

ABACUS

SWING GATES ACTUATOR
VERSIONS 230V AND 24V

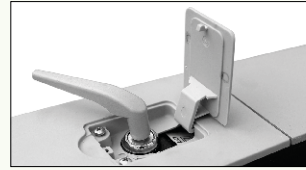
Life
made
easy



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Technical features

Emergency manual release system with aluminium handle



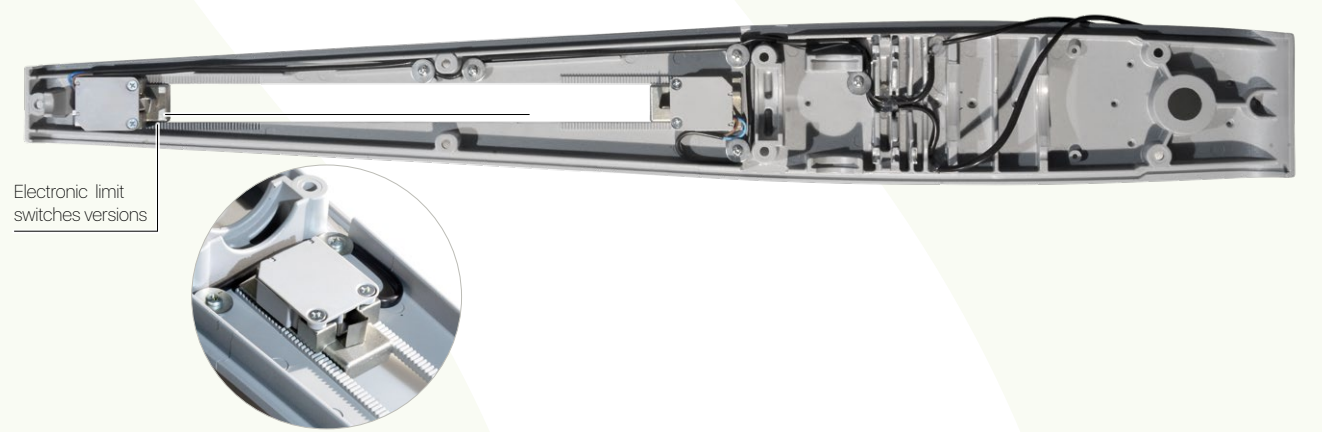
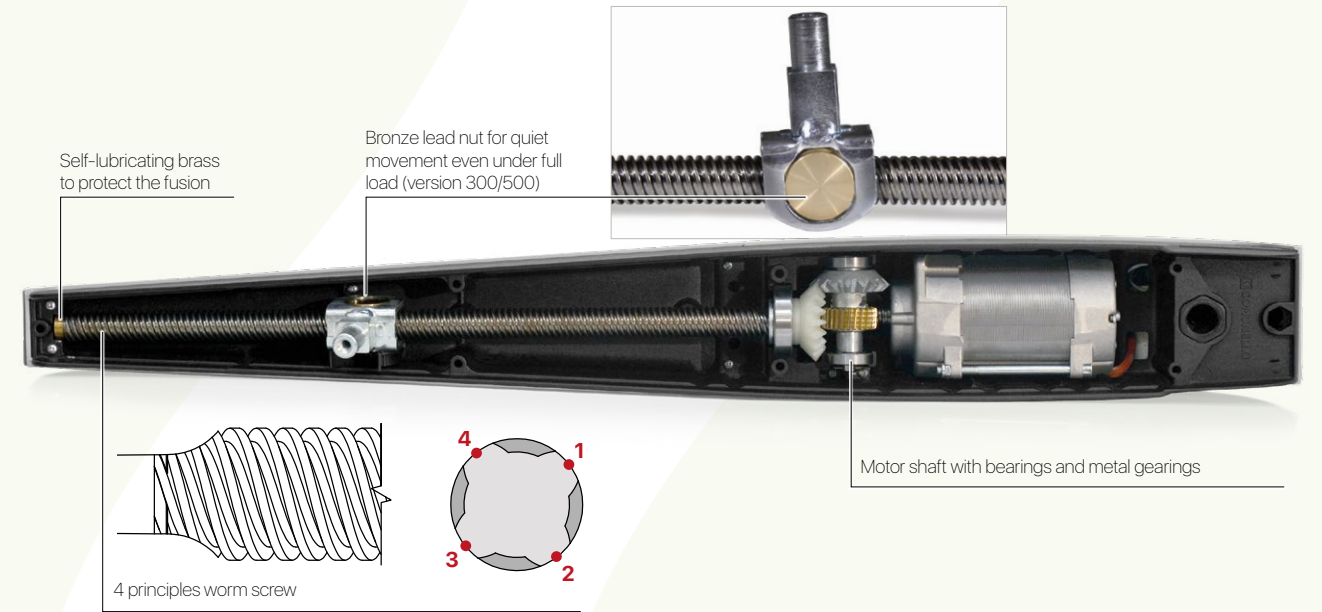
Actuators profile made of aluminium

