PD Tech Power Engineering AG, Seestrasse 14b, 5432 Neuenhof, Switzerland; **Phone:** +41 56 416 90 90; **Fax:** +41 56 416 90 91
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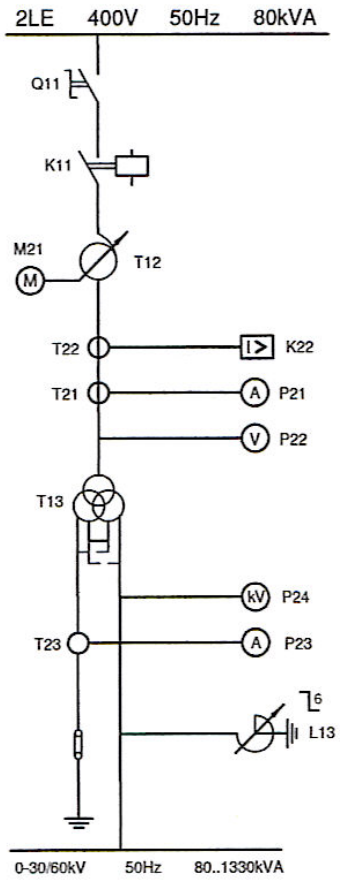
1 Stationary Test Set PU 80/1330-30/60 kV modular Parallel Resonant System for AC tests.on generators according schematic diagram Save 617



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1. Technical Specifications

1.1. Principal data

rated output power compact system.	830	kVA
rated output power extended system	1330	kVA
rated supply voltage 50Hz	400	V
high voltage, adjustable	0-30 and 0-60	kV
duty factor	20	%
15min ON / 60min OFF 6 times a day		
input power max.	80	kVA
input current max.	200	A
max. test capacity	at 30 kV basic unit 2.94	µF
max. test capacity	at 60 kV basic unit 0.73	µF
max. test capacity	at 60 kV with ext. reactor 1.18	µF
time-delay type fuse in mains	300	A
weight approx.	4600	kg

1.2. High voltage transformer T12

rated output power	80	kVA
primary voltage	400 V, 50	Hz
secondary no load voltage	2 x 60	kV
primary current	200	A
secondary current	2 x 0.67	A

1.3. Compact rectance coils L13

rated power.	150...750	kVA
inductive reactance, adjustable	75....15	H
rated current	2.5...12.5	A

1.4 Extension reactor L14

rated power.	500	kVA
inductive reactance, adjustable	23	H
rated current	8.3	A

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2. Description of Equipment

The test equipment consists of

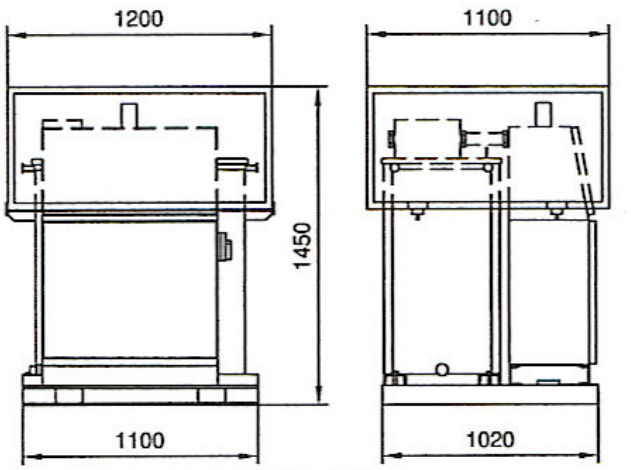
2 Transformer Units (fig.a and b) arranged on rugged steel frames with lateral lifting hooks and eye canals for transport by crane or forklift. Light weighted Alu-covers protects the stored units against normal weather conditions.

1 Extension reactor in a metal transport frame. The base trough with its 10kV insulators is to be used as a test board.

1 Savety Circuit Equipment with cordon stakes, warning lamps, emergency switches and red/white stop cordons with integrated control cable

2.1. Control desk - Regulating transformer fig a

All necessary control- protection- and measuring-units are incorporated into the desk. All instruments, push-buttons, control switches including the overcurrent-release potmeter are placed on the front panel.
Security loop and warning lamps are to be connected to subject terminal blocks.
The regulating transformer MIDEL-Oil immersed in a steel tank allows by means of a DC motor M21 with continous adjustable velocity, a continous adjustement of the test voltage.
The current collectors with commutation-diodes are protected by current transmitters T22 and overload relay K22.



