



## DCCT Series

High Precision Current Transducer

EZF – 200

### Features

- DC and AC current measuring
- $\pm 200\text{A}$  primary current
- 1,6 ppm linearity
- 0 ppm repeatability
- Magnetic remanences elimination
- Highest specification available
- Galvanic isolation

The EPOWERSYS range of **high performance current transducer** allows the electronic measurement of DC, AC and pulsed currents with galvanic isolation between the primary (high power) circuit and the secondary (electronic) circuit with **<1ppm linearity and accuracy**.

The EPOWERSYS DCCT Series is based on a zero-flux technology that allows accurate monitoring of DC and AC currents with high bandwidth, Extremely Low Temperature Drift and very low noise.

### NEW FEATURE: DEGAUSSING

The core involved in AC measuring may saturate with DC currents, leaving residual permanent magnetism in it. This may result in measuring errors and inaccuracy.

**EPOWERSYS DCCT SERIES fix the problem of magnetic remanences with the degaussing function. This process is performed at the start-up of the device or may be performed manually.**

At Ta=25°C and ±15V

Parameter	Unit	Specification
Primary DC current	A	±200
Primary AC current (rms)	A	±141
Secondary current	A	±0.2
Overload	%	110
Transfer ratio		1:1000
External burden	Ω	0...30Ω
Offset drift 30'	ppm	1
Linearity	ppm	1.6 <sup>1)</sup>
Repeatability	ppm	0
Long term stability	ppm/ month	2 <sup>1)</sup>
Bandwidth (3dB)	KHz	300KHz <sup>2)</sup>
Supply DC voltage	V	±15V±5%
Current consumption	A	0.18+secondary current
Dimensions	mm	123x97x67
Hole Diameter	mm	25



### The highest specification available

Closed Loop current transducer using an extremely accurate Zero Flux detector.

EPOWERSYS DCCT Series presents excellent linearity and extremely low noise.

Galvanic isolation allows measuring currents at a different potential and simplifies interfacing when using the EPOWERSYS DCCT in power supplies regulation.

### For highly-accurate current measurements

Certain power-electronics applications require high performance in accuracy, drift and response time.

EPOWERSYS produces transducers with high performance for these applications.

- Power Supplies
- Biomedical Devices
- Nuclear Magnetic Resonance (NMR)
- Calibration Systems
- Test & Measurement Setups



