



Industrial **brakes**

**Thrustors**

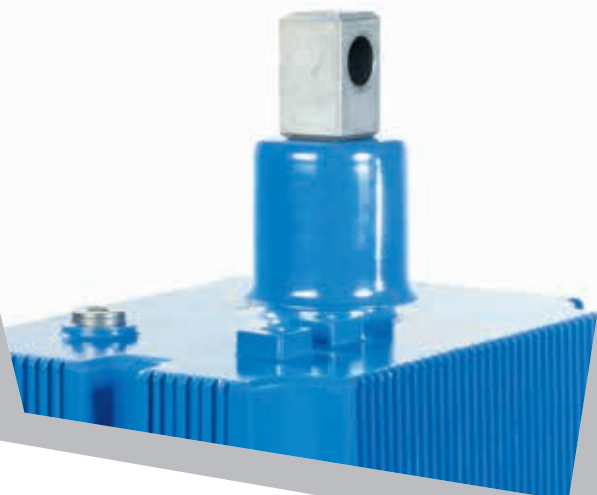
 **antec**®  
*Reliability is a must.*

# DESCRIPTION

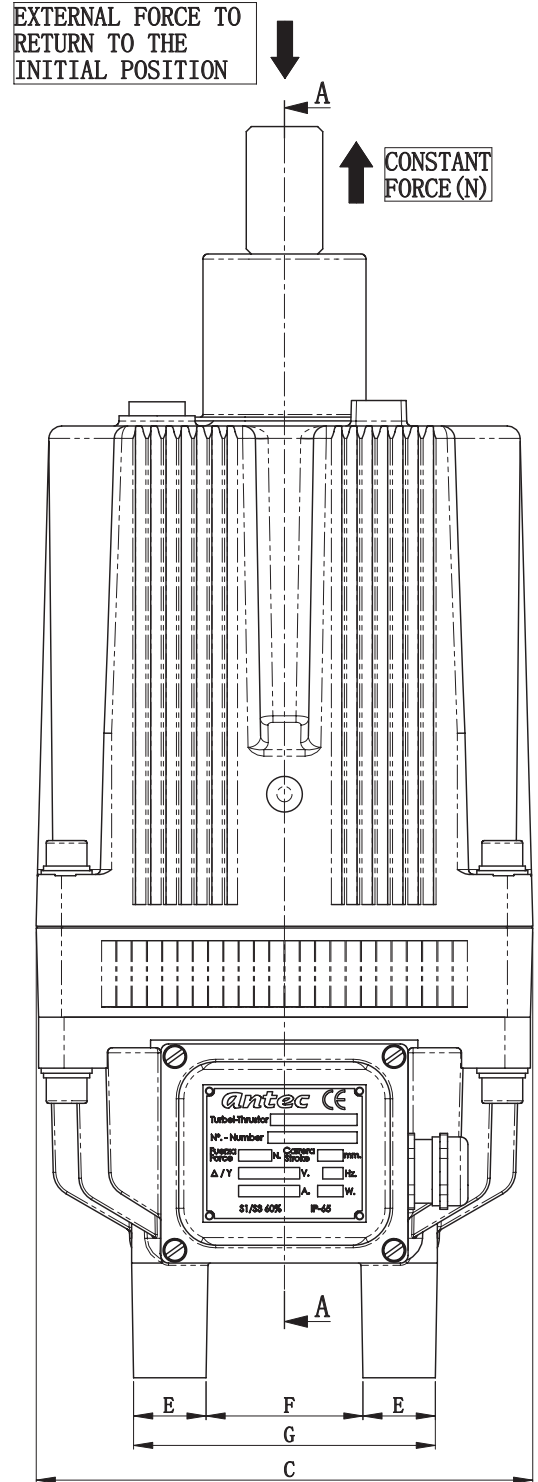
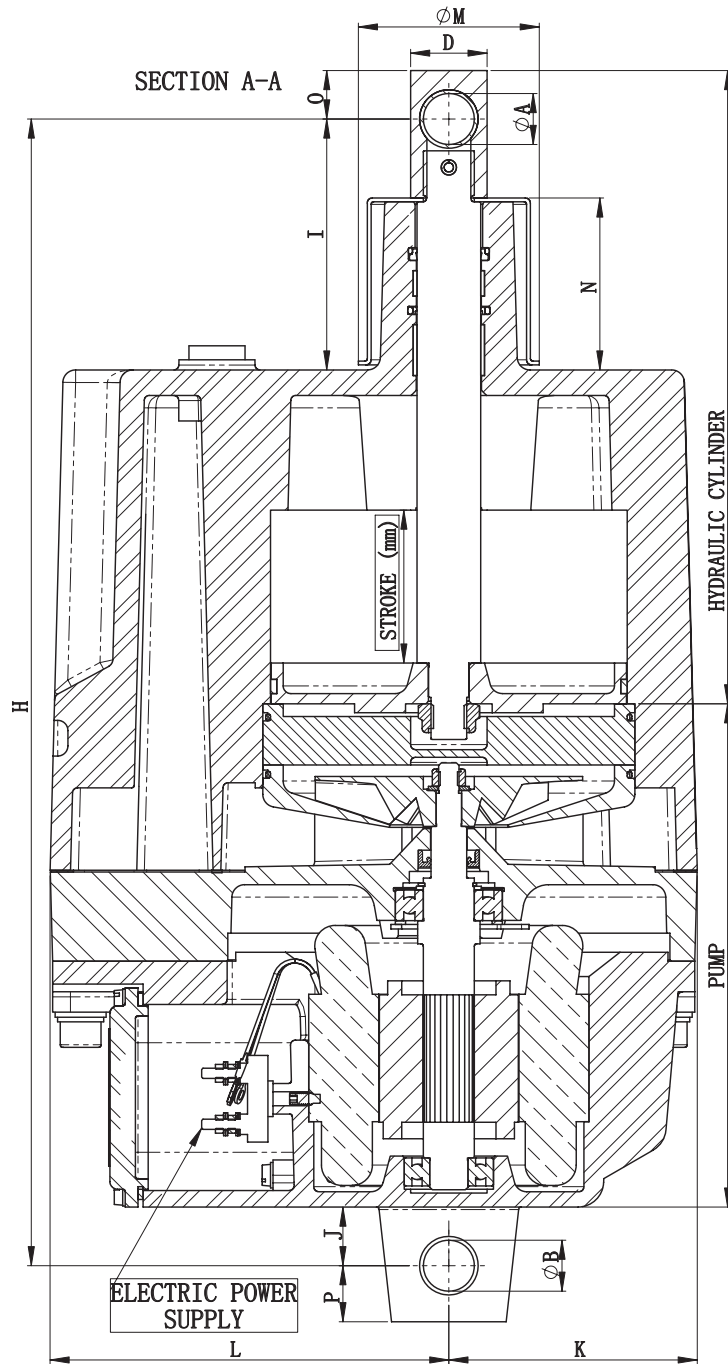
The thruster is an electrohydraulic operating device, built to generate a linear force along a stroke. All the thrusters are designed according to DIN 15.430 Standard in terms of force, stroke, fastenings and general dimensions.