Weight 1150kg
fig.a

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2.2 **Compact High Voltage Unit**

MIDEL-Oil immersed in separate steel tank acc. fig b with a dismountable plug-in HV bushing and automatic earthing device

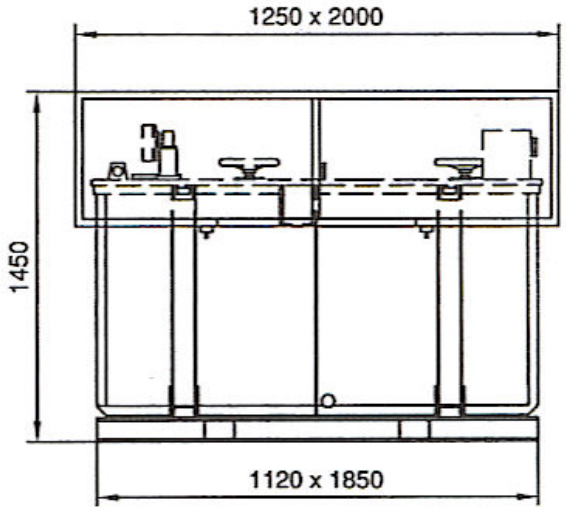

fig.b

2.2.1 **1 High voltage transformer T13**

the secondary voltage is measured by the capacitiv bushing devider and the digital kV-meter P24.

2.2.2. **2 High voltage reactors L13**

connected by a HV change over switch allowing the adjustement of the equipments load to the actual test capacitance in 5 steps.
The test current is indicated by means of current transformer T21 and digital A-meter P21.

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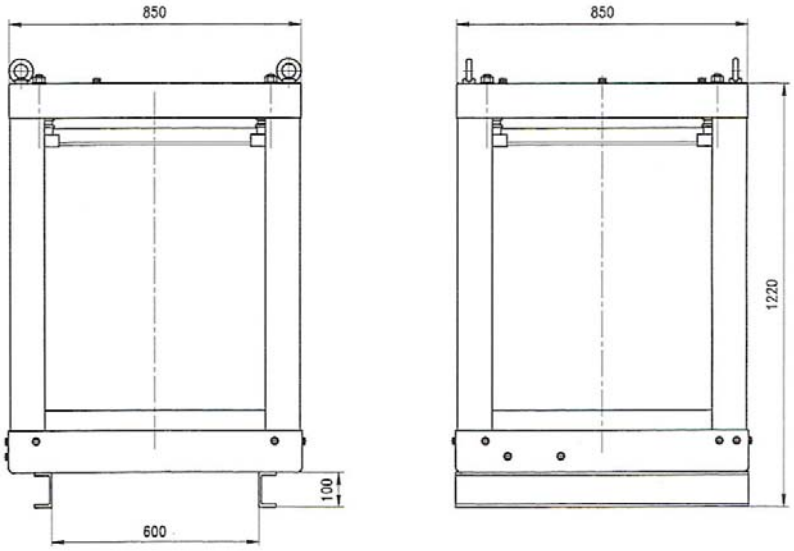
2.3 1Extension Reactor DSH 2

Monophase reactor MIDEL-Oil immersed in a cast resin tank with electrodes to extend the test capacity by 500kVA up to 1330kVA.



