Altivar ATV61 family of Variable speed drives

The Altivar ATV61 is the new variable speed drive for Variable Torque applications. Its advanced torque algorithm gives exceptional energy saving in pump and fan applications. Open communication protocols mean they can be used with all industrial and building communication networks, applications, and users.

**RELIABLE AND ROBUST:**
- 160% torque for 60 seconds
- Frequency range: 0-500Hz
- Voltage drops of up to 150%
- Built-in EMC filters
- Temperatures up to 50°C (without derating)
- PTC input
- “Power Removal” safety input prevents any unintentional starting of the motor, (comforms to machine standard EN 954-1 category 3 and the standard for electrical installations IEC/EN 61508 SIL2)

**SIMPLE:**
- Full text graphic terminal. This simplifies and enhances dialogue with its easy to read messages, graphics, navigation button, function keys for short-cuts, online help, etc
- Customisation of the parameters, display, screen, viewing, monitoring bar, etc. A “user” menu can also be created
- “Simply Start” menu enables quick start-up
- Bluetooth® wireless link with PowerSuite software

**FUNCTIONALITY:**
- 150 specialised functions
- Numerous digital and analogue inputs/outputs, PID loop
- Low / high flow
- Energy consumption/hours run calculated and available for use
- Modbus and CANopen communication built-in
- Fault management and memory

**EXPANSION:**
- Input/output option cards
- All industrial fieldbus communication options including Ethernet
- All major building communication buses including BACnet, Lonworks, Apogee FLN and Metasys N2
- Application cards including Controller inside, multi-pump and water-solutions

Panel mount versions supplied with display, IP54 mounted versions supplied with display and built-in Class A EMC filter.

A wide range of input EMC filters, AC & DC chokes for harmonics reduction and motor chokes for long cable runs are available. For more information visit rswww.com/automation. Available up to 30kW from stock, and up to 100kW through RS Extended Range.

**ENERGY SAVING TIPS**
- Select correct size of nozzle by measuring distance to work piece
- Reduce pressure loss in upstream piping.
- Use a regulator to ensure the right pressure at the nozzle
- Reduce pressure loss in upstream piping.
- Select correct size of nozzle by measuring distance to work piece
- Install a solenoid valve to reduce the blow time operation – from constant to intermittent

**ACTUATORS**
- The number of air operated cylinders will vary from machine to machine and plant to plant. But some manufacturers will use hundreds in their production facilities.

**How do you prevent actuator related wastage?**
- In many cases the air pressure needed to extend the cylinder is different to the air pressure required to retract the piston rod, yet the same pressure is used – therefore install a pressure regulator
- Don’t oversize the cylinder – select the stroke and bore size to suit your requirements
- The valve should be sized to meet the required operating conditions as a valves flow characteristics can affect the cylinders response time

**LEAKAGE – REDUCE THE ‘HISS’**
- How many times have you walked around a factory and heard the ever present background noise of air leakage?
- The hissing sound is actually the noise made by escaping air, which not only wastes energy, with a potentially harmful long term effect on the environment, but costs organisations substantial amounts of money.

**How do you prevent leaks?**
- Maintain good air quality in the system – contaminants or moisture cause increased leakage and equipment malfunction
- Take special care during assembly – use a tube cutter
- Stop air consumption during non operational times – use a solenoid valve to cut off air supply when it is not needed

**AIR BLOW**
- Many industries use air blow as part of their manufacturing processes. This can often account for up to 50% of the total compressed air consumed. An ‘open blow’ system where air is blown through the air outlet without the use of end fitted nozzles is recognised as being one of the biggest consumers of compressed air.

**How do you prevent wastage in air blow?**
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