Model: TH-III (1306) CSA +VD



# GENERAL DESCRIPTION



TYPE TH	I		II					III														
MODEL	256	356	506	512	806	812	1306A	1306	1310	1312	2006	2012	2016	3006	3010	3012	3016	4006	4008	4010	4012	
NOMINAL FORCE [N]	250	350	500		800		1300	1300				2000			3000				4000			
NOMINAL STROKE [mm]	60		60	120	60	120	60	60	100	120	60	120	160	60	100	120		60	80	100	120	
DIMENSIONS	A	12	16	20				25														
	B	16		20				25														
	C	160		195				240														
	D	20	25	30				40														
	E	20		30				25														
	F	40		60				40														
	G	80		120				90														
	H	286	370	435	515	450	530	450	645	705	705	645	705		645	705		645	645	705	705	
	I	23	36	83,5	114,5	98,5	129,5	98,5	117	177	177	117	177	177	117	177	177	177	117	117	177	177
	J	20		23				35														
	K	80		97,5				120				140	120		140	120						
	L	120		156,5				140														
	M	*		53	49	71	49	71	71													
	N	3	6	52,5	83,5	67,5	98,5	67,5	73	133	133	73	133	133	73	133	133	133	73	73	133	133
	O	12	15	19				25														
P	16		22				25															
STANDARD CURRENT CONSUMPTION 400 V 50 Hz [A]	0,4	0,5	0,7		0,8		1,0	1,0			1,1			1,4				1,9				
OIL VOLUME [L]	2	3,2	5	5,5	5	5,5	5	10														
WEIGHT WITH OIL [kg]	13	16	26	30	26	30	26	45	46	46	45	46	46	45	46	46	46	45	45	46	46	
DUSTGUARD	-	NO	NO	NO	YES	NO	YES	YES														

The standard current consumption values at 400V 50Hz are considered at a room temperature of 20°C and after the thruster has performed several operations. These values are measured with the piston at the mechanical end position after the maximum stroke has been performed. During the travel of the piston the current consumption increases. At low temperatures these consumption values increase. Dimension values are in mm. We reserve the right to modify measures or construction.

