

The background of the entire page is a photograph of industrial machinery. In the foreground, a large blue electric motor with a ribbed cooling fan is mounted on a blue metal frame. The motor is connected to a blue pump or motor housing. The machinery is situated on a wooden pallet in a factory or industrial environment. The lighting is bright, highlighting the metallic surfaces and the blue paint.

VEDA^{IN}DRIVES

Product catalogue

VEDA-IN DRIVES SFT

Soft starters for all automation applications

vedaindrives.com

General information on VEDA-IN DRIVES SFT soft starters

VEDA-IN DRIVES SFT is a brand-new family of soft starters, representing the culmination of over 15 years of experience of drive technology. The development of new products was based on the operating experience of various devices, feedback from partners and customers and the technical capabilities of suppliers.

VEDA-IN DRIVES SFT soft starters are characterized by high reliability at a low price and have all necessary product certificates. Additional versions are available for the devices – network protocols (Modbus RTU, Profibus), additional analogue output.

The devices are simple and easy to set up. The optional version of the soft starter with a start button simplifies the commissioning process.

VEDA-IN DRIVES SFT soft starters come with a warranty and post-warranty service supported by a partner network.

With its own dedicated product development center, we can make changes to the soft starter software, adapting its functionality to meet the needs of complex applications. VEDA-IN DRIVES SFT soft starters can be used in water supply and wastewater disposal, heating, ventilation and air conditioning (HVAC), chemical and mining industries, oil and gas production, power generation.



Advantages of VEDA-IN DRIVES SFT soft starters



Service

VEDA-IN DRIVES has own network of certified service and sales partners. We and our partners provide warranty and post-warranty service of VEDA-IN drives technology in the largest cities.



A wide range of products designed for specific applications.

The specialized VEDA-IN DRIVES SFT series are designed for applications in industries such as water supply and wastewater disposal, heating, ventilation and air conditioning (HVAC), chemical and mining industries, oil and gas production, power generation.



Own R&D center

When developing new products, VEDA-IN DRIVES engineers took into account the operating experience of various soft starters, feedback from partners and customers and the technical capabilities of suppliers. On request, VEDA-IN DRIVES specialists can modify the functionality of the devices to meet the requirements of the application.



100% focus on frequency converters

The VEDA-IN DRIVES team has over 15 years of experience in the drive technology market. The company employs people who are 100% focused on frequency converters and soft starters.



Increased motor life

The soft start and a number of safety features significantly increase the service life of the motor.



Series Overview

The VEDA-IN DRIVES SFT range of soft starters consists of three series for the main applications in infrastructure and industry. VEDA-IN DRIVES SFT products are developed and manufactured in fully automated plants under strict control of VEDA-IN DRIVES specialists.



The SFT10 series is a versatile and space-saving soft starter with an integrated bypass feature, suitable for motors ranging from 0.37 to 75 kW in power. It works with single-phase and three-phase motors with supply voltage 1 x 220 V and 3 x 380 V, has control voltage 24 V or 220 V. For operation in industrial networks, the SFT10 soft starter has an embedded RS-485 (Modbus RTU) interface.

Applications: centrifugal and submersible pumps, screw compressors, crushers, fans.



The SFT20 series is a versatile soft starter for motors ranging from 7.5 to 450 kW. It works with three-phase motors with supply voltage 3 x 380 V, has control voltage 220 V. For operation in industrial networks, the SFT20 has an embedded RS-485 interface (Modbus RTU) and an additional analogue output.




Applications: centrifugal and submersible pumps, screw compressors, crushers, fans.



The SFT30 series is a versatile and multi-functional soft starter for motors from 30 to 500 kW. It works with three-phase motors with supply voltage 3 x 380 V and 3 x 690 V, has control voltage 220 V. Various additional embedded options are available – Modbus RTU and Profibus network protocols, additional analogue output.

Applications: reciprocating and screw compressors, agitators, centrifugal and submersible pumps, fans, conveyors, ball mills, centrifuges, crushers, extruders, etc.

Comparison of technical features and functions of the VEDA-IN SFT soft starter

| Appearance |  |  |  |
|----------------------------------|---|---|---|
| Type | SFT30 | SFT20 | SFT10 |
| Functions | Complete motor starting solution with advanced protection features | Provides basic soft start and stop functions with advanced protection features | Provides basic soft start and stop functions with basic protection features |
| Adjustment method | Enhanced soft start and soft stop | Soft start | Soft start |
| Motor and system protection | Motor and system protection | Motor and system protection | Motor protection |
| Power range | 30–500 kW at 400 V 55–450 kW at 690 V | 7.5–450 kW | 7.5–75 kW |
| Line voltage | 3 x 380 V, 3 x 690 V | 3 x 380 V | 1 x 220 V, 3 x 380 V |
| Control voltage | 220 V AC | 220 V AC | 220 V AC or 24 V DC |
| Number of phases to be regulated | 3 phases | 3 phases | 3 phases |
| Motor type | Asynchronous 3-phase | Asynchronous 3-phase | Asynchronous 3-phase Asynchronous 1-phase |
| Bypass | External | External | Embedded |
| Version for aggressive media | - | - | + |
| Neutral connection input | + | - | - |
| Cooling | Forced | Natural | Natural |
| Ambient temperature | 0..+50 °C | 0..+50 °C | 0..+40 °C |

| Type | SFT30 | SFT20 | SFT10 |
|---|--------------|--------------|--------------|
| Ambient temperature with decreasing characteristics | - 10..+50 °C | - | - 10..+50 °C |
| Storage temperature | - 20..+70 °C | - 10..+50 °C | - 40..+70 °C |
| Enclosure protection degree | IP00 \ IP20 | IP20 | IP21 |
| Humidity | up to 98 % | up to 95 % | up to 95 % |
| Altitude above sea level | 1000 m | 2000 m | 1000 m |
| Output for external fan power supply | + | - | - |

Inputs/Outputs

| | | | |
|------------------------|--|----------------------------|----------|
| Digital inputs | 3 + 3 spec. (energy saving/low speed, generator operation/ 2nd parameter set, external fault, fault reset) | 4 programmable | 1 |
| Relay outputs | 3 relays | 2 relays | 2 relays |
| Analogue inputs | 1 (thermistor) | 1 (thermistor) | - |
| Analogue outputs | Analogue output (optional) | Analogue output (optional) | - |
| Motor thermistor input | + (optional) | + | - |
| Thermistor option | 1 thermistor, 1 analogue output | - | - |
| Modbus RTU option | + | + | + |
| PROFIBUS option | + | - | - |

Start/Stop

| | | | |
|---------------------------------------|---|---|---|
| Start-up with linear current increase | + | - | - |
| Starting with current limitation | + | - | - |
| Starting with initial current/voltage | + | + | + |

| Type | SFT30 | SFT20 | SFT10 |
|--|---|----------------------------------|-------|
| Boost start | + | + | - |
| Adaptive acceleration/deceleration control | 6 acceleration/braking curves under application | acceleration curves for the pump | - |
| Starting with linear voltage increase | + | + | + |
| Soft stop with voltage regulation | + | + | + |
| Reduced speed | + | - | - |
| Operation with a diesel generator | + | - | - |
| Motor mechanical brake control | + | - | - |
| Two-speed motor control | + | - | - |
| Run-out braking | + | + | + |
| Dynamic braking | + | - | - |
| Smooth braking | + | - | - |

Interface\Control

| | | | |
|---------------------------------------|---------------------------------------|------------------------|---------------------------------------|
| Display | Numeric letter display | Numeric letter display | - |
| Configuration Menu | Quick setup menu and application menu | Configuration Menu | Parameterization with rotary switches |
| Panel buttons | + | + | - |
| LED status indication | + | + | + |
| Inputs for two and three-wire control | + | + | - |
| Computer software | + | + | - |

| Type | SFT30 | SFT20 | SFT10 |
|------|-------|-------|-------|
|------|-------|-------|-------|

Functions

| | | | |
|---|-------------------------------|---|---|
| External Fault | + | - | - |
| Thyristor protection | Varistors and snubber circuit | - | - |
| Reversing the direction of rotation | + | - | - |
| Energy recovery | + | - | - |
| Low speed operation | + | - | - |
| Torque control at low speed | + | - | - |
| Special acceleration/braking ramps for the pump | + | + | - |
| Control of the number of starts | + | - | - |
| Mechanism jamming control | + | - | - |
| Log of 99 events | Statistical data | - | - |
| Shutdown log | Last accident | - | - |

Protection

| | | | |
|------------------------|------------------------|---|---|
| Motor overload | + | + | + |
| Exceeded start-up time | + | + | + |
| Reverse phase sequence | + | + | + |
| Motor thermistor input | + | + | - |
| Instantaneous overload | electronic safety fuse | + | + |
| Under Current | + | - | - |
| S.C. of motor | + | + | - |

| Type | SFT30 | SFT20 | SFT10 |
|-------------------------------|------------|-------|-------|
| S.C. of Thyristor | + | - | - |
| Ground fault | + | + | - |
| Power failure | + | - | + |
| Voltage drop | + | + | - |
| Overvoltage | + | + | - |
| Phase loss | + | + | + |
| Motor contactor disconnection | + | - | - |
| Soft starter overheating | + | - | + |
| Motor overheating | + | + | + |
| Current asymmetry | - | + | + |
| External failure | + | - | - |
| Internal bypass relay failure | - | - | + |
| Supply Frequency | + | - | - |
| Delayed restart | + | - | - |
| Timeout during data exchange | + | + | - |
| Adjustable protection | Adjustable | - | - |

The SFT10 series is a versatile and space-saving soft starter with an integrated bypass feature, suitable for motors ranging from 0.37 to 75 kW in power. It works with single-phase and three-phase motors with supply voltage 1 x 220 V and 3 x 380 V, has control voltage 24 V or 220 V. For operation in industrial networks, the SFT10 soft starter has an embedded RS-485 (Modbus RTU) interface.

This series provides soft start and stop of the electric motor and has basic safety functions. The SFT10 has one digital input, 2 relay outputs. Basic start and stop functions are available: start with initial current/voltage, start with linear voltage increase, soft stop with voltage control, coast braking.



SFT10 soft starters for 1 x 220 V single-phase motors

Control supply voltage 24 V, without start button

| Ordering code | Type code | Output power, kW | Rated output current, A | H x W x D, mm | Weight, kg |
|---------------|-------------------|------------------|-------------------------|---------------|------------|
| 11A00MDE001 | SFT10-S2-0002-24V | 0.37 | 2 | 175x92x95 | 0.8 |
| 11A00MDE002 | SFT10-S2-0003-24V | 0.55 | 3 | 175x92x95 | 0.8 |
| 11A00MDE003 | SFT10-S2-0004-24V | 0.75 | 4 | 175x92x95 | 0.8 |
| 11A00MDE004 | SFT10-S2-0006-24V | 1.1 | 6 | 175x92x95 | 0.8 |
| 11A00MDE005 | SFT10-S2-0009-24V | 1.5 | 9 | 175x92x95 | 0.8 |
| 11A00MDE006 | SFT10-S2-0012-24V | 2.2 | 12 | 175x92x95 | 0.8 |
| 11A00MDE007 | SFT10-S2-0020-24V | 3.7 | 20 | 175x92x95 | 0.8 |
| 11A00MDE008 | SFT10-S2-0030-24V | 5.5 | 30 | 222x125x132 | 2 |
| 11A00MDE009 | SFT10-S2-0045-24V | 7.5 | 45 | 222x125x132 | 2 |

Control supply voltage 220 V, without start button

| Ordering code | Type code | Output power, kW | Rated output current, A | H x W x D, mm | Weight, kg |
|---------------|--------------------|------------------|-------------------------|---------------|------------|
| 11A00MDE010 | SFT10-S2-0002-220V | 0.37 | 2 | 175x92x95 | 0.8 |
| 11A00MDE011 | SFT10-S2-0003-220V | 0.55 | 3 | 175x92x95 | 0.8 |
| 11A00MDE012 | SFT10-S2-0004-220V | 0.75 | 4 | 175x92x95 | 0.8 |
| 11A00MDE013 | SFT10-S2-0006-220V | 1.1 | 6 | 175x92x95 | 0.8 |
| 11A00MDE014 | SFT10-S2-0009-220V | 1.5 | 9 | 175x92x95 | 0.8 |
| 11A00MDE015 | SFT10-S2-0012-220V | 2.2 | 12 | 175x92x95 | 0.8 |
| 11A00MDE016 | SFT10-S2-0020-220V | 3.7 | 20 | 175x92x95 | 0.8 |
| 11A00MDE017 | SFT10-S2-0030-220V | 5.5 | 30 | 222x125x132 | 2 |
| 11A00MDE018 | SFT10-S2-0045-220V | 7.5 | 45 | 222x125x132 | 2 |

