

Date: 6/27/05

Subject: Guide to Control Selection to Obtain Satisfactory Risk on Machines for HVAC

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CC: Manufacturing Engineering Reference File

The following recommendations were developed by:

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Controls Required			
Risk Level	Directions Requiring Safety Controls	Vertical Cylinder Motion	Horizontal Cylinder Motion
>= R3B	1	Powered in 2 Directions 3 Position Center Open Solenoid Break w/Solenoid Herion XSZ Valve	Powered in 2 Directions 3 Position Center Open Solenoid
>= R3B	1	Special Cases Not Yet Identified: (2) 2 Position Solenoids or 3 Position Center Open Solenoid with a 2 Position Solenoid Note: These solution require engineering approval before use.	Powered in 1 Direction Special Case: Moving Rail Herion XSZ
>= R3B	2	Powered in 2 Directions 3 Position Center Open Solenoid Break w/Solenoid Herion XSZ Valve	Powered in 2 Directions 3 Position Center Open Solenoid Break w/Solenoid Herion XSZ Valve
<R3B	0	3 Position Center Blocked Solenoid	3 Position Center Open Solenoid