Canadian Pricebook

ABB Low Voltage Drives
DC Drives
DCS800

Power and productivity
for a better world™

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Specifications and pricing subject to change without notice

Canada Headquarters, Low Voltage Drives
ABB Inc.
Low Voltage Drives
2117, 32nd Avenue
Lachine, Quebec H8T 3J1

Tel(Drives): (800) 215-3006
Tel(General): (800) 567-0283
Fax: (514) 420-3137
Internet: http://www.abb.ca/drives

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Table of Contents

General Terms and Conditions of Sale....4
Overview and Guidelines for use of Price Pages....8
Product Features....9
Product Specifications....10
Product Compliance and Certifications....13
Hardware Description....14
Definition of NEMA and IEC environmental ratings....15
Basic Type Code information....16
Notes for Product Selection....17
240Vdc Ratings....18
500Vdc Ratings....19
600Vdc Ratings....21
700Vdc Ratings....22
Rebuild Kits DCS800-R....23
Component Sizing Information....24
Supporting Installation Hardware....26
Regulated Field Supplies....31
Input/Output Options....32
FieldBus Communication Options....35
Control Panel & Panel Accessories....36
Fiber Optic Cables and Branching Units....36
Driveware Options....37
Recommended Spare Parts....38
Product Dimensions....39

Symbols used

I_{2Nd} = Normal Duty Current
P_{Nd} = Normal Duty Power (HP)
I_{2Sd} = Standard Duty Current
P_{Sd} = Standard Duty Power (HP)
I_{2Hd} = Heavy Duty Current
P_{Hd} = Heavy Duty Power (HP)

TERMS AND CONDITIONS OF SALE

ABB Inc.
2117, 32e avenue
Lachine
QC
H8T 3J1
T: +1 514 420 3100
F: +1 514 420 3137

These terms and conditions of sale shall apply to all services, equipment, goods or products manufactured, distributed or sold by ABB Inc. (“Seller”) unless otherwise agreed in writing by the Seller and the Purchaser.

1. ACCEPTANCE OF CONDITIONS
The Purchaser, upon receipt of the Seller's acknowledgement of an order, or upon receipt in whole or in part of the shipment sold under an order, or upon payment in whole or in part for the equipment, workmanship, goods, products, and the license of software, related materials supplied hereunder, ("Equipment") or rendition of services ("Services") or both shall be deemed an unconditional acceptance by Purchaser of these terms and conditions. Any deletions from, alterations or modifications or additions to the terms and conditions of this order, shall not be binding unless they are expressed in writing and signed by both the Seller and the Purchaser's authorized representatives.
2. DELIVERY
2.1 Equipment sold hereunder unless agreed otherwise shall be delivered Ex Works (… named place) as per Incoterms 2000, depending on specified means of transportation. Delivery dates specified in any quote are approximate, unless specified as binding. Delivery performance is dependent upon prompt receipt from the Purchaser of all specifications, final approved drawings and any other details essential to the proper execution of the Purchaser's order.
2.2 Upon notification of readiness of Equipment by Seller to Purchaser, Purchaser shall promptly take delivery of the Equipment. Purchaser's delay to take delivery of the Equipment shall result in Purchaser paying storage, maintenance and associated charges and Seller shall invoice Purchaser as if shipment or other performance had been made as originally scheduled. Such storage, handling maintenance shall be performed at Purchaser's cost and risk. Failure of Purchaser to take prompt delivery shall result in payment terms tied to such delivery becoming due immediately and payable. The Warranty Period hereinafter defined will begin upon such notification of readiness.
2.3 Unless otherwise agreed upon between the parties, Purchaser shall have the sole responsibility of choosing the carrier and routing from Seller's manufacturing facilities to the final destination.
3. FORCE MAJEURE
The Seller shall not be liable for delays in the execution of its obligations due to causes beyond its reasonable control including but not limited to acts of God, acts of the Purchaser, fires, strikes, labour disturbances, floods, epidemics, quarantine restrictions, war, insurrection or riot, acts of a civil or military authority, compliance with priority orders or preference ratings issued by any Government, acts of Government authorities with respect with to revocation of export or reexport permits/licenses, freight embargoes, car shortages, wrecks or delays in transportation, unusually severe weather, or inability to obtain necessary labour, materials or manufacturing facilities or supplies or delays of sub-contractors. In the event of any such delay, the date of shipment will be extended for a minimum of time equal to the period of the delay. The contract of sale will in no event be subject to cancellation by the Purchaser, due either to delay in delivery or to any other cause, without the prior written consent of the Seller. In the case of cancellation, cancellation charges judged adequate by Seller shall apply.
4. WARRANTIES
4.1 The Seller warrants that during the warranty period hereinafter defined the Equipment sold shall be free from defects in material and workmanship and shall be of the kind and quality designated or described in the specifications.
4.2 If within eighteen (18) months from the date of notification of readiness of shipment or twelve (12) months from date of first use by Purchaser or the end user, whichever date occurs first, the Equipment does not meet the warranties specified above, the Seller agrees to correct any defect, at its option, either by repairing any defective parts, or by making available Ex Works, repaired or replacement parts, provided the Purchaser notifies the Seller promptly of any such defects.
4.3 The cost of removal of the defective Equipment from its related system, site and/or ancillary equipment, and the cost of its reinstallation in such system, site and/or ancillary equipment, including all transportation costs to and from Seller's plant or repair shop, shall be borne exclusively by the Purchaser. The Purchaser shall not return or dispose of any Equipment or part thereof with respect to which it intends to make a claim under the foregoing warranty, without the Seller's express prior written authorization.
4.4 Seller warrants that it shall repair or replace, at its option and Ex Works, software products which fail in manner which significantly and adversely affects operating performance to conform to Seller's published software product description applicable to the specific software version as delivered to the Purchaser, provided Seller receives written notification of any such failure to conform within ninety (90) days from the readiness of shipment software. Seller does not warrant that the functions contained in the software will operate in combinations which may be selected for use by the Purchaser, or that the software products are free from errors.
4.5 Where Seller supplies Services, Seller warrants that it shall reperform Services which are found to have been performed other than in a professional manner and in accordance with sound, generally accepted and professional practices in effect at the time of performance, provided Seller receives written notification of the defect within thirty (30) days from date of such performance.
4.6 Any repair, replacement or re-performance pursuant to the foregoing warranties pursuant hereto shall not renew or extend the warranties. The foregoing warranties shall be void to any deficiency or defect resulting from, the Equipment being improperly installed or cared for, operated under abnormal conditions or contrary to specifications or instructions of Seller, normal wear and tear, modifications or alterations made by Purchaser or a third party without Seller's consent.
4.7 THE EXPRESS WARRANTIES SET FORTH IN THIS ARTICLE ARE EXCLUSIVE AND NO OTHER WARRANTIES OF ANY KIND, WHETHER STATUTORY, ORAL, WRITTEN, EXPRESS OR IMPLIED, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, SHALL APPLY. THE PURCHASER'S EXCLUSIVE REMEDIES AND THE SELLER'S ONLY OBLIGATIONS ARISING OUT OF OR IN CONNECTION WITH DEFECTIVE EQUIPMENT OR SERVICES OR BOTH, WHETHER BASED ON WARRANTY, CONTRACT, TORT (INCLUDING NEGLIGENCE) OR OTHERWISE, SHALL BE THOSE STATED HEREIN.
5. INSURANCE, CHARGES & PROPER CARE
So long as sums shall remain owing by Purchaser to Seller hereunder, Purchaser shall exercise proper care in the possession and use of the Equipment and shall keep same at all times in good repair and free of all liens, options, taxes, charges, pledges, privileges and encumbrances. Purchaser shall insure Equipment against loss, destruction or theft for the full value of the replacement purchase price of the Equipment.
6. TITLE & RISK
6.1 The title to and property in the Equipment sold hereunder and any substitutions or additions thereto and the right to possession thereof, whether attached to realty or otherwise, shall pass from the Seller to the Purchaser when the full purchase price of the Equipment has been paid. Upon failure to make any payment as herein provided, the whole purchase price and any note or security given on account therefore shall forthwith become due

TERMS AND CONDITIONS OF SALE - Continued

and payable and the Seller may immediately enter the premises where the Equipment is located and take possession of and remove the same as its personal property, and may retain any or all partial payments already received as a rental charge for the use of the Equipment without affecting any further or other claims which Seller may have against the Purchaser.
6.2 Equipment sold hereunder shall be at the Purchaser's risk on delivery to it as specified in Article 2 above, and the loss or destruction of all or part of said Equipment shall not release Purchaser from any obligations of payment hereunder.
7. LIMITATION OF LIABILITY
7.1 Modifications or adjustments to Purchaser's processes or equipment which is made by Purchaser upon the good faith recommendations of Seller shall be made at Purchaser's risk. In no event shall Seller be liable for conditions of Purchaser's site.
7.2 The liability of the Seller, its agents, directors, officers, subcontractors, suppliers, for all claims, actions, judgements, expenses related to or resulting from any loss or damage arising out of performance or non-performance of obligations in connection with the design, manufacture, sale, delivery, storage, of the Equipment shall in no case exceed Seller's net unit price Ex Works of such Equipment or part thereof involved in a claim. Where Seller sells Services, the liability of the Seller, its agents, directors, officers, employees, subcontractors, suppliers for all claims, actions, judgment, expenses related to or resulting from any loss or damage arising out of performance or non-performance of Services, shall in no case exceed in the aggregate the amount paid by the Purchaser to Seller for the Services performed under the order.
7.3 No such claim shall be asserted against the Seller, its agents, directors, officers, employees, subcontractors, suppliers, unless the injury, loss or damage giving rise to the claim is sustained prior to the expiration of the period of warranty herein and no suit or action thereon shall be instituted or maintained unless it is filed in a court of competent jurisdiction within one year after the date the cause of action accrues.
7.4 In no event shall Seller be liable for loss of profit and for any indirect, special, incidental or consequential damages of any nature or kind including but not limited to delays, loss of revenue, loss of use, loss of data, loss of production, costs of capital or costs of replacement power, even if Seller has been advised of the possibility of such damages.
7.5 The limitations set forth in this Article 7 shall apply and be effective with respect to any claim, cause of action, or legal theory whatsoever including, but not limited to, contract or warranty (including performance guarantees) or breach thereof, indemnity, tort (including negligence), strict liability.
8. PRICES & PAYMENT TERMS
8.1 Prices are valid thirty (30) days from date of quotation by Seller. Price adjustment clauses, if applicable, will be stated at the time of quotation and a copy will be included as part of these Terms and Conditions, in an Appendix thereto.
8.2 All prices are Ex Works unless otherwise specified in writing by Seller. Prices quoted do not include federal, provincial, local or any other taxes, charges, levies and duties, and if same are applicable these shall be promptly paid by the Purchaser. Purchaser shall reimburse Seller any late payment penalty.
8.3 In cases where Seller's price includes taxes, charges, levies and duties, in the event of any changes in any taxes, charges, levies or duties, imposed under any federal, provincial municipal or local legislation or authority, after the date of submitting of Seller's tender or quotation and applicable to Equipment sold hereunder, the Seller's sale price shall be adjusted to reflect such increases or decreases. Any penalty or interest charge levied against the Seller due to the Purchaser's late payment shall be to Purchaser's account.
8.4 Price information published in catalogues, bulletins or price lists is not a definite quotation or offer to sell.
8.5 Seller reserves the right to adjust prices on any order for any alterations or changes authorized or made by the Purchaser subsequent to acceptance of the order.
8.6 All prices are in Canadian Dollars unless otherwise specified.
8.7 Payment shall be made direct to Seller's office in accordance with the conditions stated in the order. Unless otherwise specified, payment shall be due net thirty (30) days from the date of sending of the relevant invoice by the Seller, and time is of the essence in Purchaser's execution of any payment hereunder. Any late payment shall bear interest at the rate set by the Seller from time to time which is one and a half percent (1.5%) per month, eighteen percent per annum (18%), at the date of issue, calculated and due on a monthly basis.
8.8 Where Seller supplies Services, in the event of a request by Purchaser for additional specialist services, the services will be invoiced at the current per diem per person rate for those services. Associated travel and living costs will be added to those invoices. For extended hours (beyond 8 hours/daily), the rate for specialist services will change to an hourly rate person at one and a half (1.5) times the equivalent rate based on the per diem. Similarly, weekend and holiday requirements will be charged at two (2) times the hourly rate. All prices/rates quoted are valid for ninety (90) days from proposal date. Otherwise, prices are subject to change without notice. Travel and lodging will be billed at actual cost plus a ten percent (10%) administration charge.
9. PATENT INFRINGEMENT
The Seller will, at Seller's expense, defend any suit which may be brought against the Purchaser based on a claim that any Equipment or part furnished under contract constitutes an infringement of any letter patent (provided the Seller is notified promptly of such suit and copies of all papers therein are promptly delivered to Seller) and the Seller agrees to pay all judgments and costs recovered for any reasonable costs or expenses incurred in the defence of any such claim or suits. In case said Equipment or any part is held to constitute infringement and the use of the Equipment or part is enjoined, the Seller shall, at its own expense, either procure for the Purchaser the right to continue using the Equipment or part; or replace with non-infringing Equipment; or modify it so that it becomes non-infringing; or remove the Equipment and refund the purchase price and the transportation and installation costs thereof. The foregoing states the entire liability of the Seller for patent infringement by the Equipment or any part thereof. This provision shall not apply to any equipment or part which is manufactured by Seller or third parties, to Purchaser's design or specifications. The Seller assumes no liability for any such infringement and the Purchaser agrees to defend any suit against Seller for alleged infringement arising through the manufacture and sale of Equipment made to Purchaser's design or specifications and to indemnify and hold Seller harmless from any liability arising from any such infringement.
10. DAMAGES & LOSS CLAIMS
10.1 Seller shall carefully pack all Equipment sold hereunder and the Seller shall assume no responsibility for damage after having received "in good order" receipts from the carrier at Seller's works.
10.2 All claims for loss, damage and delay in transit are to be transacted by the consignee directly with the carrier. Claims for shortages or incorrect equipment must be made in writing to the Seller within fifteen (15) days after receipt of the shipment. Failure to give such notice shall constitute unqualified acceptance and a waiver by the Purchaser of all claims for shortages or incorrect equipment.
11. CHANGES
Seller reserves the right to make changes in design or to add any improvement on Equipment or other goods at any time, without incurring any obligations to install same on equipment or goods previously purchased or leased. Any changes caused or requested by Purchaser affecting the Equipment or otherwise affecting the scope of work must be accepted by Seller and resulting adjustment to price, schedule, or both, mutually agreed in writing.
12. TESTING & ACCEPTANCE OF GOODS
12.1 Testing of the Equipment before shipment is carried out in accordance with Seller's test procedures and at Seller's cost. Additional tests shall be agreed upon specifically between Seller and Purchaser and shall be charged to the Purchaser.
12.2 The Purchaser shall examine the Equipment upon taking possession of same and shall inform Seller immediately in

