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X-ray Systems

PROSLIDE 32 B

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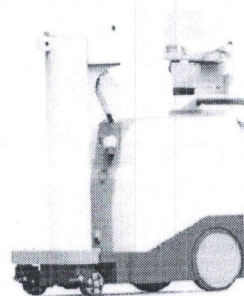
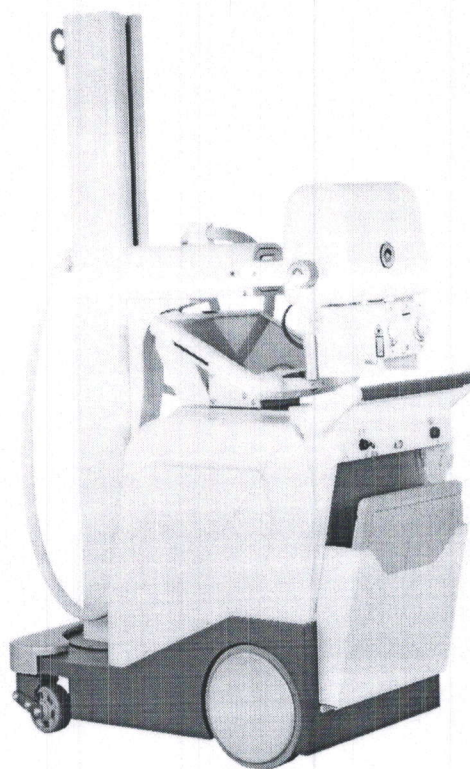


Abb. Version mit Teleskopsäule
Fig. Version with telescopic column

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PROSLIDE 32 B

Mobile X-ray unit (for analog / CR / DR)

Technical Product Specifications

* For PROSLIDE 32 B with telescopic column, details are in bold print, otherwise identical.

Electrical Specifications

Power supply	115 ÷ 230Vac ±10%
Frequency	50/60 Hz ± 5 Hz
Absorbed current	10 A
Line compensation	Automatic
Line resistance	<1 Ω @ 115/230Vac
Standard outlet	16 A @ 230Vac
Power supply cable	2.9 m, retractable
Insulation class	Class I with applied parts type B
Use conditions	Continuous working with intermittent load
Classification according to the liquid penetration	IPx0
Safety in presence of anaesthetic inflammable gases	The equipment is neither type AP nor APG

Environmental conditions

Temperature normal use / warehouse and transport	10 °C to 40 °C / -25°C to 70°C
Relative humidity normal use / warehouse and transport	30% to 75% non-condensing / 10% to 90% non-condensing
Pressure normal use / warehouse and transport	700 hPa to 1060 hPa / 500 hPa to 1060 hPa

Total filtration of the equipment

Monobloc	1.4 mm Al @75kV
Additional fixed filter	0
Collimator	2 mm Al @75kV
Total filtration of monobloc group	3.4 mm AL @75kV
Additional filtration of DAP meter	0.3 mm Al @75kV
Total filtration	3.7 mm Al @75kV

Mechanical specifications

Width (in transport position)	576 mm
Length (in transport position)	1168 mm / *1200 mm
Height (in transport position)	1855 mm / *1421 mm
Transport handle height	900 mm
Focus-floor distance (Z-axis)	727 ÷ 2014 mm / *660 ÷ 2014 mm
Max. height	2242 mm
Arm extension (X-axis)	360 mm
Front range	710 ÷ 1070 mm
Lateral range	517 ÷ 877 mm / *536 ÷ 896 mm
Rotation of the monobloc around the arm axis (α swivel)	± 180°
Rotation of monobloc around the column axis (β swivel)	± 320° from transport position
Rotation of the monobloc around its axis (γ swivel)	127° (90° forward, 37° backward)
Movement	Motorised, speed is proportional to the exerted pressure onto the transport handle.



Speed forward (transport position)	0 ÷ 1.4 m/s
Speed forward in working position	0 ÷ 0.7 m/s
Speed backwards	0 ÷ 0.7 m/s
Max. superable inclination	12° (21%)
Wheels diameter rear	300 mm, antistatic
Wheels diameter front	125 mm, antistatic, damped
Cassette holder capacity	4 cassettes format 35 x 43 cm (13.78 x 16.93 in.)
Weight	397 kg, batteries included

Batteries

Battery type	VRLA (Valve regulated lead acid batteries)
Battery pack	12 batteries x 12V, 18Ah, Pb, 144Vdc
Vacuum nominal voltage	144Vdc
Load voltage (worst case)	100V @200A
Low battery charge indicator	yes
Min. autonomic operation	200 exposures at 80kV/50mAs within 6 hours

Battery charger

Power supply	115Vac / 230Vac ±10% single-phase, 50/60 Hz
Absorption by mains	10 A max
Charge indicator	yes
Charge characteristics	IUoU - compensated in temperature
Charge time	5h
Safeties	Overtemperature, overvoltage, charge timeout

