

# Motor Controllers

## CTG Current Balance Transformer

### Accessories



- Core balance transformers for DMPUC-EL
- Current transformer ratio 1000/1
- Internal diameter from 35 to 210 mm
- Earth leakage current alarm from 0.03A to 30A

### Ordering Key

**CTG-035**

Model \_\_\_\_\_  
Diameter \_\_\_\_\_

### Product Description

A family of core balance transformers with 1000/1 ratio to monitor the earth leakage current with DMPUC-EL (alarm set-point from 0.03A to 30A). They are available with various internal diameters to satisfy the needs of several 3-phase cables diameters.

### Type Selection

<b>CTG-035</b>	Core balance transformer 35mm
<b>CTG-070</b>	Core balance transformer 70mm
<b>CTG-120</b>	Core balance transformer 120mm
<b>CTG-210</b>	Core balance transformer 210mm

### Input/Output Specification

<b>Current transformer ratio</b>	1000/1
<b>Operating frequency</b>	50-60Hz
<b>Max. system voltage</b>	720V AC
<b>Rated insulation level</b>	3kV AC

### Connections

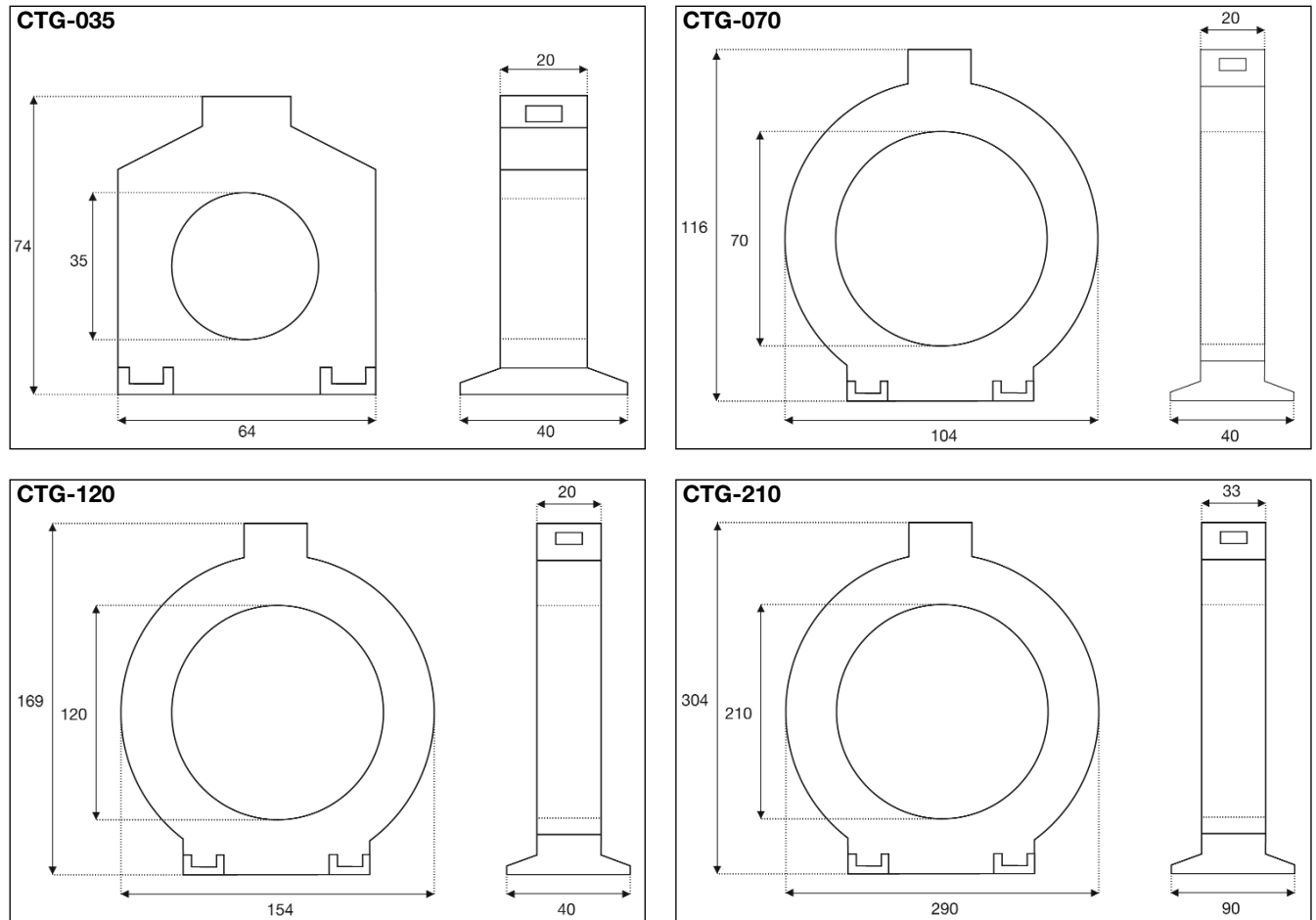
<b>Primary connection</b>	3-phase pass through
<b>Secondary connection</b>	Screw type 2 x 2.5mm <sup>2</sup>

### General Specification

<b>Standards</b>	According to IEC44-1, IEC185
<b>Approvals</b>	CE, cUL (when used with DMPUC-EL)
<b>Dimensions (WxHxD)</b>	
CTG-035	64 x 74 x 40 mm
CTG-070	104 x 116 x 40 mm
CTG-120	154 x 169 x 40 mm
CTG-210	209 x 304 x 90 mm

<b>Internal diameter</b>	
CTG-035	35mm
CTG-070	70mm
CTG-120	120mm
CTG-210	210mm
<b>Protection degree</b>	IP20
<b>Weigh (cartoon box included)</b>	
CTG-035	Approx. 80g
CTG-070	Approx. 125g
CTG-120	Approx. 235g
CTG-210	Approx. 1860g

## Dimensions



## Wiring Diagram with DMPUC-EL

The wiring diagram for core balance transformer depends on the earth leakage current set-point ( $I_{SEL}$ ) and the current transformer ratio ( $R_{CTEL}$ ); these values define the P value according of the following formula and the DMPUC-EL terminals to use:

$$P = \frac{I_{SEL}}{R_{CTEL}} \times 5 \times 10^5$$

Use C1-C terminals when  $P < 694$  and C2-C terminals when  $P \geq 694$ . In the following table the DMPUC-EL terminals are suggested according to the  $I_{SEL}$  and  $R_{CTEL}$ .

$I_{SEL}$	$R_{CTEL}$	P	DMPUC-EL terminals
0,03	1000	15	C1-C
0,05	1000	25	C1-C
0,1	1000	50	C1-C
0,3	1000	150	C1-C
0,5	1000	250	C1-C
1	1000	500	C1-C
3	1000	1500	C2-C
5	1000	2500	C2-C
10	1000	5000	C2-C
30	1000	15000	C2-C