TERMS AND CONDITIONS OF SALE - Continued

writing of all defects and deficiencies for which Seller is responsible. If Purchaser omits to so notify Seller within fifteen (15) days of Purchaser's possession of the Equipment, same shall be deemed to have been accepted.
12.3 Acceptance tests are carried out only if they have been agreed upon in writing by the Seller. As far as circumstances allow, such tests will be carried out in Seller's factory. If, for reasons beyond Seller's control, the acceptance tests cannot be carried out within the specified time, the qualities to be determined by these tests shall be deemed proved.
12.4 If it is found from one of the aforementioned tests that the Equipment does not fulfil the terms of the order, the Purchaser shall make available to Seller suitable opportunity to remedy any deficiency.
12.5 The Purchaser shall have no other rights than the rights outlined above, in case of delivery of deficient equipment.
13. TECHNICAL DOCUMENTS
13.1 Technical documents, such as drawings, descriptions, illustrations and the like, and all weight data, shall serve as an approximate indication only, provided they have not been expressly specified as binding. Seller reserves the right to make any alterations considered necessary.
13.2 All plans, drawings, technical specifications, documents, software, microfilm, data, or proprietary information relating to the Equipment sold, distributed or manufactured hereunder shall be treated in confidence by the Purchaser, who shall ensure the confidentiality thereof. They remain Seller's exclusive property and may be neither copied nor reproduced nor communicated to a third party in any way whatever nor used for manufacture of the Equipment, or parts thereof. They may be used only for operation and maintenance of the Equipment, under terms and conditions specified by the Seller.
13.3 All documents submitted with tenders that do not result in an order shall be returned to Seller on request.
14. SOFTWARE
14.1 Where Seller supplies a system program, Seller hereby grants to Purchaser a revocable non-transferable and non-exclusive license to use the computer software packages, related materials, and the intellectual property contained therein, furnished hereunder (collectively, the “Program”) for the limited use described herein and in the other documents transmitted to Purchaser by Seller. This license shall remain in effect unless terminated by Seller due to Purchaser's breach of the provisions of the license.
14.2 The Program shall be used only in connection with Seller's Equipment. Purchaser shall have no right to use, print, display modify or disclose the Program nor duplicate or copy the Program, with the exception that one copy may be made for security purposes.
14.3 The Program is proprietary to Seller and this license allows the Purchaser only the limited right to use the Program, and nothing contained herein shall be deemed to convey any title to or ownership in the Program to the Purchaser.
15. DELAYS
Where Seller supplies Services, if there is a delay in the engineering or servicing due to any cause beyond the reasonable control of contractor, then the Purchaser shall pay the Seller all additional charges with respect to the delay, including but not limited to temporary relocation of contractor's personnel performing under this order.
16. RESPONSIBILITY OF PURCHASER
16.1 The operation of the Equipment is within the exclusive control of the Purchaser and the Purchaser shall indemnify and save the Seller harmless from any and all expense and liability (including attorney's fees) incurred by or imposed upon the Seller based upon injury to persons (including death) or damage to property (including the Equipment) resulting from the Purchaser's tests, cleaning, operation, or maintenance of the Equipment of from modifications to the Equipment by the Purchaser or by third parties.
16.2 The Seller’s Service Representative(s) are not authorized to supervise operation nor are they authorized or licensed to operate the Equipment and therefore neither the Seller not its representative(s) shall be deemed to have any responsibility for the operation of the Equipment.
16.3 Purchaser agrees to provide Seller with safety practices at site where Services will be performed and identify any potential health hazards or other hazardous working conditions. Seller agrees to comply with identified safety practices and applicable laws and regulations at such site.
Purchaser shall be responsible for any influencing deficiencies at Purchaser's site, including, but not limited to input signals of poor quality, different environmental conditions, improper application engineering, process problems or difficulties and delays.
17. CANCELLATION
17.1 Where Seller supplies Services, either party may cancel a portion or all of this agreement with written notice one hundred and twenty (120) days in advance only under the following conditions:
17.2 Where Seller supplies Services, during the notification period, Seller will continue to deliver the full scope of supply; and
17.3 Where Seller supplies Services, Purchaser will continue to pay the rate defined in the agreement during the one hundred and twenty (120) day period; and
17.4 Cancellation of this agreement by Purchaser for any reason will result in a twenty percent (20%) cancellation charge unless Seller and Purchaser have agreed to any other amount in an addendum to this Agreement.
18. EXPORT CONTROLS
18.1 Purchaser represents and warrants that the Equipment and Services provided hereunder and the "direct product" thereof are intended for civil use only and will not be used, directly or indirectly, for the production of chemical or biological weapons or of precursor chemicals for such weapons, or for any direct or indirect nuclear end use. Purchaser agrees not to disclose, use, export or re-export, directly or indirectly, any information provided by Seller or the "direct product" thereof as defined in the applicable Export Control Regulations, except in compliance with such Regulations.
18.2 If applicable, Seller shall file for an export license, but only after appropriate documentation for the license application has been provided by Purchaser. Purchaser shall furnish such documentation within a reasonable time after order acceptance. Any delay in obtaining such license shall suspend performance of this Agreement by Seller. If an export license is not granted or, if once granted, is thereafter revoked or modified by the appropriate authorities, this Agreement may be canceled by Seller without liability for damages of any kind resulting from such cancellation. At Seller’s request, Purchaser shall provide to Seller a Letter of Assurance and End-User Statement in a form reasonably satisfactory to Seller.
19. GENERAL
19.1 Purchaser shall not assign this contract or any part thereof without the written consent of the Seller.
19.2 Any order received by the Seller is subject to credit approval and may be cancelled if the Purchaser's credit standing is not satisfactory to Seller.
19.3 This Agreement and any order or contract placed hereunder shall be interpreted according to the laws of the Canadian Province in which the Purchaser has placed the order under this Agreement, or failing such, the Province of Quebec; the Courts of the Canadian Province in which the Purchaser has placed the order under this Agreement shall have jurisdiction in any matter relating to same, but Seller shall also have access to the jurisdiction of the Courts of the residence of the Purchaser.
19.4 No terms of Purchaser's purchase order shall apply to this contract, even if subsequent to the terms and conditions hereof, unless agreed in writing by an authorized representative of the Seller.
19.5 No penalties or liquidated damages shall apply pursuant to the inexecution of Seller's obligations hereunder, unless accepted in writing by Seller’s authorized representative.
19.6 These terms and conditions shall supersede and abrogate all previous communications, obligations, commitments or agreements, oral or written, expressed or implied, between the Purchaser and the Seller, in relation to this Agreement and all provisions under the United Nations Convention on Contracts for the International Sale of Goods.
19.7 Purchaser and Seller acknowledge having specifically requested that this Agreement and all related documents and correspondence be drafted in English.
19.8 Any addenda or appendices to this Agreement, to be applicable to any order hereunder, must be signed by both Purchaser’s and Seller’s respective authorized representatives.
19.9 The invalidity in whole or in part of any part of this Contract shall not affect the validity of the remainder of the Contract.
19.10 Either party’s failure to enforce any provisions hereof shall not be construed a waiver of party’s right thereafter to enforce each and every such provision.

TERMS AND CONDITIONS OF SALE - Continued

Terms & Conditions for minumum order billing & Freight allowed Policy

Terms & Conditions		Business Online orders	Non-Business Online orders
Minimum Billing		$250.00 CAD	$500.00 CAD
Handling fee If minimum billing not met		$50.00 CAD	
Pick-up hours	**Hours**	Business days, between **1PM** and **3 PM** est.	
	Notice	Book order prior to **10 AM** est.	Book order prior to **9 AM** est.
Freight Terms[2]	**ACS55 ACS150 ACS3x0**	**Freight Prepaid via ground[1]** $250.00 CAD Minimum order value	**Freight Prepaid via ground[1]** $1000.00 CAD Minimum order value
	ACS8x0-x1/x4/11/31 ACS550/ACH550 (Frame R1-R6)	**Freight Prepaid via ground[1]** $1000.00 CAD Minimum order value	**Freight Prepaid via ground[1]** $1500.00 CAD Minimum order value
	ACS8x0-02/04 ACS550/ACH550 (Frame R7- R8)	**FOB Lachine, Quebec**	**FOB Lachine, Quebec**
	ACS800-x7	**FOB 1st International Airport in Canada.**	**FOB 1st International Airport in Canada.**
	DCS800 Frame D1-D5	**Freight Prepaid via ground[1]** $1000.00 CAD Minimum order value Check availability before ordering	**Freight Prepaid via ground[1]** $1500.00 CAD Minimum order value Check availability before ordering
	DCS800 Frame D6-D7 Cabinet DC Drives	Cannot be ordered on BOL	**FOB 1st International Airport in Canada.** Check availability before ordering
	Options	**Freight Prepaid via ground[1]** $250.00 CAD Minimum order value	**Freight Prepaid via ground[1]** $1000.00 CAD Minimum order value
Express order	**Express Shipping**	For garanteed same day shipping. Book order prior to 3 PM est.	For garanteed same day shipping. Book order prior to 1 PM est.
	Express fee	$50.00 CAD	$100.00 CAD

[1] Ground transportation prepaid to 1st destination in Canada except for Yukon, North West Territories and Nunavut. Those destinations are FOB Lachine, Quebec.
[2] Drop shipment and air freight available. Cost covered by the purchaser.

Overview

The DCS800 DC industrial drive is the latest drive from ABB, combining the newest control technology with a thyristor power platform that has been factory-proven all over the world. The DCS800 provides a wider single module power range than any other DC drive on the market today. The hardware and software are designed with you, the user in mind. Special features such as commissioning macros, startup assistant, and user help built into the keypad, make installation and configuration simple while allowing you to customize the application to your needs.

The DCS800 can be used for the simplest to the most complex applications without complicated configuration changes. Standard are eight (8) digital I/O, four (4) analog inputs (all 16bit), two (2) analog outputs, one (1) analog tachometer input, and one (1) digital encoder input. In additional to the standard I/O, there are three integral option slots supporting additional analog I/O, digital I/O, and various field bus communication option modules.

The DCS800 comes equipped with sixteen (16) programmable blocks that can be assigned to any one of twenty functions. Linking these blocks to the drive's signals, parameters and control functions provides an extremely flexible and adaptive tool to modify the drive to fit the exact application needs. Additionally, an extensive library of preprogrammed application macros that, at the touch of a button, allow rapid configuration of inputs, outputs, and parameters for specific applications to maximize convenience and minimize start-up time.

The DCS800 also comes standard with DriveWindow Light. DriveWindow Light (DWL) is an easy to use PC based tool for startup and maintenance of the DCS800. Features of this tool for the DCS800 include; user interface to view and edit drive parameters, Startup Assistant, fault logging with help text, and Adaptive Programming graphical interface. DWL supports the DCS800 and these other ABB drives products; ACS350, ACS550, ACS800, & DCS400. The DWL package is provided on a CD and included in the shipment with each DCS800 drive.

Guidelines for use of Price Pages

These Price Pages were developed to allow quick and easy selection of standard DCS800 products. Please contact your local ABB Low Voltage Drives sales representative for information regarding additional configurations.

Discount Schedule

Each section of this pricebook has a discount schedule indicated in the corner of the tables or pages. This discount schedule (DS-xxx) indicates the multiplier that is applicable for this table or page. You can find your multipliers in the document **"Channel Partner Discount Schedule"**

DISCOUNT SCHEDULE →

DS-DC	Unit Type	Normal Duty US 110%, 60 sec	
	2Q Converters	I_{2Nd} Amps	P_{Nd} HP
DCS800-S01-0020-05		20	5
DCS800-S01-0045-05		42	10

If options are ordered as Factory installed Plus codes, then drive's discount schedule will apply to options.

For pricing on configurations that are not in this pricebook, please send your request to : **drives.rfq@ca.abb.com**

Application considerations

Because of the variety of application uses for the DCS800 DC Drives, those responsible for the application and control of the drive must satisfy themselves that all necessary steps have been taken to ensure that they meet all safety and installation requirements regarding national and local laws, regulation, codes, and standards. Unless otherwise noted, DCS800 DC Drive products found in this document are designed to meet NEMA (National Electrical manufacturing Association) standards.

DCS800 products carry third party approval as follows;

Product	Approval
DCS800 Modules	UL / CSA / CE LV Directive / C-Tick
DCS800 Enclosed Cabinets	CE LV Directive / C-Tick

Selecting the correct drive rating

DCS800 DC Drives are current rated devices. The Hp ratings are provided for you reference only and are based on typical NEMA DC motors at nominal voltages. When selecting the drive ensure the drive has a continuous current rating equal or greater than the full load amp rating of the motor (if full motor torque is required).

Product Features

Standard Features

UL 508 C Cert E196914 and CSA C 22.2 No. 14-95
Full Graphic and Multilingual Display
Start-Up Assistant
Application macros
DriveWindow Light
- Parameter setup and backup
- Start-Up Assistant
- Adaptive Programming support

Motor ID Run (Armature, Field, Speed Reg)
Motor Control
- Direct Current Control
- EMF, Analog Tachometer, Digital Encoder

Input semi-conductor fuses in frames D5-D7
Adaptive Programming with sixteen (16) logic controller type function blocks
Coated Circuit Boards
Standard I/O
- Eight (8) Programmable Digital Inputs
- Seven (7) Programmable Digital Outputs
- One (1) Programmable Relay Contact
- Four (4) Programmable Analog Inputs (16bit)
- Two (2) Programmable Analog Outputs (12bit)
- One (1) Analog Output @ 4Vdc for Actual Arm Amps
- One (1) Analog Tachometer Input
- One (1) Digital Encoder Input

Adjustable Current Limit
Adjustable Torque Limit
Two (2) Independently Adjustable Accel and Decel Ramps
Linear or Adjustable “S” Curve Accel/Decel Ramp
Ramp to Stop or Coast to a Stop
Four (4) Preset Speeds
Motor Pot for speed reference
Internal Field Supply - in frames D1-D5
Half controlled, 3 phase supply

Available options

External Field Supply (Half or Full controlled)
I/O Options
- DDCS Communications Card SDCS-COM-8x
- Remote mounted isolated Digital I/O
- Remote mounted isolated Analog I/O
- Analog I/O Extension Card RAIO-01
- Digital I/O Extension Card RDIO-01

Field bus Adapter Modules
- DeviceNet™
- ProfiBus-DP™
- ModBus™
- ControlNet™
- Ethernet

Remote panel mounting OPMP-01
CE EMC Filters
DriveWindow® a Start-up and Programming Tool

Programmable Fault Functions

- Armature OverVoltage
- Armature Over Current
- Armature Current Rise Maximum
- Field Minimum
- Field Over Current
- Motor Stall
- Motor Thermal Protection
- External Fault & Alarm
- Speed Feedback monitor
- Motor Over Speed
- Current Ripple
- Input Voltage monitor
- Local Control Loss (Panel Loss)
- Communication Control Loss

Product Specifications

Power Connection

Control Input Voltage	115Vac or 230Vac (-15%, +10%) - Auto Sensing
Input Frequency	45 to 65 Hz
Power Consumption	120VA
Power fail level	85Vac @ 115Vac, 170Vac @ 230Vac
Connection	Terminals X99:1,2
Power Input Voltage (U1)	xxxx-05 = 230Vac to 500Vac 3-phase (+/- 10%) xxxx-06 = 270Vac to 600Vac 3-phase (+/- 10%) xxxx-07 = 315Vac to 690Vac 3-phase (+/- 10%) xxxx-08 = 360Vac to 800Vac 3-phase (+/- 10%) xxxx-10 = 450Vac to 990Vac 3-phase (+/- 10%) xxxx-12 = 540Vac to 1190Vac 3-phase (+/- 10%)
Input Frequency	48 to 63 Hz, maximum rate of change 17%/second
Line Imbalance	Max +/-3% of nominal phase to phase input voltage
Fundamental Power Factor	0.98 (at nominal load)
Connection	Terminals U1, V1, W1
Motor Armature	
Output Voltage	0 to V_{dc} (See Hardware Manual)
Output Current	See Rating Tables and/or Hardware Manual
Continuous Current	1.0 * I_{2Nd} (Normal Duty use) @ 40°C 1.0* I_{2Sd} (Standard Duty use) @ 40°C 1.0* I_{2Hd} (Heavy Duty use) @ 40°C
Short Term Overload Capacity	1.10 * I_{2Nd} (Normal Duty use) for 60 sec and 10 min at 100% 1.50* I_{2Sd} (Standard Duty use) for 30 sec and 15 min at 100% 1.50* I_{2Hd} (Heavy Duty use) for 60 sec and 15 min at 100%
Acceleration & Deceleration Time	0.01 to 30,000 Sec
Short circuit withstand rating	65,000 AIC (UL) with input semi-conductor fuses
Connection	Terminals C1 & D1
Motor Field	
On Board Field Exciter (frames D1-D4)	
Input Voltage	110Vac (-15%) to 500Vac (+10%), internally fused
Input Frequency	48 to 63Hz
Output Current	D1 - 0.3 to 6A, D2 - 0.3 to 15A, D3 - 0.3 to 20A, D4 - 0.3 to 25A
On Board Field Exciter (frame D5) FEX-425	
Input Voltage	110Vac (-15%) to 500Vac (+10%), internally fused, line reactor required
Input Frequency	48 to 63Hz
Output Current	0.3 to 25A
External Field Exciter - DCF803-0035	
Auxiliary Input Voltage	24Vdc supplied from SDCS-DSL-4 terminal X51
Input Voltage	110Vac (-15%) to 500Vac (+10%), single or three phase, semi-conductor fuses required, line reactor required
Input Frequency	48 to 63Hz
Output Current	0.3 to 35A
External Field Exciter - DCF803-0050	
Auxiliary Input Voltage	110Vac (-15%) to 230Vac (+10%), single phase (15w, 30VA)
Input Voltage	110Vac (-15%) to 500Vac (+10%), single phase, semi-conductor fuses required
Input Frequency	48 to 63Hz
Output Current	0.3 to 50A
External Field Exciter - DCF804-0050	
Auxiliary Input Voltage	110Vac (-15%) to 230Vac (+10%), single phase (15w, 30VA)
Input Voltage	110Vac (-15%) to 500Vac (+10%), single phase, semi-conductor fuses required
Input Frequency	48 to 63Hz
Output Current	0.3 to 50A

Product Specifications

Mechanical Enclosure

Module must be mounted in a protective enclosure with proper ventilation for adequate cooling

Protection Class (-S0x modules)	IP00 / UL Type Open
Paint Finish (-S0x modules)	RAL 9002 / NCS 170 4 Y015R

Ambient Conditions, Operation

Air Temperature	0° to 40°C (104°F), above 40°C the maximum output current is de-rated 1% for every additional 1°C (up to 55°C (131°F) maximum)
Relative Humidity @ 5 to 40°C	5 to 95%, no condensation allowed, maximum relative humidity is 60% in the presence of corrosive gasses
Change of ambient temp	less than 0.5°C / minute
Contamination Levels	
IEC	60721-3-1, 60721-3-2 and 60721-3-3
Chemical Gasses	3C2
Solid Particles	3S2
Installation Site Altitude	0 to 1000m (3300ft) above sea level. At sites over 1000m (3300ft) above sea level, the maximum power is de-rated 1% for every additional 100m (330ft). If the installation site is higher than 2000m (6600ft) above sea level, please contact your local ABB distributor or representative for further information.
Vibration Max	Frame D1-D4, 1.5mm @ 2 to 9Hz, 0.5g @ 5 to 55hz Frame D5-D7, 1mm @ 2 to 9Hz, 0.3g @ 9 to 200hz

