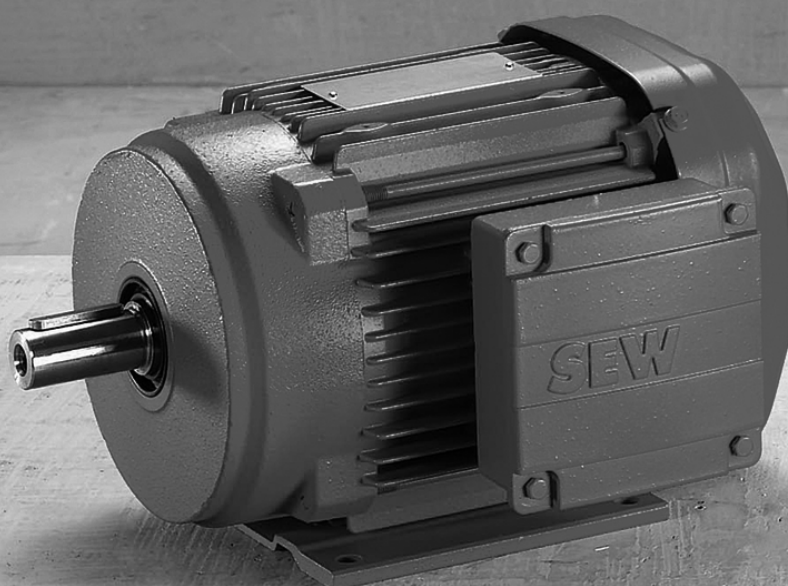




SEW
EURODRIVE

Addendum to the Operating Instructions



AC Motors
DR.. 63 – 180
Motor Protection /PI



1 Addendum to the Operating Instructions

INFORMATION



There are amendments to the "AC motors DR.. with motor protection /PI" operating instructions that are described in this addendum to the operating instructions.

Use the data specified in this addendum. This document does not replace the detailed, applicable operating instructions "AC Motors DR.. 56 – 315 DRN, DR2S, DR2L, DR2M!".

2 Motor structure

2.1 Type designation

The following table shows the structure of a motor type designation:

DRN132M4/BE11/HR/FI/TF	
DR	Product family
N	Code for product line identification
132M	Size
4	Number of poles
/BE11	Brake
/HR	Manual brake release
/FI	Output option
/TF	Thermal motor protection

2.1.1 Designation of the motors

Designation	
DR2S..	Standard motor, Standard efficiency IE1 (2nd generation)
DRN..	Energy-efficient motor, Premium Efficiency IE3
DRU..	Energy-efficient motor, Super Premium Efficiency IE4
DR2L..	Asynchronous servomotor (2nd generation)
DR2M..	Torque motor: AC motor for operation at speed $n = 0$ (2nd generation)
56 – 315	Nominal sizes: 56, 63, 71, 80, 90, 100, 112, 132, 160, 180, 200, 225, 250, 280, 315
K, S, M, L, ME, MS, MK, H, LS, LM	Lengths
R, Q P, I B	Power designation (identification of motors with the same size but with different power)
2, 4, 6, 8, 8/2, 8/4, 4/2, 12	Number of poles



INFORMATION

The DRU.. motor is identical in construction to the DRN.. motor. For this reason, all of the information listed here regarding the DRN.. motor can also be applied to the DRU.. motor.

2.2 Designs and options

2.2.1 Thermal monitoring

Code in the type designation	Description
/PI	Pt1000 sensor in the stator
/TF	Temperature sensor (PTC thermistor or PTC resistor)
/TH	Thermostat (bimetallic switch)
/PK	Pt1000 sensor in the winding
/PT	Pt100 sensor

3 Electrical installation

3.1 Options

Connect the options as shown in the wiring connection diagrams provided with the motor. You can obtain the valid wiring diagrams free of charge from SEW-EURODRIVE.

INFORMATION



Do not connect any options if the wiring diagram is missing.

3.1.1 Temperature detection /PI

NOTICE

Excessive self-heating of the temperature sensor can damage the insulation of the temperature sensor as well as the motor winding.

Possible damage to the drive system.

- The current in the circuit must not exceed 3 mA.
- Make sure that the Pt1000 is connected correctly.
- Make sure that "Temperature monitoring PI" is correctly selected during the start-up of the inverter.

