

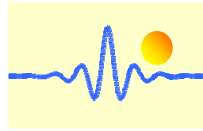
Current to Current Converter CYCCC

The signal converter is specifically designed to expand the application range of conventional current sensors. It proportionally transforms the output current of closed-loop Hall current sensors into a standard current signal as the input signal required by downstream application systems. By adjusting the component parameters inside the converter, the conversion ratio can be flexibly configured to meet the varying current range requirements of different backend acquisition devices.

Product Characteristics	Applications
<ul style="list-style-type: none">• DC/AC current scaling conversion• High measuring accuracy and linearity• Analog current output signal (0-20mA, 0-40mA or custom-made)• Protection against overvoltage• Protection against reversed polarity• Output protection against electrical disturbances	<ul style="list-style-type: none">• Power Electronics Equipment Testing• Inverter and Variable Frequency Drive (VFD) Monitoring• Switched-Mode Power Supply (SMPS) Development and Testing• Photovoltaic Systems• Energy Storage Systems• EV Charging Equipment• High-Dynamic Current Measurement Systems

Technical Data

Rated input current	0-600mA (max)
Rated output current	0-20mA, 0-40mA or custom-made
Load Resistance	20-120 Ω (with default 40mA output)
Power supply	$\pm 15V \sim \pm 24V$ DC
Measuring accuracy	$\pm 0.05\%$
Linearity (10% -100%), 25°C	$\pm 0.005\%$
Isolation	between input, output and power supply
Isolation withstanding voltage	2.5 kV DC, 1min, leakage current 1mA
Response time	$\leq 3 \mu s$
Frequency Bandwidth (-3dB)	DC – 200kHz
Thermal drift of offset current	$\pm 0.1mA$ (-20°C ~ +70°C)
Power consumption	$V_c = \pm 15VDC, \leq 36mA$ + Output Current + consumption of the connected sensor $V_c = \pm 24VDC, \leq 40mA$ + Output Current + consumption of the connected sensor



General Data:

Operating temperature	-20°C ~ +70°C
Storage temperature	-25°C ~ +85°C
MTBF	≥ 100k hours

Definition of Part number

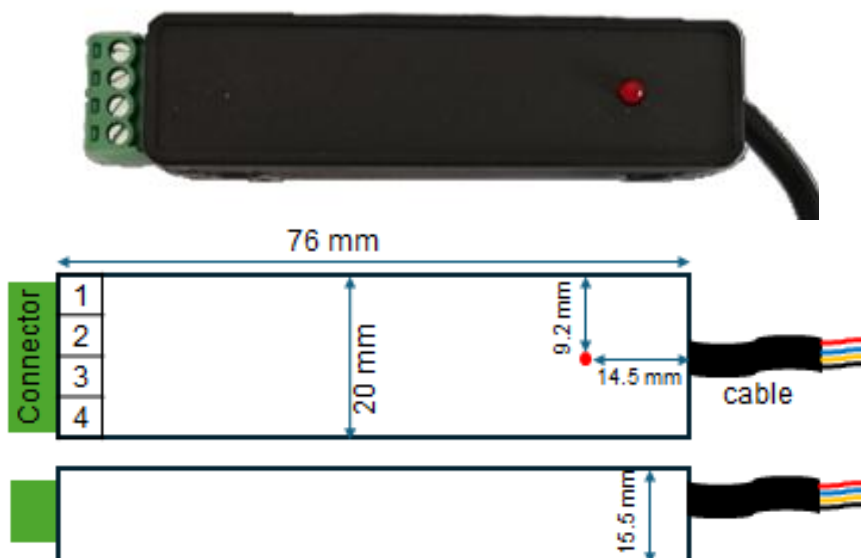
CYCCC		xxx	-	xxx
(1)		(2)		(3)

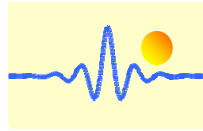
(1)	(2)	(3)
Series name	Rated input current	Output current
CYCCC	0-600mA	0-20mA 0-40mA Custom-made

Example 1:

Part number:	CYCCC400mA-20mA
Rated Input Current:	400mA
Rated Output Current:	20mA
Power supply:	±15V ~ ±24V DC

Dimension





Connection

Pin Definition

Phoenix Connector	4 cores cable
Pin1: V+	Red: V+
Pin2: V-	Blue: V-
Pin3: Output	Yellow: Input
Pin4: GND	Black: GND

Connection between converter and sensor