Actuators profile made of aluminium

One-piece die cast aluminium housing

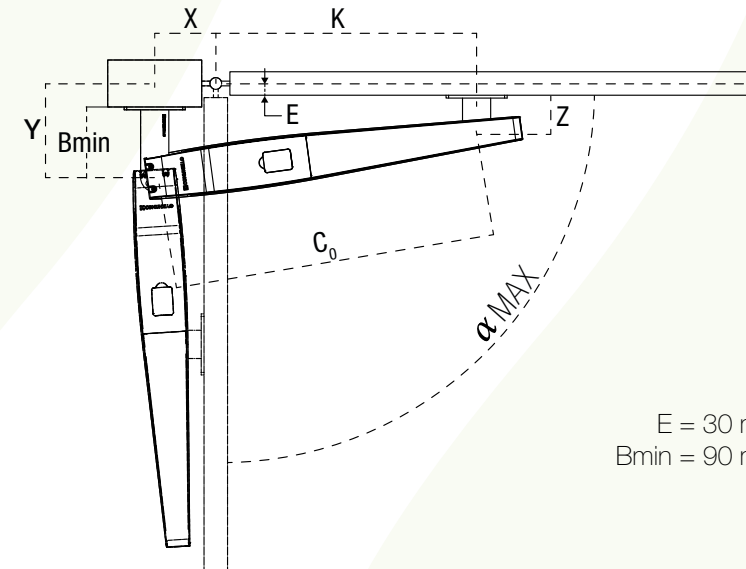


Every single product is duly tested at the end of each assembly line



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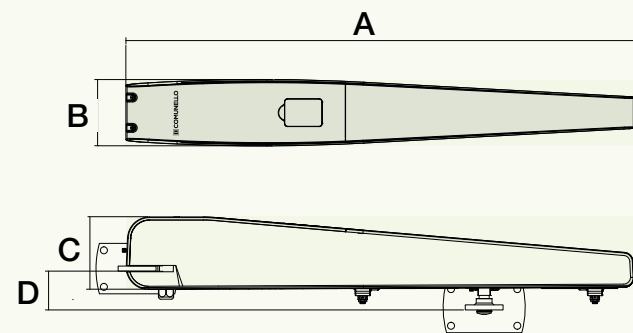
Technical features



E = 30 mm
Bmin = 90 mm

DIMENSIONS (mm)

	ABACUS 220	ABACUS 300	ABACUS 500
A	765	805	955
B	95	105	105
C	95	115	115
D	61,3	61,5	61,5

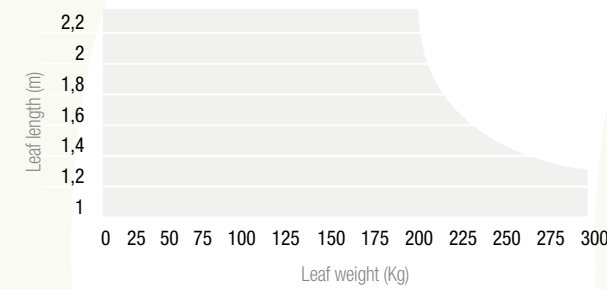


Technical features

Available with mechanical or electronic limit switches and with Encoder versions

	ABACUS 220 24V	ABACUS 220 230V	ABACUS 300 24V	ABACUS 300 230V	ABACUS 500 24V	ABACUS 500 230V
Voltage	24 VDC	230 VAC	24 VDC	230 VAC	24 VDC	230 VAC
Power consumption	70 W	180 W	110 W	280 W	110 W	280 W
Max. absorption	3 A	0,8 A	5 A	1,2 A	5 A	1,2 A
Max. thrust	1500 N	1400 N	1800 N	2000 N	1800 N	2000 N
Standard stroke	296 mm	296 mm	296 mm	296 mm	446 mm	446 mm
Duty cycle	Intensive use	50%	Intensive use	50%	Intensive use	50%
Protection degree (IP)	IP44	IP44	IP44	IP44	IP44	IP44
Insulation class	2	1 (earthing)	2	1 (earthing)	2	1 (earthing)
Working temperature	-20°C / +50°C	-20°C / +50°C	-20°C / +50°C	-20°C / +50°C	-20°C / +50°C	-20°C / +50°C
No-load speed	18 mm/s	16 mm/s	21 mm/s	16 mm/s	21 mm/s	16 mm/s
Weight	8 kg	8,6 kg	10,1 kg	10,7 kg	10,7 kg	11,2 kg

