MANUFACTURER DOCUMENT PACKAGE

# Manufacturer's Manual

Amikon cover with selected official ABB catalogue pages

APC2 / AF100 / 3ASD573001A13

## YPK112A

AF100 COMMUNICATION BOARD

OFFICIAL SOURCES

ABB 3ADW000061R0101 Rev A, pages 2 and 9. Catalogue reference excerpt, not a complete installation manual.

# Latest Technology, High Performance, and a User Friendly Concept – the New DCV 700 Series

**The DCV 700 series is a complete range of DC converters intended for the supply and control of DC machines, in stand-alone or multi-drive systems with high performance and reliability specifications.**

DCV 700 converters are fully digital and mounted in an enclosure complete with all necessary equipment, meeting the most stringent safety standards. The converter can be used for standard applications but has the flexibility to be customized for the most demanding applications.

## Comprehensive Product Range

DCV 700 converters are available as 6-/ and 12-pulse 2- or 4-quadrant, in a current range 22 to 5150/10300 A and supply voltages of 200 to 1000 VAC. A selection of options is available to provide the user with a system meeting the most demanding technical requirements and performance expectations.
Common control electronics throughout the range reduces spare parts inventory and training requirements.

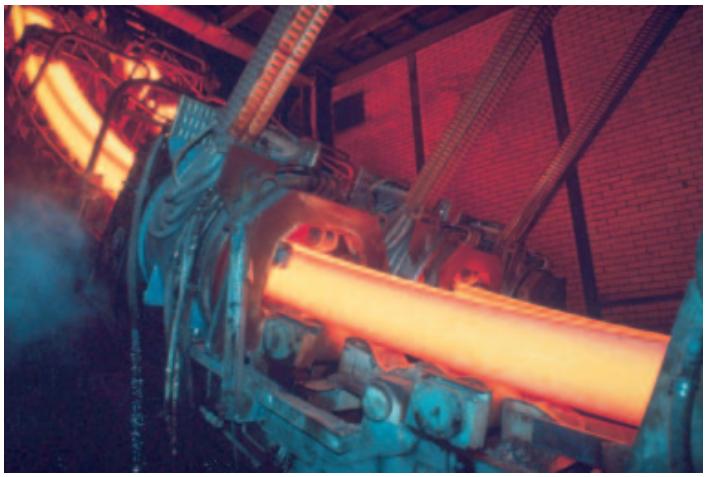
## Wide Variety of Industrial Applications

The DCV 700 series can handle the most demanding applications in:
- rolling mills
- pulp and paper
- metals (casters, processing lines etc.)
- material handling (cranes, hoists etc.)

## Digital Control

To meet the most stringent control requirements, the DCV 700 features speed control, which reduces the effects from gear backlash and torsional vibration arising in mechanical systems.
High-performance speed and torque control will fulfill all requirements for rapid response and control accuracy. Autotuning for armature current control will simplify the commissioning procedure.





# Communication

**Various communication boards are available to provide communication links between the APC and overriding control systems.**

## AF100

Advant Fieldbus 100 is a high-speed serial bus, which is used for communication between APCs or between an APC and an overriding system such as ABB's Advant Controller AC400-family. The bus administrator board CI626 (BA) is needed for controlling the bus when not using the Advant Controller AC450. The communication board YPK112A is used to connect the APC to the Advant Fieldbus 100.

## UART Board YPK113A

The UART board, YPK113A, is used to communicate with other overriding systems. Protocols for Siemens Simatic S5 and Allen Bradley DH are available together with SAMI protocol.

# Control Panel

**The optional Control Panel offers a user-friendly means to communicate with the drive.**

- Different languages defined by application program
- 2×20 character display
- Simple operation with 10 pushbuttons (membrane panel well suited to industrial environments)
- Common for AC and DC drives
- Door mounted

The Control Panel provides the following information and functions:

- Status information (run, ready, fault messages)
- Operational control with 4 freely programmable pushbuttons
- Display of reference values (speed, torque)
- Display of actual values (speed, voltage, current)
- Display of fault logger contents
- Uploading, downloading, changing, displaying and saving the Application Controller APC and Drive Controller DDC parameters.

