

Cabinet Type **Multi deck Full Height**

Model Designation **HE**

File Reference **HE-WC HC-2090**

Document Issue 1 01/04/2021 IP Provisional Data

cabinet **TECHNICAL DATA**



RETAIL EQUIPMENT LTD

Cabinet Type	Multi deck Full Height
Model Designation	HE
File Reference	HE-WC HC-2090

Contents

Technical Data -HFC Refrigerant	✓
Commissioning Data	✓
Section and Plan	✓

Carter Retail Equipment Contacts

Web Site:- www.cre-ltd.co.uk

Online Document *QR code link to this document?*

Main Office Tel :- 0121 250 1000
Email :- info@cre-ltd.co.uk

Cabinet Sales Enquiry Tel :- 0121 250 1000
Email :- info@cre-ltd.co.uk

Spares Enquiry Tel :- 0121 250 1000
Email :- spares@cre-ltd.co.uk

Technical Enquiry Tel :- 0121 250 1128
Email :- info@cre-ltd.co.uk



Cabinet Type	Multi deck Full Height
Model Designation	HE
File Reference	HE-WC HC-2090

Product Type	Dairy 3M1	F & V 3H1
Product Temperature	+5/-1	+10/+1
Maximum Design Ambient	ISO 3 25°C / 60% RH	

Case Length [m]	3.75	2.50	1.88	1.25			
------------------------	-------------	-------------	-------------	-------------	--	--	--

Engineering Data							
Total Heat Rejection KW	9.13	6.39	4.56	3.20			
Total Heat Rejection Fluid KW	8.47	5.73	4.23	2.87			
Total Heat Rejection Air KW	0.660	0.660	0.330	0.330			
DTX Glycol 15% Flow Rate [l/s]**	0.349	0.236	0.174	0.118			
Nett Environment Cooling Effect kW	0.12	0.08	0.05	0.04			
Refrigerant Used	R1270	R1270	R1270	R1270			
Refrigerant Charge grams ea	600	400	600	400			
Refrigerant GWP	3	3	3	3			
Max Fluid Supply Temperature*	40°C						
Max Fluid Return Temperature*	46°C						
Plate Heat Exchanger PD Kpa	12.0	10.0	3.8	5.8			

* Maximum water TD is 6K

**Flow rates calculated using a value of 4.0425 KJ/Kg K will differ with alternative Glycol specifications

Case Length [m]	3.75	2.50	1.88	1.25			
Pressure Ratings							
Refrigerant Liquid Side Pressure Rating	25 Bar		Refrigerant Low Side Pressure Rating		25 Bar		
Fluid Pressure Rating	12 Bar						

Case Length [m]	3.75	2.50	1.88	1.25			
Miscellaneous Data							
Refrigeration Connections	Integral						
Fluid Connection Size	22mm		Fluid Connection Type		Copper		
Electrical Connection (Default Standard)	Top of Cabinet LHS		230V 50 Hz		Terminals		
Drainage Connection	1 Off Central				Gravity		
Condensate Volume ISO 3 Ltr per 24hr							
Cabinet Weight	TBC	TBC	TBC				
Max STD shelf loading	160 Kg/m2		Max Stiffened shelf loading		180 Kg/m2		
Standard number of shelves per bay	5		Angle Options (Typical as Standard)		0° / 10°		

[Return to Contents](#)



Cabinet Type **Multi deck Full Height**
Model Designation **HE**
File Reference **HE-WC HC-2090**

Product Type Dairy 3M1 F & V 3H1
Product Temperature +5/-1 +10/+1
Maximum Design Ambient ISO 3 25°C / 60% RH

Case Length [m]	3.75	2.50	1.88	1.25			
Electrical Data (@ 230V 50Hz)	Watts	Watts	Watts	Watts			
Condensing Unit	2415	1874	1211	937			
Lights Canopy/Frame	40	32	22	16			
Fans	72	48	32	24			
Controller + Sol/Liq	10	10	10	10			
Maximum Load – Refrigeration	2537	1964	1275	987			

Electrical Data (@ 230V 50Hz)	Amps	Amps	Amps	Amps			
Condensing Unit	10.50	8.15	5.27	4.07			
Lights Canopy/Frame	0.17	0.14	0.10	0.07			
Fans	0.31	0.21	0.14	0.10			
Controller + Sol/Liq	0.04	0.04	0.04	0.04			
Maximum Load – Refrigeration	11.03	8.54	5.54	4.29			

Energy Data*							
Case Length [m]	3.75	2.50	1.88	1.25			
DEC	60.41	46.75	30.34	23.50			
HREC**	2.32	1.52	0.93	0.61			
TEC	62.73	48.27	31.26	24.11			
TDA	7.65	5.10	3.83	2.55			
TEC/TDA	8.20	9.46	8.17	9.45			
Annual Energy	22896	17618	11411	8799			
EEI Rating %	63%	69%	56%	59%			
ECO Design Rating	E	F	E	E			

*Energy data base on 30/36 °C with 40% Glycol Mix.