(\*) These thrusters are not fitted with dustguards, so this information is omitted. For any query on this point do not hesitate to contact our Sales Department (sales@antecsa.com). In thrusters TH-II-506, TH-II-512, TH-II-812 and TH-II-1312A, "M" dimensions refers to the maximum diameter of the cover's neck.

## ELECTRICAL FEATURES

<b>Motor</b>	VAC Motors. 2-pole three-phase asynchronous motor designed according to CEI-34/1. Class H insulation.
<b>Voltages and Frequencies</b>	Standard thruster: 230/400V-50Hz. 3 Phases. Possible voltages: 185-760V at 50Hz, 200-910V at 60Hz.
<b>Terminal Box</b>	Connector with 6 or 9 poles as needed / Screws M4 for power connection / Screws M5 for grounding connection / Standard input of M25x1.5 / IP65 Protection.
<b>Service</b>	Continuous service S1 (100% Ed). / Intermittent service S3 (60% Ed). / For room temperatures over 50°C the technical values change so a query is recommended.
<b>Circuit breaker</b>	If the power supply to the motor is protected with a circuit breaker, this must be set to twice the nominal value of the current.

## MECHANICAL FEATURES

### Assembly position of the thruster

Vertical assembly: The piston rod in the upper position of the thruster

Horizontal assembly: Terminal board box in the upper position of the thruster

### Hydraulic fluid for operation of the thruster

The thrusters are supplied with mineral oil for operating in a range of room temperatures between - 25°C and + 50°C (standard oil load).  
For room temperatures between - 40°C and + 70°C, the thrusters are supplied with a special oil load.

Characteristics of the oils used:		Standard oil	Special oil
Colour		Light Brown	Red
Density at 15°C, kg/L		0.856	0.850
Cinematic viscosity at:	40°C, cSt	10	14.33
	100°C, cSt	2.7	3.53
Ignition point		+150°C	+220°C
Freezing point		-39°C	-55°C

# TIME-STROKE DIAGRAMS

The diagrams obtained are the result of applying the nominal load to the thruster at a room temperature of 20°C.

Diagram legend:

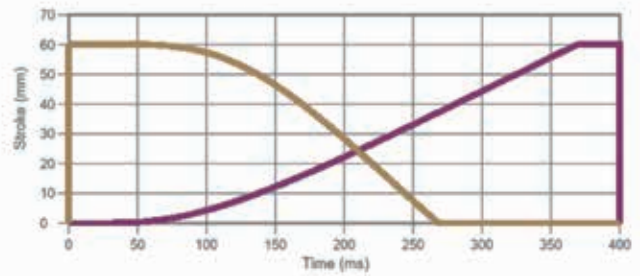
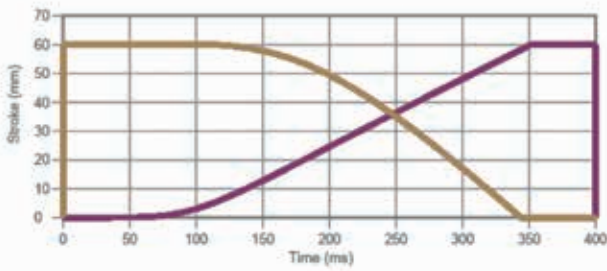
Lifting 

