INE SUPPLY MAXIMUM MOMENTARY POWER AVERAGE POWER FREQUENCIES 50/60Hz ± 0.5 Hz. VOLTAGES | POWER INPUT INE IMPEDANCE <0.040hm POWER REQUIREMENTS THREE-PHASE + GROUND 380V 400V 415V 440V 460V 480V ±6% 100 kVA 25 kVA POWER FACTOR . 0.85

00 350kg

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, equal to 2.9% max, of regulation for feeder size. There must be discrimination between supply cable protective material at the beginning of the installation (main low-voltage transformer side) and the protective devices in the PDB (circuit breaker Ith = 160A ,Imag= 1200A).

- SUPPLY CHARACTERISTICS
- wer input must be separate from any others which may generate transients levators, air conditioning, radiology rooms equipped with high speed film changers ...) requipment (lighting, power autlets, etc...) installed with GEMS system components must be wered separately.

- Maximum voltage variation at 90 kVA = 6% (including line impedance) Transients must be less than 1500V peak (on a 380V line). A record of power input disturbances over a continuous two—weeks period (prior to delivery) enables determination of the frequency and degree of these disturbances and can be used to ascertain the need to provide line conditioning equipment.

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 GEMS cableways and to additional equipotential connections linking up all the conducting units in the rooms where GEMS system units are located. The impedance of the earth bar should be less than or equal to 2 Ohms.

- Power and cable installation must comply with the distribution diagram below. All cables must be isolated and flexible of HO7RNF type, cable color cades must comply with standard for electrical installation.

 The cables from signalling and remote control (Y, AU, L...) will go to PDB with a pigtail length of and will be connected during installation. Each conductor will be identified and isolated. (screw connector)

(1) GC CT (2) GC PET (3) GC PET (SERVICE)

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)

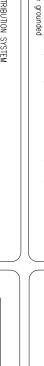
 protecting cables against abnormal temperatures (proximity to heating pipes or ducts)

 protecting cables against temperature shocks

 replacing cables (cableways should be large enough for cables to be replaced)

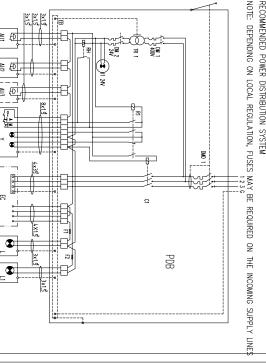
 metal cableways should be grounded

RECOMMENDED POWER DISTRIBUTION SYSTEM



POWER DISTRIBUTION BOX

DETAIL 3



POWER DISTRIBUTION BOX

PLASTIC VERTICAL -CABLE DUCT 150×100mm

EXISTING FLOOR
OPENING 400x200mm

CABLE TRAY

150x100 see DETAIL 4

Position to be defined

CM PDB DMD1 LOG OUT / TAG OUT DEVICE POWER DISTRIBUTION BOX FOR CT EQUIPMENT (NOT SUPPLIED BY GEMS, CAN BE ORDERED AS AN OPTION) DIFFERENTIAL THERMALMAGNETIC CIRCUIT BREAKER In=160A / Imag= 12/n±20% FOR 380V. DIFFERENTIAL 300m

- DM1 DM2 TR1 1 400V/24V TRANSFORMER. P= 250VA. THERMALMAGNETIC CIRCUIT BREAKER In= 1A. Imag= 12In±20%.
 THERMALMAGNETIC CIRCUIT BREAKER In= 6A 7In±20%.
- 24V TELLTALE LAMP 24V PILOT RELAY

DETAIL 4

CABLE TRAY

- RELAY WITH TEMPORARY CONTACT (200ms)

- C? 200A REMOTE CONTROLLED CONTAGTOR BY Y, 24V COIL

 Y REMOTE CONTROL LOCKED WHEN POWER OFF. "ON" AND "OFF" IMPULSE BUTTONS WITH INDICATOR

 LAME'S RED—IN! O GREEN-OFF LOCATED AT 1.50m ABOVE FLOOR.

