For more than 15 years the MICROMASTER 4 family of Variable Speed Drives have been used by industry to fulfil a wide range of applications. However, technology and market requirements do not stand still so MICROMASTER 4 will be replaced by our innovative SINAMICS drive family.

### From MICROMASTER to SINAMICS at a glance

<table>
<thead>
<tr>
<th>MICROMASTER 420</th>
<th>SINAMICS G120C</th>
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</thead>
<tbody>
<tr>
<td>MICROMASTER 420, the universal</td>
<td>The compact and versatile inverter with optimum functionality</td>
</tr>
<tr>
<td><strong>Power:</strong> 0.37 - 11kW</td>
<td><strong>Power:</strong> 0.55 - 132 kW</td>
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<td>The all-rounder</td>
<td>The modular inverter - space-saving, safe and rugged</td>
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### Benefits at a glance:

SINAMICS offers significant advantages regarding performance, functionality, and supports trends that were either not able to be realized with MICROMASTER 4, or only with considerable difficulty, including:

- Safety Integrated
- Integrated PROFINET, Profinet/Ethernet IP communication
- Integration into TIA Portal
- Coated boards for a more robust product
- Pluggable terminals
- Positioning functionality
- Energy recovery
- Push-through cooling concepts

*and many more...*
SINAMICS advantages - MICROMASTER 420

MM420

- 3AC 400V with/without communication
- G120C compact

- Extended power range
- Safety Integrated
- Graphic commissioning, Trace, TIA-Portal
- Parameter copy via SD-memory card
- Robust and dynamic control (U/f and vector)
- More detailed functions (internal)

V20 compact

- 1AC 200 3AV 400V without communication

- Extended power range
- Parameter copy via SD-memory card
- Parameter set without net voltage
- Parameter set via WEB Server

SINAMICS advantages - MICROMASTER 440

MM440

- Compact 3AC 400V
- G120C compact

- Parameter copy via SD-memory card
- Safety Integrated
- Graphic commissioning, Trace, TIA-Portal
- Integrated DC choke (starting > 18.5kW)
- Profinet communication
- More detailed functions (internal)
- Extended safety integrated functions
- Integrated energy recovery
- Integrated positioning functionality modules

G120 modular

- Modular 1/3AC 200V 3AC 400V 3AC 600V

CONTINUES
Migration support:

Learn more about Sinamics in practice - CLICK HERE

Read more on DesignSpark - CLICK HERE

Using the application matrix in the Motion Control Drives Catalog D31, select a converter that is suitable for your application from the SINAMICS drive system - CLICK HERE

Use our simple online Sinamics application selection tool - CLICK HERE

Cross-refer your Micromaster part number!
Enter your current MICROMASTER part number to obtain a recommendation for an alternative converter from the SINAMICS drive family - CLICK HERE

The benefits of Sinamics, find out more:

Click on the links below to find out more about the benefits of migrating to Sinamics.

Totally Integrated Automation - CLICK HERE

Safety Integrated - CLICK HERE

Energy Efficiency - CLICK HERE

PROFINET - CLICK HERE

1. Go to the www.siemens.com/tool-micromaster web site

2. Enter the order number of your MICROMASTER device (you can find this on the rating plate or in your last order) in the tool – the alternative article list is displayed.

3. Select the suggested SINAMICS converter to address your specific requirements – using the “Article number list” button, go directly to the Siemens Industry Mall and order your converter.

CONTINUES
Sinamics: the system based advantages

**You will become faster:**

- Simpler engineering with graphic commissioning, trace (oscilloscope function) and integration in the TIA Portal
  - Faster commissioning
  - Easier to diagnose and troubleshoot
  - Simpler to connect to the control system

- Parameters are cloned instead of programming
  - Simple data exchange using a memory card
  - Straightforward series commissioning
  - Simplified device replacement when service is required

- Commissioning Wizard with optimized user prompting
  - Intuitive operator panel
  - Optimized application settings, including
  - Simplified, error-free commissioning

- Wide range of hardware versions for various applications
  - Push-through mounting for simplified cabinet cooling
  - Modular design for reduced spare parts inventory (G120/G120P)
  - Distributed installation without electrical cabinet in an IP55 design (for G120P)

- Integrated DC link reactor
  - Lower costs and less space as an input reactor is not required
  - Allows longer motor cables to be used

- Standard USB interface to connect a PC

**You will become more flexible and perform better:**

- SINAMICS with Safety Integrated
  - Integrated and certified safety functions as standard without requiring any additional components
  - Safety-related communication via PROFIsafe
  - Depending on the converter, "Safe Torque Off (STO)" , "Safe Stop (SS1)" , "Safe Brake Control (SBC)" , "Safely Limited Speed (SLS)" , "Safe Speed Monitoring (SSM)" as well as "Safe Direction of Rotation (SDI)" can be used

- Simple connection to the automation system and improved control response
  - PROFIBUS or PROFINET fieldbus interface is already integrated in SINAMICS
  - Rugged open-loop and closed-loop control response for drives with low dynamic requirements – as well as for demanding drives with speed and torque control

- Consequential cost reduction
  - Integrated functionality, for example Safety Integrated, integrated DC link reactor, energysaving functions etc.

- High energy efficiency
  - ECO mode in partial load operation or integrated energy recovery without requiring any additional modules

- Positioning technology function integrated in the drive (EPos)
  - No additional positioning modules and encoder interfaces are required

**You will become safer and more efficient:**

- You will become faster:
- You will become more flexible and perform better:
- You will become safer and more efficient: