A mandatory component of this drawing set is the GE Healthcare Pre Installation manual. Failure to reference the Pre Installation manual will result in incomplete documentation required for site design and preparation.

Pre Installation documents for GE Healthcare products can be accessed on the web at: www.gehealthcare.com/siteplanning

GE does not take responsibility for any damages resulting from changes on drawings made by others. Errors may occur by not referring to the complete set of final issue drawing. GE cannot accept responsibility for any damage due to the partial use of GE final issue drawings, however caused. All dimensions are in millimeters unless otherwise specified. Do not scale from printed pdf files. GE accepts no responsibility for defective work due to scaling from these drawings.
Flux floor duct
Wall duct

Basic system

1 Electrical outlet 10/16A 230V + G
2 RJ 45 network socket

System remote control (Y), locked when power OFF "ON" and "OFF" impulse buttons with indicator lamps red=ON / green=OFF located at 1.50m above floor

System emergency off (SEO), (recommended height 1.50m-1.85m above floor)

System ON light (L) - 24V
X-Ray ON lamp (L1) - 24V

<table>
<thead>
<tr>
<th>ITEM</th>
<th>QTY</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td></td>
<td>Electrical outlet 10/16A 230V + G</td>
</tr>
<tr>
<td>2</td>
<td></td>
<td>RJ 45 network socket</td>
</tr>
<tr>
<td>1</td>
<td></td>
<td>System remote control (Y), locked when power OFF &quot;ON&quot; and &quot;OFF&quot; impulse buttons with indicator lamps red=ON / green=OFF located at 1.50m above floor</td>
</tr>
<tr>
<td>3</td>
<td></td>
<td>System emergency off (SEO), (recommended height 1.50m-1.85m above floor)</td>
</tr>
<tr>
<td>4</td>
<td></td>
<td>System ON light (L) - 24V</td>
</tr>
<tr>
<td>4</td>
<td></td>
<td>X-Ray ON lamp (L1) - 24V</td>
</tr>
</tbody>
</table>

Flush floor duct
Wall duct
FLOOR MOUNTING

WALLSTAND AT FOOT END WITH 180° TUBE ROTATION

- The supplied anchors require a minimum embedment of 55 mm (2.2 in) into the concrete. If the floor thickness is less than 75 mm (3 in), it is recommended that the unit be secured using a through-bolt method with a reinforcement plate on the back side.
- The ground surface must be flat and leveled.
- Anchors supplied by GE.

SCALE 1:20

CABLE MANAGEMENT

FLUSH FLOOR DUCT

- waterproof joint
- removable cover

WALL DUCT

- Removable coverplate

NOT TO SCALE
**POWER REQUIREMENTS**

<table>
<thead>
<tr>
<th>POWER SUPPLY</th>
<th>3 PHASES+G 380/400/440/480V ±10%</th>
</tr>
</thead>
<tbody>
<tr>
<td>FREQUENCIES</td>
<td>50/60Hz ± 0.5Hz</td>
</tr>
<tr>
<td>MAXIMUM INPUT POWER</td>
<td>70 kVA</td>
</tr>
<tr>
<td>MAXIMUM LINE RESISTANCE</td>
<td>380V: 0.15 Ohm / 400V: 0.16 Ohm</td>
</tr>
<tr>
<td>PER 2 PHASES WIRES (Ohm)</td>
<td>440V: 0.20 Ohm / 480V: 0.24 Ohm</td>
</tr>
</tbody>
</table>

- TNC neutral point connection must not be used.
- Line supply should come into a power distribution box (PDB) containing the protective units and controls.
- The section of the supply cable should be calculated in accordance with its length and the maximum permissible voltage drops.
- There must be discrimination between supply cable protective device at the beginning of the installation (main low-voltage transformer side) and the protective devices in the PDB.

**SUPPLY CHARACTERISTICS**

- Power input must be separated from any others which may generate transients (elevators, air conditioning, radiology rooms equipped with high speed film changers...)
- All equipment (lighting, power outlets, etc...) installed with GE system components must be powered separately.

**GROUND SYSTEM**

- Equipotential: the equipotential link will be by means of an equipotential bar. This equipotential bar should be connected to the protective earth conductors in the ducts of the non GE cableways and to additional equipotential connections linking up all the conducting units in the rooms where GE units are located.

