

Pharmacy Refrigerator DIN 13277 Advance Line

Modelo · Model

MPRA 450 S

Ref.

800904V1400

EAN

5601359904145

HSCODE

84185019



W 600
D 700
H 1875



416



93



+2/+8

Descrição

Equipamento desenvolvido para utilização em farmácia para conservação de fármacos e vacinas, de acordo com a normativa DIN 13277.

Excelente estabilidade, uniformidade e precisão de temperatura, garantida através do isolamento de 50 mm em poliuretano Base Água, sistema de refrigeração com frio ventilado e descongelação automática, bem como uma rápida recuperação de temperatura após abertura de porta. O setpoint definido de fábrica é de +5°C, podendo facilmente ser ajustado no intervalo entre +2°C a +8°C. O interior e exterior em chapa especial plastificada evita o aparecimento de corrosão com a utilização.

De série com fechadura para evitar acessos indevidos, 5 prateleiras amovíveis em aço plastificado para evitar corrosão e cesto no fundo, porta opaca reversível com retorno automático à posição de fechada, iluminação led, puxador de design ergonômico e fácil limpeza, e 4 deslizadores com dois pés niveladores para fácil movimentação do equipamento.

Title Pres.

Equipment developed for use in pharmacy, for the conservation of drugs and vaccines, in accordance with normative DIN 13277.

Excellent stability, uniformity and temperature accuracy, guaranteed through the 50 mm water-based polyurethane insulation, refrigeration system with ventilated cold and automatic defrosting, as well as a quick temperature recovery after opening the door. The factory setpoint is +5°C, which can easily be adjusted in the range between +2°C and +8°C. The interior and exterior in special plasticized steel prevents the appearance of corrosion with use.

Standard with lock to prevent unauthorized access, 5 removable shelves in plastic coated steel to prevent corrosion and basket on bottom, reversible solid door with automatic return to the closed position, led lighting, handle with ergonomic design and easy cleaning, and 4 rollers with 2 levellers for easy equipment movement.

Características Advance line

Termostato Advance Advance Controller



Características

Fácil e intuitivo

Gestão simplificada do equipamento

Controlo preciso

Sonda NTC com precisão de 0,1 °C

Display interativo

Com bloqueio de teclado

Alarmes visíveis e sonoros

Temperatura alta
Temperatura baixa
Porta aberta
Falha na sonda
Falha de corrente

Teste de Alarmes

Verificação de funcionalidade dos alarmes

Termostato de segurança

Dupla segurança para evitar que a temperatura baixe dos +2°C

Relógio tempo real

Definição de ano, mês, hora, minutos e segundos para gravação de dados

Identificação de equipamento

Definição de número de série do equipamento no termostato para controlo de registos

Controlo de humidade (OPCIONAL)

Se ativo, permite monitorizar a humidade no interior do equipamento

Datalogger

Consulta de temperatura máxima/mínima e últimos alarmes no display.

Sonda de produto

Sonda adicional com simulador de massa, permitindo simular a temperatura do produto em qualquer parte do equipamento.

USB

Para download dos registos em ficheiro PDF, garantindo assim que os dados não podem ser mudados.

Registos

Registo gráfico e em tabela dos seguintes dados: Temperatura Sonda 1; Temperatura sonda 2 (simulador de massa); Alarmes; humidade (se ativa a função). *com leituras de 10 em 10 minutos e com capacidade para 2 anos de dados.

Bateria

Em caso de falha de energia. Com capacidade para manter alarmes e registos ativos por um período até 26 horas.

Saída Alarme remoto e RS 485

Contacto livre de potencial para ligação aos alarmes externos e saída RS 485 para ligação a sistemas de gestão de edifícios.

Orifício para sonda externa

Diâmetro 12 mm para passagem de sonda de dispositivo de monitorização externo.

*Características técnicas e de construção sujeitas a variações sem aviso prévio.
Technical and construction features are subject to change without notice.*

Features

Easy and intuitive

Simplified equipment management

Precise control

NTC probe with a precision 0,1°C

Interactive Display

with keyboard lock.

Audible and visible alarms

High temperature
Low temperature
Open door
Probe failure
Power failure

Alarm Test

Test of the functionality of the alarms

Safety controller

Double safety to prevent the temperature from dropping from +2°C

Real time clock

Year, month, hour, minutes and seconds for data recording definition.

