

# SDO 05 - Sets



The following series was previously also known as Dynamic 736 and 741 FU. In the course of merging our MFZOvitor and Marantec brands, we decided to use a uniform name for identical products.





## Article

Item no.	Description	Price
185318	<b>SDO 05-8-45</b> Set for sliding gates up to 1,100 kg: 400 V-AC motor, 80 Nm, 18 cm/s, spur gear M6-13Z, CS 320 control and sheet steel housing	1698.00 €
185319	<b>SDO 05-8-45 with rope transmission system</b> Set for sliding gates up to 1,100 kg: 400 V-AC motor, 80 Nm, 18 cm/s, spur gear M6-13Z, CS 320 control, inductive signal transmission system and sheet steel housing	2690.00 €
185320	<b>SDO 05-10-30 FU-I</b> Set for sliding gates up to 1,300 kg: 230 V-AC motor with frequency converter, 100 Nm, 12 cm/s, spur gear M6-13Z, CS 320 control and sheet steel housing	1994.00 €
185321	<b>SDO 05-10-30 FU-I with rope transmission system</b> Set for sliding gates up to 1,300 kg: 230 V-AC motor with frequency converter, 100 Nm, 12 cm/s, spur gear M6-13Z, CS 320 control, inductive signal transmission system and sheet steel housing	2987.00 €

## Scope of delivery

185318	185319	185320	185321
<ul style="list-style-type: none"> <li>• Gear motor SDO 05-8-45 E 400 V/3PH (AWG)</li> <li>• Spur gear module 6 with 13 teeth</li> <li>• Control CS 320 400 V/3PH in CS combination housing with LCD in cover, connection cable with CEE plug</li> <li>• Main switch 400 V/16 A (4-pole)</li> <li>• All components already mounted in sheet steel housing with bottom console</li> <li>• Installation material</li> </ul>	<ul style="list-style-type: none"> <li>• Gear motor SDO 05-8-45 E 400 V/3PH (AWG)</li> <li>• Spur gear module 6 with 13 teeth</li> <li>• Control CS 320 400 V/3PH in CS combination housing with LCD in cover, connection cable with CEE plug</li> <li>• Main switch 400 V/16 A (4-pole)</li> <li>• Inductive signal transmission system</li> <li>• All components already mounted in sheet steel housing with bottom console</li> <li>• Installation material</li> </ul>	<ul style="list-style-type: none"> <li>• Gear motor SDO 05-10-30 E 230 V/1PH FU-I (AWG)</li> <li>• Spur gear module 6 with 13 teeth</li> <li>• Control CS 320 FU-I 230 V/1PH in CS combination housing with LCD in cover, connection cable with Schuko plug type F</li> <li>• Main switch 400 V/16 A (4-pole)</li> <li>• All components already mounted in sheet steel housing with bottom console</li> <li>• Installation material</li> </ul>	<ul style="list-style-type: none"> <li>• Gear motor SDO 05-10-30 E 230 V/1PH FU-I (AWG)</li> <li>• Spur gear module 6 with 13 teeth</li> <li>• Control CS 320 FU-I 230 V/1PH in CS combination housing with LCD in cover, connection cable with Schuko plug type F</li> <li>• Main switch 400 V/16 A (4-pole)</li> <li>• Inductive signal transmission system</li> <li>• All components already mounted in sheet steel housing with bottom console</li> <li>• Installation material</li> </ul>

# Features

## Opener

- Very robust sliding gate operator for commercial use
- Spring assisted motor mount for shock absorption
- Steel spur gear module 6 (module 4 can also be used)
- Optional stainless steel housing with height-adjustable operator bracket for adjusting the spur gear position
- For temperature ranges below -20 °C there is suitable oil and electric heating on request