Ambient Conditions, Storage & Transportation (in Protective Shipping Package)

Air Temperature	-20° to 55°C (-4° to 131°F)
Relative Humidity	Less than 95%, no condensation allowed
Atmospheric Pressure	70 to 106 kPa (10.2 to 15.4 PSI)
Vibration Max	Frame D1-D4, 1.5mm @ 2 to 9Hz, 0.5g @ 5 to 55hz Frame D5-D7, 1mm @ 2 to 9Hz, 0.3g @ 9 to 200hz
Shock (IEC 60068-2-29)	Max 100 m/s2 (330 ft/s2) 11 ms
Free Fall	250mm for weight less than 100Kg / 100mm for weight greater than 100Kg

Cooling Information

Cooling Method	Internal Fan (except DCS800-S01-0020 and DCS800-S02-0025 which have no fan)

Control Terminal Blocks

Size 0.3 to 3 mm2 (12 to 22 AWG) - All control terminal blocks

Product Specifications

Reference Power Supply

Voltage	X4:4 = +10Vdc, X4:5 = -10Vdc
Maximum Load	5mA
Applicable Potentiometer	2 k-ohm to 10 k-ohm

Analog Inputs

Four (4) Programmable Differential Inputs + Analog Tachometer

AI1 & AI2 Voltage Config	-10Vdc to +10Vdc, Input Resistance RI = 200 k-ohms (default is voltage, select via S2 & S3 jumpers)
AI1 & AI2 Current Config	0 to 20 mA, Input Resistance RI = 250 ohms (default is voltage, select via S2 & S3 jumpers)
AI3 & AI4 Voltage Only	-10Vdc to +10Vdc, Input Resistance RI = 200 k-ohms
Analog Tachometer	+/-8 to 30Vdc, +/-30 to 90Vdc, +/-90 to 270Vdc
Common mode range	+/-15v
Resolution	15bit plus sign
Input Updating Time	AI1 & AI2 = 2.8ms, AI3 & AI4 = 5ms

Analog Outputs

Two (2) Programmable Voltage Outputs + one (1) dedicated Armature Current Output

Signal Level (AO1&AO2)	-10Vdc to +10Vdc, maximum load of 5ma
Signal Level (I-Actual)	4Vdc = 325% of rated motor current entered in Parm 99.03
Resolution	11bit plus sign
Output Updating Time	5ms

Digital Inputs

Eight (8) Programmable Digital Inputs (Common Ground)

Signal Level	24Vdc, (-15%) to max of 48Vdc
Logical switch thresholds	< 7.3Vdc status “0”, >7.5Vdc status “1”
Input Current	5mA
Filtering Time Constant	2ms
Input Updating Time	DI1 to DI6 = 5ms, DI7 & DI8 = 2.8ms

Internal 24 Vdc Supply for Digital Inputs

Voltage	24Vdc
Maximum Current	125 mA
Protection	Short Circuit Proof

An external 24 Vdc supply may be used instead of the internal supply

Digital Outputs

Seven (7) Programmible Digital Outputs

Type	Transistor for Relay Driving only
Signal Level	Status 1 = 22Vdc at no load
Maximum Output	50mA, Current limit for all seven (7) outputs total is 160mA
Output Updating Time	2.8 ms

Relay Output

Digital Output 8 for power contactor control (normally open contact)

Switching Capacity	3A at 24Vdc or 115/230Vac, 0.3 A at 120Vdc
Isolation Test Voltage	4 kVac, 1 minute
Output Updating Time	2.8 ms

Digital Encoder

Encoder Voltage Supply	5Vdc @ 250mA max / 24Vdc @ 200mA max (default is 5v select via S4 jumper)
Encoder Mode	Single Ended or Differential (select via S4 jumper)
Signal Sensitivitiy	5Vdc or 12/24Vdc
Maximum Input Frequency	300kHz

Product Compliance and Certifications

North American Standards

In North America the system components fulfil the requirements of the table below.

Rated supply voltage	Standards	
	Converter module	Enclosed converter
to 600 V	UL 508 C Power Conversion Equipment CSA C 22.2 No. 14-95 Industrial Control Equipment, Industrial Products Available for converter modules including field exciter units. Types with UL mark: • see UL Listing www.ul.com / certificate no. E196914 • or on request	Enclosed converter cabinets are not UL listed
>600 V to 1000 V	EN / IEC: see table below. Available for converter modules including field exciter units.	EN / IEC types: on request (for details see table below)

Regulatory compliance

The converter module and enclosed converter components are designed for use in industrial environments. In EEA countries, the components fulfil the requirements of the EU directives, see table below.

European union directive	Manufacturer's assurance	Harmonized standards	
		Converter module	Enclosed converter
Machinery Directive			
98/37/EEC 93/68/EEC	Declaration of Incorporation	EN 60204-1 [IEC 60204-1]	EN 60204-1 [IEC 60204-1]
Low Voltage Directive			
73/23/EEC 93/68/EEC	Declaration of Conformity	EN 60146-1-1 [IEC 60146-1-1] EN 61800-5-1 (EN 50178 [IEC--]) see additional IEC 60664	EN 60204-1 [IEC 60204-1] EN 61800-5-1 EN 60439-1 [IEC 60439-1]
EMC Directive			
89/336/EEC 93/68/EEC	Declaration of Conformity (Provided that all installation instructions concerning cable selection, cabling and EMC filters or dedicated transformer are followed.)	EN 61800-3 ① [IEC 61800-3] ① in accordance with 3ADW 000 032	EN 61800-3 ① [IEC 61800-3] ① in accordance with 3ADW 000 032/3ADW 000 091

Hardware Description

The DCS800 DC industrial drive is the latest drive from ABB, combining the newest control technology with a thyristor power platform that has been factory-proven all over the world. The DCS800 provides a wider single module power range than any other DC drive on the market today. The hardware and software are designed with you, the user in mind. Special features such as commissioning macros, startup assistant, and user help built into the keypad, make installation and configuration simple while allowing you to customize the application to your needs.

DCS800-S0x-xxxx-xx

The DCS800-S0x module drive is available from 5 to 250Hp @ 240Vdc, 10 to 3000Hp @ 500Vdc, 200 to 3250Hp @ 600Vdc, 700 to 4000Hp @ 700Vdc, and is also available in voltages up to 1200Vdc. There are seven (7) different module frame sizes from D1 through D7. Each are available in a NEMA Type Open (IP00) enclosure, include a control panel for user interface, and DriveWindow Light standard. Frames D1 through D5 at <525Vdc also include an integrate internal three phase field supply. Frames D6 & D7 and all frames at 600Vdc and greater require an external field supply that must be ordered separately. All DCS800-S0x module drives must be mounted in an approved industrial enclosure with proper cooling, environmental protection, and installed to meet all local and national codes. Additionally, all frame D1-D4 drives require AC input supply semi-conductor fusing and all drives require an input reactor or dedicated isolation transformer and input or output power contactor (input preferred).

Definition of NEMA and IEC environmental ratings

NEMA and IEC environmental ratings can be confusing at times. Below is a summary of the rating definitions and recommendations for application of each type.

NEMA 1, UL type 1
Indoor use primarily to provide a degree of protection against limited amounts of falling dirt.

IP 2 1
- (2) Protected against solid foreign objects of 12.5mm diameter and greater
- (1) Protected against vertically falling water drops

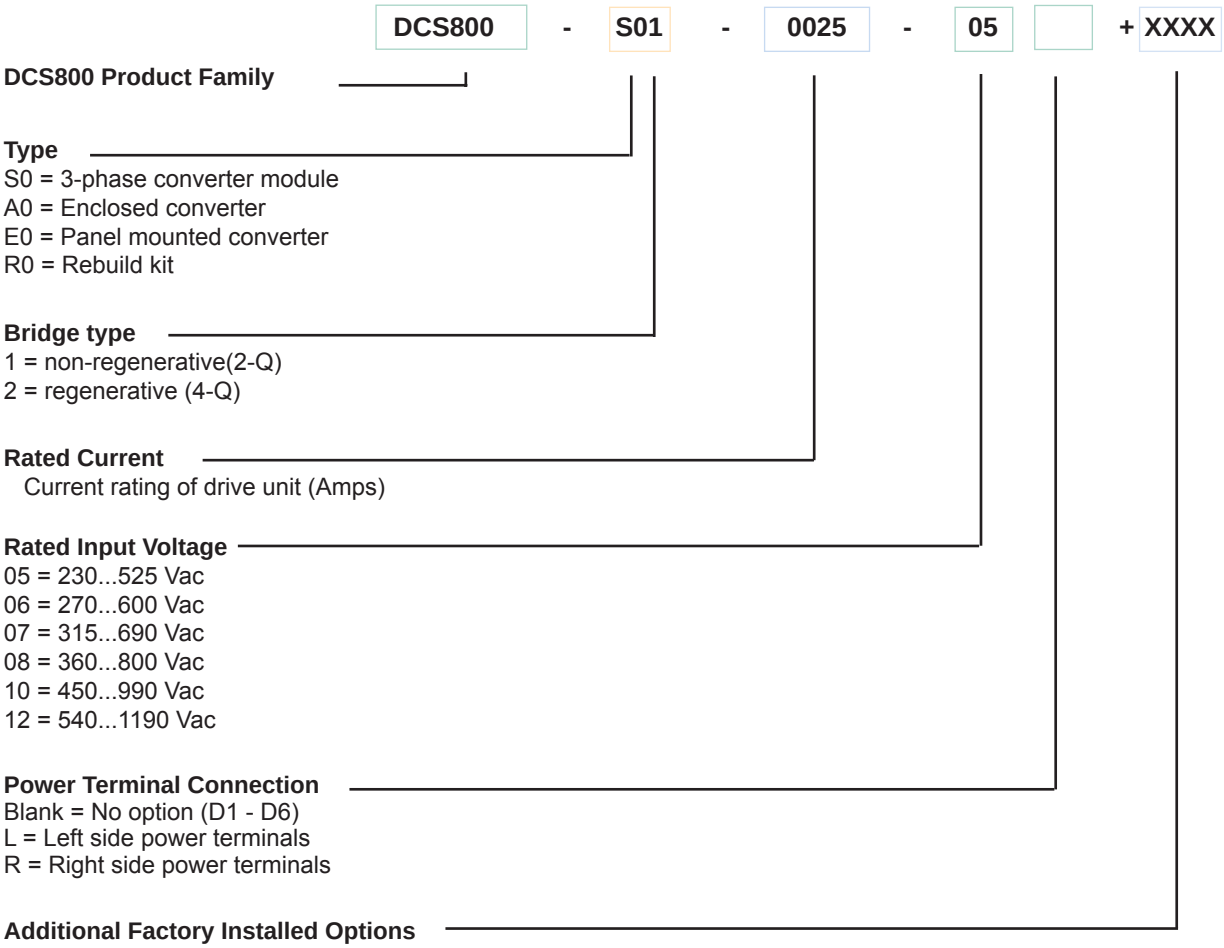
Recommendation
Installation in clean environment such as a clean room or in another enclosure with higher degree of protection

NEMA 12, UL type 12
Indoor use primarily to provide a degree of protection against circulating dust, falling dirt, and dripping non-corrosive liquids

IP 5 4
- (5) Ingress of dust is not totally prevented, but dust shall not penetrate in a quantity to interfere with satisfactory operation of the apparatus or to impair safety
- (4) Water splashed against the enclosure from any direction shall have no harmful effects

Recommendation
Installation in environments with moderate to significant dust and contaminant particles. Acceptable for most applications on factory floors where dust is present but spraying liquids are not. Regular preventative maintenance for filter changing or cleaning. Inspect drive for dust or particle build up that may limit cooling in the future, clean as needed.

Basic Type Code Information



Factory installed options will be built to order. Product lead times are 6 to 9 weeks with factory options installed. We recommend ordering options as field kits. Stock items usually ship from New Berlin, WI same day.

Ordering Information

To order a DCS800 drive, select the appropriate product type code from the following pages for your input voltage, motor voltage, motor current, and application overload requirement. This then represents the basic drive product. To add factory installed options, simply add a [+] to the end of the type code followed by the plus code of the desired option. Most factory installed options will extend lead times. We recommend ordering as field kits for ship from stock delivery of Frames D1-D5.

Required Additional Hardware:

DC Drives require additional hardware to complete the installation:

Required
- Input AC line fuses for frames D1-D4 (Standard in D5-D7) must be of semi-conductor type, i.e. Bussmann FWP
- Input reactor 1-4% or dedicated isolation transformer
- Input or output contactor (input recommended)
- External field supply for frames D6-D7 (seperate line item)

Optional
- Motor blower overload
- EMC Filter

Additional requirements per local and national codes.

Notes for product selection

General Notes

- For the D4 drive only, plus code S171 selects the option of a 115 Vac rated cooling fan for the designated drive. If a 230 Vac fan is desired, remove the +S171 when ordering. Other drives have cooling fan voltages as follows:

DCS800-S01-0020-05 and DCS800-S02-0025-05	No Fan
All other D1 drives, D2 and D3	115 or 230 Vac (reconfigurable)
D4 with +S171	115 Vac
D5	230 Vac 1-phase
D6 and D7	460 Vac 3-phase

- Plus code +S164 adds the optional internal field supply for the 500Vdc frame D5 drives[1]. If an external field supply is desired, remove the +S164 when ordering.

  [1]Note: If line voltage is greater than 400VAC +/-15%, the internally mounted field supply must be externally fed.

- $I_{2Nd:}$ continuous current at 40ºC (104ºF). Overload cycle 110% I_{2Nd} for 60 seconds, 100% for 10 minutes.

- I_{2Sd}: continuous current at 40ºC (104ºF). Overload cycle 150% I_{2Sd} for 30 seconds, 100% for 15 minutes.

- I_{2Hd}: continuous current at 40ºC (104ºF). Overload cycle 150% I_{2Hd} for 60 seconds, 100% for 15 minutes.

- The rated current of the DCS800 must be greater than or equal to the rated motor current to achieve the rated motor power given the table

- Horsepower ratings are based on NEMA motor ratings for typical dc motors. Check motor nameplate current for compatibility

- NA; indicates the information is Not Available

Standard Product

240Vdc Non-Regenerative

DS-DC Unit Type 2Q Converters	Normal Duty US 110%, 60 sec		Standard Duty US 150%, 30 sec		Heavy Duty US 150%, 60 sec		Frame Size	Price
	I_{2Nd} Amps	P_{Nd} HP	I_{2Sd} Amps	P_{Sd} HP	I_{2Hd} Amps	P_{Hd} HP		
DCS800-S01-0020-05	20	5	20	5	20	5	D1	$3,512
DCS800-S01-0045-05	42	10	40	10	40	10		$3,968
DCS800-S01-0065-05	61	15	60	15	60	15		$4,212
DCS800-S01-0090-05	85	20	78	20	78	20		$4,366
DCS800-S01-0125-05	115	30	111	30	108	30		$4,567
DCS800-S01-0180-05	175	50	160	40	155	40	D2	$5,556
DCS800-S01-0230-05	219	60	203	50	195	50		$6,080
DCS800-S01-0315-05	300	75	290	75	280	75	D3	$7,133
DCS800-S01-0405-05	385	100	341	100	319	75		$8,554
DCS800-S01-0470-05	447	125	403	100	390	100		$9,956
DCS800-S01-0610-05+S171	580	150	508	150	484	125	D4	$12,045
DCS800-S01-0740-05+S171	704	200	695	200	690	200		$14,500
DCS800-S01-0900-05+S171	865	250	817	200	784	200		$18,000

240Vdc Regenerative

DS-DC Unit Type 4Q Converters	Normal Duty US 110%, 60 sec		Standard Duty US 150%, 30 sec		Heavy Duty US 150%, 60 sec		Frame Size	Price
	I_{2Nd} Amps	P_{Nd} HP	I_{2Sd} Amps	P_{Sd} HP	I_{2Hd} Amps	P_{Hd} HP		
DCS800-S02-0025-05	23	5	23	5	23	5	D1	$4,712
DCS800-S02-0050-05	47	10	42	10	40	10		$5,121
DCS800-S02-0075-05	71	20	60	15	60	15		$5,344
DCS800-S02-0100-05	95	25	81	20	79	20		$5,565
DCS800-S02-0140-05	133	30	121	30	116	30		$5,915
DCS800-S02-0200-05	190	50	166	40	166	40	D2	$7,218
DCS800-S02-0260-05	247	60	213	60	208	50		$7,877
DCS800-S02-0350-05	333	75	287	75	285	75	D3	$9,451
DCS800-S02-0450-05	385	100	360	100	355	100		$10,883
DCS800-S02-0520-05	485	125	405	100	402	100		$12,133
DCS800-S02-0680-05+S171	647	150	630	150	614	150	D4	$14,667
DCS800-S02-0820-05+S171	780	200	770	200	740	200		$18,333
DCS800-S02-1000-05+S171	952	250	846	250	810	200		$23,392