Equipment identification

Definition of the equipment serial number in the thermostat for register control.

Humidity control (OPTIONAL)

If active, it allows monitoring the humidity in the inside the equipment

Datalogger

Query maximum/minium temperatures and last alarms in display.

Product probe

Probe with mass simulator, allowing to simulate the product temperature in any part of the equipment.

USB

Records are downloaded as PDF file, thus ensuring that the data cannot be changed.

Records

Graphical and tabular record of the following data: Probe 1 Temperature; Temperature Probe 2 (mass simulator); Alarms; Humidity (if you activate the function). *with readings every 10 minutes and with a capacity for 2 years of data.

Battery

In case of power failure. Capable of keeping alarms and logs active for up to 26 hours.

Remote alarm output and RS 485

Tension free contact for connection to external alarms and RS 485 for connection to building management systems

Hole for external probe

Diameter 12 mm to pass the probe from external monitoring system

Características Advance line

Registo gerado pelo Termostato Advance · Data report generated by Advance controller

Dados do equipamento · Equipment data

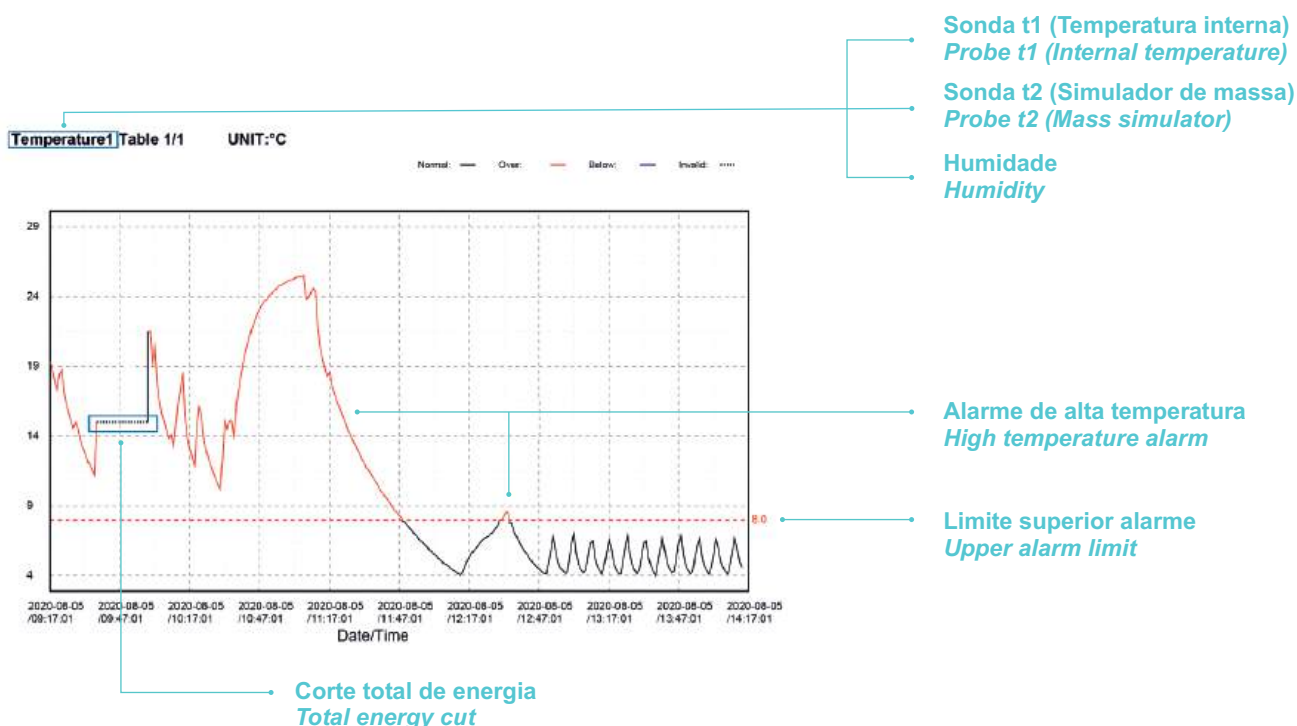
02	
01	ALARM File Created Date: 2020-08-05/14:14:21 Data Report
Device Information	
	Device Type: DR-830EN-Olitrem Storage: 85196 Device Version: V1.0
03	Device Number: 451
Record Information	
	Log Interval: 00d00h01m00s 04 Temperature Type: °C Probe Type: External
	Work Mode: Running Start Time: 2020-08-05/09:16:01 Data Points: 276
05	Temperature1 High Limit : 8.0°C
06	Temperature2 High Limit : 8.0°C
07	Humidity High Limit : 99.9 %RH
	Temperature1 Low Limit : 2.0°C Temperature Low Limit : 2.0°C Humidity Low Limit : 0.0 %RH
Temperature1 Information	
08	Alarm: Yes Max: 25.5°C Min: 4.0°C
Temperature2 Information	
09	Alarm: Yes Max: 21.7°C Min: 2.4°C
Humidity Information	
10	Alarm: No Max: 79.7 %RH Min: 27.7 %RH

