

**ELKA SLIDE GATE OPENERS** 

EST-FU 1500 / EST-FU 3000









## Slide gate openers with frequency converter controller

EST-FU 1500: max. gate leaf weight 1,500kg, max. gate running speed approx. 22.2m/min. EST-FU 3000: max. gate leaf weight 3,000kg, max. gate running speed approx. 16.2m/min.



#### **Comfortable**

- ✓ Aluminium housing with plenty of space for additional fittings
- ✓ Receptacle for safety contact profiles integrated in the housing
- ✓ Improved monitoring through 4 separate contact profile evaluations (each for direction of movement OPEN and CLOSE of the main and secondary closing edges)
- ✓ Integrated loop detector



Locking via swivelling lever lock (optional on-site installation of profile half cylinder possible)



#### **Professional**

- ✓ For gates with an opening width of up to 30,000mm
- ✓ Hypoid bevel gearbox with high efficiency
- ✓ Power Factor Correction (PFC): unrestricted operation even with low mains voltage from 200Vac upwards
- ✓ High duty cycle
- ✓ Robust steel construction for long-lasting operation



Available separately: Toothed wheel made of steel (Module 4 or Module 6)





### **Safety**

- ✓ Failsafe inputs (performance level PLc) for evaluation of safety devices
- Connection options for type E safety devices (e.g. laser scanner)
- ✔ Photoelectric barrier connections with test function for forward space and rear space monitoring
- ✓ Reliable mechanical brake on the motor (locks in de-energised state)
- ✓ With separate input (NC contact) for fire alarm system

Simple emergency release via lever on the motor

### Perfect running performance

- ✓ Gate Position Control: The position of the gate is determined exactly via an absolute encoder even after a power failure or emergency release (without re-teaching)
- **✔ Boost Function**: Higher rated power for a short time when the gate starts up
- ✓ Adjustable gate speed, soft start and soft stop
- ✓ Compliance with forces according to EN 12453 at main and secondary closing edges in conjunction with suitable safety contact profiles through electronic speed control and adjustable brake ramps

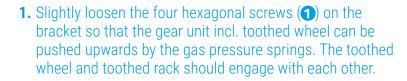


### **Quick Install**

Simple, infinitely variable height adjustment of the toothed wheel thanks to gas pressure springs and height indicator. The adjustment range of 100mm can be extended by 90mm using an optional console.

Min. and max. height of the toothed rack on the slide gate can be determined over the entire gate length during installation. This checks whether the toothed wheel and rack are sufficiently engaged over the entire travel distance. The height difference can be easily read off via the limit indicators.



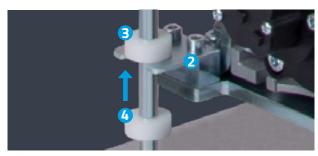




**2.** The pointer plate on the gear unit (2) pushes the upper limit indicator (3) upwards. The lower limit indicator (4) is pushed manually under the pointer plate.



**3.** To determine the minimum and maximum height, the gate leaf is pushed manually over the entire opening width. In the process, the lower limit indicator moves to the optimal setting position.



**4.** The distance between the two limit indicators (**5**) can be easily measured.



**Note:** If the recommended maximum distance between the two limit indicators is exceeded, the wear of the toothed wheel and toothed rack will increase. For more information, see our installation instructions.

**5.** The lower limit indicator is fixed in its position with a screw. The gear unit is pressed onto the lower limit indicator and the four hexagonal screws are tightened again.





