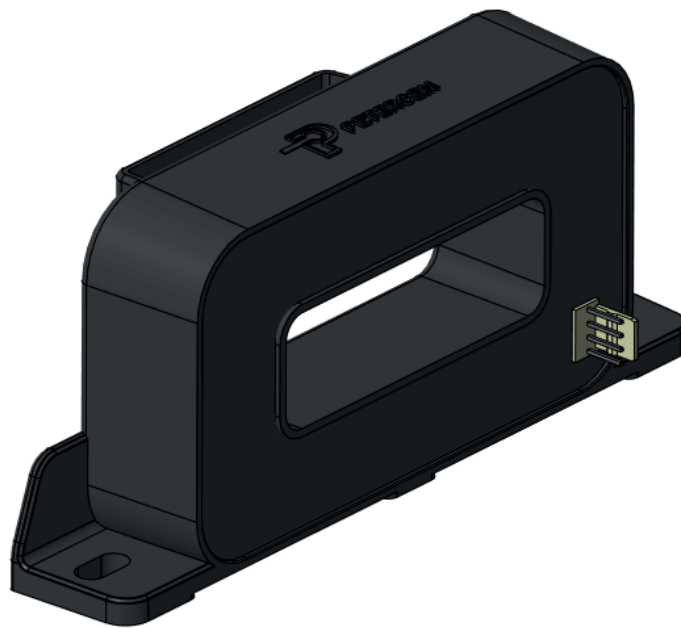


## Overview

A modern and efficient current sensor to measure AC, DC and pulsating currents with a galvanic insulation between primary and secondary circuits, able to measure currents from 10A to 3000A.

2



### KEY FEATURES

- Rectangular design, to facilitate integration with busbars
- Compact dimensions to save up to 30% of space and reduce overall dimensions of the equipment
- A wide measurement range, up to 3 times nominal current value
- High level of accuracy
- Good behavior on presence of magnetic disturbances

### APPLICATIONS

#### Industrial

- Uninterruptible Power Supplies (UPS)
- Power supplies for welding applications
- Converter for DC drives
- AC variable speed drives
- Servo motor drives

- Windmill inverters
- Solar farm inverters
- Battery chargers
- Energy Storage System (ESS)

# RFCS 1000

## Technical data

### Electrical details

Parameter	Unit	Value
Primary nominal current (AC and DC)	A	-1000/+1000
Measuring range (AC and DC)	A	-3000/+3000
Not measurable overload (10ms/h)	A	30 000
No load consumption current	mA	≤ 22
Supply voltage (+/- 5%)	V	+/- 15
Output voltage (@nominal current) *	V	+/- 4
Frequency bandwidth	kHz	0-25
Internal resistance	Ω	100

\*Value given with measuring resistance = 10k Ω and ambient temperature = 25°C

### Performances

Parameter	Unit	Value
Overall accuracy @ nominal current (cf graph 1)	%	≤ 0.5
Linearity	%	≤ 0.1
Offset value	mV	≤ 10
Temperature drift coefficient	mV/K	≤ 1
Response time	μs	≤ 3
di/dt correctly followed	A/μs	50
Frequency bandwidth	kHz	0-25
Error generated by magnetic disturbances	%	< 1

### General specs

Parameter	Unit	Value
Storage temperature	°C	-25/+85
Operating temperature	°C	-25/+85
Pollution degree		2
Overvoltage category		3
Mass	g	480g

**Insulation**

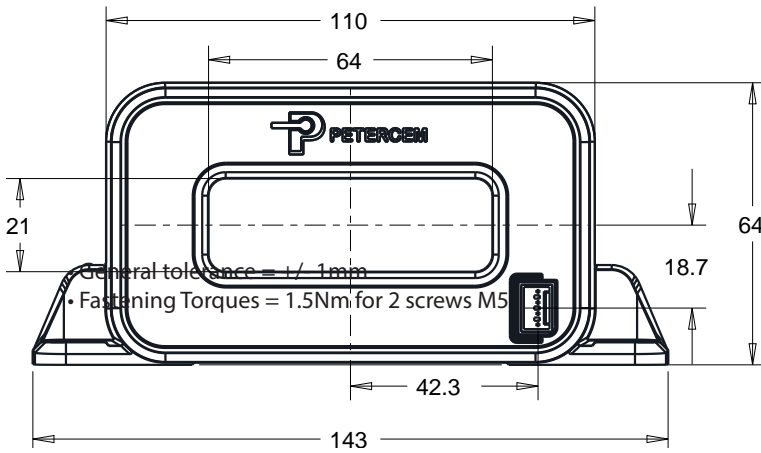
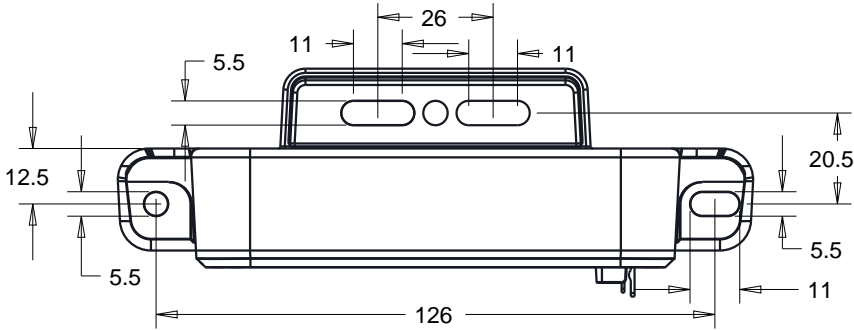
Parameter	Unit	Value
Dielectric test	kV	5.2 50Hz, 1min
Impulse test	kV	8.3 50HZ, 1min
Overvoltage category		3
Comparative Tracking Index (CTI)		600
Insulation resistance	MΩ	200
Insulation voltage, basic insulation	V	600
Insulation voltage, reinforced insulation	V	600
Clearance distance (connector to through opening)	mm	16
Creepage distance (connector to through opening)	mm	20,2

**Standards**

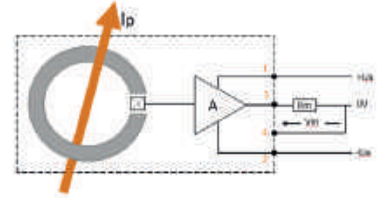
Parameter	Reference
UL	UL508
CE	
Low voltage directive	2014/30/UE
EMC directive	2014/35/UE
Product standard (industrial)	EN 61010-1
RoHS	Directive 2011/65/UE
REACH	Reglement 1907/2006
Conflict mineral	Dodd Franck Act 1502
UL	UL508
CE	
Low voltage directive	2014/30/UE
EMC directive	2014/35/UE
Product standard (industrial)	EN 61010-1
RoHS	Directive 2011/65/UE
REACH	Reglement 1907/2006

# RFCS 1000

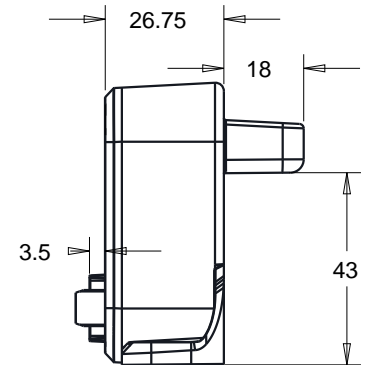
## Dimensions



### CONNECTION



CONNECTOR  
 Molex réf. 5045-04/A



TERMINAL  
 MARKING