## Structure and connection

- Switchable transformer from 230 V/1~/3~ to 400 V/3~
- Short-circuit proof extra-low voltage
- Housing protection for printed circuit board
- Connection for elements of the safety circuit
- Connection for closing edge protection (opto, 8.2 kOhm, pressure wave bar or leading light barrier) in CLOSE direction
- Connection for closing edge protection (8.2 kOhm and opto) in OPEN direction
- Connection for 2 light barriers (2-wire, relay, NPN, PNP) with/without testing
- Connection for radar presence detector
- Interface for connecting a frequency converter
- Interface for connecting expansion modules
- Slots for radio module and weekly timer
- Slot for 2-channel radio transmission system for wireless signal transmission of closing edge system and/or safety circuit
- Control of the magnetic brake via relay output
- For operators with externally switched brake, a brake monitoring module is additionally installed (BWM1)
- Supply for external devices (24 V-DC/500 mA and 230 V-AC/1 A)

## Operation

- Circuit board push buttons and LEDs for status indication (standard)
- Pluggable LC display with plain text display
- 3-button navigation/status and diagnostic messages

## End position setting

- Via mechanical limit switches (MEC) and/or via absolute encoders (AWG)
- Setting via circuit board push button or plug-in LCD monitor

## Functions

- 4 programmable relay outputs with 44 functions
- 2 programmable inputs with 27 functions
- Changing the direction of rotation via circuit board push button/display
- Intermediate position programmable (only with AWG)
- Adjustable power limitation in OPEN direction (only with AWG)
- Rotation direction monitoring and detection (only with AWG)
- Integrated gate run counter
- Programmable maintenance alarm (PIN code protected)
- Integrated error memory (readout of all error messages indicating frequency and cycle of last occurrence) only with LCD monitor

## Optional

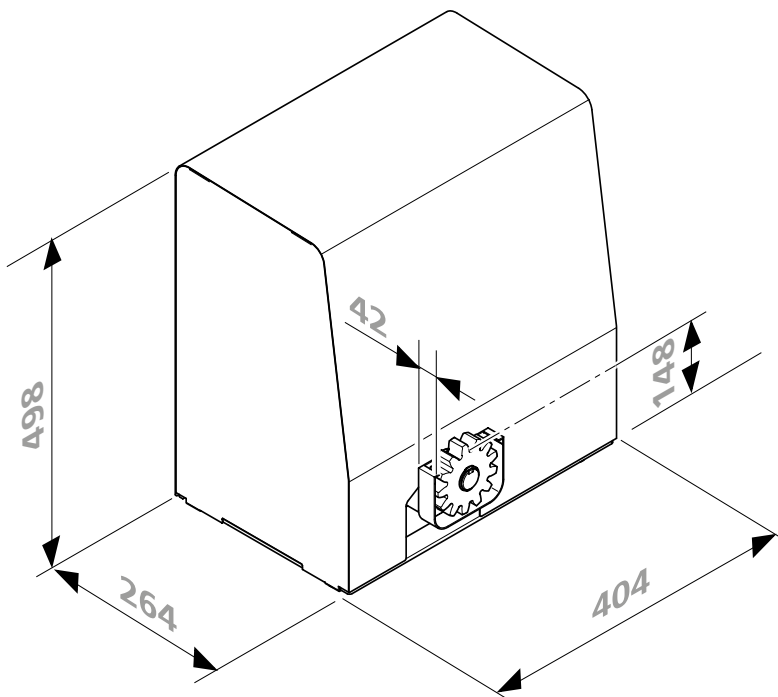
- LCD monitor with plain text display
- Customized cover lamination
- A second CS 320 can be coupled via MS-BUS in DUO function

# Technical data

	SDO 05-8-45	SDO 05-10-30 FU-I
Opening width (max.) [m]	18	18
Weight of gate leaf (max.) [kg]	1,100	1,300
Output torque [Nm]	80	100
Output speed [1/min]	45	30
Cycles per hour (max.)*	10	10
Motor power [kW]	0.55	0.55
Protection class	IP54	IP54

\* One cycle corresponds to two travels (opening and closing) of the gate. The values given refer to 10 revolutions of the output shaft per travel and assume an even distribution.