Control supply voltage 220 V, with start button

| Ordering code | Type code | Output power, kW | Rated output current, A | H x W x D, mm | Weight, kg |
|---------------|----------------------|------------------|-------------------------|---------------|------------|
| 11A00MDE019 | SFT10-S2-0002-220V-S | 0.37 | 2 | 175x92x95 | 0.8 |
| 11A00MDE020 | SFT10-S2-0003-220V-S | 0.55 | 3 | 175x92x95 | 0.8 |
| 11A00MDE021 | SFT10-S2-0004-220V-S | 0.75 | 4 | 175x92x95 | 0.8 |
| 11A00MDE022 | SFT10-S2-0006-220V-S | 1.1 | 6 | 175x92x95 | 0.8 |
| 11A00MDE023 | SFT10-S2-0009-220V-S | 1.5 | 9 | 175x92x95 | 0.8 |
| 11A00MDE024 | SFT10-S2-0012-220V-S | 2.2 | 12 | 175x92x95 | 0.8 |
| 11A00MDE025 | SFT10-S2-0020-220V-S | 3.7 | 20 | 175x92x95 | 0.8 |
| 11A00MDE026 | SFT10-S2-0030-220V-S | 5.5 | 30 | 222x125x132 | 2 |
| 11A00MDE027 | SFT10-S2-0045-220V-S | 7.5 | 45 | 222x125x132 | 2 |

SFT10 soft starters for 1 x 220 V single-phase motors

Control supply voltage 220 V, without start button +Modbus

| Ordering code | Type code | Output power, kW | Rated output current, A | H x W x D, mm | Weight, kg |
|---------------|-----------------------|------------------|-------------------------|---------------|------------|
| 11A00MDE028 | SFT10-S2-0002-220V-MB | 0.37 | 2 | 175x92x95 | 0.8 |
| 11A00MDE029 | SFT10-S2-0003-220V-MB | 0.55 | 3 | 175x92x95 | 0.8 |
| 11A00MDE030 | SFT10-S2-0004-220V-MB | 0.75 | 4 | 175x92x95 | 0.8 |
| 11A00MDE031 | SFT10-S2-0006-220V-MB | 1.1 | 6 | 175x92x95 | 0.8 |
| 11A00MDE032 | SFT10-S2-0009-220V-MB | 1.5 | 9 | 175x92x95 | 0.8 |
| 11A00MDE033 | SFT10-S2-0012-220V-MB | 2.2 | 12 | 175x92x95 | 0.8 |
| 11A00MDE034 | SFT10-S2-0020-220V-MB | 3.7 | 20 | 175x92x95 | 0.8 |
| 11A00MDE035 | SFT10-S2-0030-220V-MB | 5.5 | 30 | 222x125x132 | 2 |
| 11A00MDE036 | SFT10-S2-0045-220V-MB | 7.5 | 45 | 222x125x132 | 2 |

Control supply voltage 220 V, with start button +Modbus

| Ordering code | Type code | Output power, kW | Rated output current, A | H x W x D, mm | Weight, kg |
|---------------|-------------------------|------------------|-------------------------|---------------|------------|
| 11A00MDE037 | SFT10-S2-0002-220V-S-MB | 0.37 | 2 | 175x92x95 | 0.8 |
| 11A00MDE038 | SFT10-S2-0003-220V-S-MB | 0.55 | 3 | 175x92x95 | 0.8 |
| 11A00MDE039 | SFT10-S2-0004-220V-S-MB | 0.75 | 4 | 175x92x95 | 0.8 |
| 11A00MDE040 | SFT10-S2-0006-220V-S-MB | 1.1 | 6 | 175x92x95 | 0.8 |
| 11A00MDE041 | SFT10-S2-0009-220V-S-MB | 1.5 | 9 | 175x92x95 | 0.8 |
| 11A00MDE042 | SFT10-S2-0012-220V-S-MB | 2.2 | 12 | 175x92x95 | 0.8 |
| 11A00MDE043 | SFT10-S2-0020-220V-S-MB | 3.7 | 20 | 175x92x95 | 0.8 |
| 11A00MDE044 | SFT10-S2-0030-220V-S-MB | 5.5 | 30 | 222x125x132 | 2 |
| 11A00MDE045 | SFT10-S2-0045-220V-S-MB | 7.5 | 45 | 222x125x132 | 2 |

SFT10 soft starters for three-phase motors 3 x 380 V

Control supply voltage 24 V, without start button

| Ordering code | Type code | Output power, kW | Rated output current, A | H x W x D, mm | Weight, kg |
|---------------|-------------------|------------------|-------------------------|---------------|------------|
| 11A00MDE046 | SFT10-T4-0001-24V | 0.75 | 1.5 | 175x92x95 | 0.8 |
| 11A00MDE047 | SFT10-T4-0002-24V | 1.1 | 2.2 | 175x92x95 | 0.8 |
| 11A00MDE048 | SFT10-T4-0003-24V | 1.5 | 3 | 175x92x95 | 0.8 |
| 11A00MDE049 | SFT10-T4-0004-24V | 2.2 | 4.5 | 175x92x95 | 0.8 |
| 11A00MDE050 | SFT10-T4-0007-24V | 3.7 | 7.5 | 175x92x95 | 0.8 |
| 11A00MDE051 | SFT10-T4-0011-24V | 5.5 | 11 | 175x92x95 | 0.8 |
| 11A00MDE052 | SFT10-T4-0015-24V | 7.5 | 15 | 200x108x105 | 1.4 |
| 11A00MDE053 | SFT10-T4-0022-24V | 11 | 22 | 200x108x105 | 1.4 |
| 11A00MDE054 | SFT10-T4-0030-24V | 15 | 30 | 222x125x132 | 2.4 |
| 11A00MDE055 | SFT10-T4-0037-24V | 18.5 | 37 | 222x125x132 | 2.4 |
| 11A00MDE056 | SFT10-T4-0045-24V | 22 | 45 | 222x125x132 | 2.4 |
| 11A00MDE057 | SFT10-T4-0060-24V | 30 | 60 | 222x125x132 | 2.4 |
| 11A00MDE058 | SFT10-T4-0075-24V | 37 | 75 | 222x125x132 | 2.4 |

Control supply voltage 220 V, without start button

| Ordering code | Type code | Output power, kW | Rated output current, A | H x W x D, mm | Weight, kg |
|---------------|--------------------|------------------|-------------------------|---------------|------------|
| 11A00MDE062 | SFT10-T4-0001-220V | 0.75 | 1.5 | 175x92x95 | 0.8 |
| 11A00MDE063 | SFT10-T4-0002-220V | 1.1 | 2.2 | 175x92x95 | 0.8 |
| 11A00MDE064 | SFT10-T4-0003-220V | 1.5 | 3 | 175x92x95 | 0.8 |
| 11A00MDE065 | SFT10-T4-0004-220V | 2.2 | 4.5 | 175x92x95 | 0.8 |
| 11A00MDE066 | SFT10-T4-0007-220V | 3.7 | 7.5 | 175x92x95 | 0.8 |
| 11A00MDE067 | SFT10-T4-0011-220V | 5.5 | 11 | 175x92x95 | 0.8 |
| 11A00MDE068 | SFT10-T4-0015-220V | 7.5 | 15 | 200x108x105 | 1.4 |
| 11A00MDE069 | SFT10-T4-0022-220V | 11 | 22 | 200x108x105 | 1.4 |
| 11A00MDE070 | SFT10-T4-0030-220V | 15 | 30 | 222x125x132 | 2.4 |
| 11A00MDE071 | SFT10-T4-0037-220V | 18.5 | 37 | 222x125x132 | 2.4 |
| 11A00MDE072 | SFT10-T4-0045-220V | 22 | 45 | 222x125x132 | 2.4 |
| 11A00MDE073 | SFT10-T4-0060-220V | 30 | 60 | 222x125x132 | 2.4 |
| 11A00MDE074 | SFT10-T4-0075-220V | 37 | 75 | 222x125x132 | 2.4 |
| 11A00MDE075 | SFT10-T4-0090-220V | 45 | 90 | 310x155x160 | 5 |
| 11A00MDE076 | SFT10-T4-0110-220V | 55 | 110 | 310x155x160 | 5.2 |
| 11A00MDE077 | SFT10-T4-0150-220V | 75 | 150 | 310x155x160 | 5.2 |

SFT10 soft starters for three-phase motors 3 x 380 V

Control supply voltage 220 V, with start button

| Ordering code | Type code | Output power, kW | Rated output current, A | H x W x D, mm | Weight, kg |
|---------------|----------------------|------------------|-------------------------|---------------|------------|
| 11A00MDE078 | SFT10-T4-0001-220V-S | 0.75 | 1.5 | 175x92x95 | 0.8 |
| 11A00MDE079 | SFT10-T4-0002-220V-S | 1.1 | 2.2 | 175x92x95 | 0.8 |
| 11A00MDE080 | SFT10-T4-0003-220V-S | 1.5 | 3 | 175x92x95 | 0.8 |
| 11A00MDE081 | SFT10-T4-0004-220V-S | 2.2 | 4.5 | 175x92x95 | 0.8 |
| 11A00MDE082 | SFT10-T4-0007-220V-S | 3.7 | 7.5 | 175x92x95 | 0.8 |
| 11A00MDE083 | SFT10-T4-0011-220V-S | 5.5 | 11 | 175x92x95 | 0.8 |
| 11A00MDE084 | SFT10-T4-0015-220V-S | 7.5 | 15 | 200x108x105 | 1.4 |
| 11A00MDE085 | SFT10-T4-0022-220V-S | 11 | 22 | 200x108x105 | 1.4 |
| 11A00MDE086 | SFT10-T4-0030-220V-S | 15 | 30 | 222x125x132 | 2.4 |
| 11A00MDE087 | SFT10-T4-0037-220V-S | 18.5 | 37 | 222x125x132 | 2.4 |
| 11A00MDE088 | SFT10-T4-0045-220V-S | 22 | 45 | 222x125x132 | 2.4 |
| 11A00MDE089 | SFT10-T4-0060-220V-S | 30 | 60 | 222x125x132 | 2.4 |
| 11A00MDE090 | SFT10-T4-0075-220V-S | 37 | 75 | 222x125x132 | 2.4 |

Control supply voltage 220 V, without start button +Modbus

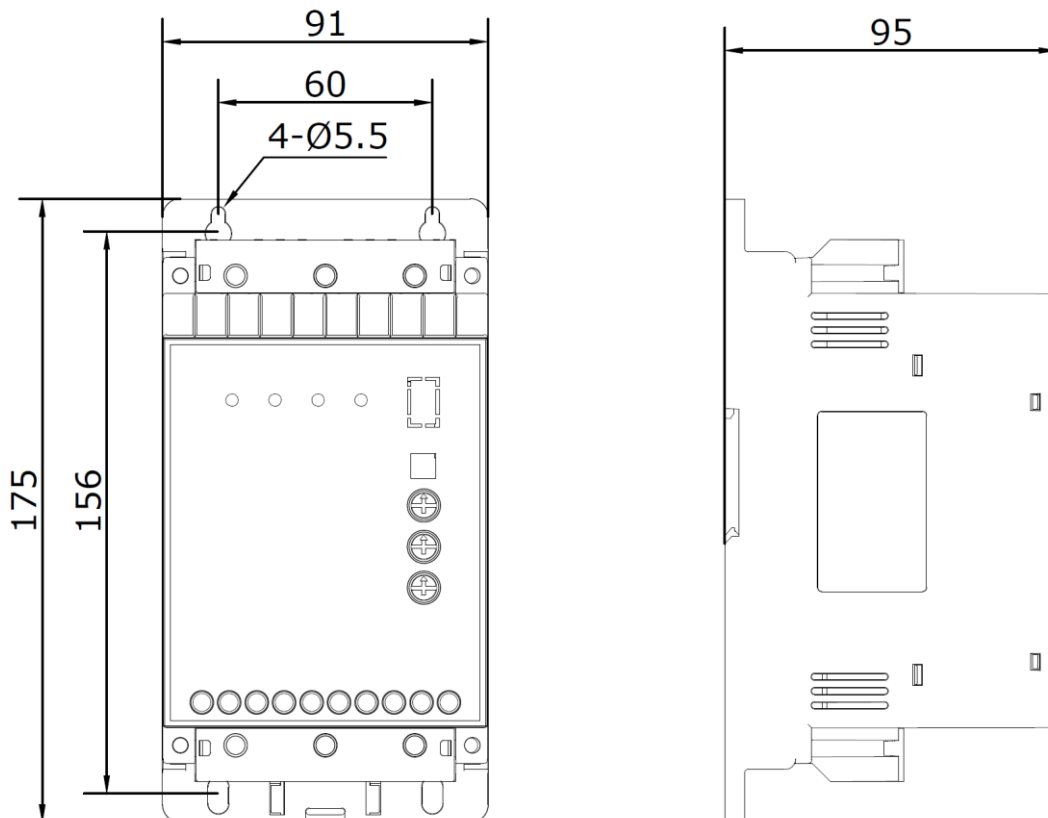
| Ordering code | Type code | Output power, kW | Rated output current, A | H x W x D, mm | Weight, kg |
|---------------|-----------------------|------------------|-------------------------|---------------|------------|
| 11A00MDE094 | SFT10-T4-0001-220V-MB | 0.75 | 1.5 | 175x92x95 | 0.8 |
| 11A00MDE095 | SFT10-T4-0002-220V-MB | 1.1 | 2.2 | 175x92x95 | 0.8 |
| 11A00MDE096 | SFT10-T4-0003-220V-MB | 1.5 | 3 | 175x92x95 | 0.8 |
| 11A00MDE097 | SFT10-T4-0004-220V-MB | 2.2 | 4.5 | 175x92x95 | 0.8 |
| 11A00MDE098 | SFT10-T4-0007-220V-MB | 3.7 | 7.5 | 175x92x95 | 0.8 |
| 11A00MDE099 | SFT10-T4-0011-220V-MB | 5.5 | 11 | 175x92x95 | 0.8 |
| 11A00MDE100 | SFT10-T4-0015-220V-MB | 7.5 | 15 | 200x108x105 | 1.4 |
| 11A00MDE101 | SFT10-T4-0022-220V-MB | 11 | 22 | 200x108x105 | 1.4 |
| 11A00MDE102 | SFT10-T4-0030-220V-MB | 15 | 30 | 222x125x132 | 2.4 |
| 11A00MDE103 | SFT10-T4-0037-220V-MB | 18.5 | 37 | 222x125x132 | 2.4 |
| 11A00MDE104 | SFT10-T4-0045-220V-MB | 22 | 45 | 222x125x132 | 2.4 |
| 11A00MDE105 | SFT10-T4-0060-220V-MB | 30 | 60 | 222x125x132 | 2.4 |
| 11A00MDE106 | SFT10-T4-0075-220V-MB | 37 | 75 | 222x125x132 | 2.4 |
| 11A00MDE107 | SFT10-T4-0090-220V-MB | 45 | 90 | 310x155x160 | 5 |
| 11A00MDE108 | SFT10-T4-0110-220V-MB | 55 | 110 | 310x155x160 | 5.2 |
| 11A00MDE109 | SFT10-T4-0150-220V-MB | 75 | 150 | 310x155x160 | 5.2 |

