

APPLICATION NOTE



Via Germania, 34 35127 Padova ITALY October 15, 2008

OBJECT: Z-D-IO, MCC CABINETS APPLICATION (MOTOR CONTROL CENTER)

Z-D-IO has an internal algorithm suitable for electric motors control (MCC cabinet):

- START enabling if THERMAL PROTECTION and STOP inputs are closed
- Setting delay on ALARM (from 2 to 30 s)

- ALARM on FEEDBACK and THERMAL PROTECTION

- LOCAL / REMOTE Management

In case of LOCAL functioning, monitoring carried out by Z-D-IO is fully automated by the module. If the selector is in REMOTE position, the module accepts commands by serial interface.

In case of standard wiring, in LOCAL position the engine control automation is completely manual while, in REMOTE position, needs of an external logic unit



Fig.1 Control panel with Z-D-IO



Fig.2 Standard control panel with input/output modules

The images shows the wiring difference on the motor control. A standard wiring with a logic via contacts (Fig.2) and, (Fig.1), an advanced cabling and control via Z-D-IO.

First important comment is the substantial difference in the wiring that in the case of Z-D-IO, manifests itself in a reduction of the total number of cable and number of modules to be used.

Z-D-IO effectively allows a motor control really distributed, it does not require an extension of cable signals up to the plc/ DCS because the control is carried out by Z-D-IO unit . It follows that the solution is more efficient and economic



Here a sequence of images to use Z-D-IO



Functioning modality



Alarm enabling on thermal protection



Stop alarm



Start up



- Just 1 module with N.6 DI and N.2 DO (relay SPST)
- Motor Control Logic integrated into the unit
- Distributed control
- Minimun wiring
- Serial interface for remote communication
- Cost effective solution





Order Code: Z-D-IO Accessories: Z-PC-DINAL, Z-PC-DIN2/4/8 Software: Z-NET3 (free download from <u>www.seneca.it</u>)