

DCS 400

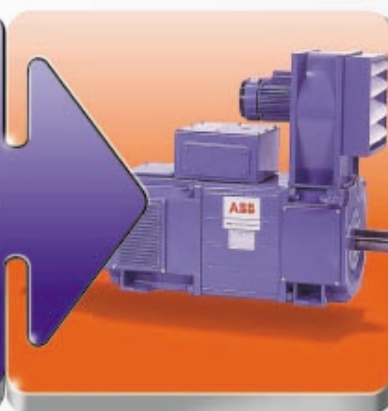
DC Drive for regenerative
or non-regenerative operation
20 to 1000 A DC
230 to 500 V AC 3-phase

Advanced version
more Power
higher Performance

COMPACT SIZE



EASY INSTALLATION



FAST COMMISSIONING



Standard Features

- IGBT-based field supply - includes fuses and choke
- Speed feedback via tacho-generator, encoder or EMF
- Multiple protection functions
- Remote / Local control logic
- Automatic field weakening
- Configurable application macros
- Self-guided commissioning
- Autotuning for armature, field and speed controller
- Rated highly for EASE OF USE

Overload capability: 150%

DCS 401 non-regenerative Converters			
Converter type	Continuous Armature Current I_{DC} [A]	Field Current I_F [A]	Module frame size
DCS401.0020	20	0.1...4	A1
DCS401.0045	45	0.1...6	
DCS401.0065	65		
DCS401.0090	90		
DCS401.0125	125		
DCS401.0180	180	0.3...16	A2
DCS401.0230	230		
DCS401.0315	315	0.3...16	A3
DCS401.0405	405		
DCS401.0500	500		
DCS401.0610	610	0.3...20	A4
DCS401.0740	740		
DCS401.0900	900		

DCS 402 regenerative Converters			
Converter type	Continuous Armature Current I_{DC} [A]	Field Current I_F [A]	Module frame size
DCS402.0025	25	0.1...4	A1
DCS402.0050	50	0.1...6	
DCS402.0075	75		
DCS402.0100	100		
DCS402.0140	140		
DCS402.0200	200	0.3...16	A2
DCS402.0260	260		
DCS402.0350	350	0.3...16	A3
DCS402.0450	450		
DCS402.0550	550		
DCS402.0680	680	0.3...20	A4
DCS402.0820	820		
DCS402.1000	1000		

Dimensions						Module frame size
mm			inches			
h	d	w	h	d	w	
310	200	270	12.50	8.00	10.75	A1
310	270	270	15.75	10.50	10.75	A2
400	310	270	15.75	12.50	10.75	A3
580	345	270	23.00	13.75	10.75	A4

Converter Ratings

Rated supply voltage: 230 to 500 V AC $\pm 10\%$, 3-ph
 Rated frequency: 50 Hz or 60 Hz
 Dyn. frequency range: 50 Hz: ± 5 Hz; 60 Hz: ± 5 Hz
 DC current: 20...1000 A DC
 Field output voltage: 50...440 V
 Operating Limits:
 Ambient temperature: +5 to +40°C (-40...104°F)
 Storage temperature: -40 to +55°C (-40...130°F)
 Relative humidity: 5 to 95%, no condensation
 Degree of protection: IP 00

I/O- connections

- 8 Digital Inputs
 - 5 Digital Outputs
 - 2 Analogue Inputs ①
 - 2 Analogue Outputs ①
 - 1 Tachogenerator input ①
 - 1 Encoder input
 - ± 10 V Ref. voltage
 - Multiple fieldbus adapters avail.
- ① Accuracy 0.05%, Resolution 12 bit incl. sign

Protection

- Speed feedback loss
- Overtemperature
- Overload
- Overspeed
- Armature overcurrent
- Armature overvoltage
- Armature current ripple
- Minimum field current
- Maximum field current
- Motor stalled

Drive Window Light

- PC-based commissioning tool for:
- Online Start-up
 - Diagnosis
 - Maintenance
 - Troubleshooting

DCS 400 Panel

- Removable control and display panel with plain text display in multiple languages for:
- Reference and feedback display
 - Drive control
 - Parameter programming
 - Fault detection
 - Lockable operation



* UL under preparation



ABB Automation Products GmbH

Postfach 1180
 D-68619 Lampertheim, Germany
 Telefon +49(0) 62 06 5 03-0
 Telefax +49(0) 62 06 5 03-6 09
 www.abb.com/dc



140R0201A0340000