Standard Product

500Vdc Non-Regenerative

DS-DC Unit Type 2Q Converters	Normal Duty US 110%, 60 sec		Standard Duty US 150%, 30 sec		Heavy Duty US 150%, 60 sec		Frame Size	Price
	I_{2Nd} Amps	P_{Nd} HP	I_{2Sd} Amps	P_{Sd} HP	I_{2Hd} Amps	P_{Hd} HP		
DCS800-S01-0020-05	19	10	18	10	18	10	D1	$3,512
DCS800-S01-0045-05	42	25	38	20	38	20		$3,968
DCS800-S01-0065-05	61	30	54	30	54	30		$4,212
DCS800-S01-0090-05	88	50	78	40	78	40		$4,366
DCS800-S01-0125-05	124	75	111	60	104	60		$4,567
DCS800-S01-0180-05	171	100	164	100	148	75	D2	$5,556
DCS800-S01-0230-05	219	125	205	125	205	125		$6,080
DCS800-S01-0315-05	300	150	264	150	264	150	D3	$7,133
DCS800-S01-0405-05	385	200	325	200	325	200		$8,554
DCS800-S01-0470-05	447	250	405	250	405	250		$9,956
DCS800-S01-0610-05+S171	580	300	484	300	490	300	D4	$12,045
DCS800-S01-0740-05+S171	704	400	670	400	664	400		$14,500
DCS800-S01-0900-05+S171	865	500	795	500	795	500		$18,000
DCS800-S01-1200-05+S164	1105	700	950	600	851	550	D5	$22,122
DCS800-S01-1500-05+S164	1450	900	1320	800	1280	800		$24,332
DCS800-S01-2000-05+S164	1904	1100	1480	900	1479	900		$27,145
DCS800-S01-2050-05	1985	1250	1585	1000	1585	1000	D6	$31,225
DCS800-S01-2500-05	2395	1500	1986	1250	1990	1250		$40,322
DCS800-S01-3000-05	2820	1750	2416	1500	2416	1500		$49,589
DCS800-S01-3300-05L	3178	2000	2416	1500	2416	1500	D7	$56,888
DCS800-S01-3300-05R	3178	2000	2416	1500	2416	1500		$56,888
DCS800-S01-4000-05L	3690	2250	2890	1750	2897	1750		$76,222
DCS800-S01-4000-05R	3690	2250	2890	1750	2897	1750		$76,222
DCS800-S01-5200-05L	4820	3000	3972	2500	3800	2250		$105,663
DCS800-S01-5200-05R	4820	3000	3972	2500	3800	2250		$105,663

Note:

(1) Frame D6 drives do not include busbar tabs for the power connection. There are five - 4 hole lug terminals on the side of the drive unit (3 for AC, 2 for DC). If busbar tabs are required, they must be ordered separately. See “Supporting Installation Hardware” section in Common Options for ordering information.

(2) Frame D6 and D7 do not include field supplies. A field supply is required for all DC motor applications. See “External Field Supplies” section for selection and ordering information.

(3) In Frame Size D7 - the ‘L’ is for left-hand bus arrangement, the ‘R’ is for right-hand bus arrangement.

Standard Product

500Vdc Regenerative

DS-DC Unit Type 4Q Converters	Normal Duty US 110%, 60 sec		Standard Duty US 150%, 30 sec		Heavy Duty US 150%, 60 sec		Frame Size	Price
	I_{2Nd} Amps	P_{Nd} HP	I_{2Sd} Amps	P_{Sd} HP	I_{2Hd} Amps	P_{Hd} HP		
DCS800-S02-0025-05	23	10	20	10	20	10	D1	$4,712
DCS800-S02-0050-05	47	25	38	20	38	20		$5,121
DCS800-S02-0075-05	71	40	54	30	54	30		$5,344
DCS800-S02-0100-05	95	50	84	50	79	40		$5,565
DCS800-S02-0140-05	133	75	125	75	110	60		$5,915
DCS800-S02-0200-05	190	100	166	100	166	100	D2	$7,218
DCS800-S02-0260-05	247	150	208	125	208	125		$7,877
DCS800-S02-0350-05	333	200	287	150	264	150	D3	$9,451
DCS800-S02-0450-05	428	250	360	200	357	200		$10,883
DCS800-S02-0520-05	489	300	405	250	405	250		$12,133
DCS800-S02-0680-05+S171	647	400	605	300	544	300	D4	$14,667
DCS800-S02-0820-05+S171	806	500	740	400	664	400		$18,333
DCS800-S02-1000-05+S171	965	600	815	500	810	500		$23,392
DCS800-S02-1200-05+S164	1105	700	950	600	851	500	D5	$29,000
DCS800-S02-1500-05+S164	1450	900	1320	800	1280	800		$34,545
DCS800-S02-2000-05+S164	1885	1100	1490	900	1479	900		$38,655
DCS800-S02-2050-05	1985	1250	1585	1000	1585	1000	D6	$44,666
DCS800-S02-2500-05	2395	1500	1995	1250	1990	1250		$56,444
DCS800-S02-3000-05	2820	1750	2382	1500	2382	1500		$67,112
DCS800-S02-3300-05L	3178	2000	2416	1500	2416	1500	D7	$75,222
DCS800-S02-3300-05R	3178	2000	2416	1500	2416	1500		$75,222
DCS800-S02-4000-05L	3690	2250	2890	1750	2890	1750		$96,236
DCS800-S02-4000-05R	3690	2250	2890	1750	2890	1750		$96,236
DCS800-S02-5200-05L	4820	3000	3972	2500	3800	2250		$129,422
DCS800-S02-5200-05R	4820	3000	3972	2500	3800	2250		$129,422

Note:

(1) Frame D6 drives do not include busbar tabs for the power connection. There are five - 4 hole lug terminals on the side of the drive unit (3 for AC, 2 for DC). If busbar tabs are required, they must be ordered separately. See “Supporting Installation Hardware” section in Common Options for ordering information.

(2) Frame D6 and D7 do not include field supplies. A field supply is required for all DC motor applications. See “External Field Supplies” section for selection and ordering information.

(3) In Frame Size D7 - the ‘L’ is for left-hand bus arrangement, the ‘R’ is for right-hand bus arrangement.

Standard Product

600Vdc Non-Regenerative

DS-DC Unit Type 2Q Converters	Normal Duty US 110%, 60 sec		Standard Duty US 150%, 30 sec		Heavy Duty US 150%, 60 sec		Frame Size	Price
	I_{2Nd} Amps	P_{Nd} HP	I_{2Sd} Amps	P_{Sd} HP	I_{2Hd} Amps	P_{Hd} HP		
DCS800-S01-0290-06	280	200	268	200	268	200	D3	$9,845
DCS800-S01-0590-06+S171	561	400	480	300	470	300	D4	$14,164
DCS800-S01-0900-06	828	600	665	500	665	500	D5	$20,120
DCS800-S01-1500-06	1428	1000	1325	1000	1325	1000		$26,446
DCS800-S01-2000-06	1850	1250	1490	1100	1479	1100		$33,846
DCS800-S01-2050-06	1850	1250	1490	1100	1479	1100	D6	$36,446
DCS800-S01-2500-06	2380	1750	1990	1500	1990	1500		$45,546
DCS800-S01-3000-06	2790	2000	2380	1750	2380	1750		$55,668
DCS800-S01-3300-06L	3035	2250	2380	1750	2380	1750	D7	$62,544
DCS800-S01-3300-06R	3035	2250	2380	1750	2380	1750		$62,544
DCS800-S01-4000-06L	3720	2500	2970	2250	2970	2250		$88,328
DCS800-S01-4000-06R	3720	2500	2970	2250	2970	2250		$88,328
DCS800-S01-4800-06L	4410	3250	3507	2500	3507	2500		$112,862
DCS800-S01-4800-06R	4410	3250	3507	2500	3507	2500		$112,862

600Vdc Regenerative

DS-DC Unit Type 4Q Converters	Normal Duty US 110%, 60 sec		Standard Duty US 150%, 30 sec		Heavy Duty US 150%, 60 sec		Frame Size	Price
	I_{2Nd} Amps	P_{Nd} HP	I_{2Sd} Amps	P_{Sd} HP	I_{2Hd} Amps	P_{Hd} HP		
DCS800-S02-0320-06	295	200	268	200	268	200	D3	$14,066
DCS800-S02-0650-06+S171	619	400	540	400	540	400	D4	$18,746
DCS800-S02-0900-06	828	600	665	500	665	500	D5	$26,944
DCS800-S02-1500-06	1428	1000	1325	1000	1325	1000		$35,444
DCS800-S02-2050-06	1850	1250	1490	1100	1490	1100	D6	$49,222
DCS800-S02-2500-06	2380	1750	1980	1500	1980	1500		$58,400
DCS800-S02-3000-06	2790	2000	2293	1750	2293	1750		$78,000
DCS800-S02-3300-06L	3035	2250	2370	1750	2370	1750	D7	$83,000
DCS800-S02-3300-06R	3035	2250	2370	1750	2370	1750		$83,000
DCS800-S02-4000-06L	3720	2500	2970	2250	2970	2250		$120,000
DCS800-S02-4000-06R	3720	2500	2970	2250	2970	2250		$120,000
DCS800-S02-4800-06L	4410	3250	3507	2500	3507	2500		$150,000
DCS800-S02-4800-06R	4410	3250	3507	2500	3507	2500		$150,000

Note:

(1) Frame D6 drives do not include busbar tabs for the power connection. There are five - 4 hole lug terminals on the side of the drive unit (3 for AC, 2 for DC). If busbar tabs are required, they must be ordered separately. See “Supporting Installation Hardware” section in Common Options for ordering information.

(2) Drives rated 600V and above do not include field supplies. A field supply is required for all DC motor applications. See “External Field Supplies” section for selection and ordering information.

(3) In Frame Size D7 - the ‘L’ is for left-hand bus arrangement, the ‘R’ is for right-hand bus arrangement.

Standard Product

700Vdc Non-Regenerative

DS-DC Unit Type 2Q Converters	Normal Duty US 110%, 60 sec		Standard Duty US 150%, 30 sec		Heavy Duty US 150%, 60 sec		Frame Size	Price
	I_{2Nd} Amps	P_{Nd} HP	I_{2Sd} Amps	P_{Sd} HP	I_{2Hd} Amps	P_{Hd} HP		
DCS800-S01-0900-07	820	700	620	500	620	500	D5	$22,120
DCS800-S01-1500-07	1428	1250	1160	1000	1160	1000		$29,446
DCS800-S01-2000-07	1850	1500	1490	1250	1479	1250		$35,846
DCS800-S01-2050-07	1850	1500	1490	1250	1479	1250	D6	$40,446
DCS800-S01-2500-07	2380	2000	1990	1750	1990	1750		$49,456
DCS800-S01-3000-07	2790	2500	2380	2000	2380	2000		$60,668
DCS800-S01-3300-07L	3035	2500	2380	2000	2380	2000	D7	$70,000
DCS800-S01-3300-07R	3035	2500	2380	2000	2380	2000		$70,000
DCS800-S01-4000-07L	3720	3250	2970	2500	2970	2500		$95,000
DCS800-S01-4000-07R	3720	3250	2970	2500	2970	2500		$95,000
DCS800-S01-4800-07L	4480	4000	3507	3000	3507	3000		$121,000
DCS800-S01-4800-07R	4480	4000	3507	3000	3507	3000		$121,000

700Vdc Regenerative

DS-DC Unit Type 4Q Converters	Normal Duty US 110%, 60 sec		Standard Duty US 150%, 30 sec		Heavy Duty US 150%, 60 sec		Frame Size	Price
	I_{2Nd} Amps	P_{Nd} HP	I_{2Sd} Amps	P_{Sd} HP	I_{2Hd} Amps	P_{Hd} HP		
DCS800-S02-0900-07	820	700	620	500	620	500	D5	$29,444
DCS800-S02-1500-07	1428	1250	1160	1000	1160	1000		$41,454
DCS800-S02-2050-07	1850	1500	1490	1250	1490	1250	D6	$58,222
DCS800-S02-2500-07	2380	2000	1990	1750	1983	1750		$72,214
DCS800-S02-3000-07	2790	2500	2280	2000	2275	2000		$88,266
DCS800-S02-3300-07L	3035	2500	2380	2000	2380	2000	D7	$94,000
DCS800-S02-3300-07R	3035	2500	2380	2000	2380	2000		$94,000
DCS800-S02-4000-07L	3720	3250	2965	2500	2965	2500		$125,000
DCS800-S02-4000-07R	3720	3250	2965	2500	2965	2500		$125,000
DCS800-S02-4800-07L	4480	4000	3507	3000	3507	3000		$160,000
DCS800-S02-4800-07R	4480	4000	3507	3000	3507	3000		$160,000

Note:

(1) Frame D6 drives do not include busbar tabs for the power connection. There are five - 4 hole lug terminals on the side of the drive unit (3 for AC, 2 for DC). If busbar tabs are required, they must be ordered separately. See “Supporting Installation Hardware” section in Common Options for ordering information.

(2) Drives rated 600V and above do not include field supplies. A field supply is required for all DC motor applications. See “External Field Supplies” section for selection and ordering information.

(3) In Frame Size D7 - the ‘L’ is for left-hand bus arrangement, the ‘R’ is for right-hand bus arrangement.

The Rebuild Kit is recommended for thyristor-based power sections that are:

- 500 horsepower (800 Amps) and above
- Originally manufactured by ABB or another drive company
- Regenerative (4-quadrant) or non-regenerative (2-quadrant)

From 1, up to 4 parallel bridges. Request a special quotation for drives with more than 2 bridges.

Field Code	Description	List Price
DCS800-R01-0000-01	Non-regenerative single bridge	Consult Factory
DCS800-R01-0000-02	Non-regenerative, 2 bridges in parallel	
DCS800-R02-0000-01	Regenerative single bridge	
DCS800-R02-0000-02	Regenerative, 2 bridges in parallel	
DCS800-R01-0000-01+S164	Non-regenerative single bridge [with field supply]	
DCS800-R01-0000-02+S164	Non-regenerative, 2 bridges in parallel [with field supply]	
DCS800-R02-0000-01+S164	Regenerative single bridge [with field supply]	
DCS800-R02-0000-02+S164	Regenerative, 2 bridges in parallel [with field supply]	

NOTE: The DCS800-R rebuild kit consists of the controller mounted in an enclosure (UL Type Open); pulse transformer board(s); measuring board; pulse amplification board; and interconnecting cables

The Upgrade kit is specifically designed to upgrade the controls of existing DCS500 and DCS600 drives.

- for frame sizes A5, A6, A7, C2b, C3, and C4
- approximately 350 hp and above
- replaces the existing door, control tray and control panel

DCS800-R Upgrade Kits - for upgrading existing ABB DCS500 and DCS600 drives with DCS800 controllers

Field Code	Description	List Price
DCS800-R00-9305	Upgrade kit, A5 to D5 without field supply (700 - 1100 hp)	Consult Factory
DCS800-R00-9306	Upgrade kit, A5 to D5 with field supply (700 - 1100 hp)	
DCS800-R00-9405	Upgrade kit, A6/7 to D6/7 (1250 - 3000 hp)	
DCS800-R00-9005	Upgrade kit, C2b to DCS800 (350 - 500 hp)	
DCS800-R00-9205	Upgrade kit, C3 to DCS800 (700 - 1100 hp)	
DCS800-R00-9105	Upgrade kit, C4 to DCS800 (1250 - 3000 hp)	

