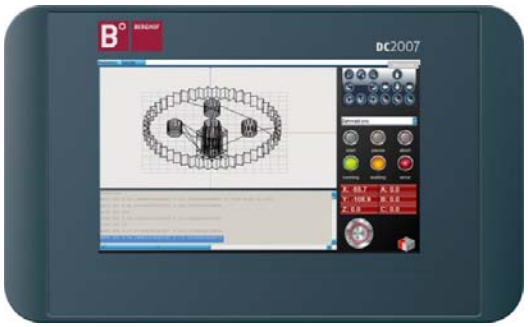
DC2007 Dialog Controller
High-performance display controller

The new compact DC2007 display controller with 7" display is designed for short PLC cycle times with hard real-time. This is made possible with a powerful, scalable 800 MHz Arm® CPU with a Cortex™-A9 core. The display controller is also furnished with the current CODESYS V3 programming language. In combination with the CODESYS SoftMotion package technologically sophisticated multi-axis drive applications can be exploited. An extensive range of communication interfaces is integrated in both display controllers: Ethernet, EtherCAT, CAN Bus, RS232 and RS485. Additional protocols such as PROFINET, BACnet and Modbus are also available. Digital and analogue I/Os as well as optional expansion cards complement the functions. The touch-screen unit is furnished either with a continuous CLEAN protective membrane or with an easy-use capacitive multitouch glass front.



- → Short cycle and reaction times
- → CODESYS V3 throughout (programming, visualisation, communication and SoftMotion)
- → 7" LED display with resistive touch (in preparation glass front and capacitive multitouch)
- → EtherCAT master, CANopen master
- → Serial interfaces
- → Onboard digital and analogue I/Os

Improved performance at reduced cost	The 800 MHz Arm® CPU with Cortex™ A9 core brings the efficiency of PCs to small display controllers. This means substantial saving potential (e.g. due to the fact that expensive additional components are not required). The scalable single core CPU may be deployed as a pin-compatible dual or quad core version in the DC2007.
Comprehensive communication options	EtherCAT and CANopen masters are the most important interfaces for field communication. Powerful and modern EtherCAT I/O and drive components can be combined with tried and trusted CANopen devices. The Ethernet interface remains in the foreground when the controller communicates with the control level via TCP/IP. For industrial plants the PROFINET device library is available. In building technology the controller can also communicate as BACnet controller. Serial interfaces round off the range of communication options.
Storage media and onboard I/Os	The gathering, processing and the storing of data using the Micro SD slot and USB interface belong to the most essential PLC controller functions. The unit has four digital inputs and four digital outputs onboard. These permits the direct control of (for example) switches and signal lamps and are complemented by four analogue inputs.

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Data	
Description / Article no.	**DC2007 / 27005900**
Display diagonals /resolution	7" display / 400 x 240 (WQVGA)
Touch operation	Resistive
Colour resolution	18 bit (3 x 6 RGB)
Dimensions	224x152x40 [mm]
Mounting	Integrated holding clips (IP20, with turning bolt IP65)
Certification	CE in compliance with EN 61131-2 / cUL (61010-2-201) product norm; in preparation
Development environment	CODESYS V3 (IEC61131-3)
CPU	800 MHz ARM® CPU with Cortex™ A9 single core (optional: dual or quad core)
RAM / Flash memory / Retain storage	256 MB RAM / 256 MB Flash / 100 kB FRAM (not including buffer battery)
Communication interfaces	1 x Ethernet, 10/100 base T1, RJ45 (protocols: e.g. TCPI/IP, Modbus TCP, BACnet, PROFINET)
	1 x EtherCAT / RJ45 (EtherCAT master)
	1 x CAN Bus (protocols: CAN bus and / or CANopen master)
	1 x RS485 (protocols: Modbus RTU)
	1 x RS232
	(CAN Bus, RS485, RS232 interface combined Potential isolation with optocoupler)
Further functions and additional storage	1 x USB 2.0 host / USB plug WR-COM Port A
	1 x Micro SD card slot
	1 x onboard expansion e.g. for communication card or additional I/Os
	1 x real-time clock, battery buffered
Onboard I/Os	4 x digital In
	4 x digital Out (0.5 A)
	2 x Analog In (-10..+10V, PT100/PT1000 (2-wire)) 2 x Analog In (-10..+10V, can use as return conductor PT100/1000 3-wire)
Supply voltage	+24 VDC (-15% / +20%) SELV max. AC voltage component 5% with reverse voltage protection
Current consumption	Typ. 0.3 A, max. 3.0 A at +24 VDC fuse protection according to I/O load
Operating conditions	Ambient temperature: 0 °C to 55 °C (with adherence to the installation instructions)
	Relative humidity: max. 85 %, non-condensing
Transport / storage	-20 °C to +70 °C
	Relative humidity: max. 85 %, non-condensing

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