



MINISTART

Smart motorstarter UG 9410 - With Modbus RTU - IE3 ready

The **smart motorstarter UG 9410** of the **MINISTART** series from DOLD combines up to 7 functions in a compact enclosure with a width of only 22.5 mm. The motorstarter ensures reliable soft starting, soft stopping, reversing and protection of 3-phase asynchronous motors. Whether for retrofitting or original equipment, the device can be used in a space-saving manner and, in addition to phase sequence monitoring, also offers an integrated motor protection function and phase failure detection.

Commissioning, parameterisation and control are carried out quickly and easily via the Modbus RTU interface. The fieldbus connection saves wiring and offers extensive diagnostic options that improve reliability and increase system availability.

The UG 9410 guarantees a low-wear and gentle start for your machines and plants and is suitable for demanding drive tasks. The areas of application include in particular reversing drives such as door and gate controls, conveyor systems as well as bridge and actuator drives.

Advantages and customer benefits

- ▶ Up to 7 functions in one device: anticlockwise / clockwise rotation, soft start, soft stop, phase failure monitoring, motor protection and phase sequence monitoring
- ▶ Simple commissioning, control and parameterisation via Modbus RTU
- ▶ Considerable space saving in the switch cabinet due to only 22.5 mm width
- ▶ Extensive diagnostic options through fieldbus connection
- ▶ Suitable for IE1, IE2 and IE3 motors
- ▶ High device availability due to
 - Semiconductor temperature monitoring
 - High dielectric strength of semiconductors up to 1500 V
 - Load free relay reversing function and device overload protection

DOLD



Our experience. Your safety.

Smart motorstarter UG 9410 - Modbus RTU

Technical features

- ▶ According to IEC/EN 60 947-4-2
- ▶ Modbus RTU interface
- ▶ For turning 3-phase motors from 0.18 kW ... 2.2 kW at 400V
- ▶ 2-phase soft start, soft stop
- ▶ 3 rotary switches for setting the Modbus address and baud rate
- ▶ 5 LEDs as status display
- ▶ Current free reversing with relays, soft start, soft stop with thyristors
- ▶ Galvanic isolation of control and main circuit
- ▶ Width 22,5 mm



3-phase smart motorstarter
UG 9410

Order information

Standard type: UG 9410PM 3 AC 200 ... 480V 50/60 Hz 5.0 A
Item number: 0067521

Standard type: UG 941 IPMAC 230V 50/60 Hz 7.0 A
Item number: 0067523



1-phase smart motorstarter
UG 9411

Fields of application

- ▶ Reversing drives for door and gate controls
- ▶ Conveyor systems with blocking monitoring
- ▶ Actuators in process engineering
- ▶ Packaging machinery
- ▶ Washing plants and car washes

Functions



Reversing (anticlockwise / clockwise)

Clockwise and anticlockwise rotation can be selected via Modbus RTU. The reversal of the direction of rotation is wear-free due to semiconductor elements and motor-friendly due to the integrated soft start function.



Soft start / soft stop

The drive can start and stop jerk-free and the drive elements are not damaged, i.e. maximum protection for mains, motor and machine.



Phase failure detection

In order not to load the motor with asymmetrical currents, it is checked at motor start whether phases L1, L2, L3 are present.



Phase sequence monitoring

The phase sequence monitoring checks the direction of rotation of the phase voltage after switching on and reports an error with anticlockwise rotating field.



Motor protection

Comfortable protection by the electronic motor protection relay with automatic and remote reset function.



IE3 ready

Gentle operation of three-phase motors in efficiency classes IE1, IE2 and IE3.

Further information

UG 9410

Start

www.dold.com

DOLD

E. DOLD & SÖHNE KG
P.O. Box 1251 • 78114 Furtwangen • Germany
Tel. +49 7723 6540 • Fax +49 7723 654356
dold-relays@dold.com • www.dold.com