

External automations  
for swing-leaf gates

# 400

## 230V Hydraulic operator



Max width single leaf

2,2 - 7 m (with electric lock)

Use frequency (cycles/hour)

50 - 70



- Key-protected, release device
- Extremely silent movement.
- Hydraulic lock resistant to intrusion attempts (mod. CBC - CBAC).



**SAFEzone system:**  
400 + E045 or  
E045S or E145S +  
SAFEcoder



**GREENTech system:**  
400 + E045 or  
E045S or E145S



### DIMENSIONS AND TECHNICAL SPECIFICATIONS

Model	400 CBC	400 SB	400 SBS	400 CBAC	400 CBAC L	400 SBS L
Power supply voltage	220-240V~ 50/60 Hz					
Motor	Asynchronous single phase					
Max. power	220 W					
Max expressed force	6200 N (*)		7750 N (*)	6200 N (*)	4650 N (*)	7750 N (*)
Rod max speed	10 mm/s (*)		7,5 mm/s (*)	10 mm/s (*)	15 mm/s (*)	7,5 mm/s (*)
Motor-pump unit capacity	1 lpm (*)		0,75 lpm (*)	1 lpm (*)	1,5 lpm (*)	0,75 lpm (*)
Rod travel		270 mm			390 mm	
Max. leaf opening angle	125°					
Operating ambient temperature	-20°C ÷ + 55°C					
Thermal protection	120°C					
Protection class	IP55					
Weight	8.6 Kg				10 kg	
Use frequency	70 cycles/hour		60 cycles/hour	70 cycles/hour	50 cycles/hour	40 cycles/hour
Max. leaf width	2.20 m	4,00 m (with electric lock)	7,00 m (with electric lock)		2.20 m	7,00 m (with electric lock)
Type of oil	FAAC HP OIL					
Mounting brackets	Rear attachment to be welded/screwed - front attachment to be welded					
Dimensions (LxDxH)	1034 x 85 x 119 mm				1277 x 85 x 119 mm	
Electronic equipment	Not included					

(\*) data referred to 230V~ 50Hz.

## FAMILY MODELS

Model	Item code
400 CBC	104205
400 SB	104206
400 SBS	104203
400 CBAC	104201
400 CBAC L	104202
400 SBS L	104220

## PACKS

**400 includes:** a hydraulic operator with hydraulic lock in opening/closing ((**400 CBC**)), without lock (**400 SB**), without hydraulic block for heavy leaves (**400 SBS and 400 SBS L**), a hydraulic operator with hydraulic lock in opening/closing (**400 CBAC and CBAC L**), installation accessories, a release key, a 400V 8 $\mu$ F thrust capacitor.

## ELECTRONIC CONTROL UNITS



E045 electronic control unit  
Info at page 136  
**Discontinuing**  
790005



E045S control unit  
**New**  
790077



E145S control unit  
Info at page 138  
**New**  
790076

## ACCESSORIES



Enclosure mod. L for electronic control units  
720118



Enclosure mod. E for electronic control units  
720119



Enclosure mod. LM for electronic control units  
720309



Plate to be walled  
737604



Joint for RTA sheath  
710010



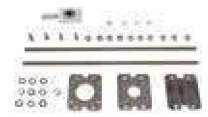
SAFEcoder BUS magnetic absolute encoder (FAAC Patent)  
404040



BUS XIB interface (for E045 or E045S or E024S boards with photocell no BUS)  
790062



Release lock with customised key  
712501001-10



Positive Stop - mechanical stops op/cl (can be integrated on mod. 400)  
490042

## INSTALLATION DIMENSIONS (MM)

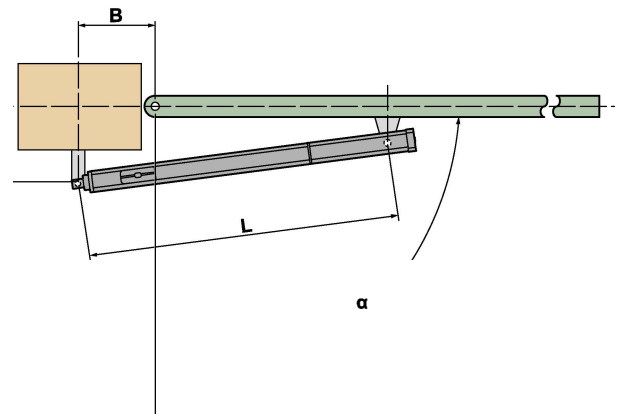


Positive Stop - mechanical stops op/cl (can be integrated on mod. 400 CBAC L)

490043

## NOTE

An electric lock should be installed for operators without hydraulic locking. The 400 L models avoid the use of niches in masonry pillars (FIG.1). The operator with lock is not recommended when there is no access to the manual release device (panelled leaves or no other access to the property).