- | | |
|---|---|
| 01 Vermelho - Registo com alarmes
Red - Log with alarms | 06 Limite superior e inferior de temperatura Sonda t2
Upper and lower temperature limit Probe t2 |
| 02 Verde - Não foram registados alarmes
Green - No alarms were logged | 07 Limite superior e inferior de humidade relativa
Upper and lower relative humidity limit |
| 03 Número de série
Serial number | 08 Existência de Alarme t1
Existence of Alarm t1 |
| 04 Tempo de recolha de dados
Data collection time | 09 Existência de Alarme t2
Existence of Alarm t2 |
| 05 Limite superior e inferior de temperatura Sonda t1
Upper and lower temperature limit Probe t1 | 10 Existência de Alarme Humidade
Existence of Alarm Humidity |

Características Advance line

Registo gerado pelo Termostato Advance · Data report generated by Advance controller

3 Gráficos gerados · 3 Generated graphics



Dados recolhidos · Collected data

Sonda t1
Probe t1

Sonda t2
Probe t2

Código Alarme
Alarm codes

Date	Time	°C	%RH	code	Date	Time	°C	%RH	code	Date	Time	°C	%RH	code		
2020-06-05	05:07:17	19.3	21.7	33.4	H1	2020-08-05	11:19:01	17.1	17.2	32.6	H1	2020-08-05	12:59:01	4.2	3.6	31.1
2020-06-05	05:06:19	16.8	21.5	37.1	H1	2020-08-05	11:20:01	16.6	16.9	31.6	H1	2020-08-05	13:00:01	5.2	3.6	32.1
2020-06-05	05:06:21	16.0	21.2	31.5	H1	2020-08-05	11:21:01	16.2	16.6	30.6	H1	2020-08-05	13:01:01	6.3	3.9	32.9
2020-06-05	05:06:23	17.3	21.0	30.1	H1	2020-08-05	11:22:01	15.7	16.4	29.7	H1	2020-08-05	13:02:01	7.0	4.0	35.0
2020-06-05	05:06:25	18.4	20.8	63.9	H1	2020-08-05	11:23:01	15.3	16.1	28.7	H1	2020-08-05	13:03:01	5.5	4.0	35.6
2020-06-05	05:06:27	16.8	20.6	50.2	H1	2020-08-05	11:24:01	14.9	15.9	29.2	H1	2020-08-05	13:04:01	4.6	3.9	33.1
2020-06-05	05:06:29	17.1	20.5	35.8	H1	2020-08-05	11:25:01	14.4	15.6	27.9	H1	2020-08-05	13:05:01	4.4	3.6	31.6
2020-06-05	05:06:31	16.3	20.4	31.6	H1	2020-08-05	11:26:01	14.1	15.3	27.7	H1	2020-08-05	13:06:01	4.2	3.6	30.8
2020-06-05	05:06:33	15.7	20.1	29.8	H1	2020-08-05	11:27:01	13.7	15.1	27.8	H1	2020-08-05	13:07:01	4.4	3.5	31.1
2020-06-05	05:06:35	14.6	19.6	28.2	H1	2020-08-05	11:28:01	13.4	14.9	27.8	H1	2020-08-05	13:08:01	5.3	3.6	31.8
2020-06-05	05:06:37	15.0	19.4	63.9	H1	2020-08-05	11:29:01	13.0	14.6	27.9	H1	2020-08-05	13:09:01	6.3	3.6	32.7
2020-06-05	05:06:39	13.7	19.0	32.6	H1	2020-08-05	11:30:01	12.7	14.4	27.9	H1	2020-08-05	13:10:01	6.5	3.7	35.9
2020-06-05	05:06:41	12.2	18.7	30.3	H1	2020-08-05	11:31:01	12.3	14.1	27.9	H1	2020-08-05	13:11:01	5.3	3.7	34.5
2020-06-05	05:06:43	12.8	18.5	29.2	H1	2020-08-05	11:32:01	12.1	13.9	27.9	H1	2020-08-05	13:12:01	4.7	3.6	32.1
2020-06-05	05:06:45	12.3	18.3	28.6	H1	2020-08-05	11:33:01	11.7	13.7	28.0	H1	2020-08-05	13:13:01	4.4	3.5	30.8