 LAME'S LICHT LOCATED ABOVE THE MAIN ENTRANCE DOORS, INDICATES X-RAY GENERATION.

 L' 24V RED LIGHT, LOCATED ABOVE THE MAIN ENTRANCE DOORS, INDICATES X-RAY GENERATION.

 L' 1 CAY RED LIGHT, LOCATED ABOVE THE MAIN ENTRANCE DOORS POSITIONED 1.50m ABOVE

 AUT-2-3 "BREAK THE CLASS." THE EMERGENY STOP, DOUBLE CONTACTS POSITIONED 1.50m ABOVE

 THE FLOOR NEAR THE ACCESS DOORS SUPPLIED BY 24V.OLANTITY: TO REFER STRUCTURAL LAYOUT.

 EB EQUIPOTENTIAL BAR LINKING ALL CONDUCTORS IN ROOMS WHERE SYSTEM COMPONENTS ARE LIOCATED.

POWER DISTRIBUTION UNIT: CABLES INLET ON SKIRTING BOARD WITH 2m EXTRA LENGTH.

150x100mm CABLE TRAY UNDER THE FLOOR

EXISTING FLOOR OPENING 400x200

PLASTIC VERTICAL CABLE
- FROM FLOOR TO PDB
200x100 see DETAL 3

(\(\)) SUPPLIED BY THE KIT B7999PW.

NOTE: UNINTERRUPTIBLE 12 KVA SEE ON POWERWARE REF::9150

PDU



BUILDING REQUIREMENT The recommended height from finished floor to ceiling in examination room is 2600mm The minimum ceiling height is 2500mm from finished floor. The minimum height from finished floor to ceiling in the control room to be 2400mm. All adoors to & within the DISCOVERY SI suite hove to have a minimum height of 2020mm to allow for DISCOVERY SI equipment access.

ARRIVEE DES CABLES PAR 2 CAROTTAGES #100mm

- RECOMMENDED CONFIGURATION

- 2 ALTERNATIVE CONFIGURATION

 TILE_SERVED.

 A declared phone line (34600 Bouds) used only for the connection to a modern must be located at 1 meter maximum from the operator console DC1

 Time line will be a direct standard phone line or will go through a PABX switch board with automatic call distributor.(ACD)

 TILEPHONE

 It is advisable to have a telephone close to the operator console to be able to have an easy dialogue with the CEMS service engeneer. ALTERNATIVE CONFIGURATION
 -SERVICE
 licated bhone line (34600 ba...t.

Θ

1750kg

DELIVERY

- adjacent to the System site, for delivery and unloading

600kg

200	BED MINI	G2 MAXI	G2 MINI	G1 MAXI	G1 MINI	ITEM
	1130	2083	1989	2000	1880	HEIGHT
1000	2794	2769	2108	2810	2790	LENGTH HENGTH
050	950	1372	1016	1050	1050	(mm) HTDIW
3	500	1811	1397	2100	1900	WEIGHT (kg)

A dedicated phone ingramme, RAA5 sacket will be connected to an ISDN router installed in the technical room. I will be a digital phone line defined as follows: Bitk line (non ISDN bus) 2 channels/1 number 4 Aggregating is channels I norme calls identification Point to point Point or point Poin All doors of the DISCOVERY ST suite to be self-closing to ensure stability of the air conditioning system. Vinyl floor coverings in the DISCOVERY ST suite have to have anti-static properties. Sufficient cupboards, work-tops, shelving, etc. to be provided in the DISCOVERY ST suite for the storage of ancilliary equipment, and GEMS service manuals etc. INSITE

- THE CUSTOMER MUST:

 Provide an area, adjacent to the System site, for delivery and unloading of the GEMS equipment.

 ensure that the dimensions of all doors, corridors, ceiling heights, are sufficient to accommodate the movement of GEMS equipment from the delivery area to the specific rooms of the site.

 ensure that the access route will accommodate the weights of the equipment and any transportation, lifting and rigging equipment,

 if the parking and dock facilities are on property wich does not belong to the customer, ensure that all necessary steps have been taken to ensure their temporary use by GEMS.

