

ESD3 Series Safety Controller Selection Guide

Safety Outputs

All Bircher Reglomat ESD3 series controllers have redundant safety outputs to meet Safety Category 3. Safety outputs do not act independently. If both controller inputs are used and any connected sensor is actuated, both relays are simultaneously activated. In addition, both output relays must be used and wired in series to meet safety category 3.

The following table applies to the safety output logic of all ESD3 series controllers:

System operative (ie. machine running)	Sensor actuated (ie. person steps on mat)	Wire failure / no voltage (ie. broken wire or power outage)
Closed	Open	Open

Reset Type & Auxiliary Output (Status Relay)

The table below shows the voltage and reset type (automatic or external/manual) for each ESD3 version as well as the output logic of the auxiliary output. The auxiliary output is an additional output (aside from the redundant safety output relays) on the controller. Popular uses for the auxiliary output include connection to a warning light, buzzer, or a system to send a text message to the remote operator. Exact usage and behavior of the auxiliary output depends on the specific programming logic of your system.

Part Number	Voltage*	Reset	Auxiliary Output (status relay) Logic		
			System operative (ie. machine is running)	Sensor actuated (ie. person steps on mat)	Wire failure/no voltage (ie. broken wire/power outage)
ESD3-04-24ACDC	24 VAC/DC	Auto	Closed	Open	Open
ESD3-04-115AC	115 VAC	Auto	Closed	Open	Open
ESD3-04-230AC	230 VAC	Auto	Closed	Open	Open
ESD3-08-24ACDC	24 VAC/DC	Auto	Open	Closed	Closed
ESD3-03-24ACDC	24 VAC/DC	Auto	Closed	Closed	Open
ESD3-03-230AC	230 VAC	Auto	Closed	Closed	Open
ESD3-06-24ACDC	24 VAC/DC	External	Closed	Open	Open
ESD3-09-24ACDC	24 VAC/DC	External	Open	Closed	Closed
ESD3-05-24ACDC	24 VAC/DC	External	Closed	Closed	Open

Controllers listed in bold are standard in most applications.

*If the desired controller version is not available in the supply voltage required for your system, use item # **991003**: switched-mode power supply.

DIN rail mounted, Input = 100 - 240 VAC, Output = 24 VDC