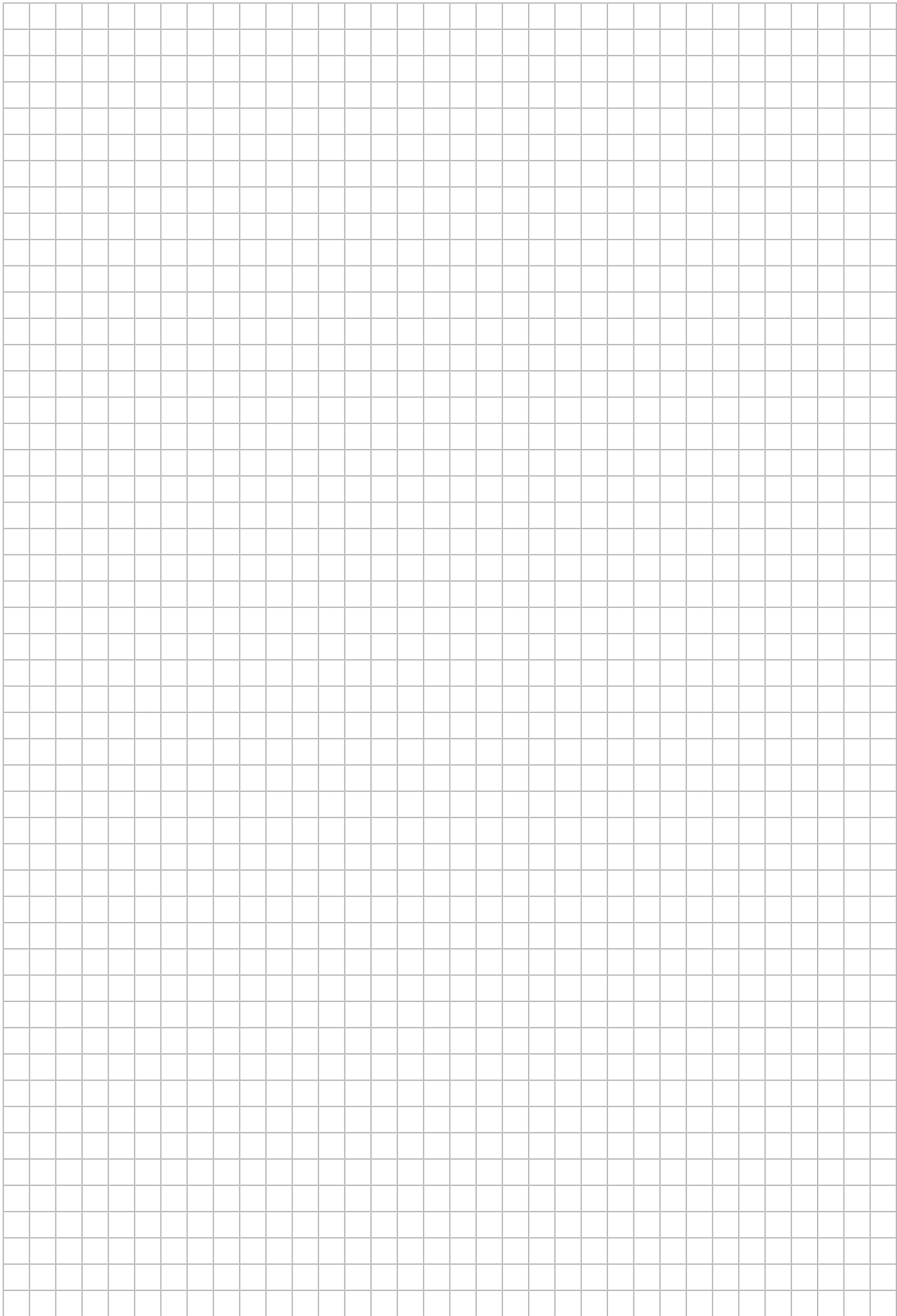
Technical data	Pt1000
Connection	Red-black
Resistance at 20 – 25 °C per Pt1000	$1077\ \Omega < R < 1098\ \Omega$
Test current	< 3 mA