Lowering 

TH-I

TH-I-256

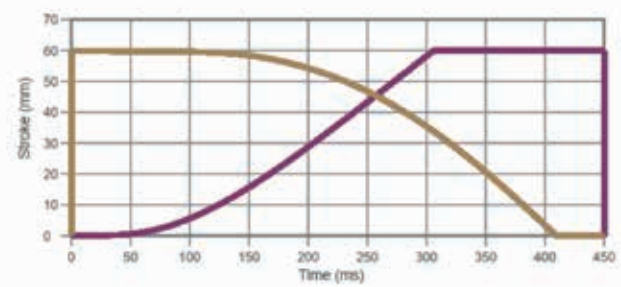
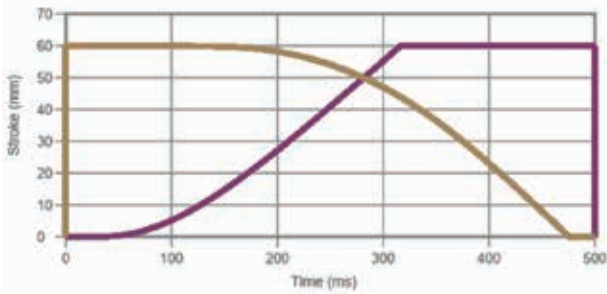
TH-I-356



TH-II

TH-II-506

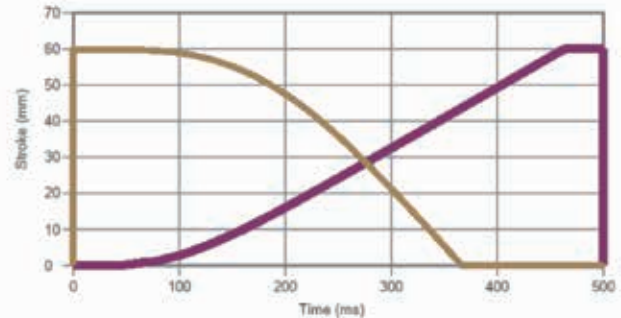
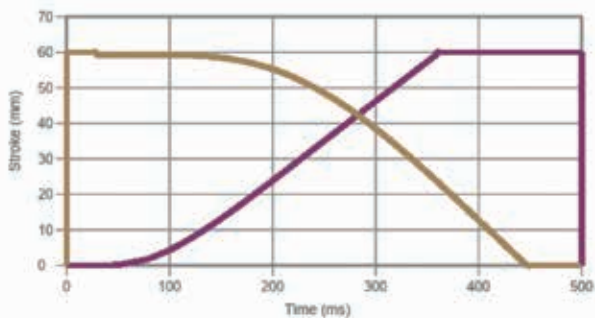
TH-II-806



