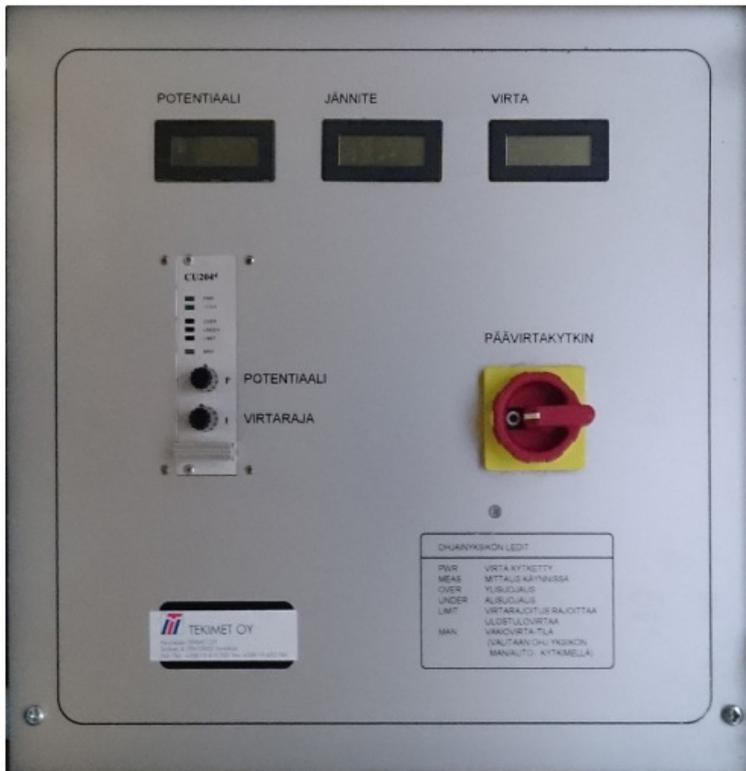


Potentiostatic Power Supply Units ASCP-0.75/1.5 and ASCPSW-0.5/1.0



Automatic Supply of Cathodic Protection

Potentiostatic Power Supply Units
ASCP-0.75/1.5 and ASCPSW-0.5/1.0

4 models:

- ASCP-0.75, output: 42V 15A, thyristor controlled
- ASCP-1.5, output: 42V 30A, thyristor controlled
- ASCPSW-0.5, output: 42V 10A / 21V 20A, switch mode
- ASCPSW-1.0, output: 42V 20A / 21V 40A, switch mode

Features

- Designed mainly for water and natural gas pipelines and other underground structures but can be used in other locations as well.
- Housed in a 500x500x300 enclosure
- Efficient protection against lightning at input, output and power input (model -O)
- 3 different reference electrode input ranges
- Potentiostatic or constant current mode selection
- LCD panel meters for electrode potential, output voltage and output current
- Potential and current limit adjustments for every circuit
- Clear LED monitoring of operation:
 - PWR for power on
 - MEAS blinks when operating
 - OVER for overprotection
 - UNDER for under protection
 - LIMIT for indicating current limit operation
 - MAN for indicating constant current mode
- Option for monitoring the under protection remotely
- Option for monitoring the potential from a 4...20mA signal
- Switch mode models available with 48VDC input

Technical specifications:

Mains input:

230VAC 50/60Hz 16A $\pm 10\%$

Other voltages on request

48VDC input available for switch mode models

Output ranges:

ASCP-0.75 42V 15A

ASCP-1.5: 42V 30A

ASCP-0.5: 42V 10A / 21V 20A

ASCP-1.0: 42V 20A / 21V 40A

Output ripple:

models 0.75 and 1.5: a few volts at maximum load

models 0.5 and 1.0: $< 500\text{mV}$

Reference electrode input ranges:

-250...+750mV, e.g. Zn - Fe

-2500...0mV, e.g. Ag/AgCl₂ - Al

Cu/CuSO₄ - Fe

-450...0mV

jumper setting for input range on control unit

Input impedance:

1M Ω , differential input

Operating principle:

Models 0.75 and 1.5:

Thyristor phase angle controlled bridge

rectifier controlled by potentiostatic feedback loop

Models 0.5 and 1.0:

DC/DC switch mode converter module controlled by potentiostatic feedback loop.

Loop response is selected by dip switches on control unit

Operating temperature:

-10 ... +50°C

on request: -30 ... +50°C (models -E)

Protection class: IP44

Dimensions: 500x500x300 (HxWxD)

EMC:

models 0.75 and 1.5:

EN 50081-1 (1992) emissions

EN 50082-2 (1995) immunity

(FIMKO)

Surge immunity:
models 0.75 and 1.5:
EN 61000-4-5 and
4kV test to all inputs and outputs

Approvals: Models 0.75 and 1.5: CE