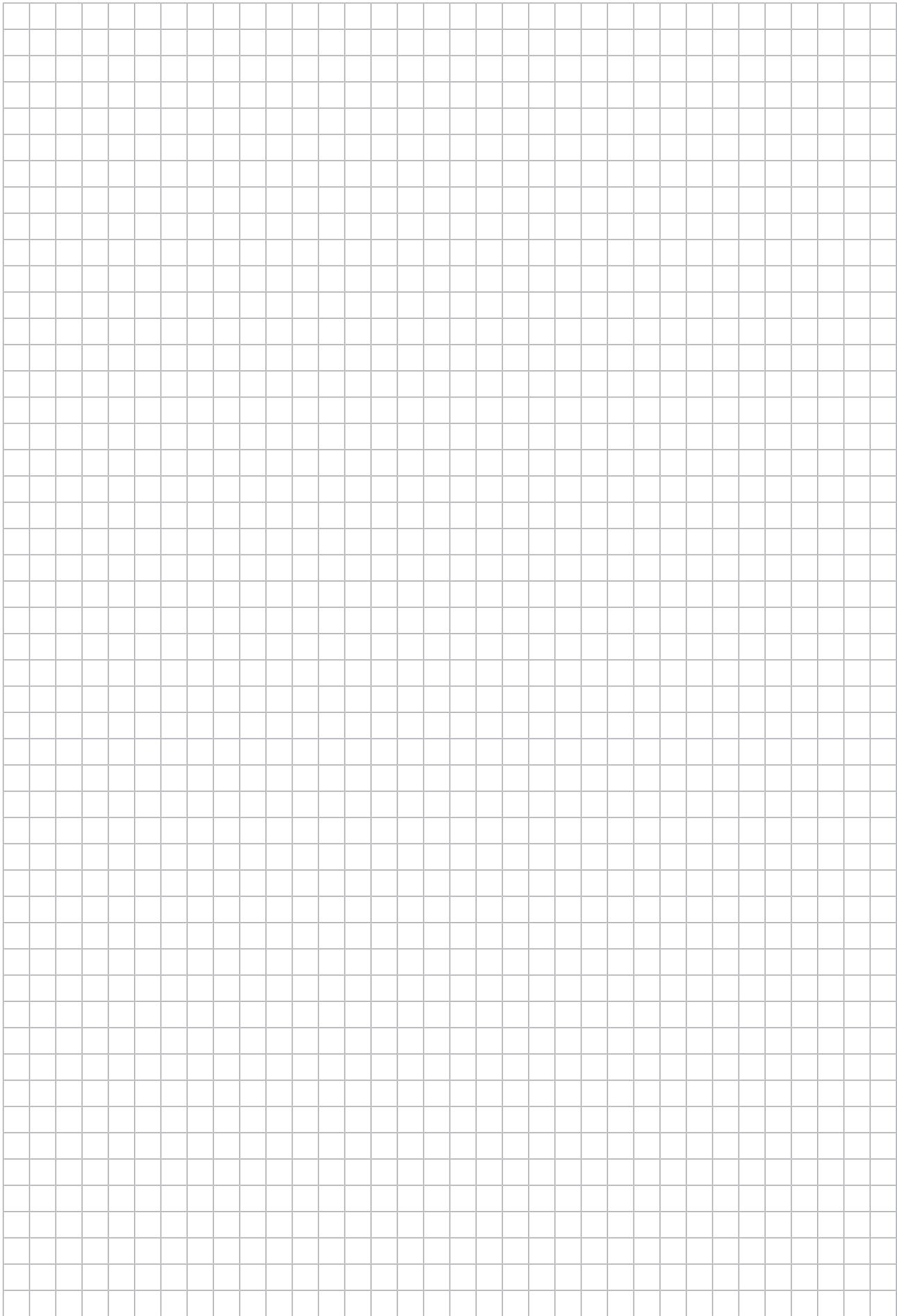
4 Startup

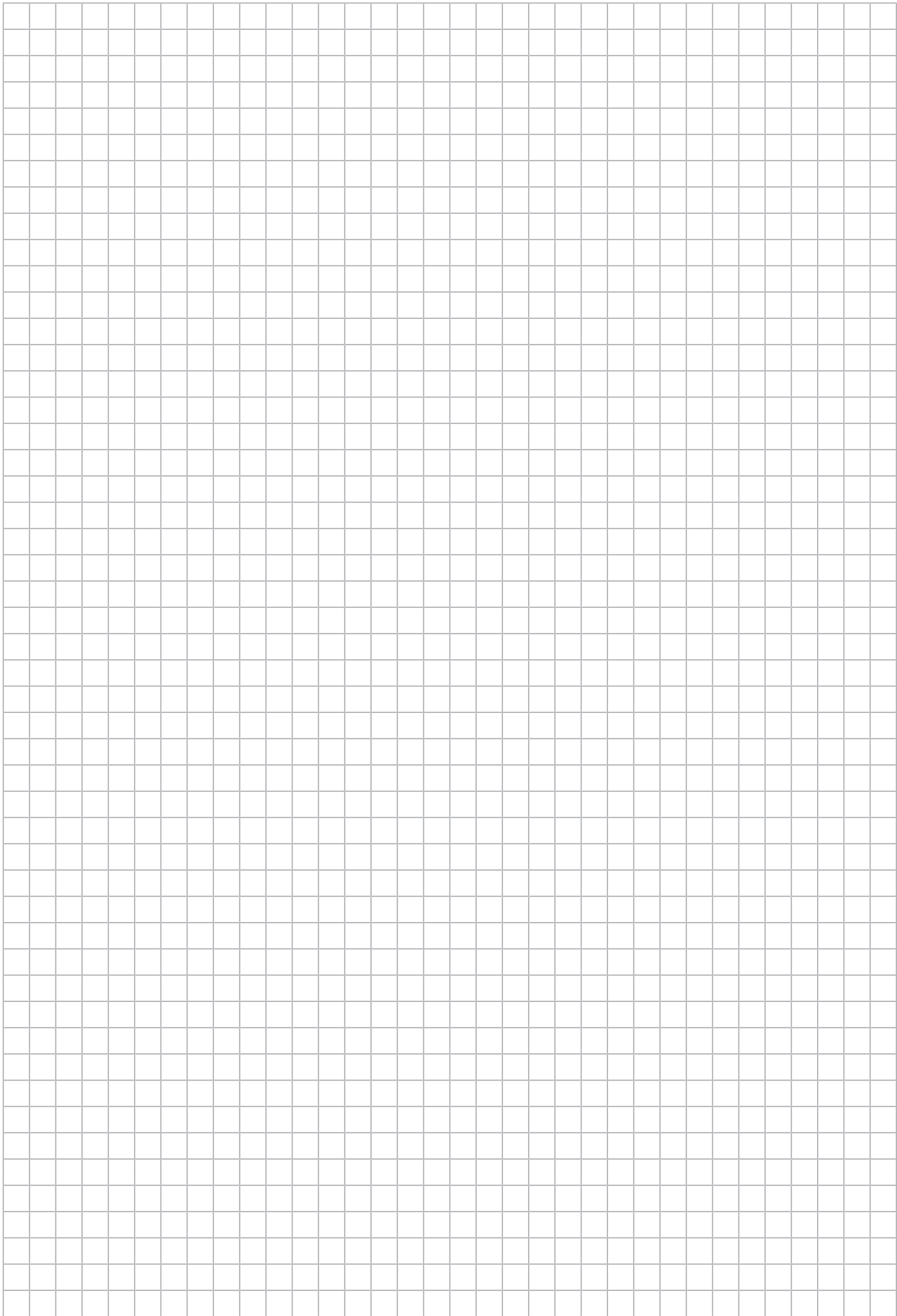
4.1 Before startup

Make sure of the following before startup:

- Only the following MOVI-C® inverters are permitted when using motors with motor protection /PI:
 - MOVITRAC® classic/advanced
 - MOVIDRIVE® system/technology/modular
 - MOVIMOT® flexible
 - MOVIPRO® technology
- The drive is undamaged and not blocked.
- Any existing transport protections have been removed.
- The measures stipulated in chapter "Preliminary work after longer periods of storage" are performed after storage periods longer than 9 months.
- All connections have been properly made.
- The direction of rotation of the motor/gearmotor is correct
 - Motor rotating clockwise: U, V, W (T1, T2, T3) to L1, L2, L3
- All protective covers are installed correctly.
- The motor protection equipment is active and set for the rated motor current.
- There are no other sources of danger present.
- Loose elements like keys are appropriately secured.
- The brake is not manually released.
 - The set screw of /HF option is loosened correctly.
 - The hand lever of the /HR option has been removed and correctly attached to the stator using the designated clamps.











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