TH-III

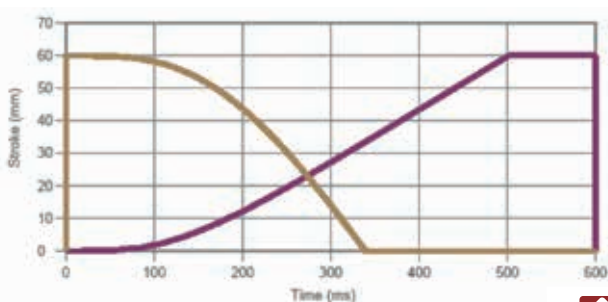
TH-III-1306

TH-III-2006



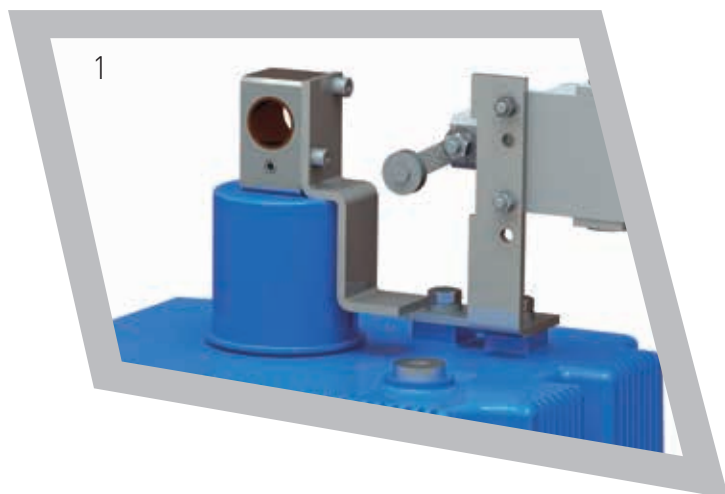
TH-III

TH-III-3006

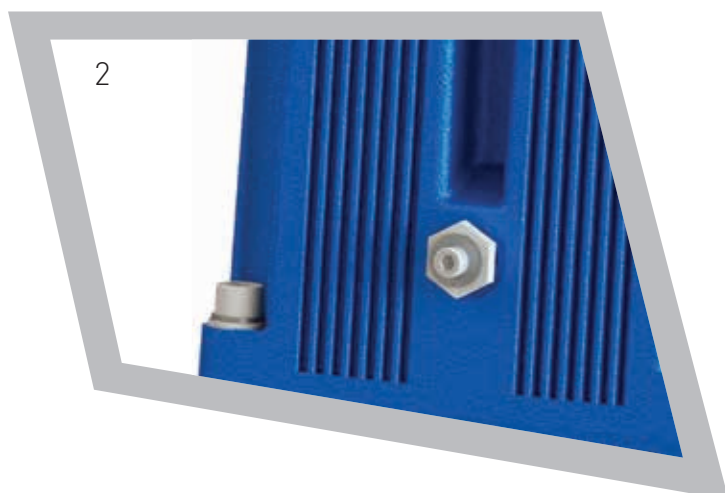
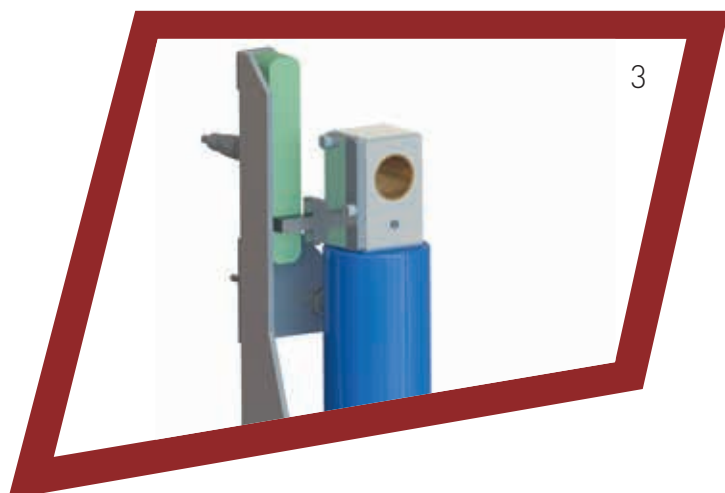




# OPTIONS



- 1. Mechanical or inductive open brake switch indicator (CSA).
- 2. Descent valve (VD).
- 3. Thrustor's stroke linear detector (DL).
- 4. Inner spring (C).
- 5. ATEX certification. ( II 2D Ex t IIIC T140°C IP65 Db).
- 6. High room temperatures between +50°C and +70°C (AT).
- 7. Low room temperatures between -25°C and -40°C (BT).



For further information about options, please contact the Antec Sales Department ([sales@antecsa.com](mailto:sales@antecsa.com))

# ORDER DATA

TH-TYPE	MODEL	VOLTAGE	FREQUENCY	OPTIONS	REMARKS*																				
					Client requests outside the standard.Example: Special operating room temperature, special paint...																				
					CSA: Limit Switch. *DM: Mechanical detector. (Standard detector). *DI: Inductive sensor DL: Thrustor's stroke linear detector (DL) VD: Descent valve. C: Inner spring. ATEX: Product with ATEX certificate. AT: High room temperatures. BT: Low room temperatures.																				
					50 Hz or 60 Hz.																				
					Operating voltage in triangle and star (Δ and λ).																				
					<table border="1"> <tr> <td>255</td> <td>256</td> <td>356</td> <td>506</td> </tr> <tr> <td>806</td> <td>812</td> <td>1306A</td> <td>1312A</td> </tr> <tr> <td>1306</td> <td>1310</td> <td>1312</td> <td>2006</td> </tr> <tr> <td>2012</td> <td>3006</td> <td>3010</td> <td>3012</td> </tr> <tr> <td>3016</td> <td>4006</td> <td>4008</td> <td>4012</td> </tr> </table>	255	256	356	506	806	812	1306A	1312A	1306	1310	1312	2006	2012	3006	3010	3012	3016	4006	4008	4012
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3016	4006	4008	4012																						
					I      II      III																				

**\* REMARKS:** Any clarification made by the client outside the above specifications shall be shown on the order as a remark.

**Example of a thruster order:**  
TH-II (806) 230/400 V 50 Hz CSA + AT

**Remarks:** RAL 5005  
ANTEC S.A.U. certifies that all the thruster have been tested on the company's test benches before delivery.



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