

➤ TABLE OF STANDARD PROPERTIES OF USE AND MEASUREMENT

The properties defined in the table below, are set up according to the technical conditions of use and measurement. These properties are warranted within their variation range and in compliance with the standard technical conditions of use.

Properties CA45	Standard technical conditions	Unit	Nominal values	Min. values	Max. values
Notes			-		
Function			Standalone voltage amplifier		
Cooling			Natural convection		
Protection			Thermal Overcurrent Overvoltage		
Main voltage	Standard main supply	VAC	230	190.0	250.0
Main frequency	Standard main supply	Hz	50	45.0	65.0
Min. input voltage	Standard environment	V	-1.2	-1.5	-1.2
Max. input voltage	Standard environment	V	7,7	7.7	7.9
Min. output voltage	Standard environment	V	-20	-19.0	-22.0
Max. output voltage	Standard environment	V	150	145.0	160.0
Gain	Standard environment	V/V	20	19.0	21.0
Max. output current		A	0.036	0.027	0.045
Max. output load capacitance		µF	400	360.0	440.0
Signal to noise ratio	Noise measurement conditions	dB	85	80.0	90.0
Unloaded output bandwidth (-3dB)		Hz	30000	27000	33000
Loaded Output bandwidth (-3dB)	Standard load	Hz	62	61.6	67.8
Input impedance		kOhms	10	9.5	10.5
Mass		g	1200	-	-
Dimensions		mm	12F wide, 3H high		

Option UC45	Standard technical conditions	Unit	Nominal values	Min. values	Max. values
Notes					
Function			Option on amplifier board - Numerical servo controller		
Size		mm	50*70		
Max. number of control channels			1 per channel		
Sampling frequency		Hz	10000		
A/D converters			16 bit @ +/-10V		
D/A converters			16 bit @ +/-10V		
Computer interface			USB		
Optional link			SPI		
Corrector filter cells	2nd order low-pass or stop-band filter @ [150 2000]Hz		Selectable by the GUI HDPM45		

*Bandwidth settled according to your specifications; by default 1 Hz.

Option SG	Standard technical conditions	Unit	Nominal values	Min. values	Max. values
Notes			Option on amplifier board		
Function			Strain Gauges conditioner		
Signal to noise ratio	Noise measurement conditions	dB	85	80	90
Output bandwidth*		Hz	2000	1800	2200
Accuracy (closed loop)		%	0.1	0.07	0.13

➤ PROPERTIES STANDARD TECHNICAL CONDITIONS OF USE AND MEASUREMENT

Quasistatic excitation	: AC voltage between -20 and 150 V at 1 Hz
Environment	: Ambient temperature (15-25°C) and dry air (Humidity < 50 % rH)
Standard main supply	: Main according to directive HD472; could be adapted to 110 VAC on request
Noise measurement conditions	: Excitation 0.5 Vrms ; reading bandwidth 1 Hz to 1 kHz
Standard load	: Actuator APA from series S or SM : 1.55 µF (load test may be different)

Any technical conditions of use, different from those defined above, can lead to temporary or definitive alterations of properties. Thank you to contact CEDRAT TECHNOLOGIES before using actuators under non standard technical conditions.

➤ FACTORY TESTS CARRIED OUT

- Test 1: Load and discharge time
- Test 2: Linearity output voltage vs. input voltage

➤ EXTRA FACTORY TESTS

- Test 3: Gain and linearity in closed loop
- Test 4: Step response in closed loop (sensor output voltage versus command voltage)
- Test 5: Bode diagram

➤ AVAILABLE OPTIONS

- [UC] Servo controller
- [PP] Push-pull
- [SG] Strain Gauges conditioner