

Selection aid for soft starters

Application	SIRIUS 3RW30 Standard applications	SIRIUS 3RW40 Standard applications	SIRIUS 3RW44 High-feature applications
Normal starting (CLASS 10)			
Pumps	●	●	●
Pumps with special pump ramp-down (to prevent water hammer)			●
Heat pumps	●	●	●
Hydraulic pumps	○	●	●
Presses	○	●	●
Conveyor belts	○	●	●
Roller conveyors	○	●	●
Screw conveyors	○	●	●
Escalators		●	●
Piston compressors		●	●
Screw compressors		●	●
Small fans ¹⁾		●	●
Centrifugal blowers		●	●
Bow thrusters		●	●
Heavy starting (CLASS 20)			
Stirrer		○	●
Extruders		○	●
Lathes		○	●
Milling machines		○	●
Very heavy starting (CLASS 30)			
Large fans ²⁾			●
Circular saws/bandsaws			●
Centrifuges			●
Mills			●
Breakers			●

● recommended soft starter, ○ possible soft starter

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

Boundary conditions

Type	Maximum starting time s	Current limiting %	Starts per hour 1/h
Normal starting (CLASS 10)			
• 3RW30	3	300	20
• 3RW40/44	10	300	5
Heavy starting (CLASS 20)			
• 3RW40 2., 3RW40 3., 3RW40 4.	20	300	5
• 3RW40 5., 3RW40 7., 3RW44	40	350	1
Very heavy starting (CLASS 30)			
• 3RW44	60	350	1

The quoted motor ratings are only approximate values. The soft starter should always be designed on the basis of the motor current (rated operational current). In the event of deviating conditions, it may be necessary to choose a larger device.

Motor rating data are based on DIN 42973 (kW) and NEC 96/UL 508 (hp).

Benefits

- The advantages of the SIRIUS soft starters at a glance:
- Soft starting and smooth ramp-down (only soft starting available for 3RW30)
- Stepless starting
- Reduction of current peaks
- Avoidance of mains voltage fluctuations during starting
- Reduced load on the power supply network

- Reduction of the mechanical load in the operating mechanism
- Considerable space savings and reduced wiring compared with conventional starters
- Maintenance-free switching
- Very easy handling
- Fits perfectly in the SIRIUS modular system