

AIR DRYERS

Simpson Air Dryers are specially designed and manufactured to be used as an air pretreatment system prior to an ozone generator. Use of an air dryer in front of an ozone generator can reduce or eliminate nitric acid formation by removing water vapor and it can increase ozone production. Use of an oxygen concentrator can further increase the ozone production and further reduce the risk of nitric acid formation by removing not only the water vapor, but also the bulk of the nitrogen.



Air dryers work by drying the air with a desiccant. After a period of use the desiccant must be regenerated. In the case of the SAD-1, the dryer will not produce dry air during regeneration since there is only one dryer tube. Regeneration is therefore normally set for a time of day when water is not likely to be required. The SAD-2 is a two tube dryer and it will function continuously, regenerating one side while the other is in operation. The SAD-3 also comes two drying tubes as well as a compressor and does not work on a vacuum like the two smaller versions, but instead pushes dry air through the system.

SAD-1



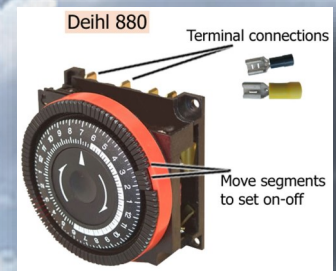
SAD-2



SAD-3



24 HR Timer



Moisture Indicators

Simpson Environmental highly recommends the use of moisture indicators in conjunction with our SAD model air dryers. Moisture indicators will clearly identify to users when the dryer is not producing dry air and needs service. This will drastically shorten system down time and ensure that the ozone generator is functioning to specifications.

When the air dryer is regenerating properly the silica inside the indicator should be blue in colour. Alternatively, when regeneration is not occurring, you will notice the silica turn light purple.



SPECIFICATIONS

| | SAD1 | SAD-2 | SAD-3 |
|---------------------------|---|---|---|
| Dry Air Flow | 10LPM | 10LPM | 10LPM |
| Regeneration Cycle | 2hrs/1hr cool down | 2hrs/1hr cool down | 2Hrs/1hr cool down |
| Regeneration Demand | Every 150 cu/ft. @50% Relative Humidity | Every 150 cu/ft. @50% Relative Humidity | Every 150 cu/ft. @50% Relative Humidity |
| Regeneration Tubes | 1 | 2 | 2 |
| Continuous Use | NO | YES | YES |
| Amp Draw @120V/60Hz | 1.0 | 1.0 | 3.00 |
| Power | 60/50Hz—120V-220V | 60/50Hz –120V-220V | 60/50Hz –120V-220V |
| Size (cm) and Weight (kg) | 61 x 20 x 11 / 2.8kg | 61 x 28 x 11 / 4.5kg | 73 x 43 x 25 / 13.6kg |
| Timer | 24hr Manual | 24Hr Automatic | 24Hr Automatic |
| Tubing Port Size | 3/8" | 3/8" | 3/8" |
| Compressor | NO | NO | YES |

Features

*1 year warranty *Available is 110V or 220V *Fuse protected
*Optional CSA Approval *Available in 120V or 220V *Wall Mountable