2020-06-05	05:06:47	12.0	18.1	28.4	H1	2020-08-05	11:34:01	11.5	13.5	28.0	H1	2020-08-05	13:14:01	4.1	3.4	29.9
2020-06-05	05:06:49	11.6	17.8	28.5	H1	2020-08-05	11:35:01	11.2	13.3	28.1	H1	2020-08-05	13:15:01	4.7	3.3	30.6
2020-06-05	05:06:51	11.2	17.6	28.5	PF	2020-08-05	11:36:01	10.9	13.0	28.1	H1	2020-08-05	13:16:01	5.6	3.3	31.2
2020-06-05	05:06:53	10.4	16.8	28.5	PF	2020-08-05	11:37:01	10.7	12.9	28.1	H1	2020-08-05	13:17:01	6.6	3.4	32.2
2020-06-05	05:06:55	10.4	16.8	28.5	PF	2020-08-05	11:38:01	10.4	12.6	28.1	H1	2020-08-05	13:18:01	6.0	3.5	35.3
2020-06-05	05:06:57	10.4	16.8	28.5	PF	2020-08-05	11:39:01	10.1	12.4	28.2	H1	2020-08-05	13:19:01	5.0	3.4	33.2
2020-06-05	05:06:59	10.4	16.8	28.5	PF	2020-08-05	11:40:01	9.9	12.2	28.1	H1	2020-08-05	13:20:01	4.5	3.3	31.0
2020-06-05	05:07:01	10.4	16.8	28.5	PF	2020-08-05	11:41:01	9.6	12.0	28.2	H1	2020-08-05	13:21:01	4.2	3.2	30.1
2020-06-05	05:07:03	10.4	16.8	28.5	PF	2020-08-05	11:42:01	9.4	11.8	28.2	H1	2020-08-05	13:22:01	4.1	3.1	29.8
2020-06-05	05:07:05	10.4	16.8	28.5	PF	2020-08-05	11:43:01	9.2	11.5	28.2	H1	2020-08-05	13:23:01	6.0	3.1	30.4
2020-06-05	05:07:07	10.4	16.8	28.5	PF	2020-08-05	11:44:01	8.9	11.4	28.3	H1	2020-08-05	13:24:01	6.0	3.2	31.4
2020-06-05	05:07:09	10.4	16.8	28.5	PF	2020-08-05	11:45:01	8.7	11.2	28.3	H1	2020-08-05	13:25:01	6.9	3.2	33.0
2020-06-05	05:07:11	10.4	16.8	28.5	PF	2020-08-05	11:46:01	8.5	11.0	28.2	H1	2020-08-05	13:26:01	6.6	3.3	34.7
2020-06-05	05:07:13	10.4	16.8	28.5	PF	2020-08-05	11:47:01	8.3	10.7	28.2	H1	2020-08-05	13:27:01	4.8	3.2	32.2
2020-06-05	05:07:15	10.4	16.8	28.5	PF	2020-08-05	11:48:01	8.1	10.6	28.3	H1	2020-08-05	13:28:01	4.4	3.1	30.3
2020-06-05	05:07:17	14.1	16.5	39.4	H1	2020-08-05	11:49:01	7.9	10.4	28.4	H1	2020-08-05	13:29:01	4.1	3.0	29.5
2020-06-05	05:07:19	14.1	16.5	39.4	H1	2020-08-05	11:50:01	7.7	10.2	28.2	H1	2020-08-05	13:30:01	4.4	2.9	29.7
2020-06-05	05:07:21	13.3	16.3	33.1	H1	2020-08-05	11:51:01	7.5	10.0	28.1	H1	2020-08-05	13:31:01	5.3	2.9	30.3
2020-06-05	05:07:23	13.3	16.3	33.1	H1	2020-08-05	11:52:01	7.3	9.8	28.1	H1	2020-08-05	13:32:01	6.3	3.0	31.2
2020-06-05	05:07:25	16.4	16.5	73.6	90	2020-08-05	11:53:01	7.1	9.6	28.1	H1	2020-08-05	13:33:01	6.5	3.1	34.2
2020-06-05	05:07:27	14.7	16.7	73.1	90	2020-08-05	11:54:01	6.9	9.4	28.2	H1	2020-08-05	13:34:01	6.3	3.1	33.6
2020-06-05	05:07:29	14.7	16.7	73.1	90	2020-08-05	11:55:01	6.7	9.2	28.3	H1	2020-08-05	13:35:01	4.7	3.0	31.2
2020-06-05	05:07:31	14.7	16.7	73.1	90	2020-08-05	11:56:01	6.5	9.0	28.4	H1	2020-08-05	13:36:01	4.3	2.9	29.8
2020-06-05	05:07:33	13.9	16.4	40.0	H1	2020-08-05	11:57:01	6.3	8.8	28.3	H1	2020-08-05	13:37:01	4.0	2.8	29.2
2020-06-05	05:07:35	12.5	15.7	33.9	H1	2020-08-05	11:58:01	6.2	8.6	28.3	H1	2020-08-05	13:38:01	4.9	2.8	29.9

