

# CA3

## Current Amplifier



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## Current amplifier

Higher voltages are often needed to provide test currents for older electro-mechanical relays. The three-phase switched current amplifier designated CA3™ solves this problem. It can provide 3 x 30 A or 1 x 60 A connected in parallel. Maximum output power is 600 VA (3 x 25 A at 8 V). If higher voltage is needed, you can make the connection between two phases (L-L).

If you need even higher current, two or more current amplifiers can be connected in parallel, thus bringing the output current up to 180 A.

The current amplifier can also be used in situations where more current generators are needed than the three built into FREJA 300. Since the amplifier can be controlled by both current and voltage, it can be connected to FREJA's voltage generators. The number of current generators can thus be increased to six, which is convenient when testing differential relays.

## Specifications CA3

Specifications are valid at nominal input voltage and an ambient temperature of +25°C, (77°F). Specifications are subject to change without notice.

### Environment

<i>Application field</i>	The instrument is intended for use in high-voltage substations and industrial environments.
<i>Temperature</i>	
<i>Operating</i>	-20°C to +50°C (-4°F to +122°F)
<i>Storage &amp; transport</i>	-40°C to +70°C (-40°F to +158°F)
<i>Humidity</i>	5% – 95% RH, non-condensing

### CE-marking

<i>LVD</i>	Low Voltage Directive 73/23/EEC am. by 93/68/EEC
<i>EMC</i>	EMC Directive 89/336/EEC am. by 91/263/EEC, 92/31/EEC and 93/68/EEC

### General

<i>Mains voltage</i>	105 – 264 V AC, 47 – 63 Hz
<i>Power consumption</i>	2500 VA (max)
<i>Dimensions</i>	
<i>Instrument</i>	450 x 132 x 410 mm (17.7" x 5.2" x 16.1")
<i>Transport case</i>	570 x 240 x 560 mm (22.4" x 9.4" x 22.0")
<i>Weight</i>	11 kg (24 lbs)

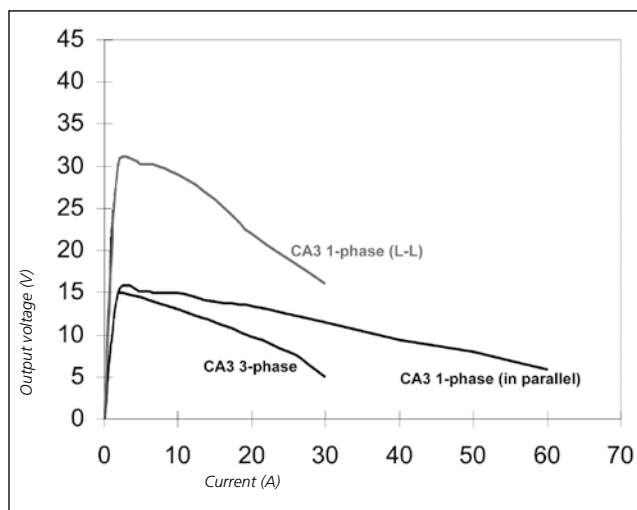
### Current outputs

<i>Setting range</i>	
<i>3-phase AC</i>	3 x 0–30 A
<i>1-phase AC <sup>1)</sup></i>	1 x 0–60 A
<i>3-channel DC</i>	3 x ±20 A
<i>Power</i>	
<i>3-phase AC</i>	3 x 200 VA
<i>1-phase AC <sup>1)</sup></i>	1 x 400 VA at 50 A (8 V)
<i>Time limits</i>	
<i>Continuous</i>	0 - 7 A
<i>10 s</i>	> 7 A
<i>Resolution</i>	
	SW 2 mA HW 1.3 mA
<i>Inaccuracy guaranteed <sup>2)</sup></i>	(± 1% of range) + (± 0.3% of reading)
<i>Distortion (THD+N) <sup>3)</sup></i>	0.1% typical (0.2% max)

<sup>1)</sup> Parallel connection

<sup>2)</sup> For sinusoidal signals at 50/60 Hz

<sup>3)</sup> THD+N: Values at 50/60 Hz, at max amplitude, 50% power and resistive load. Measurement bandwidth 22 Hz to 22 kHz.



## Ordering information

Art.No.

### CA3

Complete with: hard transport case

**CA-19090**

### Optional accessories

See section "Relay testing accessories 2"

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