

AMAC-80A-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

- 80A ac @ 50Hz nominal current
- No overheating @ 80Aac when capacitors are defect
- Max 4kA @ 100 milliseconds
- Long life >100k hour @ full AC current
- 100A 60mV Shunt for current measurement
- Tester tool available

Logistical data

Specification item	Value
Product name (DC +1.6/-2.4V)	AMAC-80A-4kA-CD23
Product name (DC +1.6/-3.2V)	AMAC-80A-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	80	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	@ 80Aac 50Hz
CD24 version			
DC voltage range	-3.2 ... +1.6	Vdc	@ 80Aac 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	295	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