 GANTRY OVER ALL DIMENSIONS

 (the bigger system sub-assembly)

	BED MAXI	BED MINI	G2 MAXI	G2 MINI	G1 MAXI	G1 MINI	
	1130	1130	2083	1989	2000	1880	(mm)
	3099	2794	2769	2108	2810	2790	(mm)
	950	950	1372	1016	1050	1050	(mm)
	600	500	1811	1397	2100	1900	(kg)
ı							

Dimensions of SCALE 1/20

are in mm

REQUIREMENTS. TEMPERATURE AND HUMIDITY SPECIFICATIONS

invironmental conditions must ensure patient and operator comfort and must be naintained within the range below:

- TEMPERATURE
 . Examination and control room.....
 . Electronics room.....
- RELATIVE HUMIDITY
 . Examination and control room.
 . Electronics room..... 20° to 24°C. 18° to 22°C. 3°C/hr max.

- RENEWING AIR

 . <u>AIR QUALITY</u>: The HVAC system should be designed to provide 5 air changes per hour to maintain adequate air quality and temperature.
- CONTROL OF AIRBORNE RADIATION: Escaped gases and exhaled radioactive carbon dioxides should not be allowed to enter active air conditioning systems. It may be necessary to install radiation detectors in duct work that can be used to stop any blower motors wich could transport radiation to active ducts.

ENVIRONMENTAL CONDITIONS

- ALTITUDE
 System operating do not exceed 2400 m above sea level.
- MAGNETIC INTERFERENCE SPECIFICATIONS: Gantry: Ambient static magnetic fields less than 1 Gauss Ambient AC magnetic fields less than 0.01 Gauss peak in range of 50/60Hz
- Electronics cabinets : Aambient static magnetic fields less than 10 Gauss Operator console : Ambient static magnetic fields less than 0.5 Gauss
- RADIATION PROTECTION Background radiation should be kept to a minimum. Radioactive sources must be kept in shielded containers and the examination room shielded from external sources.
- Electrostatic discharge is know to cause severe damage to sophisticated elctronics Static charges associated with lower humidity levels may interfere with system operation

THERMIC SHOCK

Do not place any DISCOVERY ST gantry near registers or A/C outlets, windows or other devices might vary air around the Gantry.

\exists B SUPPLIED AND INSTALLED BY THE CUSTOMER

PRELIMINARY INFORMATION

THE FOLLOWING DRAWING ARE CONTAINED IN THIS FILE:

STRUCTURAL, ELECTRICAL AND ENVIRONMENTAL PLAN

ERRORS MAY OCCUR BY NOT REFERING TO THE COMPLETE SET OF FINAL ISSUE DRAWING. GEMS CANNOT ACCEPT RESPONSABILITY FOR ANY DAMAGE DUE TO THE PARTIAL USE GEMS CANNOT ACCEPT RESPONSABILITY FOR ANY DAMAGE DUE TO THE PARTIAL USE OF GEMS FINAL ISSUE DRAWINGS, HOWEVER CAUSED.

001 RPM

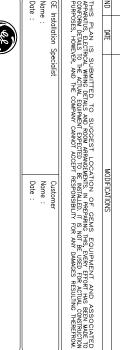
 $\stackrel{\text{AW}}{\vee}$

PLASTIC HORIZONTAL under the desk

THS	IND		
Z Z Z	DATE		
Ö			
SUBMITTED			
70			
SUGGEST	MODIFIC		
LOCATION			
유	ğ		
GEMS	S		
EQUIPMENT			
P N D			
PLAN IS SUBMITTED TO SUGGEST LOCATION OF GEMS EQUIPMENT AND ASSOCIATED			
			L









MANAGEMENT SERVICES

Discovery ST

HUNGARY SZEGED STRUCTURAL, ELECTRICAL AND ENVIRONMENTAL PLAN FINAL STUDY S P

Diagnoscan Magyarország SCALE 1/50 Gy.Tóth Sági A.Gyurasz 3.0 m S.0. ST4PETCT.02.02 | PEV |

DISCO_ST REV 1 19/05/03