ALARM CODES

LoF	- data logger (must be restarted)
H1	- high temperature (red)
L1	- low temperature (blue)
E1	- probe t1 interior failure
E2	- product t2 probe failure
E3	- defrost probe T3 failure
E4	- humidity probe failure
EE	- display connection failure
EE	- data logger connection failure
on	- PENDRIVE inserted
End	- data logging finished
do	- open door
PF	- energy failure
BL	- dead battery
EB	- battery connection failure

Pharmacy Refrigerator DIN 13277

Advance Line

Modelo · Model

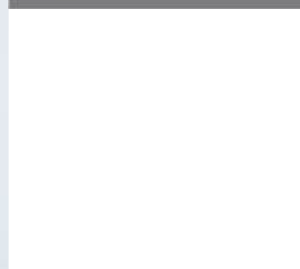
MPRA 450 S

Ref.

800904V1400

Características · Characteristics

- 01 Termostato Linha Advance
Advance Line controller
- 02 Furo para sonda externa
Hole for external probe
- 03 Cesto para interior
Internal basket
- 04 Sonda adicional para produto
(simulador de massa)
*Additional probe for product temperature
(mass simulator)*
- 05 Gavetas para Séries 150 / 350 / 450
Sliding drawers for Series 150 / 350 / 450
- 06 USB para retirar dados
USB port for data
- 07 Alarme remoto e Termostato de segurança
Remote alarm and Safety controller