## Technical drawings



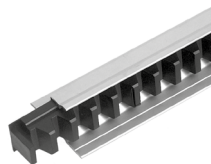
## Operator specific accessories



### Special 475

1.13 m rack, module 6, made of steel, to fasten in place

99096  
78.00 €



### Special 441

2 m plastic rack module 4 in aluminum profile with cable duct

Length [mm]	Item no.	Price
2,000	121276	120.00 €
4,000	121277	176.00 €

## Technical data

### Sliding Gate Operators TU, SU

	Comfort TU500	Comfort TU800	Comfort SU500F	Comfort SU700M	Comfort SU1100M
Weight of gate leaf (max.) [kg]	500	800	500	700	1,100
Operating mode (duty cycle)	S2 - 3 min		S2 - 8 min		
Output torque [Nm]	16	29	23	26	38
Running speed (max.) [cm/s]	16		40	25	20
Modul	4				
Motor power [kW]	0.3	0.45	0.35		0.3
Motor voltage [V]	230 V/1~		24 V-DC		
End position system	Electronic limit switch		Magnetic limit switch lugs		
Protection class	IP44				
Continuous sound pressure level (max.) [dB(A)]	70				
Temperature (min./max.) [°C]	-20/55				
Dimensions (WxHxD) [mm]	320x260x184		330x330x290		

### 861, 861 S Sliding Gate Operators

	Comfort 861 S	Comfort 861		
Width gate wing (max.) [m]	8			
Weight of gate leaf (max.) [kg]	600			
Operating mode (duty cycle)	S2 - 5 min			
Push and pull force (max.) [N]	800			
Running speed (max.) [cm/s]	18			
Modul	4			
Motor voltage [V]	24 V-DC			
End position system	Reference point technique			
Protection class	IP44			
Continuous sound pressure level (max.) [dB(A)]	70			
Temperature (min./max.) [°C]	-20/60			
Dimensions (WxHxD) [mm]	330x385x178	186x1,278x198	186x1,528x198	186xx198

## Technical data

### SDO Sliding Gate Operators

	SDO 05-8-45	SDO 05-10-24	SDO 05-10-30	SDO 35-13-45 HD	SDO 35-20-24 HD	SDO 35-21-45 HD	SDO 35-33-24 HD	
Output torque [Nm]	80	100		130	200	210	330	
Output speed [1/min]	45	24	30	45	24			
Cycles per hour (max.)*	10			8	5	8	5	
Motor power [kW]	0.55			0.95		1.5		
Operating voltage [V]	230 V/1~; 230 V/3~; 400 V/3~					230 V/3~; 400 V/3~	230 V/1~; 230 V/3~; 400 V/3~	
Nominal frequency [Hz]	50							
Rated current [A]								
Rated current in star connection [A]	1.90	2.00		3.30		4.20	3.30	
On-site fuse protection (mains operation 400 V/3~)[A]	16							
Rated current in delta connection [A]	3.20	3.50	4.10	5.70		7.30	5.70	
On-site fuse protection (mains operation 230 V/3~)[A]	16							
Operation with CS 320 FU (frequency converter 230 V/1~)	0,75 kW			1,5 kW		-	1,5 kW	
On-site fuse protection (frequency converter operation 230V/1~) [A]	16							
Operation with CS 320 FU (frequency converter 400 V/3~)	0,75 kW			1,5 kW				
On-site fuse protection (FI operation 400V/3~)[A]	16							
Power factor cos phi	0.69	0.72		0.71				
Protection class	IP54							
Brake type	Gr. 1/1 Nm				Gr. 2/10 Nm	Gr. 2/4 Nm	Gr. 2/10 Nm	Gr. 2/4 Nm
Temperature (min./max.)[°C]	-20/60							
Continuous sound pressure level (max.) [dB(A)]	70							
Weight [kg]	15			36				

\* One cycle corresponds to two travels (opening and closing) of the gate. The values given refer to 10 revolutions of the output shaft per travel and assume an even distribution.



# Sliding Gate Operators





Comfort TU



Comfort SU



Comfort 861 S



Comfort 861



SDO Sliding Gate Operators



SDO 05 - Sets



SDO 35 - Sets