

SIRIUS 3RW Soft Starters

3RW44 for High-Feature Applications

3RW44

More information

Application examples for normal starting (CLASS 10)

Normal starting CLASS 10 (up to 20 s with 350% $I_{n\ motor}$, one start per hour)
The soft starter rating can be selected to be as high as the rating of the motor used

Application	Conveyor belts	Roller conveyors	Compressors	Small fans ¹⁾	Pumps	Hydraulic pumps
Starting parameters						
• Voltage ramp and current limiting						
- Starting voltage	%	70	60	50	30	30
- Starting time	s	10	10	10	10	10
- Current limit value		deactivated	deactivated	$4 \times I_M$	$4 \times I_M$	deactivated
• Torque ramp						
- Start torque		60	50	40	20	10
- Final torque		150	150	150	150	150
- Starting time		10	10	10	10	10
• Breakaway pulse						
		Deactivated (0 ms)	Deactivated (0 ms)	Deactivated (0 ms)	Deactivated (0 ms)	Deactivated (0 ms)
Ramp-down mode						
		Smooth ramp-down	Smooth ramp-down	Free ramp-down	Free ramp-down	Pump ramp-down
						Free ramp-down

Application examples for heavy starting (CLASS 20)

Heavy starting CLASS 20 (up to 40 s with 350% $I_{n\ motor}$, one start per hour)
The soft starter has to be selected one performance class higher than the motor used

Application	Stirrers	Centrifuges	Milling machines
Starting parameters			
• Voltage ramp and current limiting			
- Starting voltage	%	30	30
- Starting time	s	30	30
- Current limit value		$4 \times I_M$	$4 \times I_M$
• Torque ramp			
- Start torque		30	30
- Final torque		150	150
- Starting time		30	30
• Breakaway pulse			
		deactivated (0 ms)	deactivated (0 ms)
Ramp-down mode			
		Free ramp-down	Free ramp-down or DC braking

Application examples for very heavy starting (CLASS 30)

Very heavy starting CLASS 30 (up to 60 s with 350% $I_{n\ motor}$, one start per hour)
The soft starter has to be selected two performance classes higher than the motor used

Application	Large fans ²⁾	Mills	Breakers	Circular saws/bandsaws
Starting parameters				
• Voltage ramp and current limiting				
- Starting voltage	%	50	50	30
- Starting time	s	60	60	60
- Current limit value		$4 \times I_M$	$4 \times I_M$	$4 \times I_M$
• Torque ramp				
- Start torque		20	50	20
- Final torque		150	150	150
- Starting time		60	60	60
• Breakaway pulse				
		deactivated (0 ms)	80 %, 300 ms	deactivated (0 ms)
Ramp-down mode				
		Free ramp-down	Free ramp-down	Free ramp-down

¹⁾ The mass inertia of the fan is <10 times the mass inertia of the motor.

²⁾ The mass inertia of the fan is ≥ 10 times the mass inertia of the motor.

Note:

These tables present sample set values and device dimensions. They are intended only for the purposes of information and are not binding. The set values depend on the application in question and must be optimized during commissioning.

The soft starter dimensions should be checked where necessary with the help of Technical Assistance.