



**Test system for function tests of defibrillators,
external cardiac pacemakers and ECG simulation
in accordance with IEC 60601-2-4 / IEC 60601-2-31**

- ☒ single-, dual- and triple-circuit cardiac pacemakers
- ☒ polarity-independent measurement of defibrillation impulses
- ☒ graphical display of the discharge plot
- ☒ touchscreen or PC control
- ☒ ECG output for all ECG standard leads
- ☒ stop clock function for charge and discharge times
- ☒ asynchron-, synchron- and AED testing
- ☒ user specific language settings

Technical Data

Line voltage:	18 V (external power supply) or internal accumulator operation	Measurement	Range	Error
Rated capacity:	max. 25 VA	DEFI		
Protection class:	internal power supply	Load resistance:	50 Ohm	± 1 %
		Energy	0 – 1000 Joule	± 1 Joule or ± 1 % of measurement value
Environmental temperature:	+ 5 - + 40 °C	Pulse width:	0 – 48 ms	± 0,1 ms or ± 2 % of measurement value
Storage temperature:	- 10 - + 50 °C	Pulse delay time:	0 – 100 ms	± 0,1 ms or ± 2 % of measurement value
Function:		PACE		
DEFI	asynchronous, synchronous, biphasic	Load resistance:	50 -150 Ohm	± 2 %
Load resistance:	50 Ohm		200 -1600 Ohm	± 1 %
Measurement range:	Range1 ± 850 V Range2 ± 4400 V 0 – 80 A 0 – 1000 J 1 V	Pulse voltage:	0,5 - 300 V	± 0,1 V or ± 5 % of measurement value
Sensitivity:	48 ms, dt 20 µs (50,0 kHz)	Pulse length:	0,1 – 250 ms	± 1 ms or ± 5 % of measurement value
Measurement duration:	6, 12, 24, 48 ms	Frequency measurement:	30 – 1200 BPM	± 1 BPM or ± 0,5 % of measurement value
Display:		ECG amplitude:	1 - 25 mV	± 5 %
PACE	transthoracic, intracardiac	Delay time:	5 - 400 ms	± 5 %
Load resistance:	50 – 1600 Ohm in 50 Ohm steps	Demand frequency:	55 - 100 BPM	± 1 %
Measurement range:	Range1 ± 30 V Range2 ± 300 V	Inhibition frequency:	55 - 100 BPM	± 1 %
Frequency measurement:	30 - 1200 BPM	Refractory time:	50 - 400 ms	± 10 %
Delay time:	5 - 400 ms	Sensitivity:	0,5 - 25 mV	± 10 %
Demand frequency:	55 - 100 BPM	Time Measurement:	1 – 1000 sec	± 1 %
Inhibition frequency:	55 - 100 BPM			
Refractory time:	50 - 400 ms	Testing device connection:		
Sensitivity:	0,5 - 25 mV	DEFI	2 Paddle sensor components with integrated 4 mm sockets	
Measurement duration:	2148 ms, dt 33 µs (30,3 kHz)	PACE	6 x 4 mm sockets	
Display:	8, 16, 32, 64 ms	ECG	10 x 4 mm sockets	
ECG	12 channel ECG			
Pulse forms:	sine, sine square, triangle, rectangle, trapeze, ISO, ventricular fibrillations (VF), ventricular tachycardia (VT), line frequency, NSR	Accessories:	1 x charger 10 x STA8 ECG adapter clip 1 x USB cable type A	
Digital display:	4,3" TFT-Display	Mechanical data:	Light weight metal case IP20	
Operation:	Touchscreen	Dimensions:	330 x 250 x 90 mm (W x H x D)	
		Weight:	approx. 2,5 kg	
Interface:	1 x USB 3.0, without charging function	Selectable languages:	german, english, french, polish, spanish, italian, portuguese, turkish	

The DP-600 is a test system for functional tests of defibrillators, external cardiac pacemakers and serves as a test signal generator for ECG pulses. It can be operated by either a power adapter or with internal accumulators. Moreover, it can be used as a stand-alone device, but also in connection with the PC.

The DP-600, as a defibrillator testing device, can be used for functional testing of external monophasic, biphasic and pulsed biphasic defibrillators. The delivered defibrillator energy is measured on a load resistance of 50 Ohm. Furthermore, the voltage curve can be graphically displayed. The tests can be done polarity independent in the synchronous and asynchronous mode. The synchronous mode

differs between paddle-synchronous and monitor-synchronous defibrillation.

