

Electric decoupling and electroprotection device Solid State Polarization Cell Replacement - DPS 150 Z

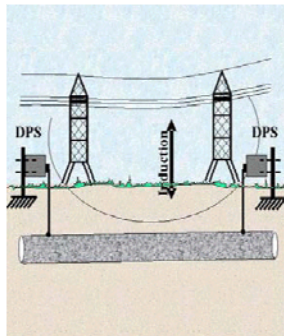
DESCRIPTION:

DPS 150 Z is a silicon solid-state device and is designated for underground metallic pipes electroprotection and protection against accelerated corrosion due to AC stray currents; by U/I characteristic, the device rectifies AC signals induced in pipes (beginning from 0.15Vrms) in a frequencies range 0.1 Hz - 2 GHz.

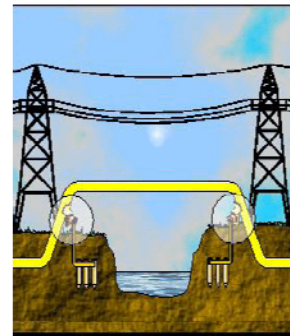
Patent RO 119399 / 2000



DPS 150 Z device



Examples of implementation



TECHNICAL CHARACTERISTICS:

Parameter	Type A	Type B
Forward voltage V_f [V] at $I_f = 1$ A	<0,31	<0,31
Forward voltage V_f [V] at $I_f = 5$ A	<0,40	<0,40
Forward voltage V_f [V] at $I_f = 150$ A	<0,85	<0,95
Reverse voltage V_z [V] at $I_z = 1$ A	15 5V	35 5V
Rated current in forward polarization I_f [A]	160	150
Rated current in reverse polarization I_z [A]	6.5	3
Current integral in forward polarization [A ² s]	200 000	200 000
Current integral in reverse polarization [A ² s]	20 000	10 000
Peak current of a lightning impulse of 8/20 s [A]	100 000	100 000

TECHNICAL ADVANTAGES:

By adequate implementation on natural gas and other oil products networks, it is assured:

- Pipe's safety from accidental electric charges with dangerous voltages, including thunders / lightnings;
- Polarized DC stray currents drainage;
- AC stray currents treatment - even of those with really low amplitude - by theirs limited rectifying;
- Efficiency increase of active anticorrosion protection systems which were previously implemented.

USERS

Distributors of natural gas, distributors of oil products