	$\alpha$	A	B	L
400	90°	130	130	960
	115°	100	120	
	125°	90	120	
400 L	90°	200	160	1200
	115°	170	160	
	125°	130	170	

For any other configuration please refer to the technical manual

Various accessories

# E145S

## Electronic control unit



Model	Item code
E145S control unit	790076



### TECHNICAL SPECIFICATIONS

Model	E145S
Power supply voltage	Power switching 90V~ a 260V~ 50(60) Hz
Max. power	4W Stand by, <2W with sleep function (programmable via PC/MAC) W
Motor max power	800 W
Max. accessories load	500 mA 24V $\overline{=}$ - 500 mA BUS 2easy
Max. electric lock load	FAAC Lock (12V~ - 24V $\overline{=}$ ) - non FAAC 24V $\overline{=}$ - 500 mA
Programming	LCD Display and buttons, by means of PC/MAC through USB-B connection
Status signalling	LCD Display and LED
Terminal board inputs	Open, Open pedestrian door, Stop (closed), BUS 2easy, Safeties in opening, Safeties in closing, Power supply + Ground, Opening and closing limit switches, Input for safety edge in opening, Input for safety edge in closing
Terminal board outputs	Flashing light, Motors, Accessories power 24V $\overline{=}$ , 2 programmable OUTPUT (default: power indicator light and fails-safe), 2 electric locks
Rapid connector	XF 433/868 Module for OMNIDEC decoding, Connector for DECODER/MINIDEC/RP, USB-A, USB-B
Protection Fuses	1 (10A)
Operating ambient temperature	-20°C ÷ +55°C

**Note:** The electronic board E145S can control one or more swing operators, a sliding gear motor, or a mixture of swing-sliding systems.

## FUNCTIONS (PROGRAMMING THROUGH DISPLAY AND BUTTONS)

### Basic programming

Type of motors	Selectable (swing, sliding, mixed swing – sliding installation)
Operating logic	Semiautomatic, Semiautomatic Step by Step, Safety Automatic, Automatic with reverse in pause, Automatic Step by Step, Safety Automatic Step by Step, Automatic, Automatic 1, Automatic with timer function, Semiautomatic B, Mixed (AP with pulse/CH with "dead-man"), deadman C, Custom (PC/MAC)
Pause time	Independently programmable after total or partial opening (from 0 to 9 min 50 sec)
Number of motors	Selectable
Thrust power	Adjustable on 50 levels for each motor independently
Encoder use	Selectable
Limit switch	limit switch function in opening and closing, selectable independently
Leaf delay time in closing	Programmable (from 0 to 1 min 30 sec)
BUS 2-Easy device registration	Selectable
Motor Power	1 and 2 (independently)

Working time learning	Simple self-learning (max 4 min and 10 sec). Self-learning of working and deceleration time of the two leaves thanks to a single complete work cycle) The SAFEcoder absolute encoder learns the open/closed/slowdown positions of the gate
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### Advanced programming

Maximum power at initial thrust	Selectable
Reverse stroke and ram stroke	Independently selectable (facilitating the coupling and uncoupling of the electric lock)
Leaf delay in opening	Selectable
Leaf 1 deceleration	Programmable, percentage of the total stroke (from 0% to 99%)
Leaf 2 deceleration	Programmable, percentage of the total stroke (from 0% to 99%)
Storable codes	Number of radio codes programmed on OMINIDEC through XF Module display

### Pre-Flashing

Photocell in closing	Selectable Function
ADMAP Function	Selectable
Anti-crushing sensitivity	Programmable there is an ENCODER (10 levels)
Mechanical stop angle search	Selectable if the ENCODER is present
Additional work time	Selectable (if ENCODERS or limit switches are not present)
OUT 1 and OUT2 programming	Independently selectable (17 statuses each)
Service request	Selectable (if the programmed number of cycles is reached, the system activates an 8 sec pre-flashing before any movement)
Cycle count	Selectable (upgrade of a "countdown" - max setting 99,000 cycles)

### File management through USB-A

Board software Upgrade	Selectable
Board configuration Upload	Selectable
Toard configuration Upload	Selectable
Radio codes list Upload	Selectable
Board configuration download	Selectable
Board timer download	Selectable
Board radio code download	Selectable

# SAFEcoder

## SAFEcoder for 230V installations



Model	Item code
SAFEcoder BUS magnetic absolute encoder (FAAC Patent)	404040
SAFEcoder for operator 412 (FAAC Patent)	404041
Encoder unit for 770N	404035



### TECHNICAL SPECIFICATIONS

Model	SAFEcoder
Power supply voltage	BUS 2easy
Protection class	IP 66
Operating ambient temperature	-20°C ÷ +55°C

*Note: the SAFEcoder is only compatible with the E045, E045S, E145S, E024S and E124 control units*