



AMAC-40A-4KA-CD2(3/4)

# Polarization Cell Replacement

## General

The PCR is a solid-state device designed to simultaneously provide DC decoupling and AC continuity / grounding when used with cathodic protected structures, such as pipelines, tanks, grounding systems, and cable casings. The PCR has very high AC fault current and lightning surge current ratings. With a higher blocking voltage.

## Application

- Cathodic Protection
- DC Grounding device

## Features

- 40A ac @ 50Hz nominal current
- No overheating @ 40Aac when capacitors are defect
- Max 4kA @ 100 milliseconds
- Long life >100k hour @ full AC current
- 100A 60mV Shunt for current measurement
- Tester tool available



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## Logistical data

Specification item	Value
Product name (DC +1.6/-2.4V)	AMAC-40A-4kA-CD23
Product name (DC +1.6/-3.2V)	AMAC-40A-4kA-CD24
Pieces per box	1
Minimal order quantity MOQ	1

## Absolute max values

Specification item	Value	Unit	Condition
Continues AC current	100	Aac	DC offset generated
Continues AC current	40	Aac	No DC Offset
Pulse Current	4.000	Aac	<100ms @ 50Hz

## Electrical data

Specification item	Value	Unit	Condition
CD23 version			
DC voltage range	-2.4 ... +1.6	Vdc	@ 40Aac 50Hz
CD24 version			
DC voltage range	-3.2 ... +1.6	Vdc	@ 40Aac 50Hz
Nominal Shunt current	100	A(ac/dc)	
Shunt voltage	60	mV(ac/dc)	@100A(ac/dc)

## Mechanical data

Specification item	Value	Unit	Condition
Height	225	mm	
Width	194	mm	
Depth	159	mm	
Weight	1.5	kg	
IP rating enclosure	IP00		



## Electrical connections

Specification item	Value	Unit	Condition
Shunt measure points	4	mm	Banana plugs
DC outgoing strips	25x5	mm	M8 cable lugs


## Environment conditionals

Specification item	Value	Unit	Condition
Max ambient temperature	65	°C	Standby
Max ambient temperature 100%	65	°C	Full power w/o derating
Min ambient temperature	-20	°C	Standby
Case temperature (T-Life)	40	°C	
Maximal case temperature	85	°C	
Storage temperature	10...30	°C	
Humidity operation	100	%	
Humidity storage	80	%	IEC 60068-2-78

## Lifetime

Specification item	Value	Unit	Condition
Operating Lifetime	>100.000	Hours	Measured @T-Life
Expected Lifetime	>200.000	Hours	Measured @T-Life
Storage Lifetime	<50.000	Hours	

## Certificates and Standards

Approval mark	
Standards	IEC
Installation	IEC-60364
EMC	IEC-61000
Electrical	IEC-60950

## Warranty

Spares parts	10 years after production stop
Manufacturing	2 years



# Mechanical Drawing