The DP-600, as a cardiac pacemaker testing device, can be used for functional testing of external single, dual or triple circuit cardiac pacemakers for intracardiac or transthoracic stimulation, operating with asynchronous or demand pulses. The pulse amplitude, the pulse time, the pulse frequency and the delay time (AV / VV) are determined. Furthermore, the voltage curve can be graphically displayed. The refractory time, sensitivity as well as the demand and inhibition frequency are automatically determined based on the generated test signal.

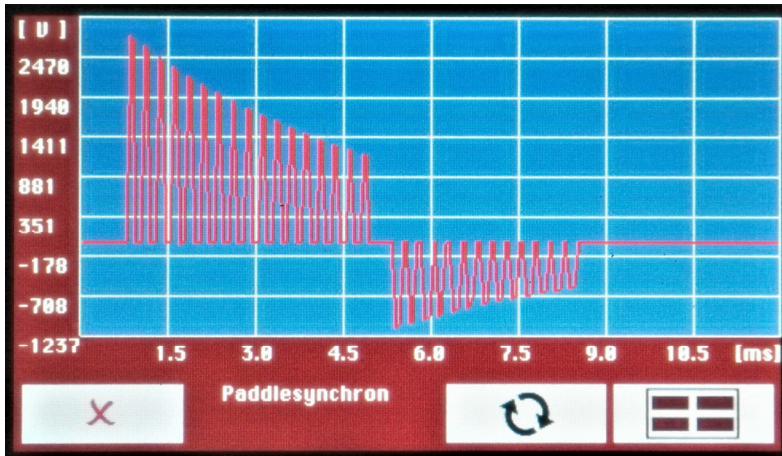
The ECG simulation serves to output ECG pulses to defibrillators and ECG devices.

(The specified measuring accuracy refers to the measuring element. Technical modifications and errors reserved. 01/2024)

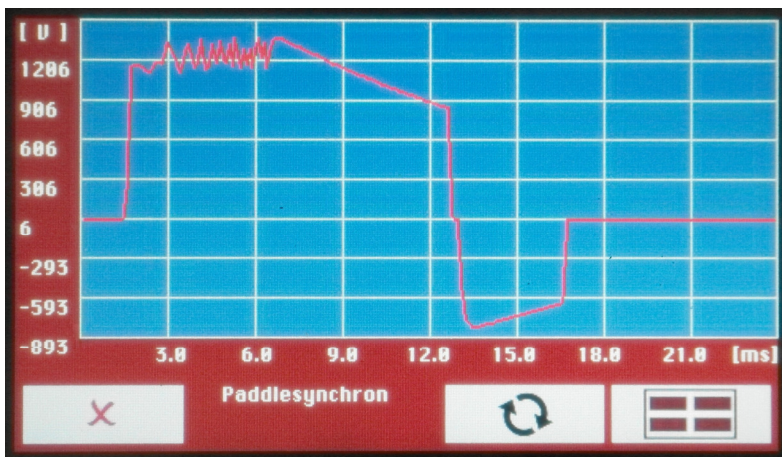
Technical Data

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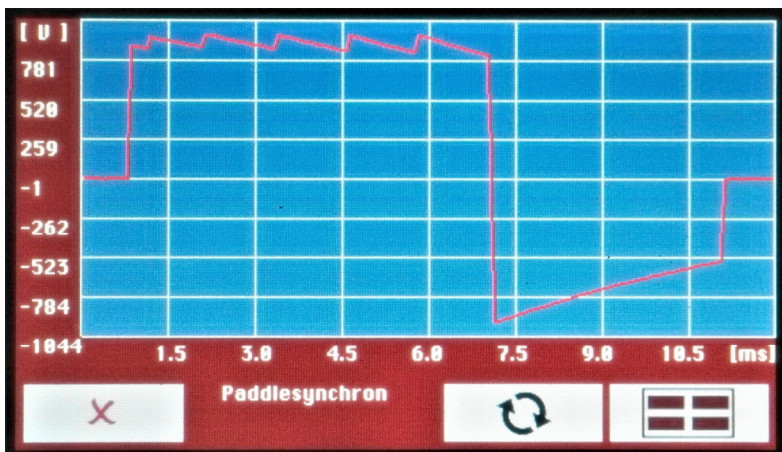
Technical Data