**CABLES**

- Power and cable installation must comply with the distribution diagram below.
- All cables must be isolated and flexible, cable color codes must comply with standards for electrical installation.
- Case PDB furnished by GE: The cables for signals and remote control (Y, SEO, L...) will go to PDB with a pigtail length of 1.5 m, and will be connected during installation. Each conductor will be identified and isolated (screw connector).

**CABLEWAYS**

The general rules for laying cableways should meet the conditions laid down in current standards and regulations, with regard to:
- Protecting cables against water (cableways should be waterproof)
- Protecting cables against abnormal temperatures (proximity to heating pipes or ducts)
- Protecting cables against temperature shocks
- Replacing cables (cableways should be large enough for cables to be replaced)
- Metal cableways should be grounded.

---

**POWER DISTRIBUTION**

- Main supply 3 phases
- Ground

![Diagram of Power Distribution Box (PDB)]

- **PDB** Power Distribution Box
- **Y** System remote-control locked when power OFF, "ON" and "OFF" impulse buttons with indicator lamps red=on / green=off
- **L** System ON light - 24V - Located near access doors
- **L1** X-Ray ON light - 24V - Located near access doors
- **SEO** Emergency OFF, near access doors
- **G** Generator cabinet

- **Cable SUPPLIED BY CUSTOMER**
- **Equipment SUPPLIED BY CUSTOMER**
- **Equipment SUPPLIED BY GE**
- **Equipment CAN BE ORDERED FROM GE**

---

**POWER REQUIREMENTS**

- **POWER SUPPLY**
  - 3 PHASES+G 380/400/440/480V ±10%
- **FREQUENCIES**
  - 50/60Hz ± 0.5Hz
- **MAXIMUM INPUT POWER** (0.1 sec max)
  - 70 kVA
- **MAXIMUM LINE RESISTANCE**
  - 380V: 0.15 Ohm / 400V: 0.16 Ohm
  - 440V: 0.20 Ohm / 480V: 0.24 Ohm

- **SUPPLY CHARACTERISTICS**
  - Power input must be separated from any others which may generate transients (elevators, air conditioning, radiology rooms equipped with high speed film changers...)
  - All equipment (lighting, power outlets, etc...) installed with GE system components must be powered separately.

- **GROUND SYSTEM**
  - Equipotential: the equipotential link will be by means of an equipotential bar. This equipotential bar should be connected to the protective earth conductors in the ducts of the non GE cableways and to additional equipotential connections linking up all the conducting units in the rooms where GE units are located.

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**CONNECTIVITY REQUIREMENTS**

Broadband Connections are necessary during the installation process and going forward to ensure full support from the Engineering Teams for the customers' system. Maximum performance and availability for the customers' system is maintained and closely monitored during the lifetime of the system. Proactive and reactive maintenance is available utilising the wide range of digital tools using the connectivity solutions listed below:

- Site-to-Site VPN/GE Solution
- Site-to-Site VPN/Customer Solution
- Connection through Dedicated Service Network
- Internet Access - connectivity for InSite 2.0

The requirements for these connectivity solutions are explained in the broadband solutions catalogue (separate document).

---

**TEMPERATURE AND HUMIDITY SPECIFICATIONS**

### IN-USE CONDITIONS

<table>
<thead>
<tr>
<th></th>
<th>EXAM ROOM</th>
<th>CONTROL ROOM</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Temperature</strong></td>
<td><strong>Min</strong></td>
<td><strong>Max</strong></td>
</tr>
<tr>
<td></td>
<td>10 °C [50 °F]</td>
<td>30 °C [86 °F]</td>
</tr>
<tr>
<td></td>
<td>10 °C [50 °F]</td>
<td>30 °C [86 °F]</td>
</tr>
<tr>
<td><strong>Temperature gradient</strong></td>
<td>&lt; 10°C/h [≤ 50°F/h]</td>
<td>&lt; 10°C/h [≤ 50°F/h]</td>
</tr>
<tr>
<td><strong>Relative humidity (1)</strong></td>
<td>30% to 80%</td>
<td>30% to 80%</td>
</tr>
<tr>
<td><strong>Humidity gradient</strong></td>
<td>&lt; 30%/h</td>
<td>&lt; 30%/h</td>
</tr>
<tr>
<td><strong>System heat dissipation</strong></td>
<td>2.5 kW</td>
<td>3.3 kW</td>
</tr>
<tr>
<td></td>
<td>0.125 kW</td>
<td>0.175 kW</td>
</tr>
<tr>
<td></td>
<td>26 BTU/hr</td>
<td>39 BTU/hr</td>
</tr>
</tbody>
</table>

