

ERESCO 42 MF4-W

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

The ERESKO 42 MF4-W 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-W 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 water-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 time-saving 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
- Additional water-cooling for environments with limited heat-dissipation capabilities
- 100% duty cycle at 30° Celsius (86° F)
- Built-in fail-safe warning lamp
- CE certification according to EMC and Low Voltage Directives
- 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"



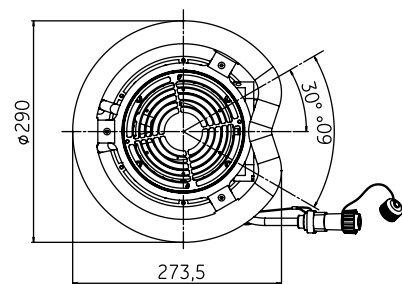
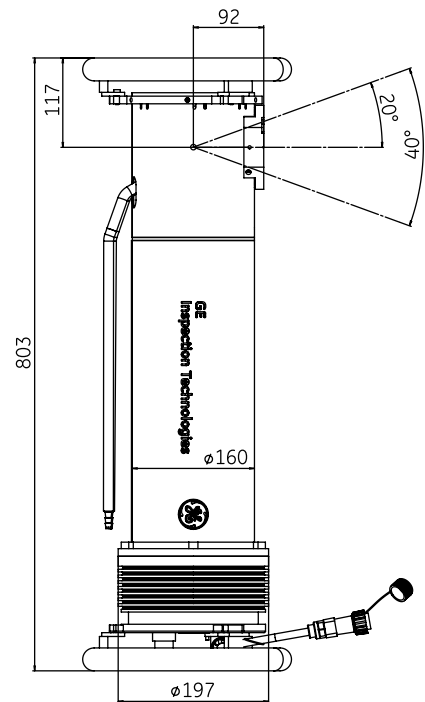
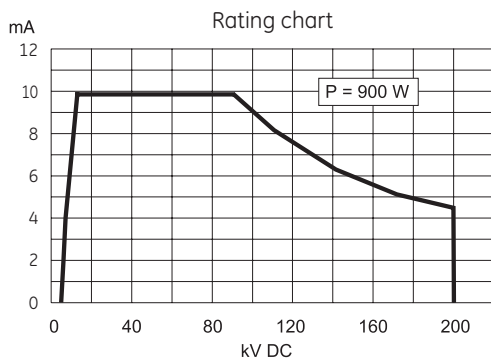
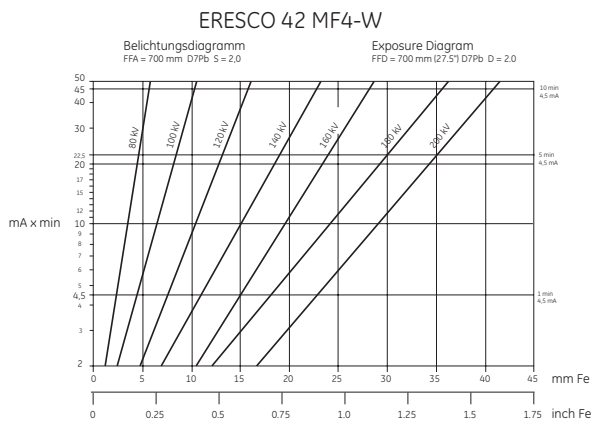
GE imagination at work

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° × 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 ($\delta_{amb} = 30^\circ \text{C}$) | 100% (up to 60 min continuous operation) |
| Power input, max. | 1.6 kVA (without water cooling pump) |
| Weight | 25.8 kg (56.9 lbs) |
| Tube head diameter | 160 mm (6.3") (without rings) |
| Protection class | IP65 |
| Min. cooling water flow rate | 2.5 l/min |
| Max. cooling water pressure | 10 bar |
| Cooling water specification | Drinking water |
| Connector for water hoses | diameter 11 mm (7/16") |
| Water filter necessary | No |
| Operating Temperature | -20°C to +50°C |
| Storage Temperature | -30°C to +80°C |

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-30174EN (11/08)

© 2008 General Electric Company. All Rights Reserved. Specifications are subject to change without notice. GE is a registered trademark of General Electric Company. Other company or product names mentioned in this document may be trademarks or registered trademarks of their respective companies, which are not affiliated with GE.

Contact: GE Sensing & Inspection Technologies GmbH, Bogenstrasse 41, 22926 Ahrensburg, Germany, T +49 (0)4102 807 0