

# SIRIUS 3RW Soft Starters

## General data

### Selection guide for soft starters



| Application  | SIRIUS 3RW30<br>Standard applications | SIRIUS 3RW40<br>Standard applications | SIRIUS 3RW44<br>High Feature applications |
|--|---------------------------------------|---------------------------------------|---|
| <b>Normal starting (CLASS 10)</b>                    |                                       |                                       |   |
| Pumps  | ●                                     | ●                                     | ●   |
| Pumps with special stop<br>(to prevent water hammer) |                                       |                                       | ●   |
| Heat pumps   | ●                                     | ●                                     | ●   |
| Hydraulic pumps                                      | ○                                     | ●                                     | ●   |
| Presses  | ○                                     | ●                                     | ●   |
| Conveyor belts                                       | ○                                     | ●                                     | ●   |
| Roller conveyors                                     | ○                                     | ●                                     | ●   |
| Screw conveyors                                      | ○                                     | ●                                     | ●   |
| Escalators   |                                       | ●                                     | ●   |
| Piston compressors                                   |                                       | ●                                     | ●   |
| Screw compressors                                    |                                       | ●                                     | ●   |
| Small fans <sup>1)</sup>                             |                                       | ●                                     | ●   |
| Centrifugal blowers                                  |                                       | ●                                     | ●   |
| Bow thrusters  |                                       | ●                                     | ●   |
| <b>Heavy starting (CLASS 20)</b>                     |                                       |                                       |   |
| Agitators  |                                       | ○                                     | ●   |
| Extruders  |                                       | ○                                     | ●   |
| Lathes   |                                       | ○                                     | ●   |
| Milling machines                                     |                                       | ○                                     | ●   |
| <b>Very heavy starting (CLASS 30)</b>                |                                       |                                       |   |
| Large fans <sup>2)</sup>                             |                                       |                                       | ●   |
| Circular saws/band saws                              |                                       |                                       | ●   |
| Centrifuges  |                                       |                                       | ●   |
| Mills  |                                       |                                       | ●   |
| Crushers   |                                       |                                       | ●   |

● recommended soft starter  
○ possible soft starter

<sup>1)</sup> The mass inertia of the fan is <10 x the mass inertia of the motor.

<sup>2)</sup> The mass inertia of the fan is ≥10 x the mass inertia of the motor.

### Boundary conditions

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

The motor ratings listed in the selection and ordering data are rough guide values. The configuration of the soft starter should always be based on the required rated operational current of the motor. The 3RW soft starters are designed for simple starting conditions. In the event of more exacting requirements, it may be necessary to choose a larger device. In some cases, however, the safety margins taken into account in the selection also permit the listed units to be used in boundary conditions which are slightly more demanding.

For detailed technical specifications for a configuration that is tailored exactly to the application, see the manuals:  
<http://support.automation.siemens.com/WW/view/en/38752095>  
<http://support.automation.siemens.com/WW/view/en/21772518>  
Siemens recommends the use of the Win-Soft Starter selection and simulation program.

Motor rating data in kW and hp are based on IEC 60947-4-1.