### STORAGE CONDITIONS

<table>
<thead>
<tr>
<th></th>
<th><strong>Min</strong></th>
<th><strong>Max</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Temperature</strong></td>
<td>0 °C [32 °F] to 50 °C [122 °F]</td>
<td></td>
</tr>
<tr>
<td><strong>Relative humidity (1)</strong></td>
<td>10% to 90%</td>
<td></td>
</tr>
<tr>
<td><strong>Temperature gradient</strong></td>
<td>&lt; 20°C/h [≤ 68°F/h]</td>
<td></td>
</tr>
<tr>
<td><strong>Humidity gradient</strong></td>
<td>&lt; 30%/h</td>
<td></td>
</tr>
</tbody>
</table>

Material should not be stored for more than 90 days.

(1) non-condensing

**AIR RENEWAL**

According to local standards.

**NOTE**

In case of using air conditioning systems that have a risk of water leakage it is recommended not to install it above electric equipment or to take measures to protect the equipment from dropping water.

---

**ENVIRONMENTAL SPECIFICATIONS**

### MAGNETIC INTERFERENCE

To guarantee specified imaging performance:

X-ray tubes and control console equipment must be located in ambient static field of less than 10 Gauss.

### ACOUSTIC OUTPUT

Measured 1 m [3.28 ft] from any point in system.

- In-use: less than 60 dBA
- Stand-by: less than 55 dBA
INTEGRATED TABLE

FRONT VIEW

SCALE 1:20

INTEGRATED TABLE WITH WALL STAND

FRONT VIEW

SCALE 1:20

EXAM ROOM CLEARANCE AREAS

A: SERVICE AREA: The least area to allow you to pull the table top out

B: SERVICE AREA: The least area to allow you to draw the table top out to open a service area for detector housing

C: AREA to ensure the SID 1 m [3.28 ft]

D: SERVICE AREA

E: SERVICE AREA: Used to allow the PDU pull out

F: SERVICE AREA

G: OPERATION AREA: Used when tube rotates 180 degree

Note: if the WS is on the left side, areas A and B will be on the right side

SCALE 1:50
THE CUSTOMER/CONTRACTOR SHOULD:

- Provide an area adjacent to the installation site for delivery and unloading of the GE equipment.
- Ensure that the dimensions of all doors, corridors, ceiling heights are sufficient to accommodate the movement of GE equipment from the delivery area into the definitive installation room.
- Ensure that access routes for equipment will accommodate the weights of the equipment and any transportation, lifting and rigging equipment.
- Ensure that all necessary arrangements for stopping and unloading on public or private property not belonging to the customer have been made.

### DELIVERY

#### DIMENSIONS

<table>
<thead>
<tr>
<th></th>
<th>TABLE</th>
<th>COLUMN</th>
<th>WALL STAND</th>
<th>CONSOLE</th>
<th>DETECTOR</th>
</tr>
</thead>
<tbody>
<tr>
<td>LENGTH (mm)</td>
<td>2500</td>
<td>2300</td>
<td>2250</td>
<td>750</td>
<td>1020</td>
</tr>
<tr>
<td>WIDTH (mm)</td>
<td>1280</td>
<td>200</td>
<td>860</td>
<td>1000</td>
<td>800</td>
</tr>
<tr>
<td>HEIGHT (mm)</td>
<td>1200</td>
<td>370</td>
<td>610</td>
<td>1150</td>
<td>440</td>
</tr>
<tr>
<td>WEIGHT (kg)</td>
<td>650</td>
<td>215</td>
<td>250</td>
<td>70</td>
<td>40</td>
</tr>
</tbody>
</table>

| LENGTH (in) | 98.4 | 90.6 | 88.6 | 29.5 | 40.2 |
| WIDTH (in)  | 50.4 | 7.9  | 33.9 | 39.4 | 31.5 |
| HEIGHT (in) | 47.2 | 14.6 | 24.0 | 45.3 | 17.3 |
| WEIGHT (lb) | 1433 | 474  | 551 | 154 | 88 |
GENERAL SPECIFICATIONS