Control supply voltage 220 V, with start button +Modbus

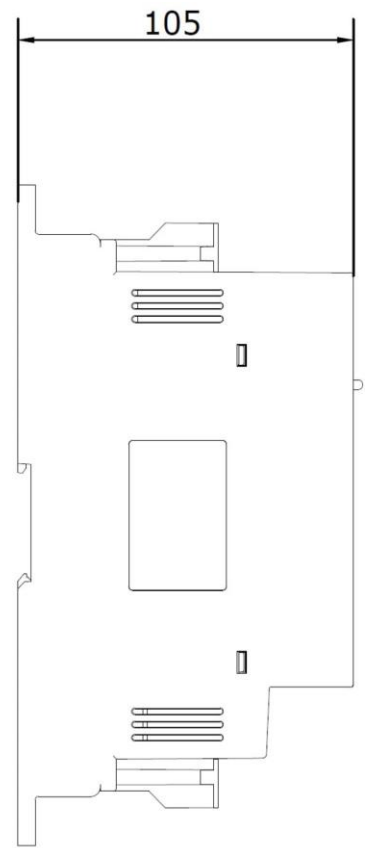
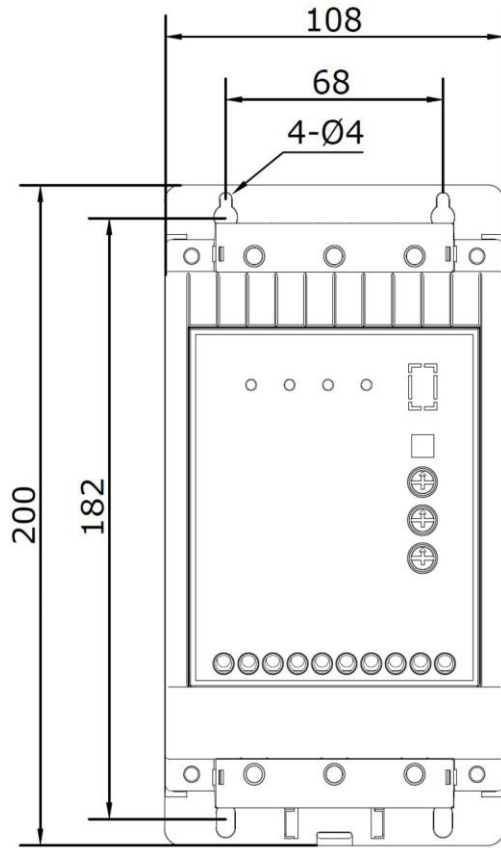
| Ordering code | Type code | Output power, kW | Rated output current, A | H x W x D, mm | Weight, kg |
|---------------|-------------------------|------------------|-------------------------|---------------|------------|
| 11A00MDE110 | SFT10-T4-0001-220V-S-MB | 0.75 | 1.5 | 175x92x95 | 0.8 |
| 11A00MDE111 | SFT10-T4-0002-220V-S-MB | 1.1 | 2.2 | 175x92x95 | 0.8 |
| 11A00MDE112 | SFT10-T4-0003-220V-S-MB | 1.5 | 3 | 175x92x95 | 0.8 |
| 11A00MDE113 | SFT10-T4-0004-220V-S-MB | 2.2 | 4.5 | 175x92x95 | 0.8 |
| 11A00MDE114 | SFT10-T4-0007-220V-S-MB | 3.7 | 7.5 | 175x92x95 | 0.8 |
| 11A00MDE115 | SFT10-T4-0011-220V-S-MB | 5.5 | 11 | 175x92x95 | 0.8 |
| 11A00MDE116 | SFT10-T4-0015-220V-S-MB | 7.5 | 15 | 200x108x105 | 1.4 |
| 11A00MDE117 | SFT10-T4-0022-220V-S-MB | 11 | 22 | 200x108x105 | 1.4 |
| 11A00MDE118 | SFT10-T4-0030-220V-S-MB | 15 | 30 | 222x125x132 | 2.4 |
| 11A00MDE119 | SFT10-T4-0037-220V-S-MB | 18.5 | 37 | 222x125x132 | 2.4 |
| 11A00MDE120 | SFT10-T4-0045-220V-S-MB | 22 | 45 | 222x125x132 | 2.4 |
| 11A00MDE121 | SFT10-T4-0060-220V-S-MB | 30 | 60 | 222x125x132 | 2.4 |
| 11A00MDE122 | SFT10-T4-0075-220V-S-MB | 37 | 75 | 222x125x132 | 2.4 |
| 11A00MDE123 | SFT10-T4-0090-220V-S-MB | 45 | 90 | 310x155x160 | 5 |
| 11A00MDE124 | SFT10-T4-0110-220V-S-MB | 55 | 110 | 310x155x160 | 5.2 |
| 11A00MDE125 | SFT10-T4-0150-220V-S-MB | 75 | 150 | 310x155x160 | 5.2 |

SFT10 dimensions

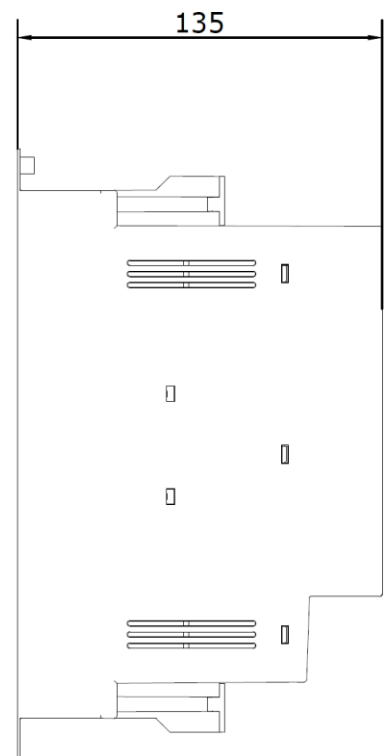
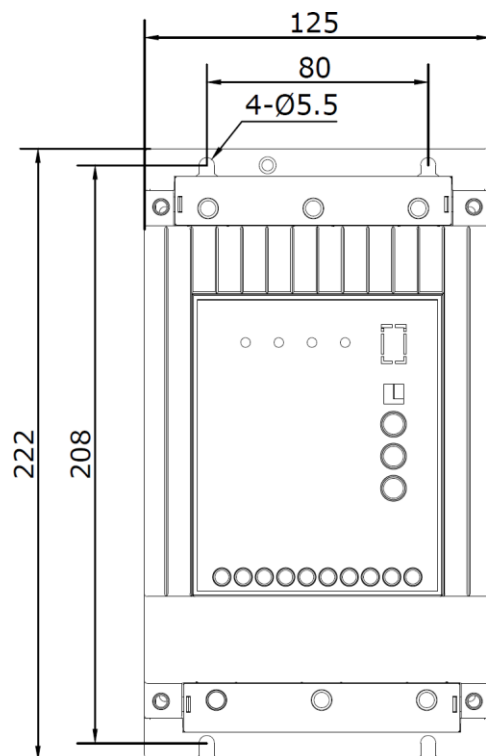
Unit size C1 (1.5–11 A)



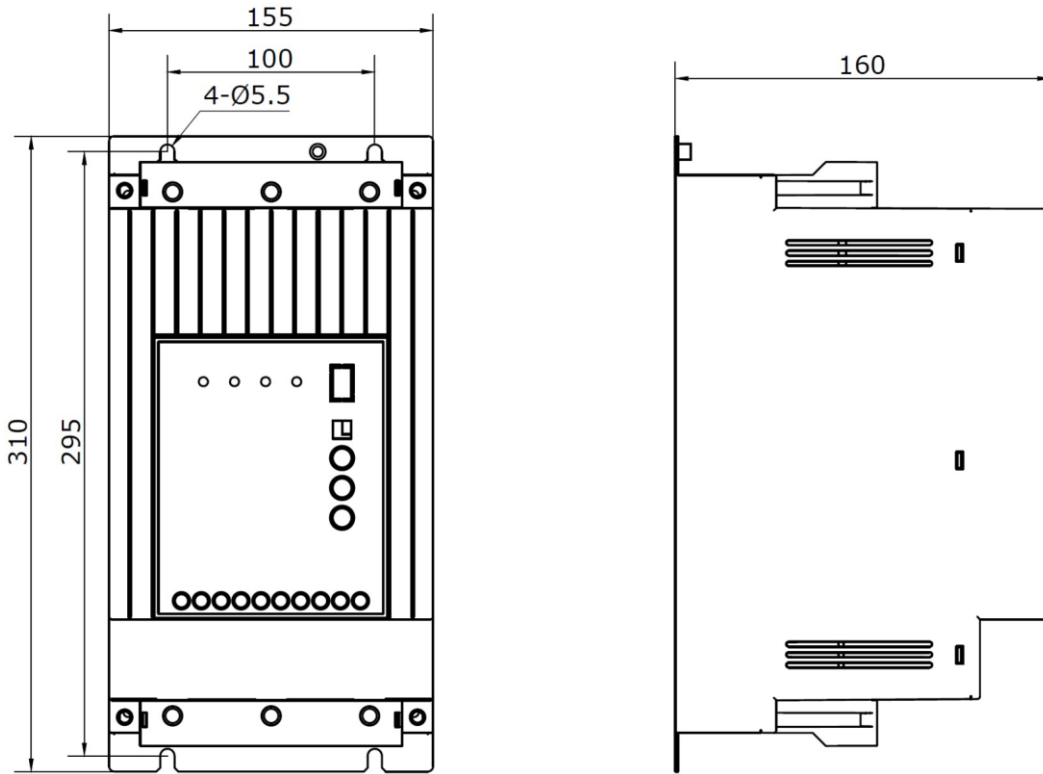
Unit size C2 (15-22 A)



Unit size C3 (30-75 A)



Unit size C4 (90–150 A)



Type code for ordering

| SFT10-XX-XXXX-XXXV-S-MB | |
|-------------------------|---|
| SFT10 | SFT product series |
| TX | Voltage class (S=1 phase, T=3 phase) |
| S2 | 1 x 220 V |
| T4 | 3 x 380 V |
| XXXX | Rated current, A |
| XXXV | Control voltage |
| | 24 V |
| | 220 V |
| S | Start button |
| S | With start button |
| MB | Modbus network protocol |
| MB | Integrated Modbus protocol |

SFT10

SFT10 technical features

| Input features of the mains supply | |
|------------------------------------|---|
| Rated voltage | 1 x 220 V, 3 x 380 V AC (-15 to +10 %)* |
| Rated frequency | 50/60 Hz |
| Rated control circuit voltage | 220 V AC or 24 V DC* |
| Key Functions | |
| Possible winding connections | Star circuit connection |
| | External delta connection |
| Initial starting voltage | 30÷70 % |
| Acceleration time | 1÷30 s |
| Deceleration time | 0÷30 s |
| Bypass | Embedded |
| Number of starts per hour | Under normal load or no load – up to 10 |
| | Under heavy load – up to 5 |
| Network protocols | Modbus RTU (RS-485)* |
| Protections | Short-circuit protection |
| | Long-term overload protection |
| | Overload protection class 10A, 10, 20 and 30 |
| | Phase current imbalance |
| | Phase sequence protection |
| | Phase failure protection |
| | Voltage loss protection |
| Thyristor overheating protection | |
| Allowable overloads | 300% for 7 s at 50% switch-on time and 50% of the switch-off time) |
| Environment, performance | |
| Service temperature | 0 to +50 °C, above 40 °C with performance degradation |
| Humidity | Relative humidity 75 % at temperature +15 °C. Transducers may be operated at relative humidity 95 % and temperature +25 °C |
| Storage temperature | -40 to 70°C |
| Protection degree | IP21 |
| Altitude above sea level | 1000 m (above 1000 m the rated current is reduced by 1 % for every 100 m) |

* Depending on the model ordered.

