

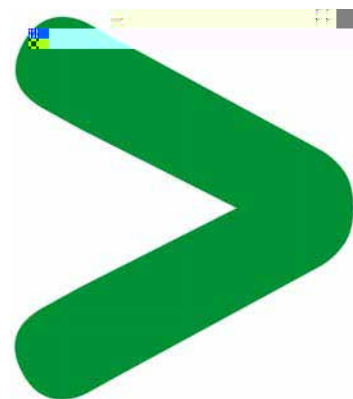
Product Environmental Profile

ALTIVAR PROCESS / MACHINES

Ranges:

30 to 45 kW - 3PH - 200/240V - IP21

55 to 90 kW - 3PH - 400/480V - IP21



Product Environmental Profile – PEP

Product overview

Product Environmental Profile – PEP

Manufacturing

The Altivar Process / Machines product range is manufactured at a Schneider Electric production site on which an ISO14001 certified environmental management system has been established.

Distribution

The weight and volume of the packaging have been optimized, based on the European Union's packaging directive.

The Altivar 630 - 90 kW / 400-480V / 3PH / IP21 packaging weight is 10320 g. It consists of 6500 g wood, 2700 g recyclable cardboard, 30 g polyethylene film, 70 g paper and 80 g desiccant dryer.

The product distribution flows have been optimised by setting up local distribution centres close to the market areas.

Use

The products of the Altivar Process / Machines product range do not generate environmental pollution (noise, emissions) requiring special precautionary measures in standard use.

The electrical power consumption depends on the conditions under which the product is implemented and used. The electrical power consumed by the Altivar Process / Machines product range is between 1065 W and 1807 W at 100% loading rate. It is 1807 W in active mode and 30 W in standby mode for the referenced Altivar 630 - 90 kW / 400-480V / 3-ph rating / IP21.

The product range does not require special maintenance operations.

End of life

At the end of life, the products in the Altivar Process / Machines product range have been optimized to decrease the amount of waste and allow recovery of the product components and materials.

This product range contains PCBAs, Electrolytic Capacitors and one Manganese Dioxide Lithium Coin Battery that should be separated from the stream of waste so as to optimize end-of-life treatment by special treatments. The location of these components and other recommendations are given in the End of Life Instruction document which is available for this product range on the Schneider-Electric Green Premium website [Green Premium website](http://www2.schneider-electric.com/sites/corporate/en/products-services/green-premium/green-premium.page) (<http://www2.schneider-electric.com/sites/corporate/en/products-services/green-premium/green-premium.page>).

The recyclability potential of the products has been evaluated using the “ECO DEEE recyclability and recoverability calculation method” (version V1, 20 Sep. 2008 presented to the French Agency for Environment and Energy Management: ADEME).

According to this method, the potential recyclability ratio without packaging is: 70%

As described in the recyclability calculation method this ratio includes only metals and plastics which have proven industrial recycling processes.

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System approach

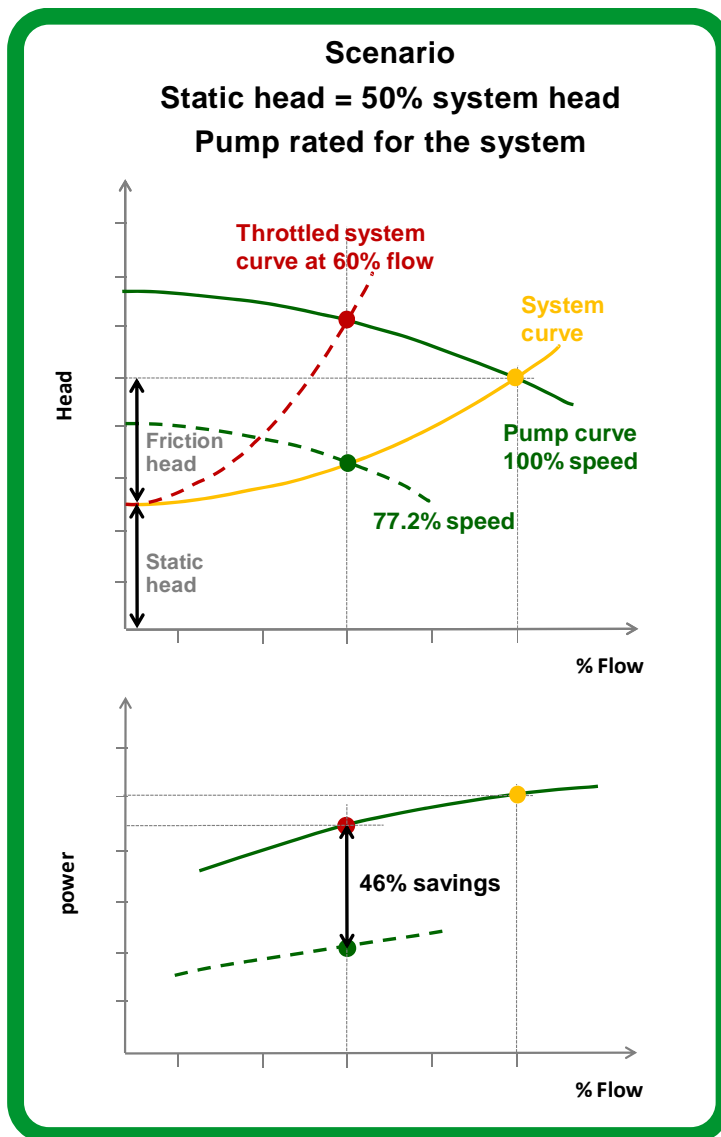
The variable speed drive saves up to 50% energy by optimising the operating cycles of the machines used for fluid applications with Altivar Process / Machines.

As the products of the range are designed in accordance with the European RoHS Directive 2011/65/EU, they can be incorporated without any restriction in an assembly or an installation subject to this Directive.

Please note that the values given above are only valid within the context specified and cannot be used directly to draw up the environmental assessment of an installation.

Figure 1

Energy saved with variable vs. fixed speed drives at 100% and 60% flow, according to the static head and pump sizing. The operating point is represented as the intersection of the pump curve with the system curve



The example in **Figure 1** compares two installations (one with a variable speed drive one with a fixed drive throttled system) in which static heads (height difference between the source and the end use) are different.

The static head represents 50% of the system head, and the pump is rated for the head and flow of the system. At 100% flow, the power consumed by the pump is the same at both fixed speed and with a variable speed drive. At 60% flow, the energy savings resulting in the variable speed drive use is 46%.