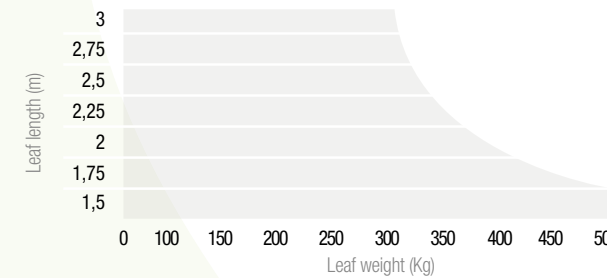
OPERATING LIMITS ABACUS 220



AS220														
Y	80		100		120		140		160		180		200	
	K α _{max}	Z C ₀	K α _{max}	Z C ₀	K α _{max}	Z C ₀	K α _{max}	Z C ₀	K α _{max}	Z C ₀	K α _{max}	Z C ₀	K α _{max}	Z C ₀
100	568	55	548	60	528	65	508	75	488	85	468	95	448	110
	98°	648,5	107°	648,5	115°	648,5	118°	648,5	103°	648,5	95°	648,5	90°	648,5
120	567	60	549	65	529	75	509	85	489	90	469	105		
	97°	649	105°	649	112°	649	106°	649	96°	649	90°	649		
140	566	65	546	70	526	80	506	90	488	100				
	96°	649	104°	649	110°	649	95°	649	89°	649				
160	564	70	546	75	527	85	508	95						
	95°	649	102°	649	95°	649	88°	649						
180	564	75	544	85	526	95								
	95°	649	96°	649	87°	649								

AC 80
AC 85

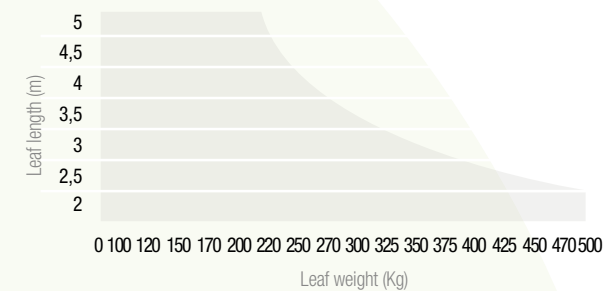
OPERATING LIMITS ABACUS 300



AS300														
Y	80		100		120		140		160		180		200	
	K α _{max}	Z C ₀	K α _{max}	Z C ₀	K α _{max}	Z C ₀	K α _{max}	Z C ₀	K α _{max}	Z C ₀	K α _{max}	Z C ₀	K α _{max}	Z C ₀
100	605	65	585	65	565	70	545	75	525	80	505	95	488	102,5
	96°	685	105°	685	114°	685	115°	685	101°	685	94°	685	90°	688
120	608	75	588	70	568	70	548	75	528	85	508	102,5		
	95°	688	104°	688	110°	688	105°	688	95°	688	90°	688		
140	607	65	586	65	567	75	547	80	529	90				
	95°	688	105°	688	110°	688	96°	688	90°	688				
160	605	70	584	75	566	80								
	94°	688	100°	688	95°	688								
180	600	75	580	80										
	89°	685	90°	680										
200	600	80												
	90°	685												