SFT20

The SFT20 series is a versatile soft starter for motors ranging from 7.5 to 450 kW in power. It works with three-phase motors with supply voltage 3 x 380 V, has control voltage 220 V. For operation in industrial networks, the SFT20 soft starter has a built-in RS-485 interface (Modbus RTU), an additional analogue output, and a convenient operator panel with buttons.

This series provides soft start and stop of the electric motor and has advanced safety functions. The SFT20 has four programmable digital inputs, 3 relay outputs, 1 analogue input (thermistor). Basic start and stop functions are available: start with initial current/voltage, start with linear voltage increase, soft stop with voltage control, coast braking. The device has advanced functions: forced start, acceleration curves for the pump.



SFT20

SFT20 soft starters for three-phase motors 3 x 380 V

Control supply voltage 220 V

| Ordering code | Type code | Output power, kW | Rated output current, A | H x W x D, mm | Weight, kg |
|---------------|---------------|------------------|-------------------------|---------------|------------|
| 11A00MDE126 | SFT20-T4-0018 | 7.5 | 18 | 310x172x194 | 5 |
| 11A00MDE127 | SFT20-T4-0030 | 15 | 30 | 310x172x194 | 5 |
| 11A00MDE128 | SFT20-T4-0045 | 22 | 45 | 310x172x194 | 5 |
| 11A00MDE129 | SFT20-T4-0060 | 30 | 60 | 310x172x194 | 5 |
| 11A00MDE130 | SFT20-T4-0075 | 37 | 75 | 406x230x224 | 9.8 |
| 11A00MDE131 | SFT20-T4-0090 | 45 | 90 | 406x230x224 | 9.8 |
| 11A00MDE132 | SFT20-T4-0110 | 55 | 110 | 406x230x224 | 9.8 |
| 11A00MDE133 | SFT20-T4-0145 | 75 | 145 | 446x300x213 | 17.8 |
| 11A00MDE134 | SFT20-T4-0175 | 90 | 175 | 446x300x213 | 17.8 |
| 11A00MDE135 | SFT20-T4-0210 | 110 | 210 | 446x300x213 | 17.8 |
| 11A00MDE136 | SFT20-T4-0250 | 132 | 250 | 446x300x213 | 17.8 |
| 11A00MDE137 | SFT20-T4-0300 | 160 | 300 | 446x300x213 | 17.8 |
| 11A00MDE138 | SFT20-T4-0370 | 200 | 370 | 446x300x213 | 17.8 |
| 11A00MDE139 | SFT20-T4-0470 | 250 | 470 | 516x350x226 | 24 |
| 11A00MDE140 | SFT20-T4-0570 | 315 | 570 | 516x350x226 | 24 |
| 11A00MDE141 | SFT20-T4-0720 | 400 | 720 | 516x350x226 | 24 |
| 11A00MDE142 | SFT20-T4-0840 | 450 | 840 | 516x350x226 | 24 |

Control supply voltage 220 V +Modbus

| Ordering code | Type code | Output power, kW | Rated output current, A | H x W x D, mm | Weight, kg |
|---------------|------------------|------------------|-------------------------|---------------|------------|
| 11A00MDE143 | SFT20-T4-0018-MB | 7.5 | 18 | 310x172x194 | 5 |
| 11A00MDE144 | SFT20-T4-0030-MB | 15 | 30 | 310x172x194 | 5 |
| 11A00MDE145 | SFT20-T4-0045-MB | 22 | 45 | 310x172x194 | 5 |
| 11A00MDE146 | SFT20-T4-0060-MB | 30 | 60 | 310x172x194 | 5 |
| 11A00MDE147 | SFT20-T4-0075-MB | 37 | 75 | 406x230x224 | 9.8 |
| 11A00MDE148 | SFT20-T4-0090-MB | 45 | 90 | 406x230x224 | 9.8 |
| 11A00MDE149 | SFT20-T4-0110-MB | 55 | 110 | 406x230x224 | 9.8 |
| 11A00MDE150 | SFT20-T4-0145-MB | 75 | 145 | 446x300x213 | 17.8 |
| 11A00MDE151 | SFT20-T4-0175-MB | 90 | 175 | 446x300x213 | 17.8 |
| 11A00MDE152 | SFT20-T4-0210-MB | 110 | 210 | 446x300x213 | 17.8 |
| 11A00MDE153 | SFT20-T4-0250-MB | 132 | 250 | 446x300x213 | 17.8 |
| 11A00MDE154 | SFT20-T4-0300-MB | 160 | 300 | 446x300x213 | 17.8 |
| 11A00MDE155 | SFT20-T4-0370-MB | 200 | 370 | 446x300x213 | 17.8 |
| 11A00MDE156 | SFT20-T4-0470-MB | 250 | 470 | 516x350x226 | 24 |
| 11A00MDE157 | SFT20-T4-0570-MB | 315 | 570 | 516x350x226 | 24 |
| 11A00MDE158 | SFT20-T4-0720-MB | 400 | 720 | 516x350x226 | 24 |
| 11A00MDE159 | SFT20-T4-0840-MB | 450 | 840 | 516x350x226 | 24 |

SFT20 soft starters for three-phase motors 3 x 380 V

Control supply voltage 220 V + Additional analogue output

| Ordering code | Type code | Output power, kW | Rated output current, A | H x W x D, mm | Weight, kg |
|---------------|------------------|------------------|-------------------------|---------------|------------|
| 11A00MDE160 | SFT20-T4-0018-AO | 7.5 | 18 | 310x172x194 | 5 |
| 11A00MDE161 | SFT20-T4-0030-AO | 15 | 30 | 310x172x194 | 5 |
| 11A00MDE162 | SFT20-T4-0045-AO | 22 | 45 | 310x172x194 | 5 |
| 11A00MDE163 | SFT20-T4-0060-AO | 30 | 60 | 310x172x194 | 5 |
| 11A00MDE164 | SFT20-T4-0075-AO | 37 | 75 | 406x230x224 | 9.8 |
| 11A00MDE165 | SFT20-T4-0090-AO | 45 | 90 | 406x230x224 | 9.8 |
| 11A00MDE166 | SFT20-T4-0110-AO | 55 | 110 | 406x230x224 | 9.8 |
| 11A00MDE167 | SFT20-T4-0145-AO | 75 | 145 | 446x300x213 | 17.8 |
| 11A00MDE168 | SFT20-T4-0175-AO | 90 | 175 | 446x300x213 | 17.8 |
| 11A00MDE169 | SFT20-T4-0210-AO | 110 | 210 | 446x300x213 | 17.8 |
| 11A00MDE170 | SFT20-T4-0250-AO | 132 | 250 | 446x300x213 | 17.8 |
| 11A00MDE171 | SFT20-T4-0300-AO | 160 | 300 | 446x300x213 | 17.8 |
| 11A00MDE172 | SFT20-T4-0370-AO | 200 | 370 | 446x300x213 | 17.8 |
| 11A00MDE173 | SFT20-T4-0470-AO | 250 | 470 | 516x350x226 | 24 |
| 11A00MDE174 | SFT20-T4-0570-AO | 315 | 570 | 516x350x226 | 24 |
| 11A00MDE175 | SFT20-T4-0720-AO | 400 | 720 | 516x350x226 | 24 |
| 11A00MDE176 | SFT20-T4-0840-AO | 450 | 840 | 516x350x226 | 24 |

Control supply voltage 220 V + Additional analogue output + Modbus

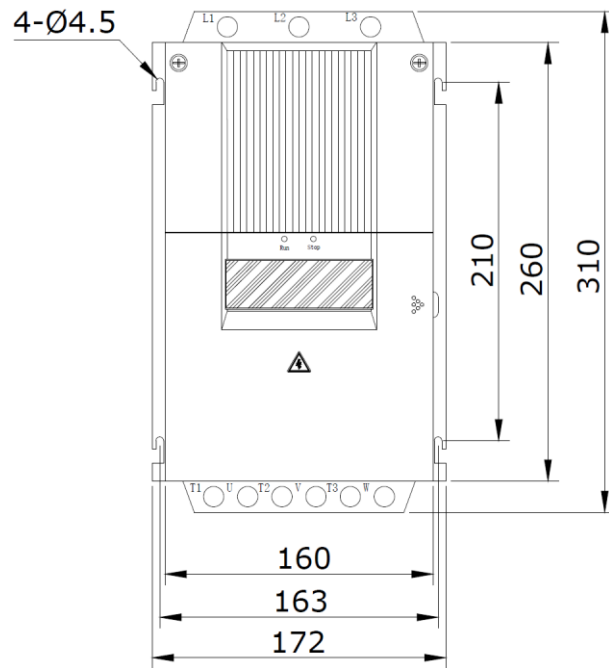
| Ordering code | Type code | Output power, kW | Rated output current, A | H x W x D, mm | Weight, kg |
|---------------|---------------------|------------------|-------------------------|---------------|------------|
| 11A00MDE177 | SFT20-T4-0018-AO-MB | 7.5 | 18 | 310x172x194 | 5 |
| 11A00MDE178 | SFT20-T4-0030-AO-MB | 15 | 30 | 310x172x194 | 5 |
| 11A00MDE179 | SFT20-T4-0045-AO-MB | 22 | 45 | 310x172x194 | 5 |
| 11A00MDE180 | SFT20-T4-0060-AO-MB | 30 | 60 | 310x172x194 | 5 |
| 11A00MDE181 | SFT20-T4-0075-AO-MB | 37 | 75 | 406x230x224 | 9.8 |
| 11A00MDE182 | SFT20-T4-0090-AO-MB | 45 | 90 | 406x230x224 | 9.8 |
| 11A00MDE183 | SFT20-T4-0110-AO-MB | 55 | 110 | 406x230x224 | 9.8 |
| 11A00MDE184 | SFT20-T4-0145-AO-MB | 75 | 145 | 446x300x213 | 17.8 |
| 11A00MDE185 | SFT20-T4-0175-AO-MB | 90 | 175 | 446x300x213 | 17.8 |
| 11A00MDE186 | SFT20-T4-0210-AO-MB | 110 | 210 | 446x300x213 | 17.8 |
| 11A00MDE187 | SFT20-T4-0250-AO-MB | 132 | 250 | 446x300x213 | 17.8 |
| 11A00MDE188 | SFT20-T4-0300-AO-MB | 160 | 300 | 446x300x213 | 17.8 |
| 11A00MDE189 | SFT20-T4-0370-AO-MB | 200 | 370 | 446x300x213 | 17.8 |
| 11A00MDE190 | SFT20-T4-0470-AO-MB | 250 | 470 | 516x350x226 | 24 |
| 11A00MDE191 | SFT20-T4-0570-AO-MB | 315 | 570 | 516x350x226 | 24 |
| 11A00MDE192 | SFT20-T4-0720-AO-MB | 400 | 720 | 516x350x226 | 24 |
| 11A00MDE193 | SFT20-T4-0840-AO-MB | 450 | 840 | 516x350x226 | 24 |

