

SK TU4-24V-140-B-C

Part number: 275 281 159

Mains unit

NOTICE

Validity of this document

This document is only valid in combination with the operating instructions for the relevant electronic drive technology and under strict compliance with the safety and warning instructions which they contain. Safe commissioning of this module and the electronic drive technology depends on the availability of this information.

Scope of delivery

| | | |
|-----------------------------|-------------------------|---|
| 1 x | Module | SK TU4-24V-140-B-C |
| 1 x | Mains voltage cable set | brown / black* * incl. fuse (5A slow-acting) |
| 1 x | 24 VDC cable set | brown / blue |
| 1 x | PE cable | green/yellow |
| 1 x | Burden resistor | 500 Ω |
| 4 x | Hexagonal socket screw | M4 x 40 |
| <i>Accessories required</i> | | |
| 1 x | Connection unit | SK TI4-TU-NET-C Part No. 275 280 600) |



Field of use

Mains unit for mounting on, or in the immediate vicinity of a decentralised electronic drive technology frequency inverter. The voltage / frequency converter which is integrated into the module enables conversion of analogue signals from a potentiometer into a digital pulsed signal. This pulsed signal can be interpreted as an analogue signal by certain digital inputs of the drive electronics.

| Technical Information / Datasheet | SK TU4-24V-140-B-C | | | |
|-----------------------------------|--------------------|-------|------|----|
| Power supply | TI 275281159 | V 1.0 | 5115 | EN |

Technical data

| | |
|-------------------|-----------------|
| Temperature range | -25°C ... 50 °C |
| Temperature class | Class 3K4 |
| | |

| | |
|----------------------|---------------------|
| Vibration resistance | 3M7 |
| Protection class | IP66 |
| Dimensions [mm]* | HxWxD 95 x 136 x 91 |

* module mounted on the connection unit

| Designation | Terminal | Data |
|------------------------------------|----------------------|---|
| Module power supply | L1 + L2 | 380 V AC ... 500 V AC |
| Output voltage (load capacity) | x ¹⁾ + 40 | 24 VDC ± 10 % (≤ 420 mA) |
| Analogue input - reference voltage | 11 | 10 VDC ±0.2 V, ≤ 5 mA (output) |
| Analogue input | 12 + 14 | Resolution: 8 Bit, precision: 0.2 V ²⁾ |
| Frequency output | B1 | PLC-compatible as per EN 61131-2 Low: 0 V, High: 24 V Clock frequency: approx. 1 – 32 kHz |

1) Depending on the frequency inverter version: SK TU4: x = Terminal 43, SK CU4: x = Terminal 44

2) For connecting a potentiometer (5 – 10 kΩ). A 500 Ω burden resistor (enclosed) must be used for the evaluation of 0/4 – 20 mA signals

Assembly

The module must be plugged on to the relevant connection unit (SK TI4-TU- ...) and connected using the four enclosed M4 x 40 mm screws. Installation details can be found in the *Technical Information / Data Sheet* for the relevant connection units.

Connections

Connection of the signal and control cables is made via the connection unit SK TI4-TU-NET(-C).

Further documentation (www.nord.com)

| Document | Name |
|-------------------------|--|
| BU 0135 | Motor starter manual SK 135E, SK 175E |
| BU 0180 | Frequency inverter manual SK 180E, SK 190E |

| Document | Name |
|------------------------------|-----------------------------------|
| BU 0200 | Frequency inverter manual SK 2xxE |
| TI 275280600 | Connection unit SK TI4-TU-NET-C |