General Guidelines

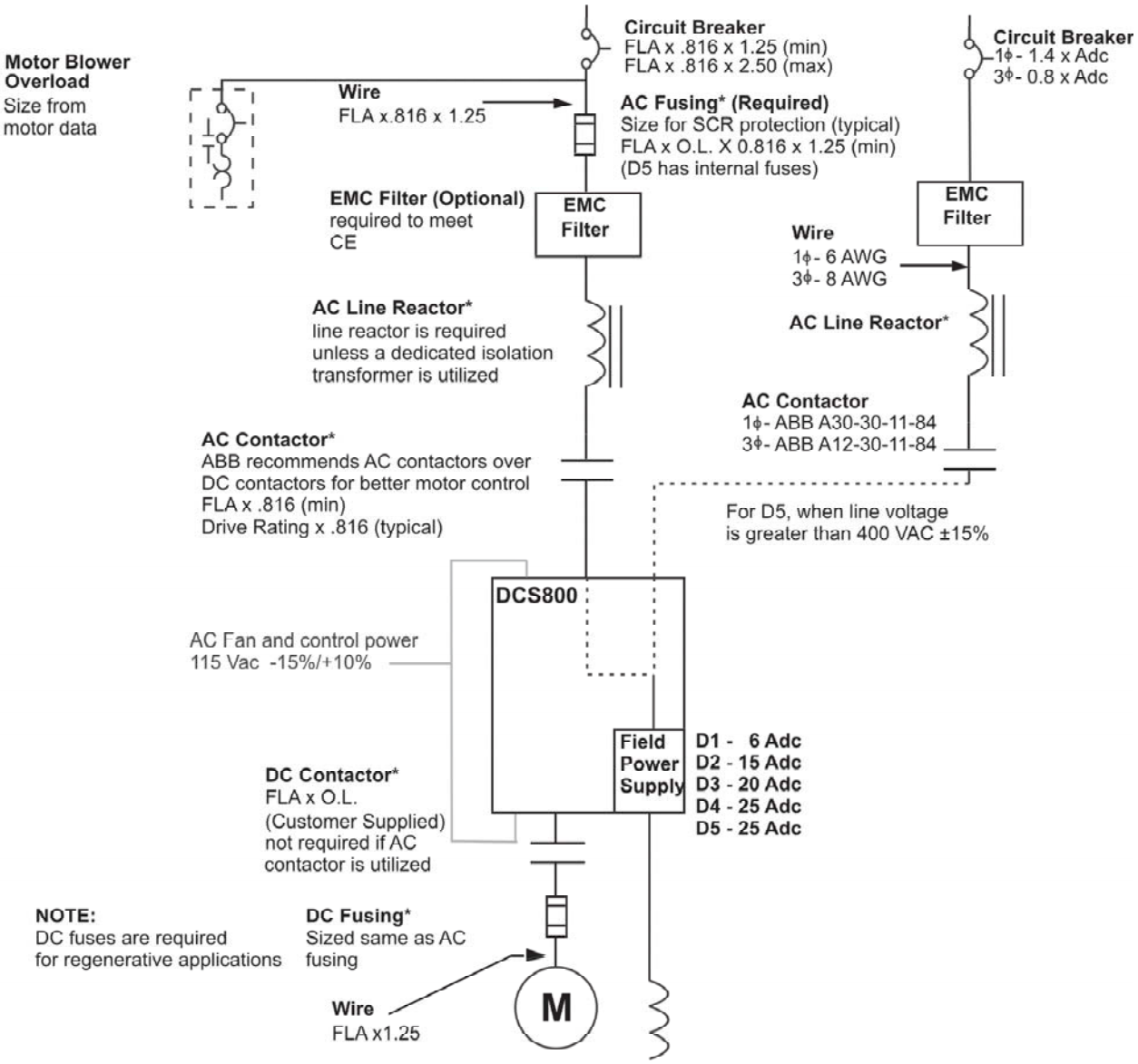
In order to determine if an existing drive can be rebuilt, the following is required:

- Healthy power section: Replacing the controls usually does not reduce the occurrence of blown fuses or over-current faults. These conditions commonly indicate that there is a malfunction in the power section. Carefully consider the benefits of upgrading compared to replacing with a full drive that carries a brand new warranty.
- Accurate, up-to-date schematic is essential.
- Panel layout diagram, along with visual inspection of the panel is needed to determine where to mount the new components.
- Special features: The DCS800 has functionality to run most any application but it is important to be sure that the new controller has the functionality of the existing controller, or if other modifications will be required.

Specific Requirements

- Consultation with ABB application engineering is required before committing to a project.
- Rebuild kits only - each circuit board needs to be located close to its interface device, such as the thyristors or the current transformers. The controller can be located most anywhere within the drive enclosure.
- In addition to controlling the power section, the DCS800-R will also provide user interface (via keypad or DriveWindow Light) and encoder and/or tachometer interface, if present. After the drive is rebuilt, the complete drive system will operate like a DCS800, which may include communicating with the PLC via Ethernet, ControlNet, etc, receiving signals from switches, push-buttons and pots, and sending signals to lamps and meters.
- +S164: The internal field supply is half controlled, 1 or 3 phase, with single quadrant operation. It is current regulated with a max output current of 25 amps with 3-phase input, 16 amps with 1-phase input. With 1-phase input, an autotransformer is recommended for voltage adaptation. An input line reactor is required when supply voltage is over 400 Vac. Fuses are included.

Component Sizing Information:
D1 - D5 Frame (500Vdc)



Notes:

* Product recommendations are included in this catalog. See section 3 for details.

Sizing information given on this page are general guidelines. Sizing of system components must comply with local and national electrical codes.

FLA = Nominal DC Motor Current

Motor Data:

HP_____ Model_____ Frame_____

RPM Base/Max _____/_____

Armature Voltage_____ Amps_____

Field Voltage _____/ Amps_____/_____ Ohms_____

Overload requirements / Duty cycle_____

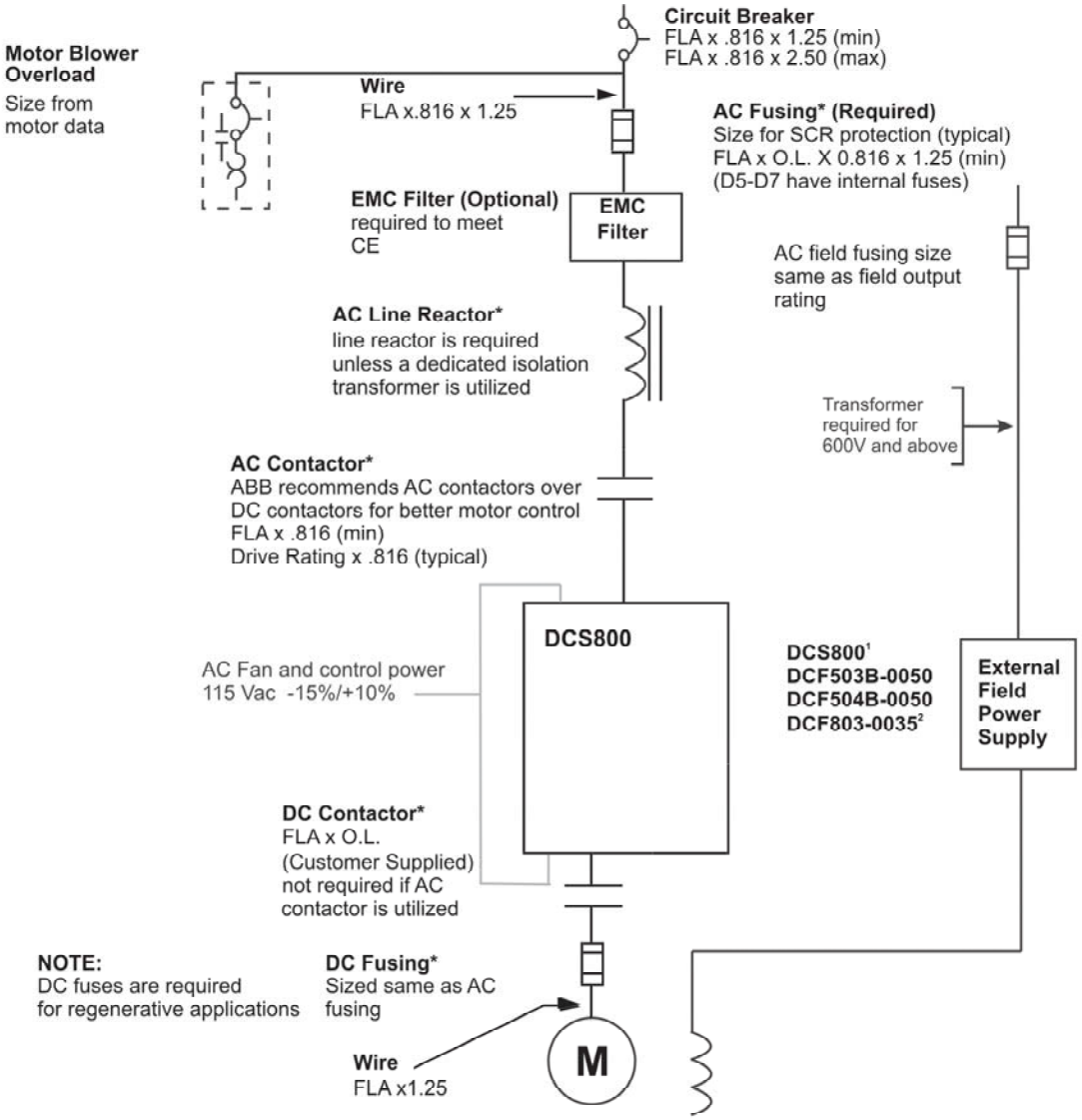
Tach:
Volts/1000RPM_____

Encoder:
PPR_____ Volts_____

Blower:
Voltage_____ Amps _____ Phase_____

Altitude_____ Ambient Temp _____

Component Sizing Information:
D1 - D5 Frames (600 Vdc and above) and D6 - D7 Frames (all voltages)



Notes:

[1] Overvoltage protection unit and AC Line reactor required

[2] Requires AC line reactor. For single phase supply, autotransformer is recommended

* Product recommendations are included in this catalog. See section 3 for details.

Sizing information given on this page are general guidelines. Sizing of system components must comply with local and national electrical codes.

FLA = Nominal DC Motor Current

Motor Data:

HP_____ Model_____ Frame_____

RPM Base/Max _____/_____

Armature Voltage_____ Amps_____

Field Voltage _____/ Amps_____/_____ Ohms_____

Overload requirements / Duty cycle_____

Tach:
Volts/1000RPM_____

Encoder:
PPR_____ Volts_____

Blower:
Voltage_____ Amps _____ Phase_____

Altitude_____ Ambient Temp _____

Supporting Installation Hardware		DS-OPT		
Name	Description	Field Kit Code	Plus Code	List Price
AC & DC busbars for Frame D6 module	Busbar kit for multiple wire connections on frame D6 DCS800 module drives. The kit includes five (5) tinned copper busbar "ears" and mounting hardware. Dimension 250x140x100mm (LxHxD) and 10mm thick.	DCS800 D6 BUSBARS QTY5	NA	$ 1246

AC Line Fuses

AC Line Fuses					
Type of Converter		Fuse	Fuse Holder	Fuse	Fuse Holder
2-Q Converter	4-Q Converter	North America		Worldwide	
DCS800-S01-0020-05	DCS800-S02-0025-05	FWP-50B	1BS101	170M 1564	OFAX 00 S3L
DCS800-S01-0045-05	DCS800-S02-0050-05	FWP-80B	1BS101	170M 1565	OFAX 00 S3L
DCS800-S01-0065-05	DCS800-S02-0075-05	FWP-125A	1BS103	170M 1568	OFAX 00 S3L
DCS800-S01-0090-05	DCS800-S02-0100-05	FWP-125A	1BS103	170M 1568	OFAX 00 S3L
DCS800-S01-0125-05	DCS800-S02-0140-05	FWP-200A	1BS103	170M 3815	OFAX 1 S3
DCS800-S01-0180-05	DCS800-S02-0200-05	FWP-250A	1BS103	170M 3816	OFAX 1 S3
DCS800-S01-0230-05	DCS800-S02-0260-05	FWP-300A	1BS103	170M 3817	OFAX 1 S3
DCS800-S01-0315-05	DCS800-S02-0350-05	FWP-500A	1BS103	170M 5810	OFAX 2 S3
DCS800-S01-0405-05	DCS800-S02-0450-05	FWP-700A	busbar	170M 6811	OFAX 3 S3
DCS800-S01-0470-05	DCS800-S02-0520-05	FWP-700A	busbar	170M 6811	OFAX 3 S3
DCS800-S01-0610-05	DCS800-S02-0680-05	FWP-900A	busbar	170M 6163	3X 170H 3006
DCS800-S01-0740-05	DCS800-S02-0820-05	FWP-900A	busbar	170M 6163	3X 170H 3006
DCS800-S01-0900-05	DCS800-S02-1000-05	FWP-1200A	busbar	170M 6166	3X 170H 3006
DCS800-S01-0290-06	DCS800-S02-0320-06	FWP-500A	1BS103	170M 5810	OFAX 2 S3
DCS800-S01-0590-06	DCS800-S02-0650-06	FWP-900A	busbar	170M 6813	OFAX 3 S3

NA

Required AC Line Fuses are available directly from Bussmann. For information, see their web page **www.bussmann.com**. These are semiconductor type fuses.
Three (3) fuses and fuse holders are required per drive.
See Hardware Manual for more information.

Fuses for field supplies

Fuses for Externally Supplied, Field Exciters				
Field Conv.	Field Current	Fuse Rating	Bussmann Fuse Type	Fuse Block
FEX425-Int*	$I_F \leq$ 6A	10A	FWP-10B	1BS101
DCF803-0035	$I_F \leq$ 12A	15A	FWP-15B	1BS101
DCF-503B-0050	$I_F \leq$ 16A	25A	FWP-25B	1BS101
DCF-504B-0050	$I_F \leq$ 25A	25A	FWP-25B	1BS101
DCF-503B-0050 DCF-504B-0050	$I_F \leq$ 35A	50A	FWP-50B	1BS101
DCF-503B-0050 DCF-504B-0050	$I_F \leq$ 50A	60A	FWP-60B	1BS101

NA

Field supply fuses must be of semi-conductor type and must be installed after the AC supply auto-tranformer and before any external line reactor. Note, DCF503B-0050 and DCF504B-0050 have an internal reactor.

*Fuse KTK25 included in FEX425-INT inside D5 drive

Supporting Installation Hardware	DS-OPT	
Name	Description	List Price

AC Line Reactors

NA

AC Line Reactors			
Type of Converter		1.5% Impedance	5.0% Impedance
2-Q Converter	4-Q Converter		
500Vdc			
DCS800-S01-0020-05	DCS800-S02-0025-05	KLR21BTB	KLR21CTB
DCS800-S01-0045-05	DCS800-S02-0050-05	KLR45BTB	KLR45CTB
DCS800-S01-0065-05	DCS800-S02-0075-05	KLR80BTB	KLR80CTB
DCS800-S01-0090-05	DCS800-S02-0100-05	KLR110BCB	KLR110CCB
DCS800-S01-0125-05	DCS800-S02-0140-05	KLR130BCB	KLR130CCB
DCS800-S01-0180-05	DCS800-S02-0200-05	KLR200BCB	KLR200CCB
DCS800-S01-0230-05	-	KLR200BCB	KLR200CCB
-	DCS800-S02-0260-05	KLR250BCB	KLR250CCB
DCS800-S01-0315-05	DCS800-S02-0350-05	KLR300BCB	KLR300CCB
DCS800-S01-0405-05	-	KLR360BCB	KLR360CCB
DCS800-S01-0470-05	DCS800-S02-0450-05	KLR420BCB	KLR420CCB
-	DCS800-S02-0520-05	KLR480BCB	KLR480CCB
DCS800-S01-0610-05	DCS800-S02-0680-05	KLR600BCB	KLR600CCB
DCS800-S01-0740-05	DCS800-S02-0820-05	KLR750BCB	KLR750CCB
DCS800-S01-0900-05	-	KLR750BCB	KLR750CCB
-	DCS800-S02-1000-05	KLR850BCB	KLR850CCB
DCS800-S01-1200-05	DCS800-S02-1200-05	KLR1100BCB	KLR1100CCB
DCS800-S01-1500-05	DCS800-S02-1500-05	KLR1250BCB	KLR1250CCB
600Vdc			
DCS800-S01-0290-06	-	KLR250BCB	KLR250ECB
-	DCS800-S02-0320-06	KLR300BCB	KLR300ECB
DCS800-S01-0590-06	DCS800-S02-0650-06	KLR600BCB	KLR600ECB
DCS800-S01-0900-06	DCS800-S02-0900-06	KLR750BCB	KLR750ECB
DCS800-S01-1500-06	DCS800-S02-1500-06	KLR1250BCB	KLR1250ECB

Recommended AC Line Reactors are available directly from TCI. For information, see their web page **www.transcoil.com**. Line reactor selection is determined by the drive power and system requirements. A minimum impedence of 1% is required unless an input isolation transformer is provided for each drive (1 to 5% impedence).
See Hardware Manual for more information.

AC Line Reactors for Externally Supplied Field Exciter and Internal Supply on the D5 Drive

NA

AC Line Reactors for Externally Supplied Field Exciter			
Field Supply	I_{Field}	1-phase Reactor	3-phase Reactor
SDCS-FEX-425-INT	<16A	NTI-3530	KLR16BTB
SDCS-FEX-425-INT	16 - 25 A	-	KLR45CTB
DCF803-0035	<16A	NTI-3530	KLR16BTB
DCF803-0035	16 - 35 A	-	KLR45CTB
DCF803-0050	-	-	Internal
DCF804-0050	-	-	Internal

For 3-phase reactor, see note in “AC Line Reactors” above. Recommended 1-phase reactor is available directly from Nicollet Technologies Corp. For information, see their website www.nictec.com or email to sales@nictec.com.

Reactor for Field supply on the D5 Drive:
The D5 drive with plus code +S164 has internal field supply FEX425-INT. This field supply should be seperately powered and requires its own line reactor as identified above.