- GE is not responsible for the installation of developers and associated equipment, lighting, cassette trays and protective screens or derivatives not mentioned in the order.
- The final study contains recommendations for the location of GE equipment and associated devices, electrical wiring and room arrangements. When preparing the study, every effort has been made to consider every aspect of the actual equipment expected to be installed.
- The layout of the equipment offered by GE, the dimensions given for the premises, the details provided for the pre-installation work and electrical power supply are given according to the information noted during on-site study and the wishes expressed by the customer.
- The room dimensions used to create the equipment layout may originate from a previous layout and may not be accurate as they may not have been verified on site. GE cannot take any responsibility for errors due to the lack of information.
- Dimensions apply to finished surfaces of the room.
- Actual configuration may differ from options presented in some typical views or tables.
- If this set of drawings has been approved by the customer, any subsequent modification of the site must be subject to further investigation by GE about the feasibility of installing the equipment. Any reservations must be noted.
- The equipment layout indicates the placement and interconnection of the indicated equipment components. There may be local requirements that could impact the placement of these components. It remains the customer's responsibility to ensure that the site and final equipment placement complies with all applicable local requirements.
- All work required to install GE equipment must be carried out in compliance with the building regulations and the safety standards of legal force in the country concerned.
- These drawings are not to be used for actual construction purposes. The company cannot take responsibility for any damage resulting therefrom.

CUSTOMER RESPONSIBILITIES

- It is the responsibility of the customer to prepare the site in accordance with the specifications stated in the final study. A detailed site readiness checklist is provided by GE. It is the responsibility of the customer to ensure all requirements are fulfilled and that the site conforms to all specifications defined in the checklist and final study. The GE Project Manager of Installation (PMI) will work in cooperation with the customer to follow up and ensure that actions in the checklist are complete, and if necessary, will aid in the rescheduling of the delivery and installation date.
- Prior to installation, a structural engineer of record must ensure that the floor and ceiling is designed in such a way that the loads of the installed system can be securely borne and transferred. The layout of additional structural elements, dimensioning and the selection of appropriate installation methods are the sole responsibility of the structural engineer. Execution of load bearing structures supporting equipment on the ceiling, floor or walls are the customer’s responsibility.

RADIO-PROTECTION

- Suitable radiological protection must be determined by a qualified radiological physicist in conformance with local regulations. GE does not take responsibility for the specification or provision of radio-protection.

---

THE UNDERSIGNED, HEREBY CERTIFIES THAT I HAVE READ AND APPROVED THE PLANS IN THIS DOCUMENT.

<table>
<thead>
<tr>
<th>DATE</th>
<th>NAME</th>
<th>SIGNATURE</th>
</tr>
</thead>
</table>

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GLOBAL SITE READINESS CHECKLIST (DI)

---

DOCS 180966 Rev. 6

Customer Name: [Field]
PMI Name: [Field]
GON/SD Number: [Field]
Equipment: [Field]
Site Visit Date for SRC: [Field]

Customer supplied countertops where GE equipment will be installed are in place.

System power & grounding (PDB/MDP) is available as per GE specifications, installed at point of final connection and ready to use. Lock Out Tag Out is available.

Network outlets installed and computer network available and working.

Hospital IT/Connectivity contacts have been engaged and information has been added to Project management tool. (If Required)

Floor levelness/flatness is measured and within tolerance, and there are no visible defects per GEHC specifications. Floor Strength and thickness have been discussed with customer/contactor and they have confirmed GE requirements are met.

Customer supplied countertops where GE equipment will be installed are in place.

Specific for CT & X-ray

Doors and windows complete or scheduled to be installed. If applicable, radiation protection (shielding) finished & radioprotection regulatory approval for installation obtained.

PMI Signature: [Field]
Customer signature: [Field]
FS Signature: optional

---

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SITE NAME: BRIVO DRF

EN-RAD-TYP-BRIVO_DRF.DWG

Rev: A | Date: 09/09

Disclaimer: Site Readiness

09/09