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Características Técnicas

Technical Features

Largura interior	Internal width	480 mm
Profundidade interior	Internal depth	500 mm
Altura interior	Internal height	1724 mm
Isolamento	Insulation	50 mm
Tipo de isolamento	Insulation type	Poliuretano de alta densidade com base de água 42Kg/m³ High density water base polyurethane 42Kg/m³
Volume bruto	Gross volume	416 Lts
Volume líquido	Liquid volume	361 Lts
Peso líquido	Net weight	93 Kg
Peso com embalagem	Weight with packaging	103 Kg
Material interior	Interior material	Chapa Plástica Branca (Skinplate) White Coated Steel
Material exterior	Exterior material	Chapa Plástica Branca (Skinplate) White Coated Steel
Material traseiro	Back material	Poliestireno de Alta densidade High Density Polystyrene
Prateleiras	Shelves	5x(475x470) em Aço Plástico + Cesto (455x350x200) 5x(475x470) in Plasticized Steel + Basket (455x350x200)
Peso max. / Prateleira	Max. weight / Shelves	18,3 Kg
Nº gavetas (Standart / Max)	Nº drawers (Standart / Max)	— / 14
Peso max. / Gaveta	Max. weight / Drawer	18,3 Kg
Material gaveta	Drawer material	Alumínio Aluminum
Tipo de rodas / Pés	Wheel type / Feet	4 Deslizadores + 2 Niveladores 4 Rollers + 2 Levelers
Porta	Door	☒ Opaca · Solid ☐ Vidro · Glass
Porta reversível	Reversible door	☒ SIM · YES ☐ NÃO · NO
Fechadura	Lock	☒ SIM · YES ☐ NÃO · NO
Descongelação	Defrost	☒ Automática · Automatic ☐ Manual · Manual
Condensador	Condenser	☐ Ventilado · Ventilated ☒ Estático · Static
Evaporador	Evaporator	☒ Ventilado · Ventilated ☐ Estático · Static
Iluminação	Lighting	☒ SIM · YES ☐ NÃO · NO
Buraco Sonda Externa	External probe hole	☒ SIM · YES ☐ NÃO · NO
Potência Potência Frigorífica	Power Cooling Capacity	210 W 337 W
Tensão Freq.	Tension Freq.	230V/50 Hz
Comprimento cabo de alimentação	Power supply length	2,5 m
Consumo	Consumption	877 Kwh/ano 877 Kwh/year
Nível de Ruído	Noise Level	< 50 dBa
Termostato	Controller	Digital ADVANCE
Gás	Gas	R600a
Carga de gás	Gas load	52 g

Características técnicas e de construção sujeitas a variações sem aviso prévio.
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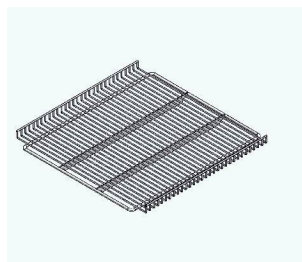
Modelo · Model

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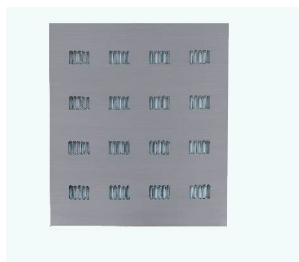
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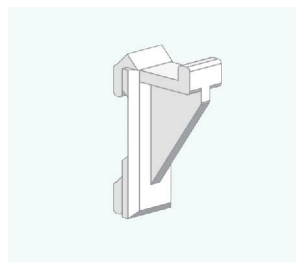
Acessórios · Accessories



Prateleira · Shelf
Cód. 007122



Prateleira Inox · Inox Shelf
Cód. 108666



Dental - Suporte Prateleira · Shelf Holder
Cód. 004042_002



Interior Inox · Inside Inox
Cód. 129045_2



Cesto · Basket
Cód. 003356_100



Kit Gaveta · Drawer Kit
Cód. 129043_1



Kit Separador Gaveta · Separator Drawer Kit
Cód. 129044



Embalagem Madeira · Wood Package

Design for precision

Pharmacy Refrigerator DIN 13277

Advance Line

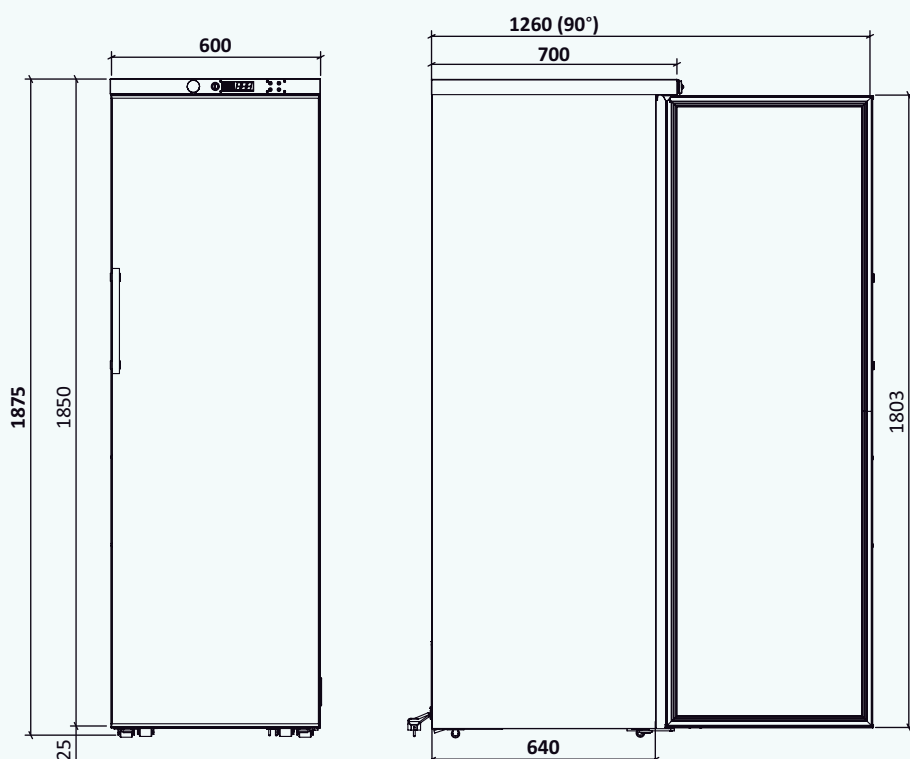
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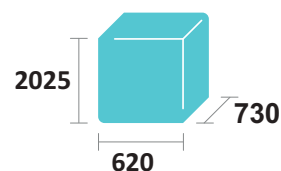
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Desenho Técnico · Technical Drawing

