scale).

Ordering numbers

- MOD138 Orbit analysis, unlimited use
- MOD238 Orbit analysis, limited use