SFT20

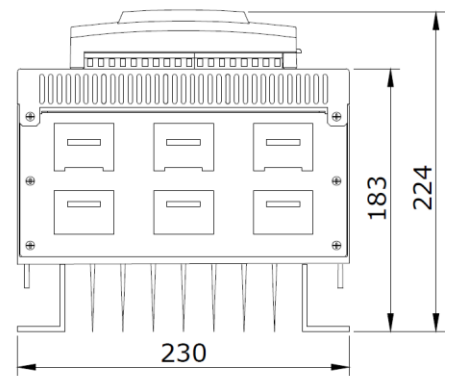
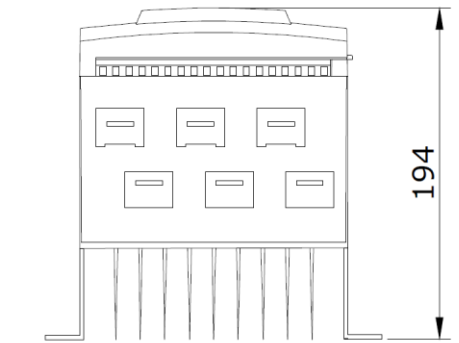
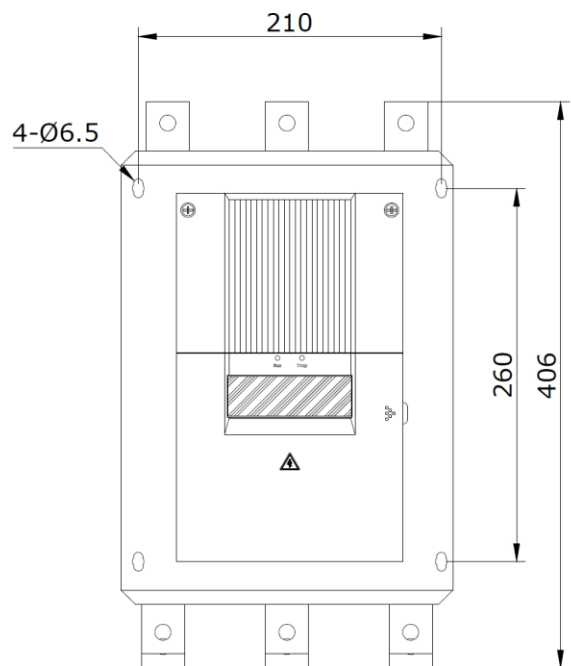
SFT20

SFT20 dimensions

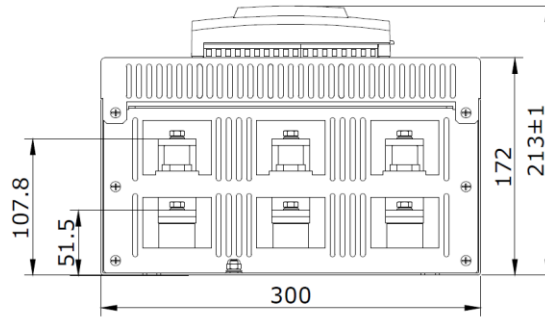
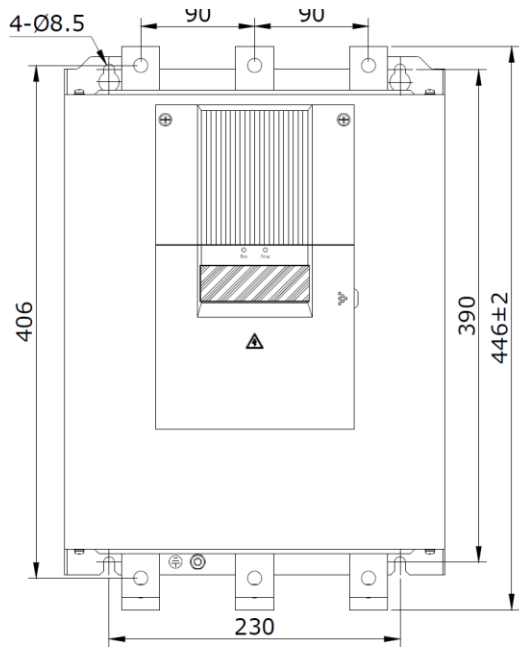
Unit size D1 18–60 A



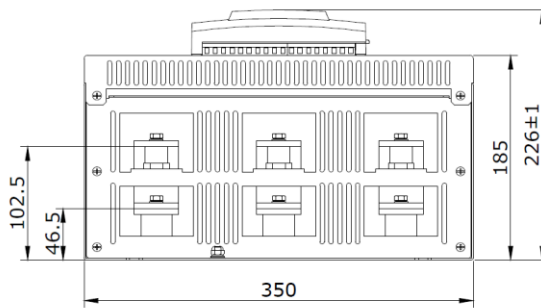
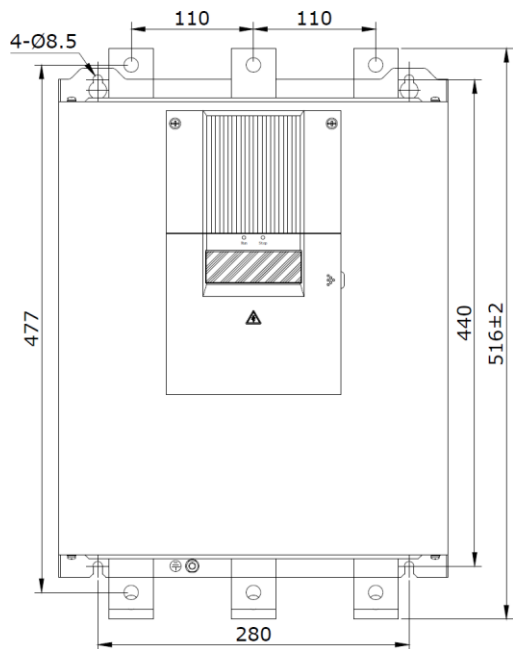
Unit size D2 (75–110 A)



Unit size D3 (145–370 A)



Unit size D4 (470–720 A)



Type code for ordering

| SFT20-TX-XXXX-AO-MB | |
|---------------------|--------------------------------|
| SFT20 | SFT product series |
| TX | Voltage class |
| T4 | 3 x 380 V |
| XXXX | Rated current, A |
| AO | Analogue output |
| AO | Additional analogue output |
| MB | Modbus network protocol |
| MB | Integrated Modbus protocol |

SFT20 technical features

| Input features of the mains supply | |
|------------------------------------|--|
| Rated voltage | 3 x 380 V AC (-15 to +10 %) |
| Rated frequency | 50/60 Hz |
| Rated control circuit voltage | 220 VAC |
| Key Functions | |
| Bypass | External |
| Number of starts per hour | 3–6 times an hour |
| Additional analogue output | 1* |
| Network protocols | Modbus RTU (RS-485)* |
| Protections | Short-circuit protection |
| | Motor overload protection |
| | Protection against exceeding the start-up time |
| | Voltage drop protection |
| | Phase sequence protection |
| | Ground fault protection |
| | Surge Protection |
| | Thyristor overheating protection |
| | Timeout during data exchange |
| | Current asymmetry |
| Pump Control | Special acceleration/braking ramps |
| Allowable overloads | 75–150 % for 10 s |
| Digital inputs | 4 programmable |
| Relay outputs | 3 relays |
| Analogue inputs | 1 (thermistor) |
| Environment, performance | |
| Service temperature | 0 to +50 °C |
| Humidity | Transducers may be operated at relative humidity 95 % and temperature +25 °C |
| Storage temperature | -10 to +50 °C |
| Protection degree | IP20 |
| Altitude above sea level | 2000 m |

* Depending on the model ordered.

SFT20

The SFT30 series is a versatile and multi-functional soft starter for motors from 30 to 500 kW. It works with three-phase motors with supply voltage 3 x 380 V and 3 x 690 V, has control voltage and Profibus network protocols, additional analogue output. 220 V. Various additional embedded options are available – Modbus RTU

This series provides soft start and stop of the electric motor, has advanced protection functions, can operate in heavy environmental conditions (operating temperature from 0 to +50 °C). The SFT30 has 3 digital inputs and 3 special inputs (energy storage, generator operation, 2 parameter sets, external fault, fault reset), 3 relay outputs, 1 analogue input (thermistor). In addition to the standard functions, the device has a number of additional functions: forced start, 6 acceleration and braking curves for different applications, diesel generator operation, mechanical brake control, dynamic braking, event log.



SFT30 soft starters for three-phase motors 3 x 380 V

Control supply voltage 220 V

| Ordering code | Type code | Output power, kW | Rated output current, A | H x W x D, mm | Weight, kg |
|---------------|---------------|------------------|-------------------------|---------------|------------|
| 11A00MDE194 | SFT30-T4-0058 | 30 | 58 | 400x280x218 | 11 |
| 11A00MDE195 | SFT30-T4-0072 | 37 | 72 | 400x280x218 | 11 |
| 11A00MDE196 | SFT30-T4-0085 | 45 | 85 | 400x280x218 | 12.5 |
| 11A00MDE197 | SFT30-T4-0105 | 55 | 105 | 400x280x218 | 12.5 |
| 11A00MDE198 | SFT30-T4-0145 | 75 | 145 | 400x280x218 | 12.5 |
| 11A00MDE199 | SFT30-T4-0170 | 90 | 170 | 488x390x280 | 21.9 |
| 11A00MDE200 | SFT30-T4-0210 | 110 | 210 | 488x390x280 | 21.9 |
| 11A00MDE201 | SFT30-T4-0250 | 132 | 250 | 488x390x280 | 21.9 |
| 11A00MDE202 | SFT30-T4-0310 | 160 | 310 | 600x540x310 | 59 |
| 11A00MDE203 | SFT30-T4-0390 | 200 | 390 | 600x540x310 | 59 |
| 11A00MDE204 | SFT30-T4-0460 | 250 | 460 | 600x540x310 | 59 |
| 11A00MDE205 | SFT30-T4-0580 | 315 | 580 | 600x540x310 | 59 |
| 11A00MDE206 | SFT30-T4-0720 | 400 | 720 | 600x540x310 | 59 |
| 11A00MDE207 | SFT30-T4-0820 | 450 | 820 | 600x540x310 | 59 |
| 11A00MDE208 | SFT30-T4-0950 | 500 | 950 | 600x540x310 | 59 |

Control supply voltage 220 V +Modbus

| Ordering code | Type code | Output power, kW | Rated output current, A | H x W x D, mm | Weight, kg |
|---------------|------------------|------------------|-------------------------|---------------|------------|
| 11A00MDE210 | SFT30-T4-0058-MB | 30 | 58 | 400x280x218 | 11 |
| 11A00MDE211 | SFT30-T4-0072-MB | 37 | 72 | 400x280x218 | 11 |
| 11A00MDE212 | SFT30-T4-0085-MB | 45 | 85 | 400x280x218 | 12.5 |
| 11A00MDE213 | SFT30-T4-0105-MB | 55 | 105 | 400x280x218 | 12.5 |
| 11A00MDE214 | SFT30-T4-0145-MB | 75 | 145 | 400x280x218 | 12.5 |
| 11A00MDE215 | SFT30-T4-0170-MB | 90 | 170 | 488x390x280 | 21.9 |
| 11A00MDE216 | SFT30-T4-0210-MB | 110 | 210 | 488x390x280 | 21.9 |
| 11A00MDE217 | SFT30-T4-0250-MB | 132 | 250 | 488x390x280 | 21.9 |
| 11A00MDE218 | SFT30-T4-0310-MB | 160 | 310 | 600x540x310 | 59 |
| 11A00MDE219 | SFT30-T4-0390-MB | 200 | 390 | 600x540x310 | 59 |
| 11A00MDE220 | SFT30-T4-0460-MB | 250 | 460 | 600x540x310 | 59 |
| 11A00MDE221 | SFT30-T4-0580-MB | 315 | 580 | 600x540x310 | 59 |
| 11A00MDE222 | SFT30-T4-0720-MB | 400 | 720 | 600x540x310 | 59 |
| 11A00MDE223 | SFT30-T4-0820-MB | 450 | 820 | 600x540x310 | 59 |
| 11A00MDE224 | SFT30-T4-0950-MB | 500 | 950 | 600x540x310 | 59 |

SFT30

SFT30 soft starters for three-phase motors 3 x 380 V

Control supply voltage 220 V+Profibus

| Ordering code | Type code | Output power, kW | Rated output current, A | H x W x D, mm | Weight, kg |
|---------------|------------------|------------------|-------------------------|---------------|------------|
| 11A00MDE225 | SFT30-T4-0058-PB | 30 | 58 | 400x280x218 | 11 |
| 11A00MDE226 | SFT30-T4-0072-PB | 37 | 72 | 400x280x218 | 11 |
| 11A00MDE227 | SFT30-T4-0085-PB | 45 | 85 | 400x280x218 | 12.5 |
| 11A00MDE228 | SFT30-T4-0105-PB | 55 | 105 | 400x280x218 | 12.5 |
| 11A00MDE229 | SFT30-T4-0145-PB | 75 | 145 | 400x280x218 | 12.5 |
| 11A00MDE230 | SFT30-T4-0170-PB | 90 | 170 | 488x390x280 | 21.9 |
| 11A00MDE231 | SFT30-T4-0210-PB | 110 | 210 | 488x390x280 | 21.9 |
| 11A00MDE232 | SFT30-T4-0250-PB | 132 | 250 | 488x390x280 | 21.9 |
| 11A00MDE233 | SFT30-T4-0310-PB | 160 | 310 | 600x540x310 | 59 |
| 11A00MDE234 | SFT30-T4-0390-PB | 200 | 390 | 600x540x310 | 59 |
| 11A00MDE235 | SFT30-T4-0460-PB | 250 | 460 | 600x540x310 | 59 |
| 11A00MDE236 | SFT30-T4-0580-PB | 315 | 580 | 600x540x310 | 59 |
| 11A00MDE237 | SFT30-T4-0720-PB | 400 | 720 | 600x540x310 | 59 |
| 11A00MDE238 | SFT30-T4-0820-PB | 450 | 820 | 600x540x310 | 59 |
| 11A00MDE239 | SFT30-T4-0950-PB | 500 | 950 | 600x540x310 | 59 |