Supporting Installation Hardware (continued)	DS-OPT	
Name	Description	List Price
EMC Filters		NA

EMC Filters

2-Q Converter	4-Q Converter	Filter Type	List Price
DCS800-S01-0020-05	DCS800-S02-0025-05	NF3-500-25	$2,050
DCS800-S01-0045-05	DCS800-S02-0050-05	NF3-500-50	$2,400
DCS800-S01-0065-05	DCS800-S02-0075-05	NF3-500-64	$2,600
DCS800-S01-0090-05	DCS800-S02-0100-05	NF3-500-80	$3,350
DCS800-S01-0125-05	DCS800-S02-0140-05	NF3-500-110	$4,700
DCS800-S01-0180-05	DCS800-S02-0200-05	NF3-500-320	$4,800
DCS800-S01-0230-05	DCS800-S02-0260-05	NF3-500-320	$4,800
DCS800-S01-0315-05	DCS800-S02-0350-05	NF3-500-320	$4,800
DCS800-S01-0405-05	DCS800-S02-0450-05	NF3-500-600	$5,550
DCS800-S01-0470-05	DCS800-S02-0520-05	NF3-500-600	$5,550
DCS800-S01-0610-05	DCS800-S02-0680-05	NF3-500-600	$5,550
DCS800-S01-0740-05	-	NF3-500-600	$5,550
-	DCS800-S02-0820-05	NF3-690-1000	$9,000
DCS800-S01-0900-05	DCS800-S02-1000-05	NF3-690-1000	$9,000
DCS800-S01-1200-05	DCS800-S02-1200-05	NF3-690-1000	$9,000
DCS800-S01-1500-05	DCS800-S02-1500-05	NF3-690-1600	$16,500
DCS800-S01-2000-05	DCS800-S02-2000-05	NF3-690-1600	$16,500

CE Compliance: Converters conform to the CE label and meet the low voltage specifications. External filters are required for full CE compliance. Responsibility for proving CE compliance of an installation is up to the end user. Consult the factory for current prices and lead times.

Supporting Installation Hardware (continued)	DS-OPT	
Name	Description	List Price

ABB AC Line Contactors

Unit Type		AC Input Contactors
2Q Converters	4Q Converters	3-Pole (NO)
500 Vdc		
DCS800-S01-0020-05	DCS800-S02-0025-05	A12-30-11-84
DCS800-S01-0045-05	DCS800-S02-0050-05	A30-30-11-84
DCS800-S01-0065-05	DCS800-S02-0075-05	A50-30-11-84
DCS800-S01-0090-05	DCS800-S02-0100-05	A75-30-11-84
DCS800-S01-0125-05	DCS800-S02-0140-05	A110-30-11-84
DCS800-S01-0180-05	DCS800-S02-0200-05	A145-30-11-84
DCS800-S01-0230-05	- -	A210-30-11-84
- -	DCS800-S02-0260-05	A210-30-11-84
DCS800-S01-0315-05	DCS800-S02-0350-05	A260-30-11-84
DCS800-S01-0405-05	- -	AF400-30-11-70
DCS800-S01-0470-05	DCS800-S02-0450-05	AF400-30-11-70
- -	DCS800-S02-0520-05	AF400-30-11-70
DCS800-S01-0610-05	- -	AF580-30-11-70
- -	DCS800-S02-0680-05	AF580-30-11-70
DCS800-S01-0740-05	- -	AF750-30-11-70
	DCS800-S02-0820-05	AF750-30-11-70
DCS800-S01-0900-05	- -	AF1350-30-11-70
- -	DCS800-S02-1000-05	AF1350-30-11-70
DCS800-S01-1200-05	DCS800-S02-1200-05	AF1350-30-11-70
DCS800-S01-1500-05	DCS800-S02-1500-05	AF1650-30-11-70
600 Vdc		
DCS800-S01-0290-06	DCS800-S02-0320-06	A260-30-11-84
DCS800-S01-0590-06	DCS800-S02-0650-06	AF460-30-11-70
DCS800-S01-0900-06	DCS800-S02-0900-06	AF750-30-11-70
DCS800-S01-1500-06	DCS800-S02-1500-06	AF1650-30-11-70

List Price: NA

NOTE:
- Please contact your local ABB Controls representative for current contactor pricing.
- The contactors above have been sized for a 100% continuous duty rating at 500V. For special O.L. and duty cycles the AC contactor size may need to be increased.
- Contactors have 120Vac / 50-60 Hz coil with 1-NO and 1-NC aux contact

Supporting Installation Hardware (continued)	DS-OPT	
Name	Description	List Price

ABB DC Line Contactors

NA

Unit Type		DC Output Contactors	Dynamic Brake Contactors
2Q Converters	4Q Converters	2-Pole (NO)	2-NO & 1-NC
500 Vdc			
DCS800-S01-0020-05	DCS800-S02-0025-05	DA75-20-11-84	DA75-21-21-84
DCS800-S01-0045-05	DCS800-S02-0050-05	DA75-20-11-84	DA75-21-21-84
DCS800-S01-0065-05	DCS800-S02-0075-05	EHDB220C2P-1L	EHDB220C-1L
DCS800-S01-0090-05	DCS800-S02-0100-05	EHDB220C2P-1L	EHDB220C-1L
DCS800-S01-0125-05	DCS800-S02-0140-05	EHDB220C2P-1L	EHDB220C-1L
DCS800-S01-0180-05	DCS800-S02-0200-05	EHDB220C2P-1L	EHDB220C-1L
DCS800-S01-0230-05	-	EHDB280C2P-1L	EHDB280C-1L
-	DCS800-S02-0260-05	EHDB280C2P-1L	EHDB280C-1L
DCS800-S01-0315-05	DCS800-S02-0350-05	EHDB360C2P-1L	EHDB360C-1L
DCS800-S01-0405-05	-	EHDB520C2P-1L	EHDB520C-1L
DCS800-S01-0470-05	DCS800-S02-0450-05	EHDB520C2P-1L	EHDB520C-1L
-	DCS800-S02-0520-05	EHDB520C2P-1L	EHDB520C-1L
DCS800-S01-0610-05	-	EHDB650C2P-1L	EHDB650C-1L
-	DCS800-S02-0680-05	EHDB800C2P-1L	EHDB800C-1L
DCS800-S01-0740-05	-	EHDB800C2P-1L	EHDB800C-1L
-	DCS800-S02-0820-05	EHDB960C2P-1L	EHDB960C-1L
DCS800-S01-0900-05	-	EHDB960C2P-1L	EHDB960C-1L
-	DCS800-S02-1000-05	Bar Contactor	Bar Contactor
DCS800-S01-1200-05	DCS800-S02-1200-05	Bar Contactor	Bar Contactor
DCS800-S01-1500-05	DCS800-S02-1500-05	Bar Contactor	Bar Contactor
600 Vdc			
DCS800-S01-0290-06	DCS800-S02-0320-06	EHDB360C2P-1L	EHDB360C-1L
DCS800-S01-0590-06	DCS800-S02-0650-06	EHDB680C2P-1L	EHDB680C-1L
DCS800-S01-0900-06	DCS800-S02-0900-06	EHDB960C2P-1L	EHDB960C-1L
DCS800-S01-1500-06	DCS800-S02-1500-06	Bar Contactor	Bar Contactor

NOTE:
- Please contact your local ABB Controls representative for current pricing.
- The contactors above are rated for 100% continous duty at 600 Vdc. The NO contacts are rated for 200% overload under abnormal conditions. For special O.L. and duty cycles the DC conatctor size may need to be adjusted.
- All contactors have 120Vac / 60Hz coils and have 1 N.O. and 1 N.C. auxiliary contacts.

Regulated Field Supplies		DS-OPT		
Name	Description	Field Kit Code	Plus Code	List Price
External Field Supply	Externally mounted, half controlled 3-phase field exciter, with single quadrant operation. This field supply is current regulated with a max output current of 35 amps. With 1-phase input, an autotransformer is recommended for voltage adaptation. An input line reactor is required when supply voltage is over 400 Vac. Fuses are always required. **DSL communication cable is required. (See Below)** Communication to the converter unit is required via the SDC-DSL-4 board, standard in D5-D7 and all drives 600 Vdc or greater; otherwise optional.	DCF803-0035	NA	$2,466
External Field Supply	Externally mounted, half controlled 1 phase field exciter, with single quadrant operation. This field supply is current regulated with a max output current of 50amps with 1 phase input voltage (auto transformer required for). Input line fuses required. **DSL communication cable is required. (See Below)** Communication to the converter unit is required via the SDC-DSL-4 board, standard in D5-D7 and all drives 600 Vdc or greater; otherwise optional.	DCF503B-0050	NA	$3,480
External Field Supply	Externally mounted, full controlled 1phase field exciter, with four quadrant operation (supports field reversal). This field supply is current regulated with a max output current of 50amps with 1 phase input voltage (auto transformer required). Input line fuses required. **DSL communication cable is required. (See Below)** Communication to the converter unit is required via the SDC-DSL-4 board, standard in D5-D7 and all drives 600 Vdc or greater; otherwise optional.	DCF504B-0050	NA	$3,980
External Field Supply	For high current field supply requirements a standard DCS800 converter unit will be used as the field controller. The converter drive can be used to supply up to 520amp for motor field in a single quadrant or four quadrant configuration with 3 phase input supply. An over voltage protection unit DCF506-0140-51 or -0520 must be used. **DSL communication cable is required. (See Below)** The SDCS-DSL-4 communication board is required in the field converter and the armature converter for proper control	DCS800-S0x -xxxx-05+S199 * DS-DC Discount schedule applies.	NA	See Rating Table
Internal Field Supply	Internally mounted inside the D5 drive and DCS800-R Rebuild Kits, half controlled 3 phase field exciter, with single quadrant operation. This field supply is current regulated with a max output current of 25 amps, 16 amps with 1-phase input for DCS800-R. With 1-phase input, an autotransformer is recommended for voltage adaptation. An input line reactor is required when supply voltage is over 400 Vac. Fuses are included.	SDCS-FEX425-INT	+S164	$2,250
DSL Communication Cable	Interface cable for communication between the DCF external field supply and main converter. The cable also supports communication for 12 pulse operation and drive-to-drive communication with the SDCS-DSL-4 board. This cable is 21 inches (0.5m) long and has ferrule-tipped wires on both ends.	DCS800-DSL Cable P5M		$220
DSL Comm. Cable	Same as above except 6-1/2 ft (2m) long.	DCS800-DSL Cable 2M		$220
DSL Comm. Cable	Same as above except 13 ft (4m) long.	DCS800-DSL Cable 4M		$280
DSL Comm. Cable	Same as above except 33 ft (10m) long.	DCS800-DSL Cable 10M		$360
DSL Comm. Cable	Same as above except 66 ft (20m) long.	DCS800-DSL Cable 20M		$460
OverVoltage Protection for field supply applications	The three phase field supply converters DCS800-S01 and -S02 drives need a separate active over voltage protection for proper operation on the inductive load of a motor field. This unit will protect the drive against inadmissible high voltages. The DCF506-0140 is to be used with -0020-05 through -0140-05 units.	DCF506-0140-51	NA	$4,980
OverVoltage Protection for field supply applications	The three phase field supply converters DCS800-S01 and -S02 drives need a separate active over voltage protection for proper operation on the inductive load of a motor field. This unit will protect the drive against inadmissible high voltages. The DCF506-0520 is to be used with -0200-05 through -0520-05 units.	DCF506-0520-51	NA	$5,660
OverVoltage Protection for non-Motor Applications	Non motor applications of the DCS800 on inductive loads require a separate active over voltage protection. For applications of this type utilizing a 2Q configuration (DCS800-S01-xxxx-05) select this unit for protection the drive against inadmissible high voltages. The DCF505-0140 is to be used with -0020-05 through -0140-05 units.	DCF505-0140-51	NA	$3,180

Regulated Field Supplies (continued)		DS-OPT		
Name	Description	Field Kit Code	Plus Code	List Price
OverVoltage Protection for non-Motor Applications	Non motor applications of the DCS800 on inductive loads require a separate active over voltage protection. For applications of this type utilizing a 2Q configuration (DCS800-S01-xxxx-05) select this unit for protection the drive against inadmissible high voltages. The DCF505-0520 is to be used with -0200-05 through -0520-05 units.	DCF505-0520-51	NA	$4,400
OverVoltage Protection for non-Motor Applications	Non motor applications of the DCS800 on inductive loads require a separate active over voltage protection. For applications of this type utilizing a 2Q configuration (DCS800-S01-xxxx-05) select this unit for protection the drive against inadmissible high voltages. The DCF505-1200 is to be used with -0610-05 through -1200-05 units.	DCF505-1200-51	NA	$5,200

Input / Output Options		DS-OPT		
Name	Description	Field Kit Code	Plus Code	List Price
Drive to Drive Communication	The DSL board provides a drive to drive communication dedicated to the DCS800, based on CAN bus. This communication adapter is also used in 12-pulse operation and communication / control of external field. This board is standard in all D5-D7 frames and all frames rated 600vdc or greater.	SDCS-DSL-4	+S199	$390
DDCS Communications	Fiber optic communication interface board and CDP312RD panel support • CH 0 - 10Mb - overriding system control (APC2, AC80, etc.) • CH 1 - 5Mb - is used for DDCS I/O extension. AIMA-01 • CH 2 - 10Mb - Master-Follower link (drive to drive) • CH 3 - 10Mb - PC tool such as DriveWindow • X19 is used for CDP312RD panel for Master-Follower interface to ACS800 use the RDCO-01C or -02C	SDCS-COM-81	+L508	$1,100
DDCS Communications	Fiber optic communication interface board and CDP312RD panel support • CH 0 - 5Mb - overriding system control (APC2, AC80, Nxxx module) • CH 1 - 5Mb - is used for DDCS I/O extension. AIMA-01 • CH 2 - 10Mb - Master-Follower link (drive to drive) • CH 3 - 10Mb - PC tool such as DriveWindow • X19 is used for CDP312RD panel for Master-Follower interface to ACS800 use the RDCO-01C or -02C	SDCS-COM-82	+L509	$1,100
External Isolated Digital I/O	Replaces the standard digital inputs and outputs with 8 DI/O points externally mounted with input voltage level of 24...48V DC The inputs are filtered and galvanically isolated by using opto-couplers. Inputs can form 2 galvanically separated groups by using X7:1 or X7:2. The outputs 1-5 & 8 are NO relay contacts and outputs 6&7 are potential isolated by opto-coupler with 24vdc sourced externally. Terminals X6 & X7 on the main control must not be used when a SDCS-IOB-2x board is installed. **Note: If IOB-3 is also required, you must order the combination kit instead. (See below)**	SDCS-IOB-21 w/1 CABLE	NA	$940
External Isolated Digital I/O	Replaces the standard digital inputs and outputs with 8 DI/O points externally mounted with input voltage level of 115 V AC The inputs are filtered and galvanically isolated by using opto-couplers. Inputs can form 2 galvanically separated groups by using X7:1 or X7:2. The outputs 1-5 & 8 are NO relay contacts and outputs 6&7 are potential isolated by opto-coupler with 24vdc sourced externally. Terminals X6 & X7 on the main control must not be used when a SDCS-IOB-2x board is installed. **Note: If IOB-3 is also required, you must order the combination kit instead. (See below)**	SDCS-IOB-22 w/1 CABLE	NA	$940

Input / Output Options (continued)		DS-OPT		
Name	Description	Field Kit Code	Plus Code	List Price
External Isolated Digital I/O	Replaces the standard digital inputs and outputs with 8 DI/O points externally mounted with input voltage level of 230 V AC The inputs are filtered and galvanically isolated by using opto-couplers. Inputs can form 2 galvanically separated groups by using X7:1 or X7:2. The outputs 1-5 & 8 are NO relay contacts and outputs 6&7 are potential isolated by opto-coupler with 24vdc sourced externally. Terminals X6 & X7 on the main control must not be used when a SDCS-IOB-2x board is installed. **Note: If IOB-3 is also required, you must order the combination kit instead. (See below)**	SDCS-IOB-23 w/1 CABLE	NA	$940
External Isolated Analog I/O	This board consists of the 5 analog inputs, 3 analog outputs, the galvanically isolated pulse encoder interface and a current source for temperature measuring devices. The analog tachometer on the main control must not be used when a SDCS-IOB-3 board is installed. **Note: If IOB-22 or -23 is also required, you must order the combination kit instead. (See below)**	SDCS-IOB-3 w/2 CABLES	NA	$1,020
External Isolated Analog & Digital I/O	This kit provides both the SDCS-IOB-21 board and the SDCS-IOB-3 board with all required cables in one kit. Please see related descriptions above for specific features. The kit includes 3 cables total, 2 for connected to the drive unit and 1 for interconnection between the IOB boards.	SDCS-IOB-21 / IOB-3 3 CABLES	NA	$1,960
External Isolated Analog & Digital I/O	This kit provides both the SDCS-IOB-22 board and the SDCS-IOB-3 board with all required cables in one kit. Please see related descriptions above for specific features. The kit includes 3 cables total, 2 for connected to the drive unit and 1 for interconnection between the IOB boards.	SDCS-IOB-22 / IOB-3 3 CABLES	NA	$1,960
External Isolated Analog & Digital I/O	This kit provides both the SDCS-IOB-23 board and the SDCS-IOB-3 board with all required cables in one kit. Please see related descriptions above for specific features. The kit includes 3 cables total, 2 for connected to the drive unit and 1 for interconnection between the IOB boards.	SDCS-IOB-23 / IOB-3 3 CABLES	NA	$1,960
Card Holder for SDCS-IOB-2x or -3	This card holder is used to mount the IOB-2x or IOB-3 board to a back panel. With universal Phoenix clamp 1202713, it is possible to mount the card holder to a standard DIN-rail system horizontally or vertically. Includes (6) clamps to attach the flat cables to the card holder. See diagram on page 108 of the hardware manual (rev. E). NOTE: Without this card holder, the IOB-2x and IOB-3 board can be mounted to the back panel by using stand-offs.	Card Holder for SDCS-IOB-2x / SDCS-IOB-3		$380
Analog I/O Extension Module	The Analog I/O Extension module offers two unipolar current (0[4]…20 mA) or bipolar voltage (±0[2]…10 V or ±0…2 V) inputs and two unipolar current (0[4]-20 mA) outputs. Analog unipolar inputs are 12 bit resolution. Bipolar inputs are 11 bit resolution. Analog outputs are 12 bit resolution. The analog inputs and outputs are galvanically isolated as a group, from each other and the power supply. This option, when installed internally to the DCS800, uses 120 mA of the available 250 mA power supply.	RAIO-01-KIT	+L500	$1068
Digital I/O Extension Module	The Digital I/O Extension module offers three digital inputs (24…250 Vdc or 110…230 Vac) and two relay outputs (1250 VA/250 Vac or 5 A/24 Vdc). The isolation voltage between the digital inputs, digital outputs and power supply is 2.5 kV (1.5 kV between DI2 and DI3). This option, when installed internally to the DCS800, uses 30 mA of the available 250 mA power supply.	RDIO-01-KIT	+L501	$876
I/O Extension Adapter * Requires DDCS Communication	The I/O extension adapter adds support for 3 additional (R) type adapters for the DCS800. This module is mounted by the user external from the drive unit. Adapter is DIN rail mountable . The SDCS-COM-8x is required for support of this option	AIMA-01-KIT	NA	$1600

