LEROY® SOMER

DIGIDRIVE SK DID

Variable speed drive with flux vector control for asynchronous motor from 0.3 to 1.5 kW ranges

DIGIDRIVE SK DID

Variable speed drive with flux vector control

FOREWORD

The professional and technological training in electro-technical disciplines requires the use of equipment representative of industrial applications allowing study of electric motor operation and control in real situations.

Based on the industrial variable speed drive, DIGIDRIVE has been adapted for training use.

Supplied in an enclosure, it comprises the control and protection devices of the variable speed drive for a direct use with a motor belonging from our 0.3 or 1.5 kW range.

Training applicable:
Engineering Degree,
Technical qualification.

DESCRIPTION

DIGIDRIVE SK is a variable frequency speed drive with open loop flux vector control for supplying asynchronous motors.

It may be configured in U/f for certain operations:
- Control of several motors simultaneously,
- Control of a motor through a transformer,
- Control of a motor supplied by a long cable.

The DIGIDRIVE SK inverter bridge allows the operation of the motor in all 4 quadrants of the torque-speed plane. During operation in recovery mode, the energy supplied by the motor is dissipated in resistors.

Inputs/Outputs are available on 4 mm safety terminals:
- 1 0-10V analogue input,
- 1 4-20mA analogue input,
- 1 0-10V analogue output,
- 1 250V/2A relay output.

All I/O may be programmed by PC, connected to the front panel using the DIGISOFT software. The software and the cable are supplied with the drive (PC not supplied).

PRESENTATION

The unit provides all control and protection devices necessary for safe operation.

The user is protected by a magneto-thermal switch controlled on the front panel.

In order to keep the front panel clear, the power part is wired on safety terminals (Ø 4mm) located on the left side of the control panel.

Only the connections for command and control are made on the front panel.

Programming keys and to the display are accessible on the front panel.

The access to special adjustments is made by the PC through the RJ45 socket located on the front panel (cable provided with the drive).

MAIN POSSIBILITIES

- Speed and/or torque control.
- Preset of acceleration / deceleration ramp for each speed (ex. machine tool pin),
- Control of 2 different motors,
- Modification of analogue I / O presets,
- Modification of digital I / O presets,
- Use of an AND or OR logic function,
- Use of an internal variable,
- Access to the external value regulation by the DIGIDRIVE PID,
- "Machine flow"* display.

ELECTRICAL CHARACTERISTICS

1- DIGIDRIVE SK for connection to a single phase supply of 200 to 240 V + 10 % 48 to 62 Hz

   Reference: SK 2.5 M DID for motor
   (4 poles) 1.5 kW In : 7 A - I max. : 10.5 A

2- DIGIDRIVE for connection to a 3-phase supply of 380 to 480 V + 10 % 48 to 62 Hz

   Reference: SK 2.5 T DID for motor
   (4 poles) 1.5 kW In : 3.8 A – I Max : 5.2 A

* "machine flow": conversion of the speed to a unit chosen by the user, for example "boxes/hour" for a conveyor belt.

Size : Height = 330 mm - Width = 225 mm - Depth = 220 mm
Weight : 5,7 kg

Complying with the requirements of the $C\epsilon$ marking
Complying with the Low Voltage and Machine Directives
Complying with the Electromagnetic Compatbility Directive:
• Immunity: EN 50082- 2 in conduit
• Issuance: EN 50081- 2.

CONTACT :