## Sensing & Inspection Technologies

# ERESCO 42 MF4

## Portable X-ray Unit 200 kV Directional Radiating Tube Head, air cooled

The ERESCO 42 MF4 is a 200 kV constant potential portable X-ray tube head using state of the art switching technology with high radiation output allowing shortest exposure times thereby increasing productivity.

GE Sensing & Inspection Technologies uses the number 42 to identify the superior penetration performance of its portable X-ray unit line. This means the

ERESCO 42 MF4 is capable of penetrating 42 mm (1.65") Fe with a 2.0 density after a ten-minute exposure using AGFA STRUCTURIX D7 film @ 700 mm (27.5") FFD.

The X-ray tube head consists of a sturdy metal-ceramic X-ray tube and high voltage generator integrated into a rugged compact housing. The air-cooled 200 kV/900 W end-grounded X-ray tube is thermally protected for extended life.

The high voltage generator generates high-stability constant potential voltage at higher efficiency than conventional line frequency equipment.

The performance of the X-ray tube and the high voltage generator is continuously monitored for protection and operational safety. An on-board real time clock facilitates fully automatic warm-up routines for optimized and timesaving tube conditioning. The flexible connecting cable is heavy-duty and light weight.

#### **Additional Features**

- Rugged construction with proven reliability
- Gas insulated high voltage section reduces size & weight
- End-grounded, Be-window, metal-ceramic X-ray tube
- DC voltage operation
- Modern power electronics provides high stability
- On-board real time clock supports fully automatic warm-up
- Extended operating range from 5 kV to 200 kV enables flexible use
- Large 40° x 60° emergent beam
- Optimized air-flow cooling for efficient heat dissipation
- 100% duty cycle at 30° Celsius (86° F)
- Built-in fail-safe warning lamp
- CE certification according to EMC and Low Voltage Directives
- French Standard NFC 74 100 compliant
- BfS certification (PTB approval)
- Water / dust resistant in accordance with protection class IP65
- Produced under ISO 9001 certified quality management system

#### **Standard Delivery Scope**

See product info "ERESCO MF4 Control"

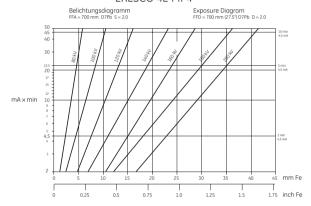


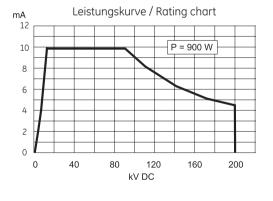


# **Technical Data**

X-ray tube type	200 kV metal-ceramic with Tungsten (W) anode
kV range	5 - 200 kV (acc. to rating chart)
Target angle	20°
Inherent filtration	0.8 mm ± 0.1 mm, Be
Emergent beam	40° x 60°, elliptical
Focal spot size (EN 12 543)	3.0 mm (~1.5 IEC 336)
Tube current	0.5 - 10 mA (4.5 mA /200 kV)
Anode temperature, max.	100°C
Current and voltage stability	± 1%
Continuous rating	900 W
Duty cycle (δ <sub>amb</sub> = 30° C)	100 %
Power input, max.	1.6 kVA
Weight	26.8 kg (59.1 lbs)
Tube head diameter	160 mm (6.3") (without rings)
Protection class	IP65
Operating Temperature	-20°C to +50°C

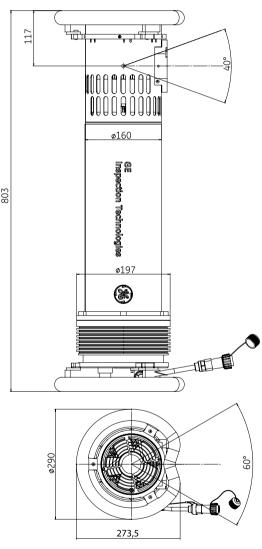
#### ERESCO 42 MF4





## **Options**

- Carrying cradle
- Diaphragm / collimator attachments
- Laser centering device
- Telescope centering device
- Transport and positioning cart
- Fail-safe flashing warning lamp
- Stands and mounting kits
- Aluminium transport box



drawings not true to scale



## www.gesensinginspection.com

GEIT-30173EN (11/08)