Operating specifications

External interfaces	Interface for Bucky. Serial communication (RS232) for service. Keyboard with graphic LCD display 160 x 101mm (effective area 123 x 68 mm), to display the operating parameters and possible unusual messages or conditions.
User interface	Service program for troubleshooting. Management by microcontrollers (master-slave). English, German, French, Spanish, Italian, Portuguese.
Available languages	Further language available for non-European characters.
X-ray hand switch	Local hand switch with extensible cable. Wireless remote control (optional) Filament current, Monobloc temperature,
Safeties	Overloading, Max kV or fault in HV, Check of the stored data, Microcontroller auto test, Battery overvoltage. Storage of 36 exams (6 anatomical groups, each one of 6 examinations)
Programmed Anatomic Mode (APR)	
Use coefficient (duty cycle) according to the applied power	Waiting $t = kV * mAs / 100 (s)$

X-ray specifications

Max. power of the generator	32kW (320 mA @ 100 kV)
Inverter frequency in high voltage	40 kHz
Max ripple	<2% @100kV
Climbing time	<1ms @100kV
kV values	40 ÷ 125kV in steps of 1kV
kV accuracy	±5% (IEC 60601-2-54)
mA values	70 ÷ 320mA automatically associated to kV
mA accuracy	±10% (IEC 60601-2-54)



mAs values	0.1 ÷ 320mAs with increases of 12,5%
mAs accuracy	±10% (IEC 60601-2-54)
Exposure times	0.001 ÷ 3sec according to set mAs
Exposure time accuracy	±10% (IEC 60601-2-54)
Continuous thermal dissipation	60 W

Monobloc

Nominal power (100 kV - 320 mA) 0.1s	32 kW
Max. voltage at the tube	125 kV
Max. current at the tube	350 mA
Ripple to the max. power	< 2%
kV increasing time to max. power	< 1 ms
Half-value layer @ 75kV	2 mm Al
Min. inherent filtration @75kV	1.4 mm Al
Weight	19.0 kg
Thermal capacity	600 kJ
Total thermal safety	900 kJ
Thermal safety (n.c. thermal switch)	60 °C ±5° C
Compensation lung volume	0.2 dm ³
Continuous thermal dissipation	60 W
Leakage radiation	< 1 mGy/h

X-ray tube

Rotation speed	3000 min ⁻¹
Nominal High voltage	130 kVp
Nominal focus dim. (IEC 60336)	0,8 mm small focus / 1,3 mm large focus
Nominal anodic power (IEC 60613)	16 kW small focus / 32 kW large focus
Anodic material	RT (Focus track: Tungsten-Rhenium), TZM (Anode mass: molybdenum + titanium + zirconium)
Anodic diameter	64 mm (2,52in.)
Anodic angle	15°
Thermal capacity of the anode	80 kJ (107kHU)
Max continuous anode dissipation	300 W
Min. inherent filtration (IEC 522)	0.7 mm Al eq.
Tube material	glass

Collimator

Collimation	Manual with internal light source, multilayer, squared field
Assembly plan from focus	80 mm (3.14")
Coverage of the field at 100cm FFD (SID)	min 0 x 0 cm, max 43 x 43 cm Laser field to determine the focal distance at 1 m
Lighting source	Clusters of high-brightness LED power
Lamp lighting time	30 s
Light intensity (IEC 60601-2-54)	> 160 lux
Minimum contrast ratio (IEC 60601-2-54)	4:1
Focal distance measurement	Retractable tape measure (max extension 3 m)
Inherent filtration	2 mm equivalent Al/75kV
Additional filtration	0 mm Al / 1 mm Al + 0,1 mm Cu / 1 mm Al + 0,2 mm Cu / 2 mm Al
Rotation	± 120°
Weight	5,5 Kg

Optional

DAP meter	Device for the area-dose product measurement in X-ray diagnostics according to IEC 60580 standard
Bluetooth DAP	Automatic data transfer with Bluetooth DAP
Collimator with laser	Collimator with included double laser
Remote exposure control	Infrared X-ray control device



PROSLIDE 32 B System

Mobile X-ray unit with DR system

Consisting of:

PROSLIDE 32 B

Mobile X-ray unit,
specification see previous pages,
with PC holder

CE 0051

RAPIXX DR system

DR detector with CONAXX 2 acquisition software
RAPIXX models are limited to RAPIXX WIFI versions

CE 0297

The PROSLIDE 32 B System is supplied with an EC Declaration of Conformity issued by the manufacturer for the mobile X-ray unit and an EC Declaration of Conformity issued by PROTEC for the RAPIXX DR system.

PROSLIDE 32 B as well as RAPIXX DR system have their own EC Certificate issued by the corresponding notified bodies.

For the PROSLIDE 32 B System PROTEC applies Article 12 of the Medical Device Directive and puts the two above mentioned devices bearing the CE marking together, in order to place them on the market as a medical system. Accordingly PROTEC provides a Declaration in accordance with Article 12 of Directive 93/42/EEC for PROSLIDE 32 B System, which may be used by our distributors for sales and installation activities.

Optional

8" Tablet PC Tablet PC - 1920 x 1200 Pixel

Intel Bay Trail Quad Core , 2 GB RAM, capacitive Multi Touch, 1 USB for battery charging, 1 micro-USB, WLAN, Windows 8 operating system

CE

19" All-in-one Touch-PC

All-in-one Touch-PC, 1280 x 1024 pixel LCD with LED backlight, resistive Touch, Intel Celeron J1900 quad-core processor, 4 GB RAM, 256 GB SSD, USB/COM/LAN Medical 4KV Isolation, WLAN, waterproof: IP65 Front Panel, 6 hours battery time, Windows 10 operating system

CE

