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.

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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

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 400 V 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
Order information	Standard type: UG 9410PM 3 AC 200 480V 50/60 Hz 5.0 A Item number: 0067521 Standard type: UG 9411PM AC 230V 50/60 Hz 7.0 A Item number: 0067523
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)



Soft Start



Soft

mains, motor and machine.

Soft start / soft stop

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.

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.

The drive can start and stop jerk-free and the drive

elements are not damaged, i.e. maximum protection for



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

Start 5

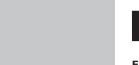
Comfortable protection by the electronic motor protection relay with automatic and remote reset function.



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



UG 9410





3-phase smart motorstarter UG 9410



1-phase smart motorstarter UG 9411



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

www.dold.com