

**The Standard** when it comes to cost-effectiveness



simoreg  
DC-MASTER



**SIEMENS**



# Utilize practical cost-saving measures.

## Use hardware which reduces your costs

Depending on the particular application, often, DC drives are the most favourably-priced drive solution. They offer many benefits when it comes to reliability, operator-friendliness and performance. If you are looking for the optimum cost-effective DC drive solution, then you can depend on SIMOREG® DC-MASTER – drive converters with the highest output and integrated intelligence. When it comes down to it, they have the unique features of Siemens products: Totally Integrated Automation. This means that you benefit from the fact that they are completely integrated into the Siemens system environment: when engineering/configuring and programming, with the common database and the integrated communications – and you can save money in more than just one way!

### A complete family: SIMOREG DC-MASTER

The SIMOREG DC-MASTER family is available in all versions – for an output range from 6.3 kW to 1900 kW, for armature and field supply, for single- and four-quadrant drives. And it offers high dynamic performance: its current and torque rise times are significantly less than 10 ms. This means that you can select the optimum version for your particular application.

And here are some of the highlights of the SIMOREG DC-MASTER:

- It can be fully integrated into any automation environment
- It can be expanded in a modular fashion – from the standard application up to high-performance solutions
- It has an extended output range up to 12,000 A
- Rated supply voltages from 400 V to 830 V
- Short and fast commissioning as all of the settings are fully electronically parameterized
- Unified operator control philosophy





### **Retrofitting to rejuvenate plants/systems**

You can rejuvenate older DC solutions using the SIMOREG CM unit. The Control Module permits a favourably-priced and efficient retrofit solution – no matter whether retrofitting or upgrading.

### **Siemens is completely international – that's the norm**

For us, it goes without saying that our products are internationally certified. SIMOREG products are fully compliant with the most important standards and regulations as standard – from the EN European Standard up to IEC/VDE. CE marking, UL, cUL and CSA certification make the SIMOREG DC-MASTER a real global player.

### **Motors – the muscles of the DC system**

Our SIMOREG DC-MASTER together with the range of DC motors form the ideal team. Compact Siemens DC motors prove themselves worldwide, everywhere where favourably-priced drive systems and the highest degree of availability are demanded. They are rugged and have a long lifetime and a high power density of 0.7 kW up to 1,550 kW.

Whether self- or separately ventilated, with or without fan, in degree of protection IP 23, IP 54 or IP 55: the modular design permits any combination. But not only that: our DC motors can be integrated into the automation environment via the motor interface – for ongoing monitoring, precise diagnostics, effective service and maintenance.





# Better to save where it really makes sense: **your engineering costs**

The Siemens SIMOREG product family distinguishes itself by the simple and unified operator control philosophy. Programming know-how is not required, all of the settings are made completely electronically. If you are interested in user-friendly commissioning, a menu-prompted start-up via a PC is available. Furthermore, SIMOREG DC-MASTER, with BICO technology, has an increased software functionality which significantly reduces the engineering time and costs. The benefits: master and bus systems are relieved, and in many cases a separate PLC is not required; the open- and closed-loop control are realized directly in the drive. You really can depend on the SIMOREG DC-MASTER!

## **Siemens OP – and operator control is simple and straightforward**

The optional user-friendly OP1S operator panel guarantees fast and straightforward operator control. For example, when up-reading and downloading parameter sets online and offline.

The four-line plain text display with 16 characters is clear and functional. The OP1S can be universally used for all SIMOREG DC-MASTER and SIMOVERT MASTERDRIVES drive converters.

## **Innovative technology for applications with a high level of availability**

Today, you have access to a new interface to configure parallel circuits for redundant drive systems. The complete system will still function even if one or several drives fail.

## **Pre-configuration for short commissioning**

All SIMOREG DC-MASTER units are already pre-configured in the factory. The equipment-specific parameters no longer have to be set, and the adaptation to the particular application (e.g. the load resistor for optimum current actual values or the terminating resistor for perfect communications) is also realized fully electronically using parameters. This means that they can be immediately used when service is required.

