

Soft start, soft stop and braking of three-phase asynchronous motors up to 18,5 kW

(in delta-connection up to 30 kW)



Features

- ◆ Microprocessor controlled
 - one-button operation
 - 2-line display
- ◆ Optional interfaces (e.g. Ethernet, Profinet)
- ◆ 3 modes:
 - Soft start – soft stop
 - Soft start – braking
 - Soft start – soft stop in delta-connection
- ◆ Ramp up- and ramp down-time separately adjustable
- ◆ Suitable for IE1-, IE2- und IE3- motors
- ◆ Three-phase controlled soft start / soft stop
- ◆ Soft start with current limiting
- ◆ Integrated bypass relays to minimize power losses
- ◆ Phase failure and phase sequence monitoring
- ◆ Integrated DC-current brake: fully controlled, 2-phase
- ◆ Integrated zero speed detection
- ◆ Integrated motor winding temperature supervision
- ◆ Default parameter sets for different applications
- ◆ 2 memories for user-parameter sets

Applications

- ◆ Woodworking machinery
(saws, planing benches, grinding machines)
- ◆ Machines with gear boxes, belt and chain drives
- ◆ Conveyor belts, fans, compressors and pumps
- ◆ Braking of machines with long run out time

User benefits

Mechanical

- ◆ Soft start - torque load during startup reduced
- ◆ Start torque / start puls adjustable
- ◆ Braking torque (-current) adjustable

Safety

- ◆ Fast electronic braking
- ◆ Zero speed detection
- ◆ Machine protection: electronic overload trip
- ◆ Brake function fulfills the requirements to PL = b acc. to DIN EN ISO 18349-1 (in preparation)

Electrical

- ◆ Reduction of starting current
- ◆ Reduced maintenance costs
 - Low wear of the main contactor contacts by zero-current switching
- ◆ Wide voltage range: AC 200...480 V
- ◆ Control voltage 24 V DC

TECHNICAL DATA

LEKTROMIK 15DS1-11	
Voltage	3AC 200 ... 480 V; -15 ... +10 %
Frequency	50 ... 60 Hz
Rated insulation voltage to PE	300 V AC
Rated motor power	3AC 230 V 400 V 480 V
Standard connection	7,5 kW 15 kW 18,5 kW
Delta-connection (Soft start / Soft stop only)	15 kW 26 kW 30 kW
Minimum motor power	10% of respective rated motor power
Rated current	30 A
Starting current	max. 6-times I rated
Braking current	max. 5-times I rated
Load cycle	30A: AC53b: 6-6:354
Form	1
Control voltage	24 VDC ± 20%
Permissible temperatures	0 ... +40 °C operation -25 ... +55 °C storage -25 ... +70 °C transport (short term)
Climatic conditions	5 ... 85 % relative humidity class 3K3 (EN 60721-3-3)
Cooling	Convection, optional fan
Weight	approx. 3 kg
Height	235 mm
Width	90 mm
Depth	195 mm
Order-no.	8110.322

Options	Designation	Order-no.
	Certification according to EN ISO 19085-1: 2018 for wood working machines	in progress
	Integrated fan to increase the load cycle	on request

Optimum drive solutions from 0,25 up to 2000 kW and from 110 up to 690 V



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