Input / Output Options (continued)		DS-OPT		
Name	Description	Field Kit Code	Plus Code	List Price
Pulse Encoder Interface	The Pulse Encoder Interface module offers a differential or single ended interface for a digital pulse encoder. The module is capable of operating from either a 15 or 24Vdc signal with a max frequency of 200kHz. This option uses 55 mA of the available 250 mA power supply. When the drive's internal power supply is used to power the encoder, additional options may not be installed. Check the encoder's power supply requirements prior to installation.	RTAC-01-KIT	+L502	$984
Pulse Encoder Interface	TTL incremental Pulse Encoder Interface module for use with Positioning App SW only. The module is capable of operating at 24Vdc signal with a max frequency of 200kHz. This option uses 55 mA of the available 250 mA power supply.	RTAC-03-KIT	+L517	$984

NOTES:
1, A maximum of three (3) Rxxx type options are allowed. If additional options are required, the AIMA-01 extension adapter is required.
2, When the SDCS-COM-8x is installed in the drive, only two (2) Rxxx type options can be installed inside the drive.
3, Factory installed options will extend lead time, Order as field kit in separate line item for quick ship from stock.

FieldBus Communication Options		DS-OPT		
Name	Description	Field Kit Code	Plus Code	List Price
DeviceNet Adapter	The DeviceNet network uses a linear bus topology. Terminating resistors are required on each end of the trunk line. Drop lines as long as 6 meters (20 feet) each are permitted, allowing one or more nodes to be attached. DeviceNet allows branching structures only on drop lines.	RDNA-01-KIT	+K451	$680
ProfiBus-DP Adapter	ProfiBus is an open serial communication standard that enables data exchange between automation components. The transmission medium of the bus is a twisted pair cable (according to RS-485 standard). The maximum length of the bus cable is 100 to 1200 meters, depending on the transmission rate. Up to 31 stations can be connected to the same PROFIBUS system without use of repeaters.	RPBA-01-KIT	+K454	$862
ModBus Adapter	ModBus is a serial, asynchronous protocol. The ModBus protocol does not specify the physical interface. Typical physical interfaces are RS-232 and RS-485. The RMBA-01 provides a galvanically isolated RS-485 interface. ModBus is designed for integration with Modicon PLCs or other automation devices, and the services closely correspond to the PLC architecture. The RMBA-01 supports the RTU protocol only.	RMBA-01-KIT	+K458	$759
ControlNet Adapter	The ControlNet network uses a RG-6 quad shielded cable or fiber with support for media redundancy. The RCNA-01 Adapter module supports only RG-6 quad shielded cable (coax) for the bus connection. ControlNet is flexible in topology options (bus, tree, star) to meet various application needs. The fieldbus speed is 5 Mbits/s. The RCNA-01 ControlNet Adapter module can not originate connections on its own, but a scanner node can open a connection towards it. The ControlNet protocol is implemented according to the ControlNet international specification for a Communication adapter.	RCNA-01-KIT	+K462	$680
EtherNet Adapter * New offering, check with factory for availability	The RETA-01 module supports the Modbus/TCP and EtherNet/IP network protocols. Modbus/TCP is a variant of the Modbus family of simple, vendor neutral communication protocols intended for supervision and control of automation equipment. EtherNet/IP is based on the Common Industrial Protocol (CIP), which is also the framework for both the ControlNet and DeviceNet networks. The RETA-01 supports 10/100 Mbps transfer rate with network connection made with standard RJ-45 connector.	RETA-01-KIT	+K466	$790
EtherNet Enhanced Adapter * Requires DDCS Communication	The NETA-01 Ethernet Adapter module is an optional device for browser-based remote monitoring of ABB drives via Ethernet. Multiple drives (up to 9) can be connected to the network through the DDCS Branching Unit (NDBU-85/95) or using ring topology with the NETA-01 Ethernet Adapter module.	NETA-01-KIT	NA	$2,200
CANopen Adapter *New offering, check with factory for availability	The RCAN-01 CANopen adapter module enables the connection of the ABB drive to a CANopen system. CANopen is a higher level protocol based on the CAN(Control Area Network) serial bus system and the CAL (CAN Application Layer). The RCAN-01 fulfills CiA (CAN in Application) standard DSP-402 (Drives and Motion Control), supporting the ‘‘Manufacturer Specific’’ operating mode only the pysical medium of CANopen is a differently drive two-wire bus line with common return according to ISO 11989. The RCAN-01 supports baud rates of 10Kbits/s to 1 Mbits/s. The module provides DIP-switches for selection of the node number and baud rate. The node number and baud rate can be alternatively be set via the control panel of the drive.	RCAN-01-KIT	NA	$759

NOTES:
1, A maximum of three (3) Rxxx type options are allowed. If additional options are required, the AIMA-01 extension adapter is required.
2, When the SDCS-COM-8x is installed in the drive, only two (2) Rxxx type options can be installed inside the drive.
3, Factory installed options will extend lead time, Order as field kit in separate line item for quick ship from stock.

Control Panel & Panel Accessories		DS-OPT		
Name	Description	Field Kit Code	Plus Code	List Price
Control Panel	DCS800 control panel - included in all drives	DCS800-PAN	NA	$350
Cabinet Panel Mounting	Control Panel Mounting Platform allows remote mounting of the DCS800-PAN on an enclosure or remote panel. The kit maintains UL Type 12 integrity of the mounting location. Adapters, 3 m (10 ft) cable and mounting hardware are included in this kit. With this mounting arrangement, the keypad is removeable from the panel in a fashion identical to a drive-mounted keypad	OPMP-01	NA	$166
Panel Extension Cable	7 foot CAT patch cable allows remote operation of the DCS800-PAN panel	OCAT-01	NA	$75
Optional Control Panel	CDP312R Control panel option. Requires additional mounting platform and SDCS-Com-8x drive interface card.	CDP312R	NA	$413
Cabinet Panel Mounting	Panel mounting platform for CDP312R is NEMA 12 rated, includes the 3 meter cable. (Requires SDCS-COM-8x). The CDP312R panel must be purchased seperately. Maximum door panel thickness 14ga (2.5mm)	RPMP-11	NA	$413
Cabinet Panel Mounting with control panel	Panel mounting platform for CDP312R is NEMA 12 rated, includes the 3 meter cable. (Requires SDCS-COM-8x) Maximum door panel thickness 14ga (2.5mm)	RPMP-13	NA	$826
Cabinet Panel Mounting	Legacy Panel mounting platform for the CDP312R, includes 3 meter cable. This panel mounting is larger than the RPMP-11. It includes screw mounting for larger gauge steel panels and NEMA 12 rated gasket. The CDP312RD panel must be purchased separately.	NPMP-01-KIT	NA	$750
Panel Extension Cable	Screened control panel cable (RJ11 to RJ11) for the CDP312R panel, 3.0m	NPLC-03C	NA	$120
NEMA 4X Cabinet Panel Mounting	Allows remote mounting of the ACS-CP-X Operator Panels on a larger NEMA 4X (IP66) enclosure or remote panel. The kit maintains NEMA 4X integrity of the mounting location. All necessary hardware and a mounting template are provided in addition to a 3 m panel cable. When mounted, the operator is not removable from the front of the enclosure. The operator panel must be purchased separately.	ACS/H-CP-EXT-IP66	NA	$85

Fiber Optic cables and Branching units		DS-OPT		
Name	Description	Field Kit Code	Plus Code	List Price
Branching Unit	Star connection branching unit with nine (9) output connections. Eight (8) output connections rated for 5Mb, one (1) rated for 10Mb.	NDBU-85C	NA	$2,110
Branching Unit	Star connection branching unit with 9 output connections. Nine (9) output connections rated for 10Mb.	NDBU-95C	NA	$2,556
Fiber Optic Converter / Repeater	The NOCR (optical converter and repeater) converts between different types of optical cable. The NOCR can convert plastic fiber optic to glass fiber optic (GOF) or hard clad silica (HCS) and back to plastic. The NOCR can be used as a repeater for long distance (up to 1200m) transmission using GOF or HCS for long distance link.	NOCR-01	NA	$4.650
Fiber Optic cable	Single plastic fiber optic, Qty2, 2 meter long	NLWC-02	NA	$155
Fiber Optic cable	Single plastic fiber optic, Qty2, 3 meter long	NLWC-03	NA	$190
Fiber Optic cable	Single plastic fiber optic, Qty2, 5 meter long	NLWC-05	NA	$230
Fiber Optic cable	Single plastic fiber optic, Qty2, 7 meter long	NLWC-07	NA	$265
Fiber Optic cable	Single plastic fiber optic, Qty2, 10 meter long	NLWC-10	NA	$345
Fiber Optic cable	Double plastic fiber optic, Qty1, 0.5 meter long	PN - 61059130	NA	$230
Fiber Optic cable	Double plastic fiber optic, Qty1, 2 meter long	PN - 61059121	NA	$280
Fiber Optic cable	Double plastic fiber optic, Qty1, 5 meter long	PN - 61059113	NA	$395
Fiber Optic cable	Double plastic fiber optic, Qty1, 10 meter long	PN - 61046534	NA	$475

Driveware options		DS-OPT		
Name	Description	Field Kit Code	Plus Code	List Price
Control Builder License with Compact Flash memory card	Compact Flash memory card with electronic license control for CoDeSys programming software. This unique memory card for the DCS800 unlocks the programming features of this exceptionally flexible tool. Control Builder is the PC tool package that includes the CoDeSys programming (included with each drive). This programming tool is compliant with the IEC 61131-3 standard. The target audience for this optional programming tool are System Integrator's, OEM's, and Large Users who need the ability to develop their own application specific programs or wish eliminate the need for an external controller. For those who wish to become Control Builder experts, training is available through ABB drive training group beginning 2Q 2007. Control Builder experts will be eligible for a special programming license discount. Control Builder supports Microsoft Windows 2000 & XP.	SDCS-MEM-8	NA	$5,800
Drive AP	**Drive AP for support of Adaptive Programming in the DCS800 is not required. The standard DWL included with all DCS800 drives includes support for AP configuration.**	NA	NA	NA
DriveWindow Light	**DriveWindow Light is included as standard with every DCS800.** A reduced version of ABB's full DriveWindow package. DriveWindow Light communicates via an RS232 to RS485 adapter, using a serial connection. DriveWindow Light supports Microsoft Windows operating systems (Windows NT4, 2000, & XP). • Upload/download drive parameter files, save and copy • Compare files • Drive Adaptive Programming support • Trending (on a limited basis) • Drive Control (Start, Stop, Speed Ref)	3AFE64532871	NA	$800
DriveWindow with Hardware PCMCIA	DriveWindow is a software designed for online drive commissioning and maintenance purposes. Connection to the drive is through a PCMCIA card and high speed fiber optic cable. Drive requires an optional SDCS-COM-81 or -82 card to support the fiber optic connection. DriveWindow supports Microsoft Windows operating systems (Windows NT4, 2000, & XP). • Parameter editing and monitoring • Upload/download drive parameter files, save and copy • Compare files • Trending up to six (6) signals • Drive Control for commissioning and test Includes, DriveWindow install CD and PCMCIA connection kit (PCMCIA card, fiber optic connector, & fiber optic cable 10meters)	3AFE64547992	NA	$3,500
DriveWindow with Hardware USB	DriveWindow is a software designed for online drive commissioning and maintenance purposes. Connection to the drive is through a USB to fiber optic adapter and high speed fiber optic cable. Drive requires an optional SDCS-COM-81 or -82 card to support the fiber optic connection. DriveWindow supports Microsoft Windows operating systems (Windows NT4, 2000, & XP). • Parameter editing and monitoring • Upload/download drive parameter files, save and copy • Compare files • Trending up to six (6) signals • Drive Control for commissioning and test Includes, DriveWindow install CD and USB connection kit (USB to fiber optic adapter , & fiber optic cable 10meters)	3AUA0000040000	NA	$3,500
DriveWindow without Hardware	DriveWindow install CD (upgrade) Hardware is not included.	3AFE64547968	NA	$1,200
PCI adapter card for PCMCIA card	PCI socket adapter card for support of PCMCIA card in desktop PC	3AFE64510304	NA	$830
DCS800 Democase	Powered by 115VAC the DCS800 Democase includes a DCS800 frame D1 drive mounted on a panel. Included is a motor with analog tachometer and an I/O board.	DCS800-DEMOCASE	NA	$7,000

Recommended Spare Parts

Recommended spare parts for new DCS800 drives are shown below. Contact ABB Drive Services for Pricing. For existing drives, please contact ABB Drive Services for pricing to be sure the part numbers have not changed. (Drive serial number required.)

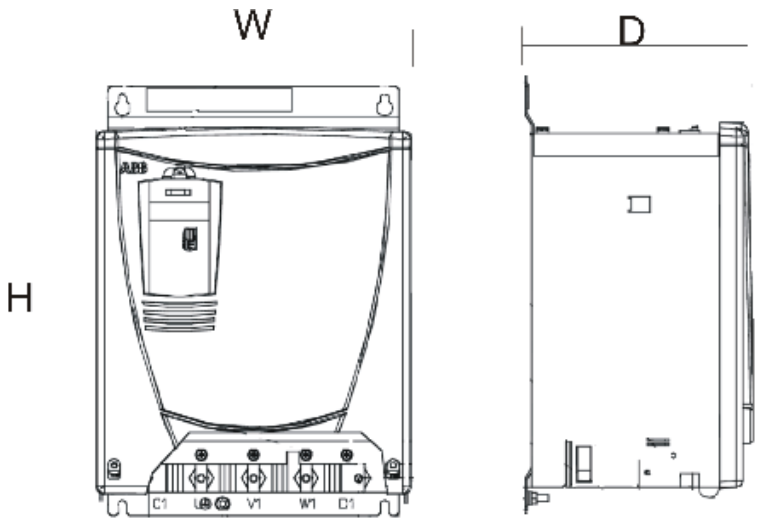
Unit Type 2Q Converters	Unit Type 4Q Converters	Field Fuse	Fan / Blower	Qty	Line Fuse Part Number	Qty	Thyristor (SCR) Part Number	Optional Circuit Boards	Frame
DCS800-S01-0020-05	DCS800-S02-0025-05	F1	-	-	*	3	3ADC340063P0001	CB-A	D1
DCS800-S01-0045-05	DCS800-S02-0050-05	F1	A	-	*	3	3ADC340063P0001	CB-A	
DCS800-S01-0065-05	DCS800-S02-0075-05	F1	A	-	*	3	3ADC340067P0001	CB-A	
DCS800-S01-0090-05	DCS800-S02-0100-05	F1	A	-	*	3	3ADC340068P0001	CB-A	
DCS800-S01-0125-05	DCS800-S02-0140-05	F1	A	-	*	3	3ADC340064P0001	CB-A	
DCS800-S01-0180-05	DCS800-S02-0200-05	F1	A	-	*	3	3ADC340064P0001	CB-A	D2
DCS800-S01-0230-05	DCS800-S02-0260-05	F1	A	-	*	3	DCA0011965P0001	CB-A	
DCS800-S01-0315-05	DCS800-S02-0350-05	F1	A	-	*	3	GHSN610089P0002	CB-A	D3
DCS800-S01-0405-05	DCS800-S02-0450-05	F1	A	-	*	3	GHSN610089P0002	CB-A	
DCS800-S01-0470-05	DCS800-S02-0520-05	F1	A	-	*	3	3ADC340092P0001	CB-A	
DCS800-S01-0610-05+S171	DCS800-S02-0680-05+S171	F1	B	-	*	3	3ADC340032P0001	CB-A	D4
DCS800-S01-0740-05+S171	DCS800-S02-0820-05+S171	F1	B	-	*	3	3ADC340066P0001	CB-A	
DCS800-S01-0900-05+S171	DCS800-S02-1000-05+S171	F1	B	-	*	3	3ADC340066P0001	CB-A	
DCS800-S01-1200-05+S164	DCS800-S02-1200-05+S164	F1	C	3	3ADC770010P0005	6	DCA0012015P0001	CB-B	D5
DCS800-S01-1500-05+S164	DCS800-S02-1500-05+S164	F1	C	3	3ADC770010P0009	6	3ADC340077P0001	CB-B	
DCS800-S01-2000-05+S164	DCS800-S02-2000-05+S164	F1	C	3	3ADC770010P0012	6	3ADC340078P0001	CB-B	
DCS800-S01-2050-05	DCS800-S02-2050-05	-	D	3	3ADC770010P0011	6	3ADC340081P0001	CB-C	D6
DCS800-S01-2500-05	-	-	D	3	3ADC770010P0006	6	3ADC340089P0001	CB-D	
-	DCS800-S02-2500-05	-	D	3	3ADC770010P0006	6	3ADC340079P0001	CB-D	
DCS800-S01-3000-05	-	-	D	3	3ADC770010P0009	6	3ADC340088P0001	CB-D	
-	DCS800-S02-3000-05	-	D	3	3ADC770010P0009	6	3ADC340079P0001	CB-D	
DCS800-S01-3300-05 L or R	DCS800-S02-3300-05 L or R	-	E	3	DCA0012821P0001	6	3ADC340089P0001	CB-C	D7
DCS800-S01-4000-05 L or R	DCS800-S02-4000-05 L or R	-	E	3	DCA0012830P0001	6	3ADC340088P0001	CB-C	
DCS800-S01-5200-05 L or R	DCS800-S02-5200-05 L or R	-	E	3	3ADC770030P0001	6	3ADC340083P0001	CB-C	

*External panel-mounted fuses supplied by user. See page ## for fuse recommendations.