# Frequency converter controller MO 45 FU





### Simple operation

- ✓ Illuminated graphic display and plain text menu (4 languages)
- ✓ Monitoring of the inputs via display (e.g. display of resistance values of the 8k2 safety contact profiles, status changes, gate OPEN/CLOSED)
- ✓ Automatic teaching (using additional limit switches can simplify commissioning)
- ✓ 6 multifunctional relays (4x NO, 2x changeover), expandable by up to 8 relays
- ✔ Plug-in socket for TCP/IP and radio remote control

### Menu display examples



Overview and status display



Status safety contact profiles and photoelectric barriers (with actual resistance values)



E.g. state of the gate as graphic and text



E.g. display of serial number and operating hours



# Drive assembly EST-FU 1500A / EST-FU 3000A

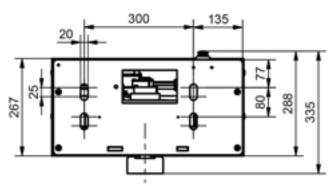


#### EST-FU 1500A / EST-FU 3000A

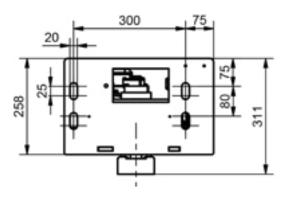
- $\checkmark$  Available as drive assembly for on-site gate posts
- ✓ Including controller
- $\checkmark$  ELKA will gladly assist you with the certification of standard-compliant series gates



Technical data	EST-FU 1500 / EST-FU 1500A	EST-FU 3000 / EST-FU 3000A
Gate leaf weight max.	1,500kg	3,000kg
Travel/opening width max.	30,000mm	
Velocity max.	approx. 22.2m/min.	approx. 16.2m/min.
Cycles/h max.	Depending on opening width, e.g. 12,000mm: 30 18,000mm: 20 24,000mm: 15 30,000mm: 12	Depending on opening width, e.g. 12,000mm: 22 18,000mm: 14 24,000mm: 11 30,000mm: 9
Controller	MO 45 FU with integrated frequency converter, illuminated graphic display and 4-language plain text menu	
Mains voltage	230Vac, 50Hz	
Nominal electrical system power motor	0.37kW	
Protection class housing	IP44	
Protection class controller	IP54	
Protection class drive assembly	IP20	
Limit switch operation	optional	
Network connection	via TCP/IP interface	
Performance level	PLc	
Mechanical brake	Yes	
Toothed wheel	Available separately, steel, Module 4 or Module 6	
Shaft diameter	30mm	
Height adjustment toothed wheel	100mm, infinitely variable (can be extended by 90mm using optional console)	
Dimensions incl. toothed wheel (WxHxD)	530mm x 1,185mm x 335mm	
Weight	63kg / drive assembly 42kg	
Temperature range	-20°C to +50°C	





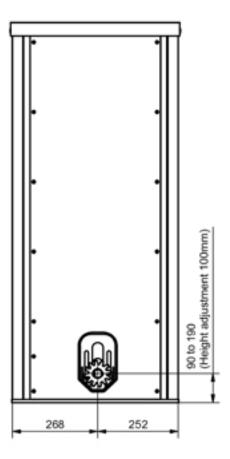


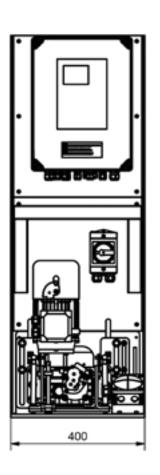
View from below drive assembly

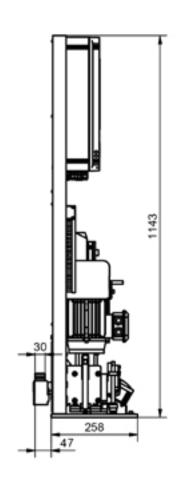


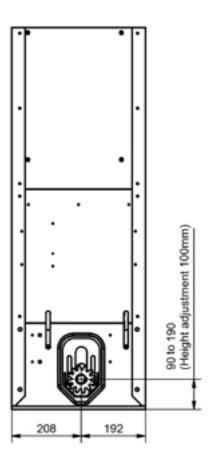
















ELKA-Torantriebe GmbH u. Co. Betriebs KG Dithmarscher Str. 9, 25832 Tönning / Germany