

Current Transducer CASR series

 $I_{DN} = 6, 15, 25, 50 A$

Ref: CASR 6-NP, CASR 15-NP, CASR 25-NP, CASR 50-NP

For the electronic measurement of current: DC, AC, pulsed..., with galvanic isolation between the primary and the secondary circuit.

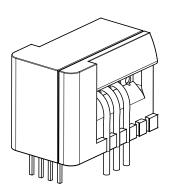












Features

- Closed loop (compensated) multi-range current transducer
- Voltage output
- Single supply
- · Isolated plastic case material recognized according to UL 94-V0
- · Compact design for PCB mounting.

Advantages

- Very low temperature coefficient of offset
- Very good dv/dt immunity
- LTSR compatible footprint
- · Reduced height
- Reference pin with two modes: Ref IN and Ref OUT
- · Extended measuring range for unipolar measurement.

Applications

- AC variable speed and servo motor drives
- · Static converters for DC motor drives
- · Battery supplied applications
- Uninterruptible Power Supplies (UPS)
- Switched Mode Power Supplies (SMPS)
- · Power supplies for welding applications
- Solar inverters.

Standards

- EN 50178
- UL 508
- IEC 61010-1 (safety).

Application Domain

Industrial.



Absolute maximum ratings

Parameter	Symbol	Unit	Value		
Supply voltage	v _c	V	7		
Primary conductor temperature		°C	110		
Maximum primary current	l _{P max}	А	20 x I _{PN}		
ESD rating, Human Body Model (HBM)		kV	4		

Stresses above these ratings may cause permanent damage. Exposure to absolute maximum ratings for extended periods may degrade reliability.

Isolation characteristics

Parameter	Symbol	Unit	Value	Comment	
RMS voltage for AC isolation test 50/60Hz/1 min	V _d	kV	4.1		
Impulse withstand voltage 1.2/50 µs	Ŷ _w	kV	7.5		
Partial discharge extinction voltage @ 10 pC (rms)	V _e	V	1000		
Clearance distance (pri sec.)	dCI	mm	7.5	Shortest distance through air	
Creepage distance (pri sec.)	dCp	mm	7.5	Shortest path along device body	
Creepage distance (pri sec.)	dCp	mm	6.2	When mounted on PCB with recommended layout	
Case material	-	-	V0 according to UL 94		
Comparative tracking index	СТІ	V	600		
Application example	-	-	300 V CAT III PD2	Reinforced isolation, non uniform field according to EN 50178, EN 61010	
Application example	-	-	600 V CAT III PD2	Simple isolation, non uniform field according to EN 50178, EN 61010	
According to UL 508: primary potential involved in Volts RMS AC or DC		V	600	For use in a pollution degree 2 environment	

Environmental and mechanical characteristics

Parameter	Symbol	Unit	Min	Тур	Max	Comment
Ambient operating temperature	T _A	°C	-40		85	
Ambient storage temperature	T _s	°C	-55		105	
Mass	т	g		9		
Standards	EN 50178, IEC 60950-1, IEC 61010-1, IEC 61326-1, UL 508					