Control supply voltage 220 V+Additional analogue output

| Ordering code | Type code | Output power, kW | Rated output current, A | H x W x D, mm | Weight, kg |
|---------------|------------------|------------------|-------------------------|---------------|------------|
| 11A00MDE240 | SFT30-T4-0058-AO | 30 | 58 | 400x280x218 | 11 |
| 11A00MDE241 | SFT30-T4-0072-AO | 37 | 72 | 400x280x218 | 11 |
| 11A00MDE242 | SFT30-T4-0085-AO | 45 | 85 | 400x280x218 | 12.5 |
| 11A00MDE243 | SFT30-T4-0105-AO | 55 | 105 | 400x280x218 | 12.5 |
| 11A00MDE244 | SFT30-T4-0145-AO | 75 | 145 | 400x280x218 | 12.5 |
| 11A00MDE245 | SFT30-T4-0170-AO | 90 | 170 | 488x390x280 | 21.9 |
| 11A00MDE246 | SFT30-T4-0210-AO | 110 | 210 | 488x390x280 | 21.9 |
| 11A00MDE247 | SFT30-T4-0250-AO | 132 | 250 | 488x390x280 | 21.9 |
| 11A00MDE248 | SFT30-T4-0310-AO | 160 | 310 | 600x540x310 | 59 |
| 11A00MDE249 | SFT30-T4-0390-AO | 200 | 390 | 600x540x310 | 59 |
| 11A00MDE250 | SFT30-T4-0460-AO | 250 | 460 | 600x540x310 | 59 |
| 11A00MDE251 | SFT30-T4-0580-AO | 315 | 580 | 600x540x310 | 59 |
| 11A00MDE252 | SFT30-T4-0720-AO | 400 | 720 | 600x540x310 | 59 |
| 11A00MDE253 | SFT30-T4-0820-AO | 450 | 820 | 600x540x310 | 59 |
| 11A00MDE254 | SFT30-T4-0950-AO | 500 | 950 | 600x540x310 | 59 |

SFT30 soft starters for three-phase motors 3 x 380 V

Control supply voltage 220 V+Modbus+Additional analogue output

| Ordering code | Type code | Output power, kW | Rated output current, A | H x W x D, mm | Weight, kg |
|---------------|---------------------|------------------|-------------------------|---------------|------------|
| 11A00MDE255 | SFT30-T4-0058-MB-AO | 30 | 58 | 400x280x218 | 11 |
| 11A00MDE256 | SFT30-T4-0072-MB-AO | 37 | 72 | 400x280x218 | 11 |
| 11A00MDE257 | SFT30-T4-0085-MB-AO | 45 | 85 | 400x280x218 | 12.5 |
| 11A00MDE258 | SFT30-T4-0105-MB-AO | 55 | 105 | 400x280x218 | 12.5 |
| 11A00MDE259 | SFT30-T4-0145-MB-AO | 75 | 145 | 400x280x218 | 12.5 |
| 11A00MDE260 | SFT30-T4-0170-MB-AO | 90 | 170 | 488x390x280 | 21.9 |
| 11A00MDE261 | SFT30-T4-0210-MB-AO | 110 | 210 | 488x390x280 | 21.9 |
| 11A00MDE262 | SFT30-T4-0250-MB-AO | 132 | 250 | 488x390x280 | 21.9 |
| 11A00MDE263 | SFT30-T4-0310-MB-AO | 160 | 310 | 600x540x310 | 59 |
| 11A00MDE264 | SFT30-T4-0390-MB-AO | 200 | 390 | 600x540x310 | 59 |
| 11A00MDE265 | SFT30-T4-0460-MB-AO | 250 | 460 | 600x540x310 | 59 |
| 11A00MDE266 | SFT30-T4-0580-MB-AO | 315 | 580 | 600x540x310 | 59 |
| 11A00MDE267 | SFT30-T4-0720-MB-AO | 400 | 720 | 600x540x310 | 59 |
| 11A00MDE268 | SFT30-T4-0820-MB-AO | 450 | 820 | 600x540x310 | 59 |
| 11A00MDE269 | SFT30-T4-0950-MB-AO | 500 | 950 | 600x540x310 | 59 |

Control supply voltage 220 V+Profibus+Additional analogue output

| Ordering code | Type code | Output power, kW | Rated output current, A | H x W x D, mm | Weight, kg |
|---------------|---------------------|------------------|-------------------------|---------------|------------|
| 11A00MDE270 | SFT30-T4-0058-PB-AO | 30 | 58 | 400x280x218 | 11 |
| 11A00MDE271 | SFT30-T4-0072-PB-AO | 37 | 72 | 400x280x218 | 11 |
| 11A00MDE272 | SFT30-T4-0085-PB-AO | 45 | 85 | 400x280x218 | 12.5 |
| 11A00MDE273 | SFT30-T4-0105-PB-AO | 55 | 105 | 400x280x218 | 12.5 |
| 11A00MDE274 | SFT30-T4-0145-PB-AO | 75 | 145 | 400x280x218 | 12.5 |
| 11A00MDE275 | SFT30-T4-0170-PB-AO | 90 | 170 | 488x390x280 | 21.9 |
| 11A00MDE276 | SFT30-T4-0210-PB-AO | 110 | 210 | 488x390x280 | 21.9 |
| 11A00MDE277 | SFT30-T4-0250-PB-AO | 132 | 250 | 488x390x280 | 21.9 |
| 11A00MDE278 | SFT30-T4-0310-PB-AO | 160 | 310 | 600x540x310 | 59 |
| 11A00MDE279 | SFT30-T4-0390-PB-AO | 200 | 390 | 600x540x310 | 59 |
| 11A00MDE280 | SFT30-T4-0460-PB-AO | 250 | 460 | 600x540x310 | 59 |
| 11A00MDE281 | SFT30-T4-0580-PB-AO | 315 | 580 | 600x540x310 | 59 |
| 11A00MDE282 | SFT30-T4-0720-PB-AO | 400 | 720 | 600x540x310 | 59 |
| 11A00MDE283 | SFT30-T4-0820-PB-AO | 450 | 820 | 600x540x310 | 59 |
| 11A00MDE284 | SFT30-T4-0950-PB-AO | 500 | 950 | 600x540x310 | 59 |

O
M
S
F
T
3
0

SFT30 soft starters for three-phase motors 3 x 690 V

Control supply voltage 220 V

| Ordering code | Type code | Output power, kW | Rated output current, A | H x W x D, mm | Weight, kg |
|---------------|---------------|------------------|-------------------------|---------------|------------|
| 11A00MDE285 | SFT30-T6-0058 | 55 | 58 | 400x280x218 | 11 |
| 11A00MDE286 | SFT30-T6-0085 | 75 | 85 | 400x280x218 | 12.5 |
| 11A00MDE287 | SFT30-T6-0105 | 90 | 105 | 400x280x218 | 12.5 |
| 11A00MDE288 | SFT30-T6-0145 | 132 | 145 | 400x280x218 | 12.5 |
| 11A00MDE289 | SFT30-T6-0170 | 160 | 170 | 488x390x280 | 21.9 |
| 11A00MDE290 | SFT30-T6-0210 | 200 | 210 | 488x390x280 | 21.9 |
| 11A00MDE291 | SFT30-T6-0310 | 257 | 310 | 600x540x310 | 59 |
| 11A00MDE292 | SFT30-T6-0390 | 355 | 390 | 600x540x310 | 59 |
| 11A00MDE293 | SFT30-T6-0460 | 450 | 460 | 600x540x310 | 59 |

Control supply voltage 220 V +Modbus

| Ordering code | Type code | Output power, kW | Rated output current, A | H x W x D, mm | Weight, kg |
|---------------|------------------|------------------|-------------------------|---------------|------------|
| 11A00MDE294 | SFT30-T6-0058-MB | 55 | 58 | 400x280x218 | 11 |
| 11A00MDE295 | SFT30-T6-0085-MB | 75 | 85 | 400x280x218 | 12.5 |
| 11A00MDE296 | SFT30-T6-0105-MB | 90 | 105 | 400x280x218 | 12.5 |
| 11A00MDE297 | SFT30-T6-0145-MB | 132 | 145 | 400x280x218 | 12.5 |
| 11A00MDE298 | SFT30-T6-0170-MB | 160 | 170 | 488x390x280 | 21.9 |
| 11A00MDE299 | SFT30-T6-0210-MB | 200 | 210 | 488x390x280 | 21.9 |
| 11A00MDE300 | SFT30-T6-0310-MB | 257 | 310 | 600x540x310 | 59 |
| 11A00MDE301 | SFT30-T6-0390-MB | 355 | 390 | 600x540x310 | 59 |
| 11A00MDE302 | SFT30-T6-0460-MB | 450 | 460 | 600x540x310 | 59 |

Control supply voltage 220 V+Profibus

| Ordering code | Type code | Output power, kW | Rated output current, A | H x W x D, mm | Weight, kg |
|---------------|------------------|------------------|-------------------------|---------------|------------|
| 11A00MDE303 | SFT30-T6-0058-PB | 55 | 58 | 400x280x218 | 11 |
| 11A00MDE304 | SFT30-T6-0085-PB | 75 | 85 | 400x280x218 | 12.5 |
| 11A00MDE305 | SFT30-T6-0105-PB | 90 | 105 | 400x280x218 | 12.5 |
| 11A00MDE306 | SFT30-T6-0145-PB | 132 | 145 | 400x280x218 | 12.5 |
| 11A00MDE307 | SFT30-T6-0170-PB | 160 | 170 | 488x390x280 | 21.9 |
| 11A00MDE308 | SFT30-T6-0210-PB | 200 | 210 | 488x390x280 | 21.9 |
| 11A00MDE309 | SFT30-T6-0310-PB | 257 | 310 | 600x540x310 | 59 |
| 11A00MDE310 | SFT30-T6-0390-PB | 355 | 390 | 600x540x310 | 59 |
| 11A00MDE311 | SFT30-T6-0460-PB | 450 | 460 | 600x540x310 | 59 |

SFT30 soft starters for three-phase motors 3 x 690 V

Control supply voltage 220 V+Additional analogue output

| Ordering code | Type code | Output power, kW | Rated output current, A | H x W x D, mm | Weight, kg |
|---------------|------------------|------------------|-------------------------|---------------|------------|
| 11A00MDE312 | SFT30-T6-0058-AO | 55 | 58 | 400x280x218 | 11 |
| 11A00MDE313 | SFT30-T6-0085-AO | 75 | 85 | 400x280x218 | 12.5 |
| 11A00MDE314 | SFT30-T6-0105-AO | 90 | 105 | 400x280x218 | 12.5 |
| 11A00MDE315 | SFT30-T6-0145-AO | 132 | 145 | 400x280x218 | 12.5 |
| 11A00MDE316 | SFT30-T6-0170-AO | 160 | 170 | 488x390x280 | 21.9 |
| 11A00MDE317 | SFT30-T6-0210-AO | 200 | 210 | 488x390x280 | 21.9 |
| 11A00MDE318 | SFT30-T6-0310-AO | 257 | 310 | 600x540x310 | 59 |
| 11A00MDE319 | SFT30-T6-0390-AO | 355 | 390 | 600x540x310 | 59 |
| 11A00MDE320 | SFT30-T6-0460-AO | 450 | 460 | 600x540x310 | 59 |

Control supply voltage 220 V+Modbus+Additional analogue output

| Ordering code | Type code | Output power, kW | Rated output current, A | H x W x D, mm | Weight, kg |
|---------------|---------------------|------------------|-------------------------|---------------|------------|
| 11A00MDE321 | SFT30-T6-0058-MB-AO | 55 | 58 | 400x280x218 | 11 |
| 11A00MDE322 | SFT30-T6-0085-MB-AO | 75 | 85 | 400x280x218 | 12.5 |
| 11A00MDE323 | SFT30-T6-0105-MB-AO | 90 | 105 | 400x280x218 | 12.5 |
| 11A00MDE324 | SFT30-T6-0145-MB-AO | 132 | 145 | 400x280x218 | 12.5 |
| 11A00MDE325 | SFT30-T6-0170-MB-AO | 160 | 170 | 488x390x280 | 21.9 |
| 11A00MDE326 | SFT30-T6-0210-MB-AO | 200 | 210 | 488x390x280 | 21.9 |
| 11A00MDE327 | SFT30-T6-0310-MB-AO | 257 | 310 | 600x540x310 | 59 |
| 11A00MDE328 | SFT30-T6-0390-MB-AO | 355 | 390 | 600x540x310 | 59 |
| 11A00MDE329 | SFT30-T6-0460-MB-AO | 450 | 460 | 600x540x310 | 59 |

