DCS 500
DC Drive for regenerative or non-regenerative operation
25 to 5200 A DC
230 to 1000 V AC 3-phase

MODERN DESIGN

DEMANDING APPLICATIONS

PROCESS FOCUSED

Standard Features
- Design and commissioning tools
- Monitoring functions
- Communication via databus
- Human-machine interface
- More than 300 additional functions blocks programmable under Windows
- Graphical Application Designer
- Plain text display
- FOR HIGH POWER

New A6 Power Tower up to 3000 A - 2.6 MW
2- and 4-quadrant operation
Power spectrum of DCS 500 Converters

### DCS 501 non-regenerative Converters (2-O)

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<th>at supply Voltage [V AC]</th>
<th>Frame Size</th>
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### DCS 502 regenerative Converters (4-Q)

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### Technical Data of DCS 500 Converters

#### Converter Ratings
- Rated supply voltage: 230 to 1000 V AC ±10%, 3-ph
- Rated frequency: 50 Hz or 60 Hz
- Dyn. frequency range: 50 Hz: ±5 Hz; 60 Hz: ± 5 Hz
- DC current range: 25...5200 A DC

#### Operating Conditions:
- Ambient temperature: 0 to +40°C (32...104°F)
- Storage temperature: -40 to +55°C (-40...130°F)
- Relative humidity: 5 to 95%, no condensation
- Degree of protection: IP 00

#### Dimensions

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#### Field supply
- up to 16 A incorporated in the drive module (not for A6 and A7-converters)
- 25...520 A external

#### I/O- connections
- 8 Digital Inputs
- 8 Digital Outputs
- 4 Analogue Inputs
- 3 Analogue Outputs
- 1 Tachogenerator input
- 1 Encoder input
- ±10 V Ref. voltage
- Multiple fieldbus adapters avail.

#### Protection
- Speed feedback error
- Overtemperature
- Overload
- Overspeed
- Zero speed
- Armature overcurrent
- Armature ripple
- Armature overvoltage
- Minimum field current
- Field overcurrent
- Motor stalled
- Mains over- and undervoltage
- Auxiliary undervoltage
- Incorrect mains phase sequence

#### Tools

#### GAD
- PC-based application tool for:
  - Drawing
  - Creating Software functions
  - Documentation

#### Serial Communication
- Profbus
- CS 31
- ModBus
- ModBus+
- CANopen
- ControlNet
- DeviceNet

DCS 500 converters are available as modules or in cabinets as DCA 500 Enclosed converters.

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