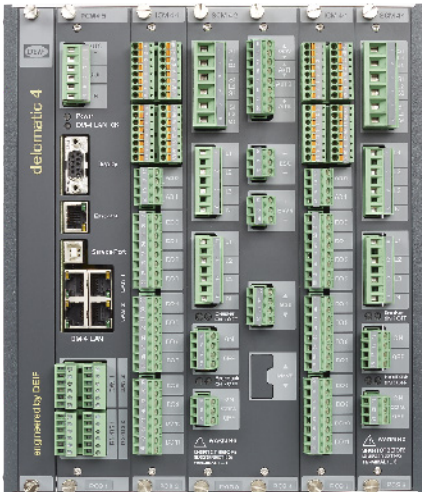


Integrated Systems, DM 400 Hydro

Fully automated operation for all turbine types



A customised solution, DEIF's integrated Delomatic 400 Hydro (DM 400 Hydro) system cuts installation costs significantly compared to systems that require multiple units to provide synchronisation, protection and PLC functionality.

DM 400 Hydro-controlled plants offer fully automated control for stable optimised operation and require less maintenance and fewer man hours.

The DM 400 Hydro is compatible with all types of turbines and flexible and easy to adapt with simple parameter settings.

Critical functions such as speed governing, generator protections and synchronising are fully integrated with password-protected features for maximum security.

Apart from valve control (main valve, drain valve, fill valve), turbine adaptation options include the following:

Francis and similar

Control of wicket gate, UP/DOWN digital commands or analogue for hydraulic proportional valves.

Kaplan

As Francis, plus control of runner pitch. The relation between wicket gate opening and runner pitch is a configurable curve laid into the DM 400 Hydro.

Pelton/Turgo

Configurable sequential control of multiple nozzle/spear valves. Control can be UP/DOWN digital commands or analogue. Control of deflector/bypass.

Other turbine types

The DM 400 Hydro can be adapted to all turbine types.

DM 400 Hydro features

- ▶ Hydro Turbine Controller for parallel with mains or stand-alone generator
- ▶ Valve controls (main/drain/fill)
- ▶ Water level control
- ▶ Relay or analogue output for speed/power control
- ▶ Turbine control, protection and supervision
- ▶ Generator control, protection and supervision

DM 400 Hydro type approval