Control supply voltage 220 V+Profibus+Additional analogue output

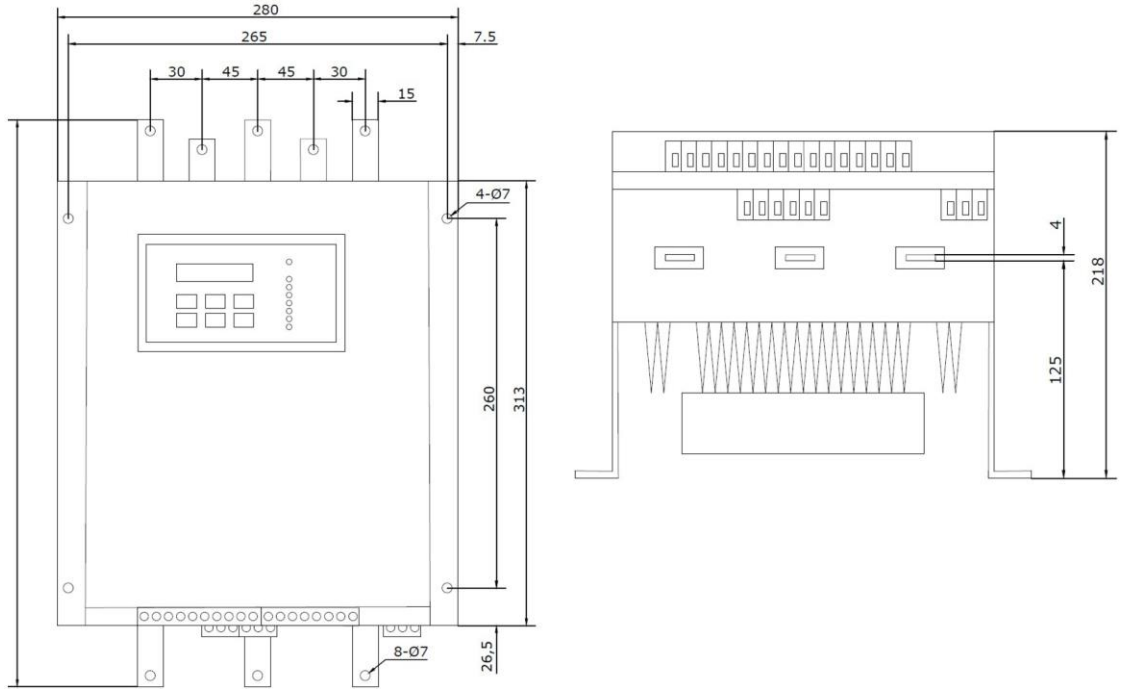
| Ordering code | Type code | Output power, kW | Rated output current, A | H x W x D, mm | Weight, kg |
|---------------|---------------------|------------------|-------------------------|---------------|------------|
| 11A00MDE330 | SFT30-T6-0058-PB-AO | 55 | 58 | 400x280x218 | 11 |
| 11A00MDE331 | SFT30-T6-0085-PB-AO | 75 | 85 | 400x280x218 | 12.5 |
| 11A00MDE332 | SFT30-T6-0105-PB-AO | 90 | 105 | 400x280x218 | 12.5 |
| 11A00MDE333 | SFT30-T6-0145-PB-AO | 132 | 145 | 400x280x218 | 12.5 |
| 11A00MDE334 | SFT30-T6-0170-PB-AO | 160 | 170 | 488x390x280 | 21.9 |
| 11A00MDE335 | SFT30-T6-0210-PB-AO | 200 | 210 | 488x390x280 | 21.9 |
| 11A00MDE336 | SFT30-T6-0310-PB-AO | 257 | 310 | 600x540x310 | 59 |
| 11A00MDE337 | SFT30-T6-0390-PB-AO | 355 | 390 | 600x540x310 | 59 |
| 11A00MDE338 | SFT30-T6-0460-PB-AO | 450 | 460 | 600x540x310 | 59 |

SFT30

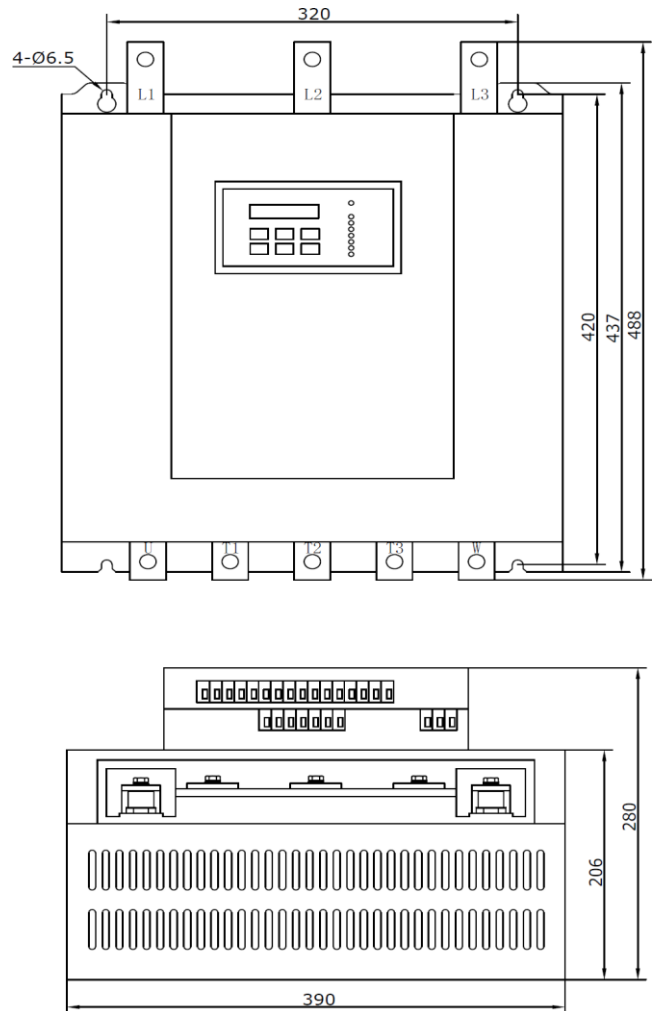
SFT30

SFT30 dimensions

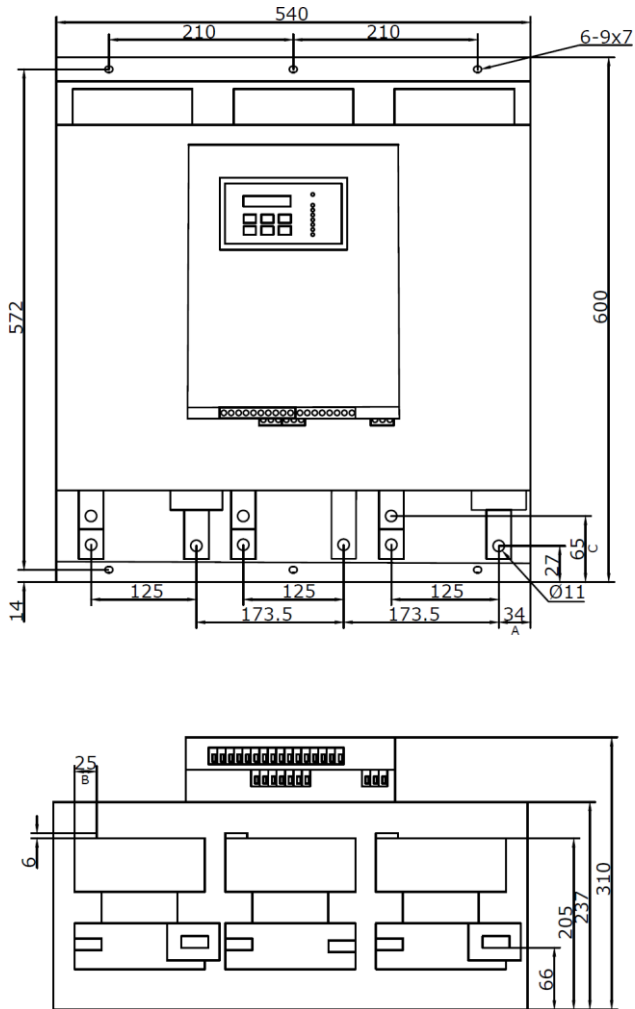
Unit size E1 (18–145 A)



Unit size E2 (175–250 A)



Unit size E3 (300–950 A)



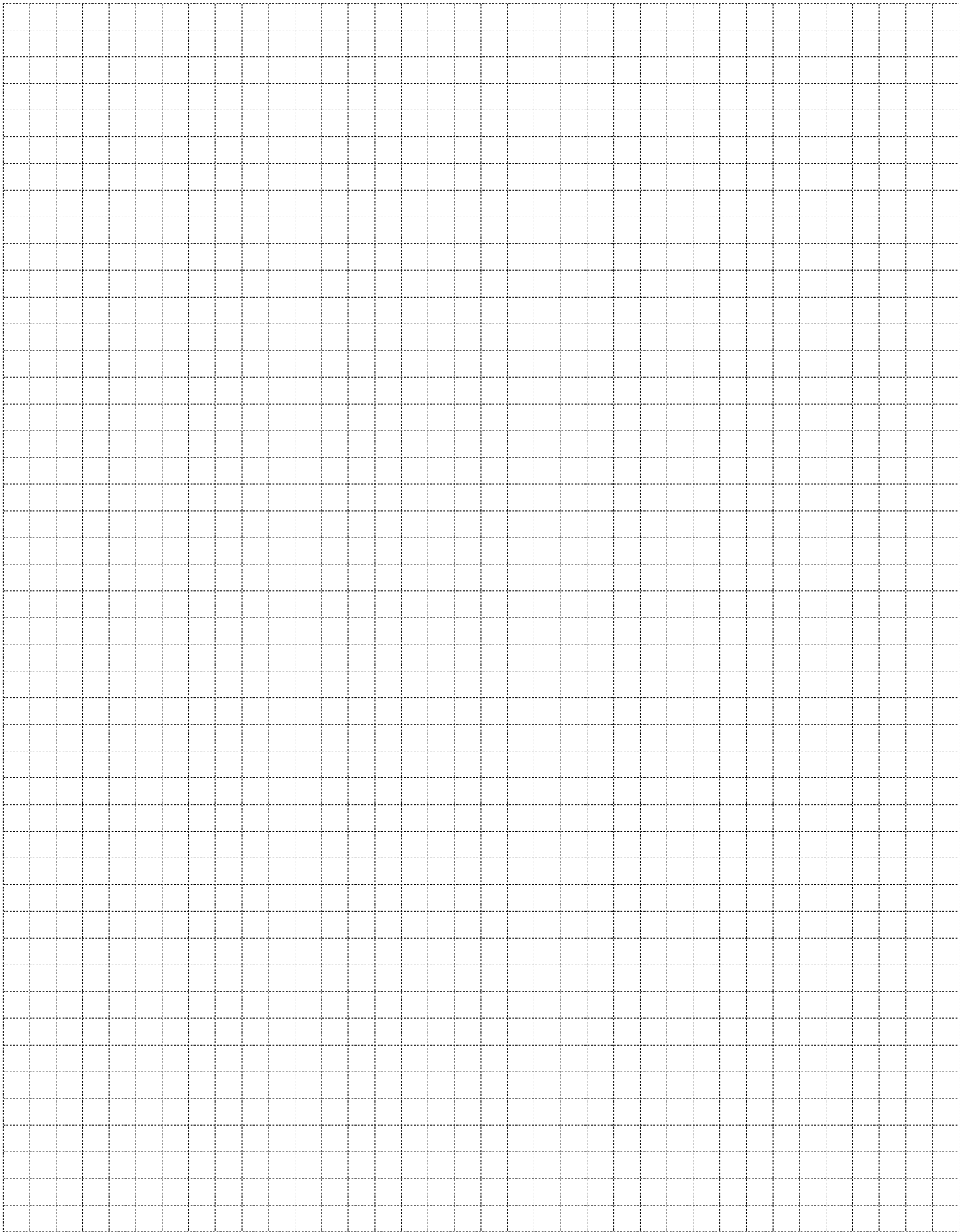
Type code for ordering

| SFT30-TX-XXXX-XX-AO | |
|---------------------|------------------------------|
| SFT30 | SFT product series |
| TX | Voltage class |
| T4 | 3 x 380 V |
| T6 | 3 x 690 V |
| XXXX | Rated current, A |
| XX | Network protocol |
| MB | Integrated Modbus protocol |
| PB | Integrated Profibus protocol |
| AO | Analogue output |
| AO | Additional analogue output |