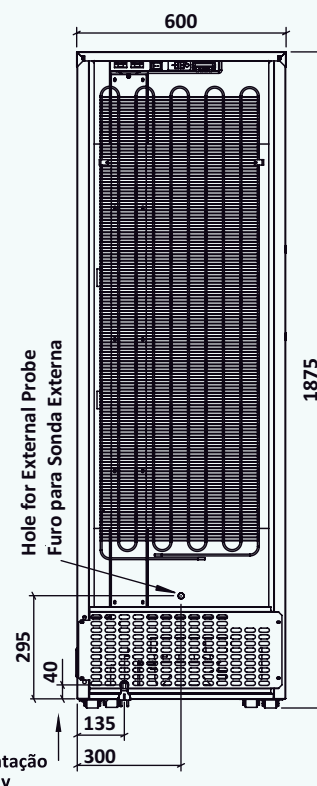
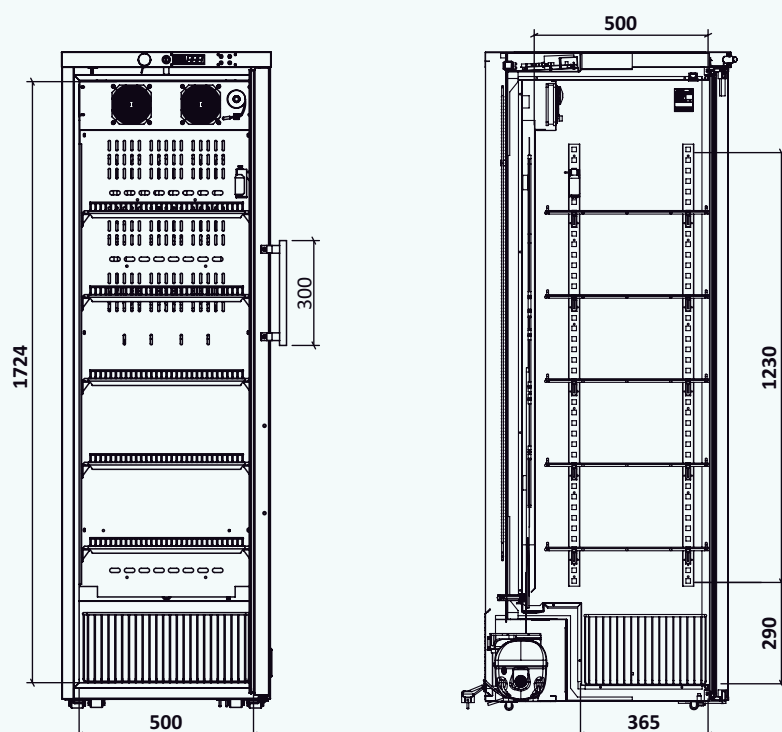


Dimensões embalagem (mm)
Package dimensions (mm)



Capacidade de Carga (unid)
Load Capacity (unit)

TIR	20"	40"
63	27	57



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Cabo Alimentação
Power Supply