

Case note

Tailor-made DC Drive system provides ideal retrofit for US Extruder

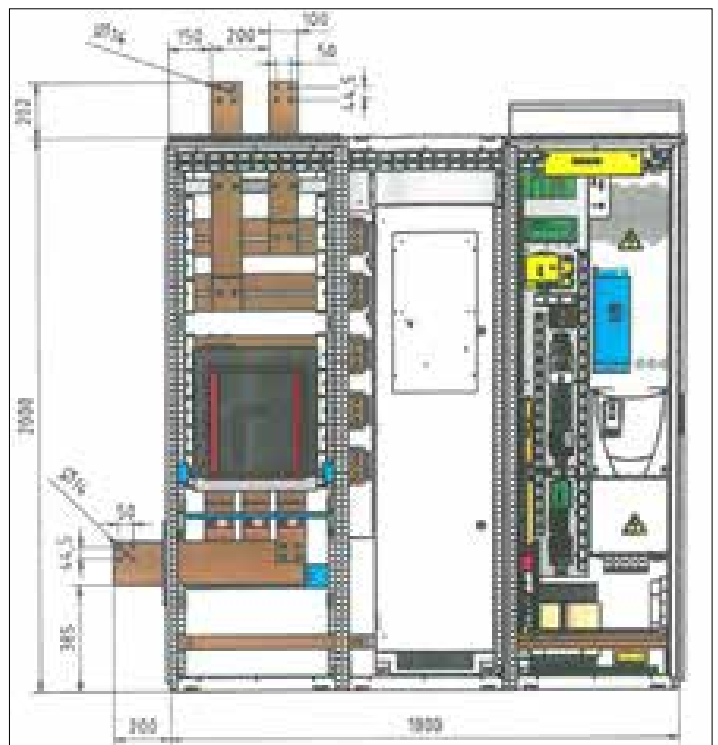
The ABB/Baldor District Office in Memphis, TN won a project in 2013 for a DC Drive replacement to control an extruder motor.



DC converters are very well known for use in extruder applications. A DC drive in an extruder often will be upgraded with a new DC drive because, in many cases, the mechanical dimensions and requirements do not allow additional space and room for an AC installation. The new drive has to match the dimensions and the same footprint of the original drive. The team of experts from the District Office, ABB in New Berlin, and the DC Drives Factory in Germany, met the requirements and fulfilled the needs of this project for an important customer in the extruder business; the solution included:

- Providing I/O's in the Drive system to match to the existing extruder application;
- A customized drive footprint to fit to the existing location; and
- A special busbar design, including a connection from the left side to interface to the existing supply.

The project was delivered on time, and the documentation, quality and performance of the retrofit has met all of the customer's needs and requirements.



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Technical Data (Type, Rating and Dimension) of the DCS800-A Extruder Drive

Scope of delivery

- DCS800-A01-3000-05:
 - 40° C ambient temperature
 - IP21 (comparable to UL Type 1)
 - American Wire Gauge
 - UL listed components
 - UL fusing
 - DCS800 control panel, IOB3 measurement board
 - Armature voltage and current meters
- 35 A field exciter, 1-Q
- Safe Torque Off
- SDCS-COM-81 communication board
- SDCS-IOB-22 (115V control voltage and 115V digital input voltage)
- RAIO I/O Extension module
- Residual Current measurement
- DC Connection Top, AC Connection Left Side
- 1 x Poti , 2 x switch, 2 x lights run status, Fault status, terminals
- 4 x isolation amplifier
- Drawings and parts list on CD

List of options

Field bus adapters

- RPBA-01 Profibus
- RCAN-01 CANopen
- RDNA-01 DeviceNet
- RMBA-01 Modbus
- RCNA-01 ControlNet
- RETA-01 Ethernet

Fast optical DDCS communication module

- SDCS-COM-81 communication board
- Master-Follower function
- AC800 M serial communication
- Drive Window connection

IEC 61131 programming

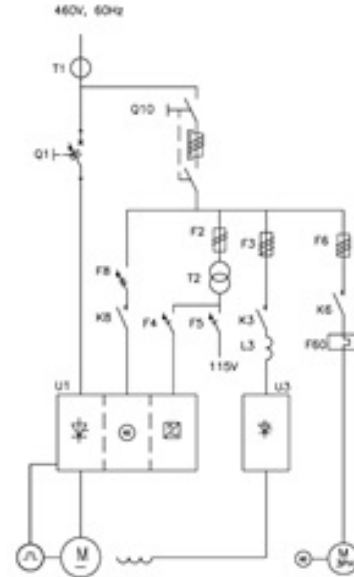
- SDCS-MEM-8 Memory Card

Further Possible Options

- Anti-condensation heater
- Extra cubicle (empty)
- Special name plate text
- Insect screen in air inlet/outlet (IP31)
- Air inlet filters (IP41)

For more options refer to DC Drive Technical Catalogue.

Drive Unit Type	IDC [A]	Supply Voltage [VAC]	Height [in]	Depth [in]	Width [in]
DCS800-A01 (2-Q)	3000	460	86,6	23,6	23,6



For more information please contact:

www.abb.com/drives