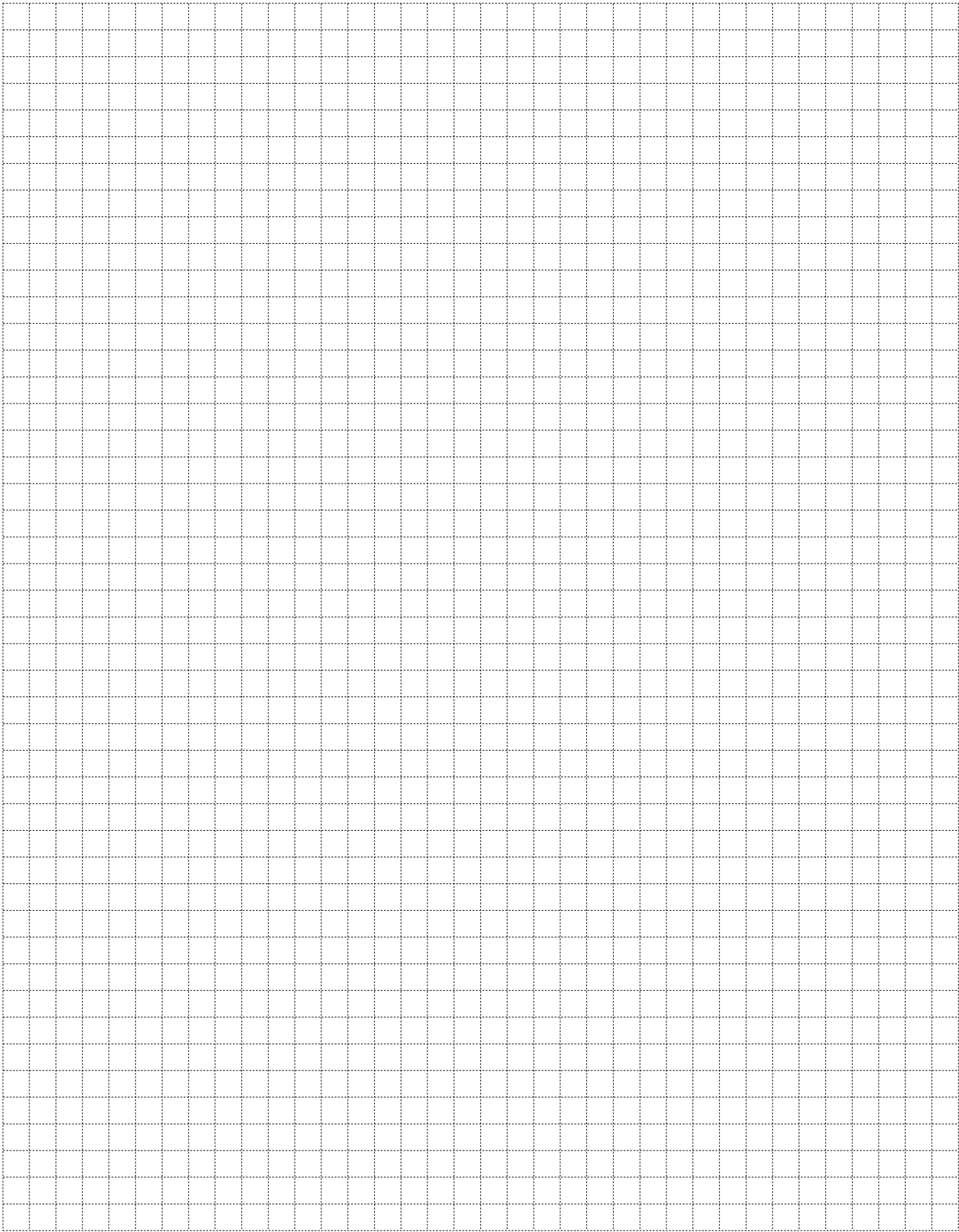
General technical data VEDA-IN DRIVES SFT30

| Input features of the power supply network (R, S, T/L, N) | |
|---|---|
| Supply voltage | 380, 690 V \pm 10% |
| Frequency | 50/60 Hz \pm 4 Hz |
| Control power supply | 220–240 V \pm 10% |
| Control inputs and outputs | 220–240 V \pm 10% |
| Load | 3-phase, asynchronous squirrel cage motor |
| Operating temperature | 0 °C to 50 °C |
| Maximum Starts per Hour | 30 |
| Soft starter full load current | Starter full load current 18~840 A |
| Motor full load current | Current at full motor load 50–100% starter motor FLC |
| Start / stop parameters | |
| Pump control curves | 6 locally selectable curves to prevent overpressure during start-up and hydraulic shock during shutdown |
| Start pulse duration | Pulse 80% U_n for an adjustable time of 0–1 second to start high friction loads. |
| Initial voltage | 10–50% U_n |
| Current limiting | 100–400 % of full motor load |
| Acceleration time | 1–30 seconds |
| Braking time | 1–30 seconds |
| Second start-up characteristic | Secondary start and stop characteristics for initial voltage, current limit, acceleration and deceleration time, full load motor current. |
| Energy Save | activated when the motor is under light load for an extended period of time. |
| Torque at low speed | The maximum torque produced when the motor is operated at 1/6 of rated speed for a maximum of 30 seconds. |
| Linear acceleration | 12 selectable curves - define the starting mode to improve the linearity of acceleration. |
| Protections | |
| Exceeding the number of starts per hour | determines the maximum permissible number of starts during the "start-up period". Range 1–10 starts in a start-up period of 1–60 minutes. |
| Start inhibit | prevents start-up for a variable period of 1 to 60 minutes after too many start-ups are indicated. |
| Long start-up time (rotor lockout protection) | The soft starter is switched off if full motor speed is not reached within the maximum start time of 1–30 seconds |
| Electronic safety fuse | Shuts down the soft starter in 1 cycle at 850% during start-up and 200–850% during operation |
| Electronic overload (I2t) | is regulated in the range of 75–150 % of full motor load. The motor overload curve can be selected by setting the tripping time at 500% for 1–10 seconds. |
| Under Current | The soft starter triggers when the current drops below 20–90% I_n , time delay 1–40 seconds |
| Low voltage | The soft starter triggers when the mains voltage drops below 120–600 V with a delay of 1–10 seconds. |
| Overvoltage | The soft starter triggers when mains voltage rises above 150–750 V, time delay 1– 10 seconds |
| Phase failure (reduced/increased frequency) | The soft starter is switched off when 1 or 2 phases are open and when the frequency is \pm 4 Hz from the rated frequency. |
| Phase alternation | The soft starter is switched off in case of incorrect phase sequence |
| Long operating time at low speed | The soft starter is switched off if it runs at low speed for more than 30 seconds. |
| Improper connection | Prevents starting if the motor is not correctly connected to the starter. |
| Short circuit in Thyristor | Prevents start-up when one or more thyristors are short-circuited. |
| Radiator over-temperature | The soft starter is switched off when the radiator temperature rises above 85 °C |
| External Failure | The soft starter is switched off by closing the external contact for 2 seconds |
| Thyristor protection | metal oxide varistors (MOV) and snubber circuits |
| Analogue input/output | input of motor overtemperature signal, output of analogue motor current signals |

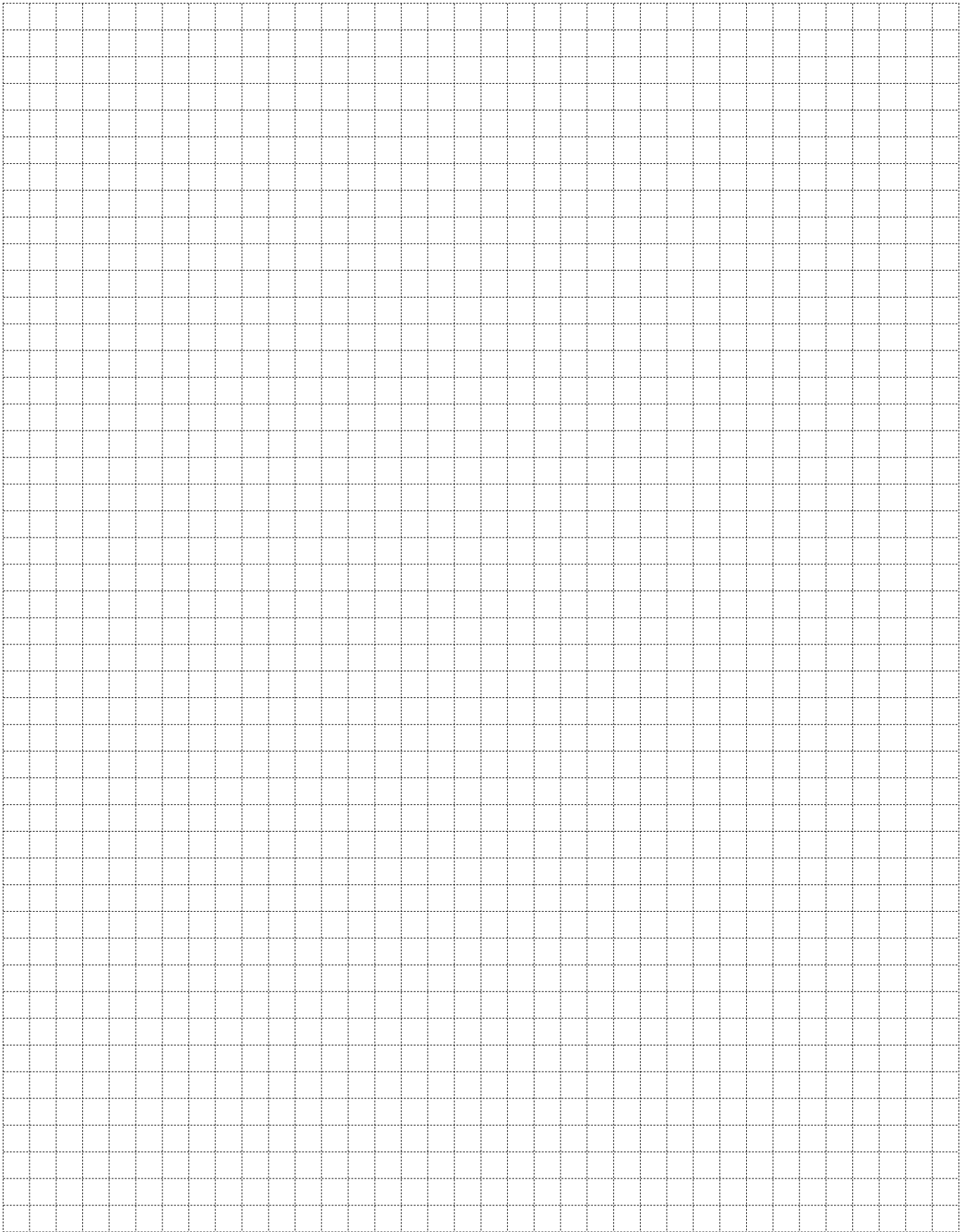
Notes



Notes



Notes



VEDA-IN DRIVES is a drive and automation technology

VEDA-IN DRIVES was founded by engineers and specialists with more than 15 years of experience in the drive technology market. The development of new products was based on the operating experience of various frequency converters, feedback from partners and customers and the technical capabilities of suppliers.

Currently, the product portfolio of VEDA-IN DRIVES includes VEDA-IN DRIVES RD low-voltage frequency converters, VEDA-IN DRIVES MVD medium-voltage converters, VEDA-IN DRIVES SFT and VEDA-IN DRIVES MV SFT soft starters, industrial logic controllers and HMI panels, servomotors, gearboxes and gearmotors, as well as all necessary options.

VEDA-IN DRIVES products are manufactured in fully automated factories under the strict supervision of VEDA-IN DRIVES specialists. We have ambitions to take our share in the market as a reliable supplier of power electronics and related products under our own brand.

VEDA-IN DRIVES product advantages

- Proprietary designs, performance flexibility.
- 100% focus on frequency converters and more than 15 years of experience.
- Shortest delivery times.
- Energy saving: up to 50 % on average in applications with pumps and fans.
- Warranty and post-warranty maintenance of equipment.

VEDA-IN DRIVES drive technology is widely used in areas such as water supply and wastewater disposal, heating, ventilation and air conditioning (HVAC), chemical and mining industries, lifts and cranes, shipbuilding, oil and gas production, power generation.

VEDA-IN DRIVES specialists regularly organize training seminars for engineering company specialists and service partners in the field of efficiency improvement and process automation. Special courses are used to train engineers for consumer companies.