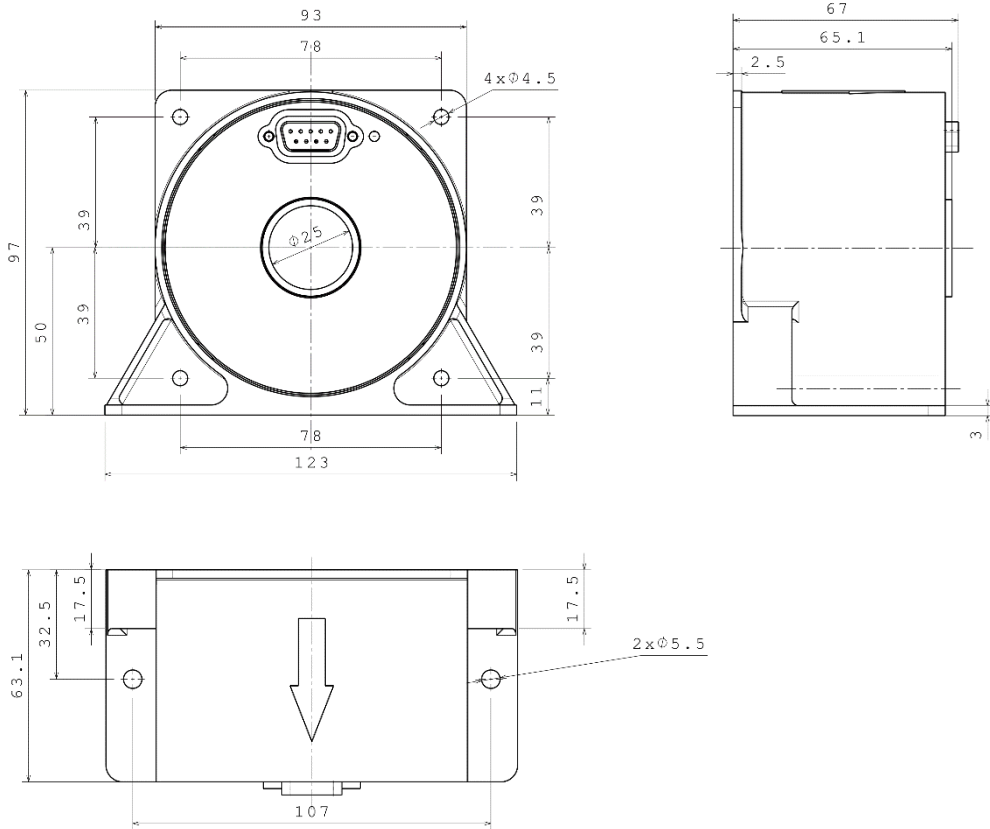
**CE RoHS**

- EN 61000-6-2:2005
- EN 61000-6-3:2007
- EN 61010-1:2010

1)Standard deviation

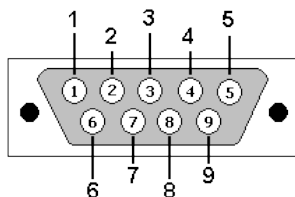
2)Small-signal bandwidth at 0.5% of primary current

# Dimensions (mm)



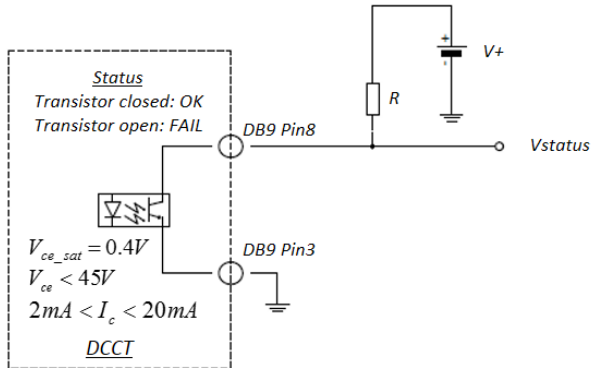
Signal	DB9 Pin	Meaning
Output return	1	Current output return
Degauss (-)	2	Negative side degauss by user
Status (-)	3	Status negative side
GND	4	Common ground
-15V	5	Negative power supply
Output	6	Current output
Degauss (+)	7	Positive side degauss by user
Status (+)	8	Status positive side
+15V	9	Positive power supply

RS232 DB9 (EIA/TIA 574)



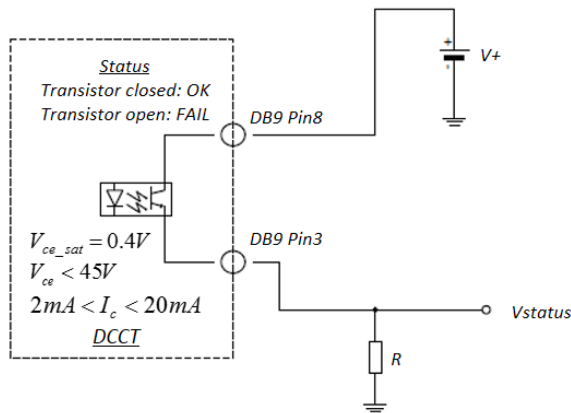
# Wiring

Status wiring. High output configuration



Vstatus	Meaning
<0.4V	OK
V+	FAIL

Status wiring. Low output configuration



Vstatus	Meaning
<0.4V	FAIL
V+	OK

Degauss request wiring