Discharge plot of
Schiller FRED easy



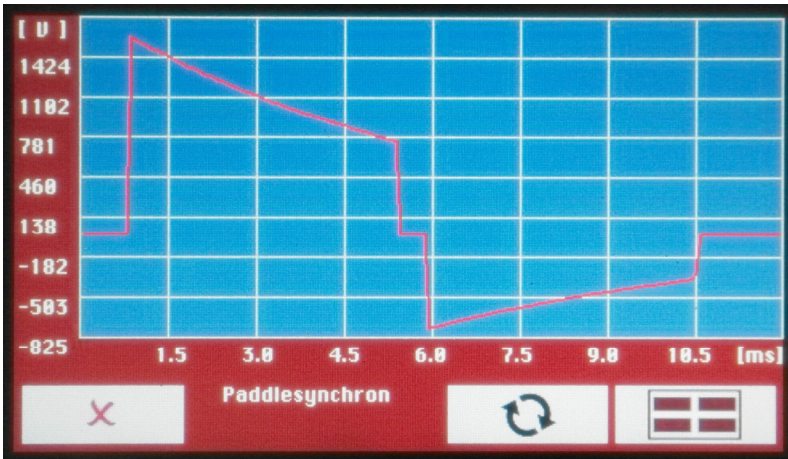
Discharge plot of
PRIMEDIC HeartSave PAD



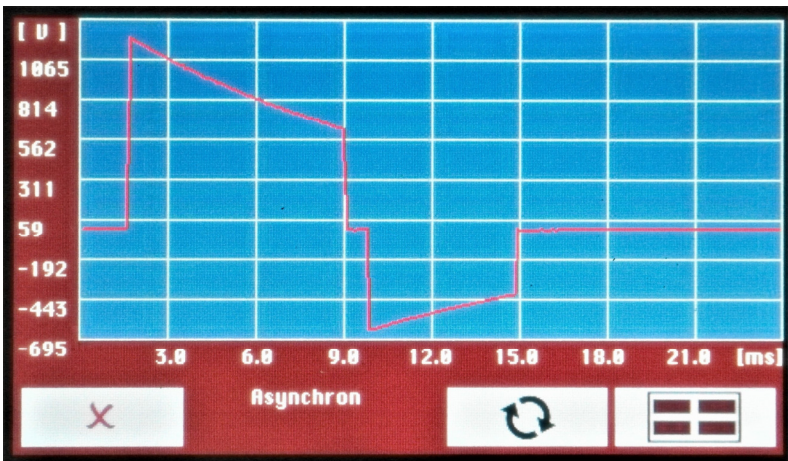
Discharge plot of
ZOLL MSeries Biphasisch

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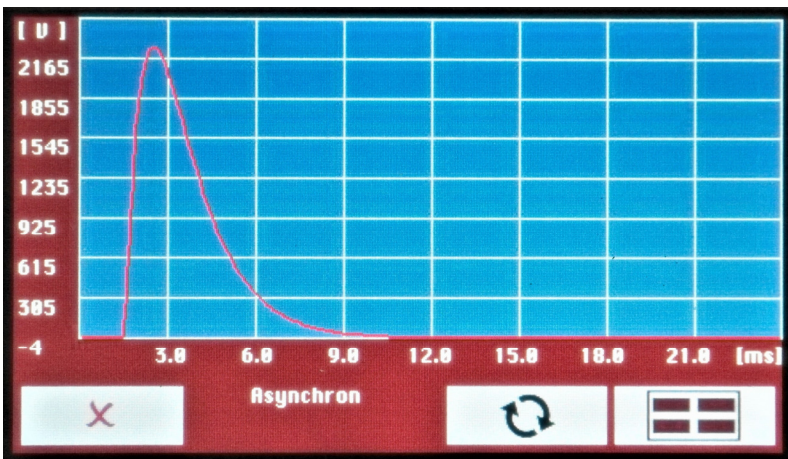
Technical Data



Discharge plot of
Philips Heart Start



Discharge plot of
LIFEPAK 12



Discharge plot of
LIFEPAK 10

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