NOT RECOMMENDED
AC 80

OPERATING LIMITS ABACUS 500



AS500																				
Y	80		100		120		140		160		180		200		220		240		260	
	K α _{max}	Z C ₀	K α _{max}	Z C ₀	K α _{max}	Z C ₀	K α _{max}	Z C ₀	K α _{max}	Z C ₀	K α _{max}	Z C ₀	K α _{max}	Z C ₀	K α _{max}	Z C ₀	K α _{max}	Z C ₀	K α _{max}	Z C ₀
100	758	60	738	60	718	60	698	65	678	75	658	85	638	95	618	102,5	598	120	577	135
	95°	838	104°	838	113°	838	120°	838	127°	838	130°	838	135°	838	133°	838	118°	837	118°	837
120	757	60	737	60	717	65	698	70	678	80	658	90	638	100			598	125	577	135
	94°	837	102°	837	110°	837	116°	838	123°	838	128°	838	132°	838			112°	837	105°	837
140	756	65	736	60	716	75	696	80	676	85	656	90	636	102,5			596	125	576	140
	94°	836	102°	836	108°	836	115°	836	120°	836	125°	836	129°	836			107°	836	101°	836
160	756	65	736	70	716	80	696	90	676	95	656	102,5					596	135	576	145
	93°	836	100°	836	106°	836	112°	836	118°	836	122°	836					101°	836	96°	836
180	753	70	733	75	713	80	693	90	673	95	653	102,5	633	115	613	125	593	140		
	93°	838	99°	838	104°	838	110°	838	115°	838	119°	838	109°	838	100°	838	95°	838		
200	756	75	736	80	716	90	696	102,5	676	110	656	120	637	130	617	140				
	93°	838	98°	838	104°	838	108°	838	113°	838	117°	838	103°	838	97°	838				
220	748	80	728	90	708	100	688	110	673	115	653	120	633	130	613	140				
	93°	837	98°	837	102°	837	107°	838	111°	838	115°	838	95°	838	90°	835				
240	748	85	728	95	709	100	692	110	672	120	654	130	635	140	615	145				
	93°	838	98°	838	102°	837	106°	838	108°	838	97°	838	90°	838	89°	838				

AC 85 AC 80 AC 80 + AC 85 NOT RECOMMENDED



OFFICIAL DEALER:

 **COMUNELLO**
AUTOMATION

AUTOMATION FOR GATES, DOORS AND BARRIERS

FRATELLI COMUNELLO S.P.A.

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ABACUS Accessories



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AC-60

Galvanized adjustable rear bracket to be screwed

GAS001ASN0G00

6

1 kg



AC-70

Galvanized rear bracket to be screwed

GAS002ASN0G00

2

0,95 kg



AC-80

Galvanized rear long bracket to weld

GAS003ASN0G00

2

1,75 kg



AC-85

Galvanised adjustable front bracket

GAS004ASN0G00

1

0,9 kg

ABACUS KIT System



24V Complete kits with worm screw actuators for swinging gates, 24 Vdc, encoder, up to 5 m length

	KIT System						
	ENTRY	GKAS220MLB930	•	•	QUAD 24 HP	19,7 kg	16
Abacus 220	LIGHT	GKAS220MLB920	•	•	QUAD 24 HP	19,8 kg	16
	FULL	GKAS220MLB908	•	•	QUAD 24 HP	22 kg	16
	ENTRY	GKAS300MLB930	•	•	QUAD 24 HP	25,9 kg	16
Abacus 300	LIGHT	GKAS300MLB920	•	•	QUAD 24 HP	26 kg	16
	FULL	GKAS300MLB908	•	•	QUAD 24 HP	26,2 kg	16
	ENTRY	GKAS500MLB930	•	•	QUAD 24 HP	25,9 kg	9
Abacus 500	LIGHT	GKAS500MLB920	•	•	QUAD 24 HP	26 kg	9
	FULL	GKAS500MLB900	•	•	QUAD 24 HP	26,2 kg	9

= Mechanical endstops - $\begin{matrix} 0100 \\ 10101 \\ 0010 \end{matrix}$ = Encoder

= Available version with electrical endstops

ABACUS KIT System



230V Complete kits with worm screw actuators for swinging gates, 230 Vac, encoder, up to 5 m length

	KIT System						
	ENTRY	GKAS220MEH930	•	•	QUAD 230 HP	19,9 kg	16
Abacus 220	LIGHT	GKAS220MEH920	•	•	QUAD 230 HP	22 kg	16
	FULL	GKAS220MEH900	•	•	QUAD 230 HP	22,2 kg	16
	ENTRY	GKAS300MEH930	•	•	QUAD 230 HP	26,1 kg	16
Abacus 300	LIGHT	GKAS300MEH920	•	•	QUAD 230 HP	26,2 kg	16
	FULL	GKAS300MEH900	•	•	QUAD 230 HP	26,4 kg	16
	ENTRY	GKAS500MEH930	•	•	QUAD 230 HP	28 kg	9
Abacus 500	LIGHT	GKAS500MEH920	•	•	QUAD 230 HP	28 kg	9
	FULL	GKAS500MEH900	•	•	QUAD 230 HP	28 kg	9

= Mechanical endstops - $\begin{matrix} 0100 \\ 10101 \\ 0010 \end{matrix}$ = Encoder

= Available version with electrical endstops