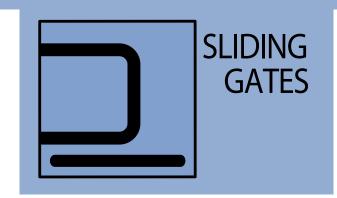
INDUSTRIAL USE

2000 kg





SINGLE-PHASE

- 230 Vac single-phase operator with built-in control panel and receiver
 - Self-ventilated version equipped with encoder
 - Control unit with electronic braking
 - Available in versions with magnetic limit switches (BULL20M.S)

THREE-PHASE

- Self-ventilated operator with external control unit
- Operator equipped with electric brake
 - Anti-crushing electronic brake
 - Available in versions with magnetic limit switches (BULL20T.S)

Equipped with foundation plate













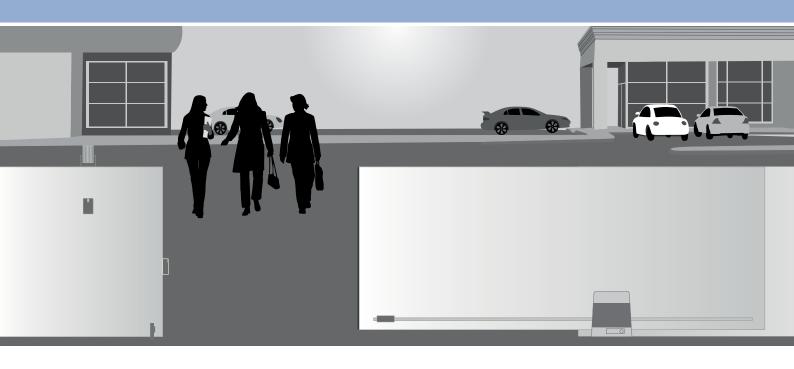
Functional design. Shape to convey all the strength and reliability of the motor

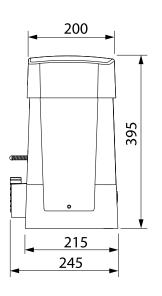


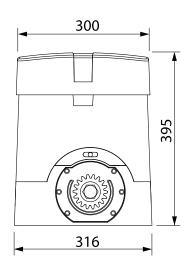
Sturdy key-operated personalized unlocking system



Self-ventilated versions









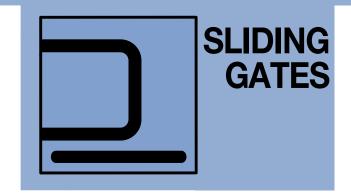
TECHNICAL DATA	BULL20M	BULL20M.S	BULL20T	BULL20T.S	
Power supply	230 Vac	230 Vac	400 Vac	400 Vac	
Motor supply	230 Vac	230 Vac	400 Vac	400 Vac	
Max. absorbed current	2,9 A	2,9 A	1,7 A	1,7 A	
Thrust	1667 N	1667 N	2000 N	2000 N	
Opening speed	10,5 m/min	10,5 m/min	10,5 m/min	10,5 m/min	
Operation cycle	40%	40%	intensive use	intensive use	
Protection level	IP 44	IP 44	IP 44	IP 44	
Operating temp.	-20°C /+50°C	-20°C /+50°C	-20°C /+50°C	-20°C /+50°C	
Max gate weight	2000 kg	2000 kg	2000 kg	2000 kg	
Driving gear for rack	M4 Z18	M4 Z18	M4 Z18	M4 Z18	
Magnetic limit switches	No	Yes	No	Yes	
Weight	21,6 kg	21,6 kg	21,6 kg	21,6 kg	
Items no. per pallet	20	20	20	20	

QUALITY AUTOMATIONS



INDUSTRIAL USE

3000 kg to 4500 kg





- Three-phase operator for gates from 3000 kg to 4500 kg with submerged in oil gear
 - Control unit with built-in receiver
- With inverter and magnetic encoder

















Unlocking from outside with personalized key

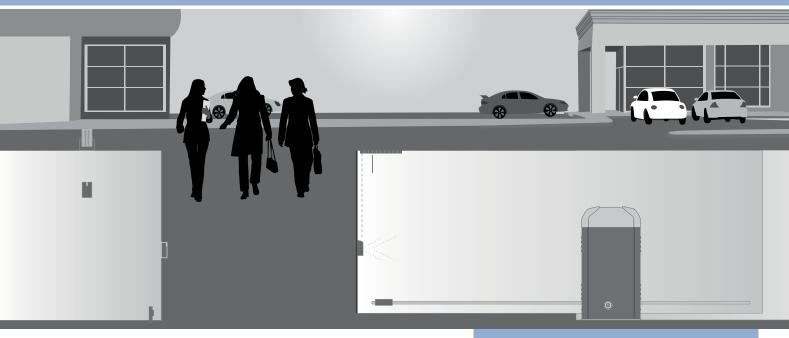


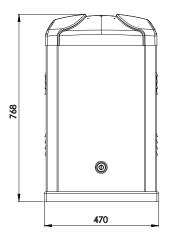
Possibility of integrated FTC.S photocells, available on request

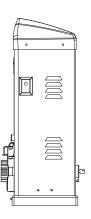


Force ventilated model for intensive use

NC	OTE	ES:									
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INVERTER TECHNOLOGY:

- It is possible to adjust the speed of the motor gradually by changing its frequency, during either acceleration or deceleration
- Built-in anti-crushing system
- Very quiet
- Optimal adjustment of torque at different points of the stroke (optimal start-up)



TECHNICAL DATA	BISON30 OTI	BISON45 OTI	
Power supply	400 Vac	400 Vac	
Motor supply	400 Vac	400 Vac	
Max. absorbed current	3 A	2,6 A	
Thrust	3200 N	4600 N	
Opening speed	10,2 m/min.	10,2 m/min.	
Operation cycle	intensive use	intensive use	
Protection level	IP 44	IP 44	
Operating temp.	-20°C /+50°C	-20°C /+50°C	
Lubrification	Oil	Oil	
Max gate weight	3000 Kg	4500 Kg	
Driving gear for rack	M6 Z18	M6 Z18	

Different power supply versions on request