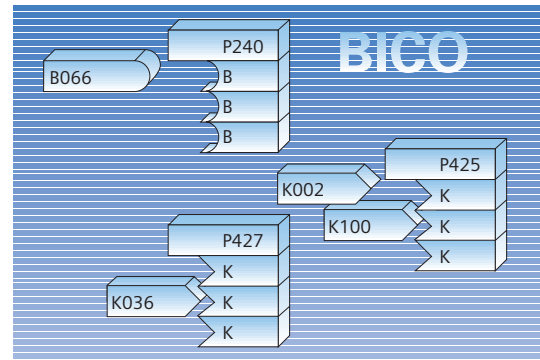
SIMOREG DC-MASTER – the more cost-effective solution even before it goes into operation.





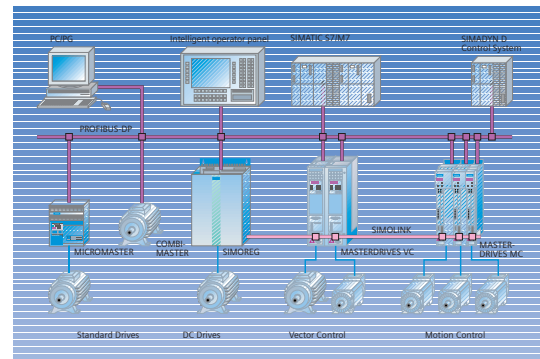
## Drive ES

You can now implement Totally Integrated Automation for your drives using Drive ES. Drive ES is extremely simple to handle: the software operates with the operator interface of the SIMATIC Manager – known worldwide. The supplementary Drive ES Graphic and Drive ES SIMATIC programs provide other convincing benefits.



## Communications at every level

SIMOREG DC-MASTER uses the open, standardized PROFIBUS-DP fieldbus system, the direct coupling to the PC via the RS232 interface, and peer-to-peer communications via the RS485 interface. PROFIBUS-DP is the central communications medium for networking in an automation environment.



## Programmed for low costs: BICO software

SIMOREG DC-MASTER can be adapted to every application without requiring any programming using the user-oriented BICO technology. Closed-loop drive control and technology for various applications are parameterized in one operation – but your know-how still remains protected.





## And you will also save time and costs – and avoid frustration – **with Siemens Global Service**

It is important that you can depend on a widespread service network which, when it comes to the crunch, offers you a full range of professional services.

Siemens has a finely-meshed quality assurance – that is guaranteed. This starts off in the development phase and extends up to after-sales service. A service center, which is manned around the clock, as well as our fast logistics guarantee that your SIMOREG DC-MASTER always runs smoothly.







### **The optimum fit for every application**

SIMOREG DC-MASTER distinguish themselves due to the highest operational reliability and availability – worldwide in the widest range of industry sectors: Whether as main drives for printing or plastic machines, as traversing or hoisting drives in the crane industry, as lift or cable railway drives, for applications in the rubber and paper industries, as shears drives in the steel industry, as rolling mill drives, winder drives, cross-cutters or profile machines and dynamometers for engines, turbines or gearbox test stands.

### **There for you worldwide**

As part of our worldwide service network, we offer you a sophisticated logistics concept for short delivery times, fast handling and prompt service. With approximately 180 service support centers in more than 110 countries, we can be reached around the clock for troubleshooting, and we also offer individual services associated with our products and systems. For us, on-call service means that we can be reached 24 hours a day for troubleshooting, but also individual services associated with all of our products and systems. As part of our on-call service, as professional technical service provider, we offer technical know-how, logistical services as well as all of the parts and components which are required for fast, straightforward service calls.

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### **Well trained for all situations**

You are well equipped for every situation with our comprehensive training courses for automation and drive technology. From the basics up to highly complex technological subjects – our courses allow you to tap into the optimum know-how for your application.

### **Logistics at its best**

You can simply and quickly order our products through the Internet – and at any time: you will find all of our products and know-how associated with automation technology under [mall.siemens.de](http://mall.siemens.de). Our sophisticated logistics concept guarantees the shortest delivery times and straightforward contract administration – so that you can quickly profit from our products.

### **Can be reached around the globe**

SIMOREG-DC MASTER can always be accessed via GSM telephones, ISDN cables, analogue modems and via the Internet. Highest availability is guaranteed by the remote in-depth diagnostic capabilities.





**Your Siemens partner worldwide**  
can be found in the Internet under  
the following address:

**<http://www.siemens.com/automation/partner>**

**Siemens AG**

Automation and Drives

Large Drives

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