Field Fuse	Qty	Part Number	Description
F1	3	3ADC770032P0025	KTK 25
A	1	3ADT754014P0001	CN2B2
B	1	3ADT754012P0001	W2E 200-HH86-14
C	1	3ADT754018P0001	D2E 160-AH02-15
D	1	3ADT754008P0001	GR31M-..(500V)
E	1	3ADT754020P0001	GR 35C

Optional Circuit Boards	Qty	Part Number	Description
CB-A	1	3ADT313900R1001	SDCS-CON-4
	1	3ADT314100R1001	SDCS-PIN-4
CB-B	1	3ADT313900R1001	SDCS-CON-4
	1	3ADT220090R0006	SDCS-PIN-51-COAT
	1	3ADT220090R0043	SDCS-PIN-48-COAT
	1	3ADT315100R1001	SDCS-POW-4 COAT
CB-C	1	3ADT313900R1001	SDCS-CON-4
	1	3ADT220090R0006	SDCS-PIN-51-COAT
	1	3ADT220090R0043	SDCS-PIN-48-COAT
	1	3ADT315100R1001	SDCS-POW-4 COAT
	1	DCF1066659P0001	P 233A-4-AHC
CB-D	1	3ADT313900R1001	SDCS-CON-4
	1	3ADT220090R0006	SDCS-PIN-51-COAT
	1	3BSE004939R1003	SDCS-PIN-46-coat
	1	3ADT315100R1001	SDCS-POW-4 COAT

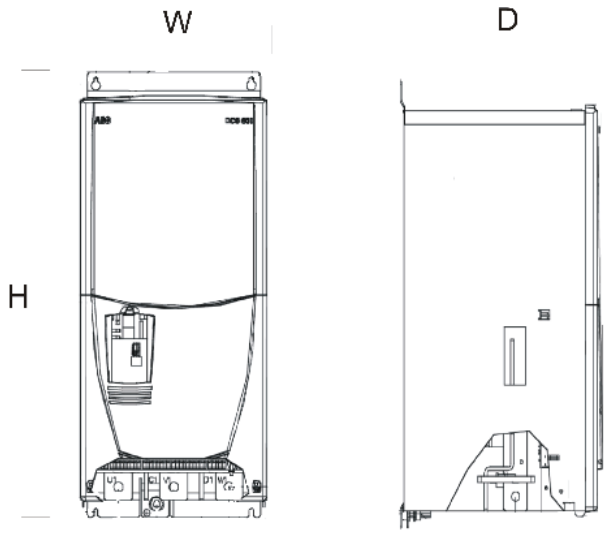
Dimensions: Frame Size D1 - D3



Dimensions	Imperical Units (in) (lbs)				Metric Units (mm) (kg)				Shipping Dimensions* (in) (lbs)			
	H	W	D	Weight	H	W	D	Weight	H	L	W	Weight
D1	14.6	10.6	7.9	24.3	370	270	200	11	14.8	20.3	14.4	31
D2	14.6	10.6	10.5	35.3	370	270	267	16	14.8	20.3	14.4	42
D3	18.1	10.6	12.2	55.1	459	270	310	25	14.8	20.3	14.4	62

*Note: Product is shipped laying on back.

Dimensions: Frame Size D4

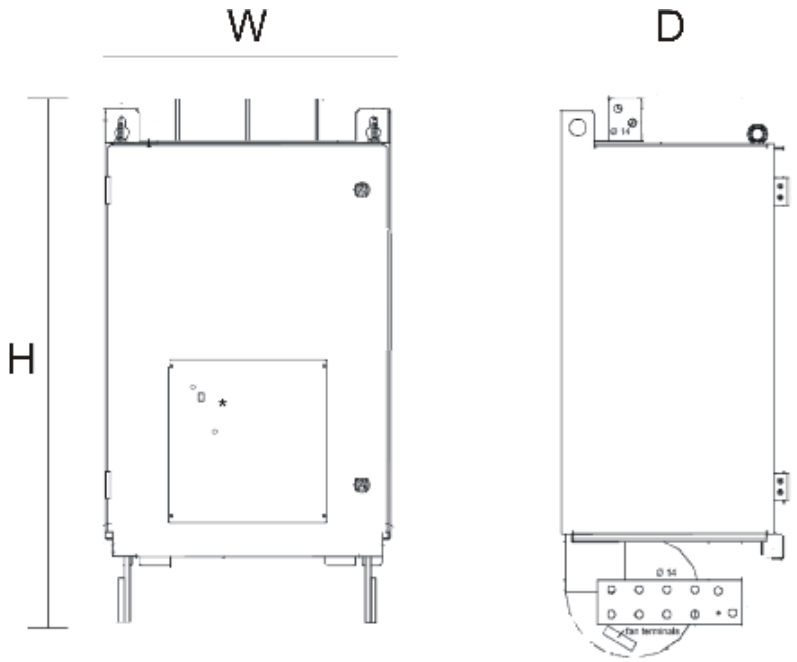


Dimensions	Imperical Units (in) (lbs)				Metric Units (mm) (kg)				Shipping Dimensions* (in) (lbs)			
	H	W	D	Weight	H	W	D	Weight	H	L	W	Weight
D4	24.2	10.6	13.6	83.8	614	270	346	38	23.8	31.5	23.6	103

Drawing is not for engineering purposes.

*Note: Product is shipped laying on back.

Dimensions: Frame Size D5

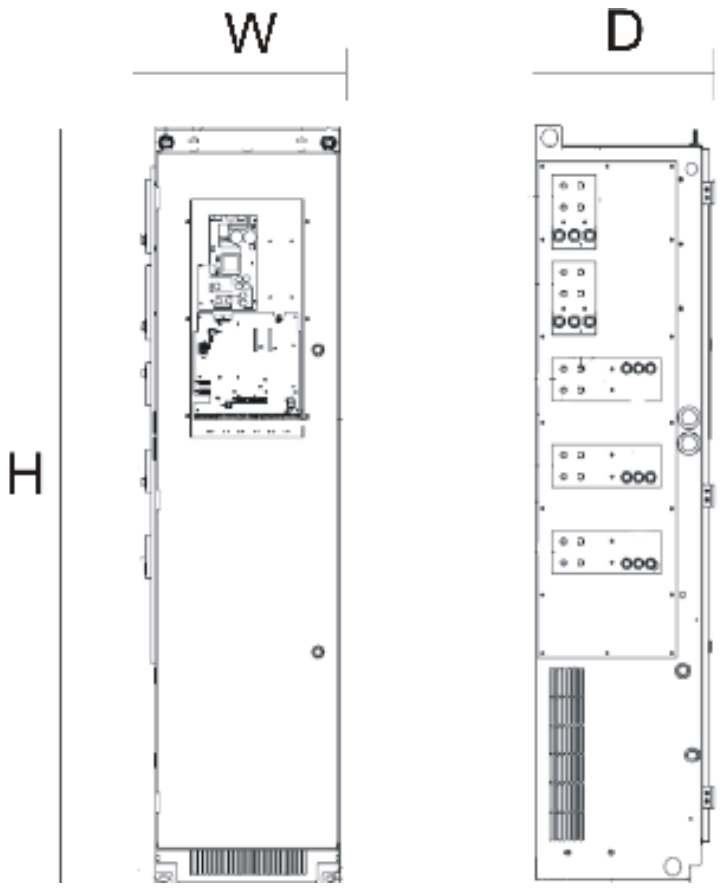


Dimensions	Imperical Units (in) (lbs)				Metric Units (mm) (kg)				Shipping Dimensions* (in) (lbs)			
	H	W	D	Weight	H	W	D	Weight	H	L	W	Weight
D5	36.3	20.1	15.7	242.5	922	510	400	110	27.0	47.2	31.5	295

*Note: Product is shipped laying on back.

Drawing is not for engineering purposes.

Dimensions: Frame Size D6

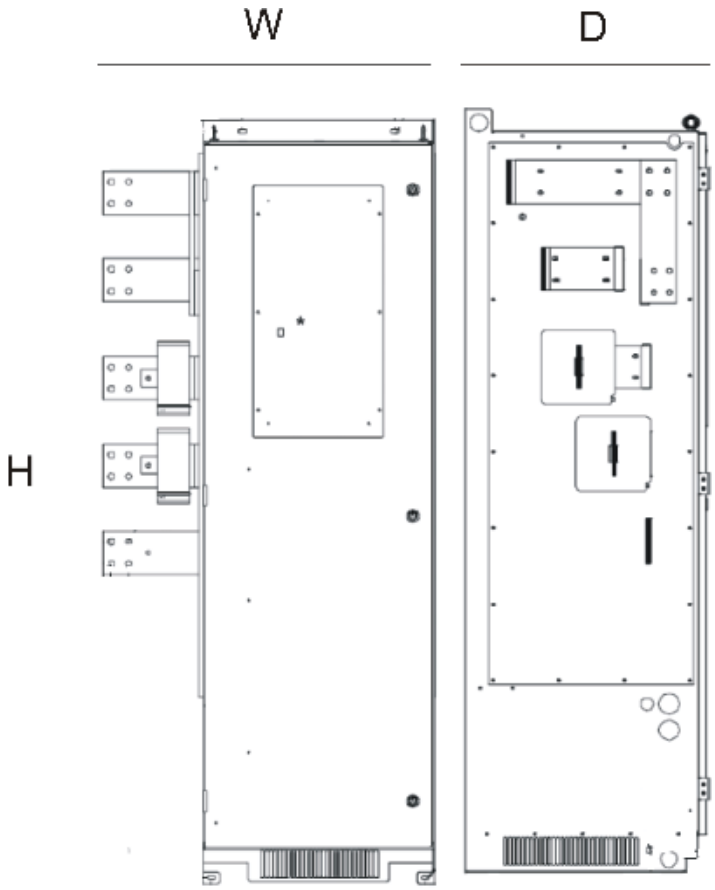


Dimensions	Imperical Units (in) (lbs)				Metric Units (mm) (kg)				Shipping Dimensions* (in) (lbs)			
	H	W	D	Weight	H	W	D	Weight	H	L	W	Weight
D6	68.9	18.0	16.1	396.8	1750	458	409	180	28.3	78.0	22.4	507

*Note: Product is shipped laying on back.

Drawing is not for engineering purposes.

Dimensions: Frame Size D7



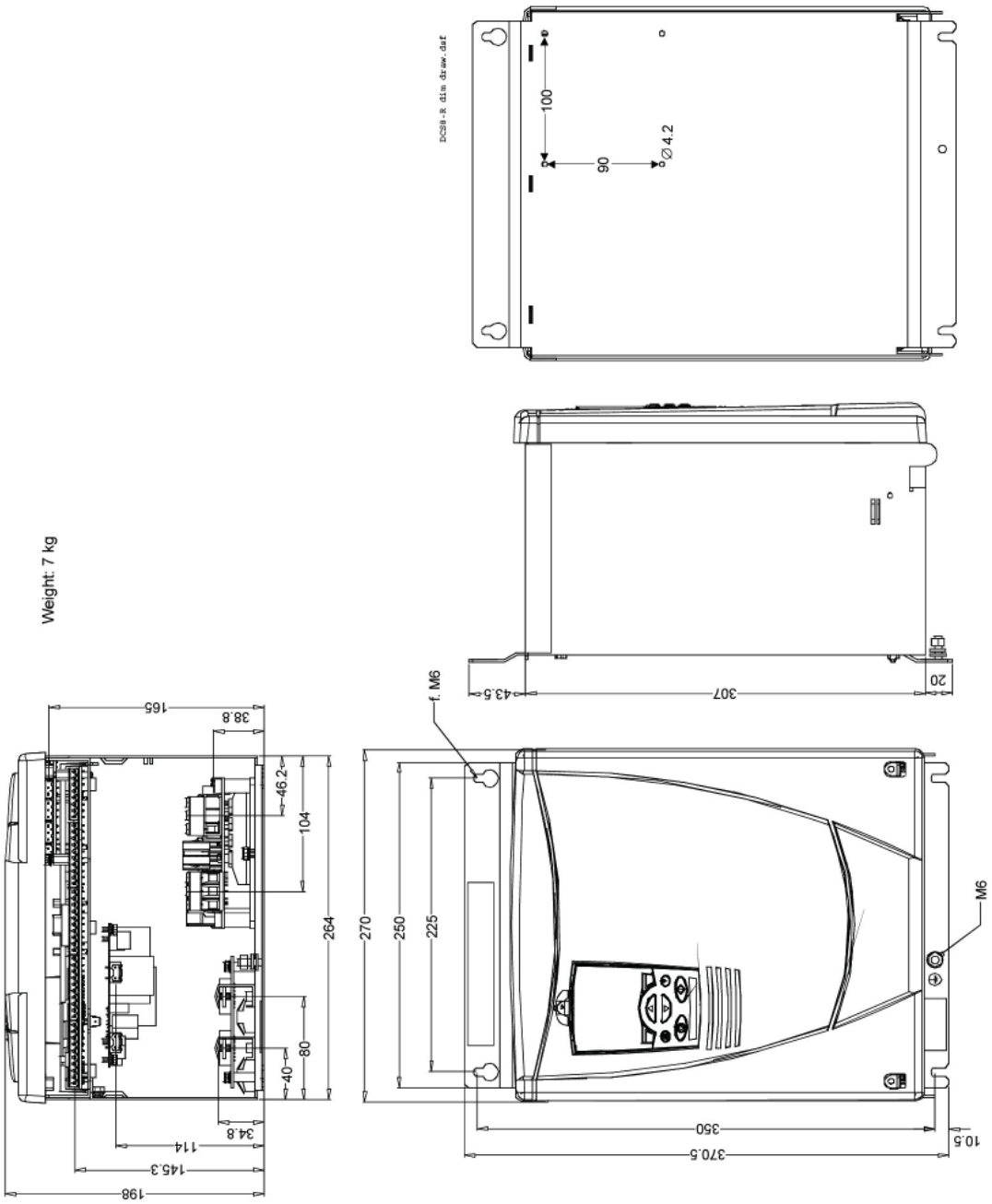
Dimensions	Imperical Units (in) (lbs)				Metric Units (mm) (kg)				Shipping Dimensions* (in) (lbs)			
	H	W	D	Weight	H	W	D	Weight	H	L	W	Weight
D7	67.9	29.9	22.0	694.5	1725	760	559	315	32.3	78.0	34.4	827

*Note: Product is shipped laying on back.

Drawing is not for engineering purposes.

Dimensions: DCS800-R Main Electronic Housing

The electronics housing includes the control board (CON-4), power supply board (POW-4), drive-to-drive serial interface board (DSL-4), and control panel (DCS800-PAN). There is no cooling fan, but natural convection cooling is required to keep the temperature within normal limits. Therefore, it is important to mount the unit on a back-panel in the upright direction.



See DCS800-R "Selection, Installation and Start-Up Manual for Rebuild Kits" for dimensional drawings of other components.

Drawing is not for engineering purposes.

Contact us

ABB Inc.
Low Voltage Drives
2117, 32nd Avenue
Lachine, Quebec H8T 3J1
Telephone(Drives): (800) 215-3006
Telephone(General): (800) 567-0283
Internet: http://www.abb.ca/drives

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