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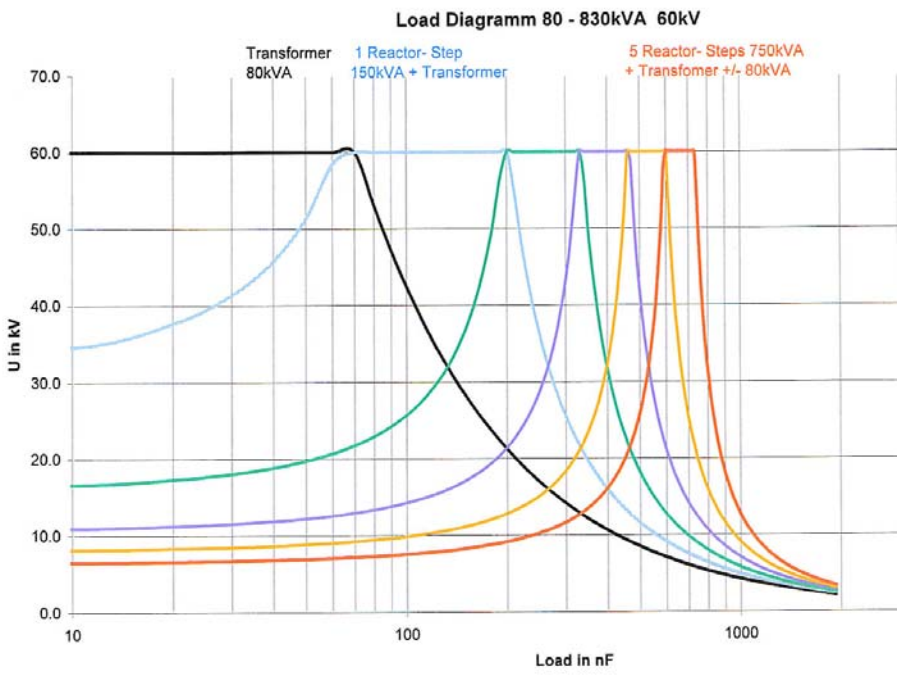
2.4 **1 Savety Circuit Equipment**
in a solid transport box consisting of
- 6 red/white cordon staks each with each with warning lampr and emergency switch as well as
- 6 red/white stop chains with integrated control cable and HAN plugs

2.5 **Ranges of Test Capacity**
The compact system alone allows in the **60kV steps** tests up to 870nF



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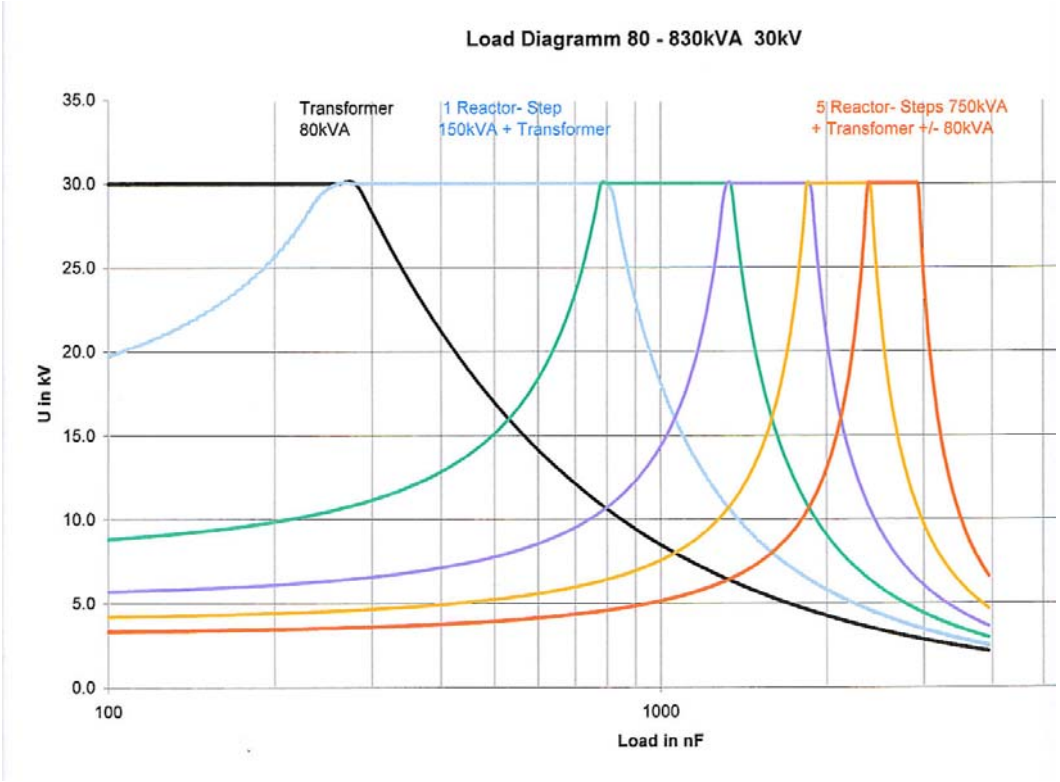
Tests up to nearly 3µF are feasible in the HV unit's **30kV steps.**



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The **Extension Reactor DSH 2** connected in parallel to the 60kV steps extends the test capacitance from 715nF up to 1.4µF