**HREC calculated using proposed ISO 23953 calculations

[Return to Contents](#)

Cabinet Type

Multideck Full Height Chilled Air

Model Designation

HE

File Reference

HE-WC HC-2090

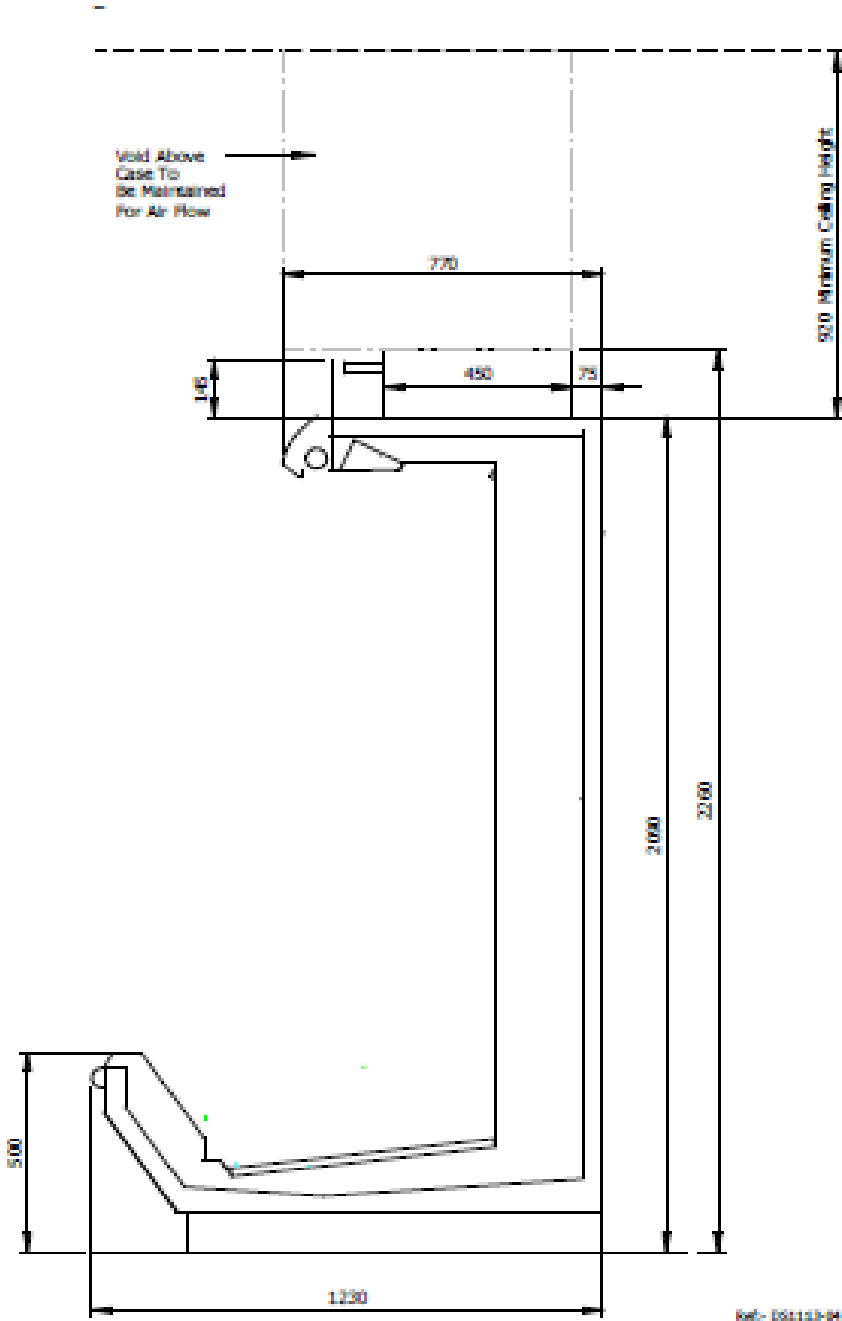
Set Up Data**	Dairy	Produce
Cut In Temperature °C	4	5
Cut Out Temperature °C	2	4
Cabinet Temp ratio (% Air Off)	60	60
No Defrost in 24hrs	8	8
Max Defrost Duration (Mins)	45	45
Defrost Termination Temp C (Case Air Off)	8	8
Drain Down Time (Mins)	1	1
Fans in Defrost	On	On
Anti Cycle Time [Seconds]	180	180
Lag Comp Delay [Seconds]	180	180
Integral Control	Basic	Basic

** Set up data for guidance only. Final settings to be determined by commissioning personnel

[Return to Contents](#)

Section Drawing

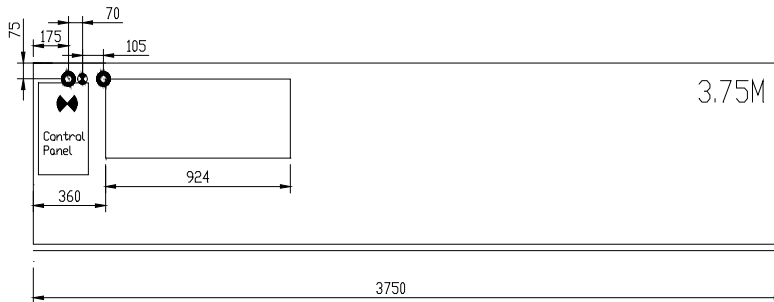
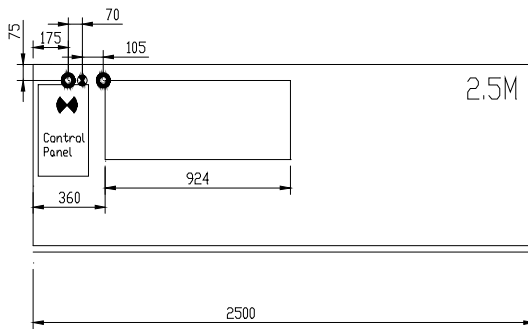
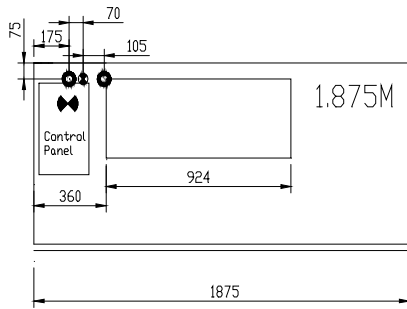
HE-WC HC-2090



[Return to Contents](#)

Plan Drawing-Top

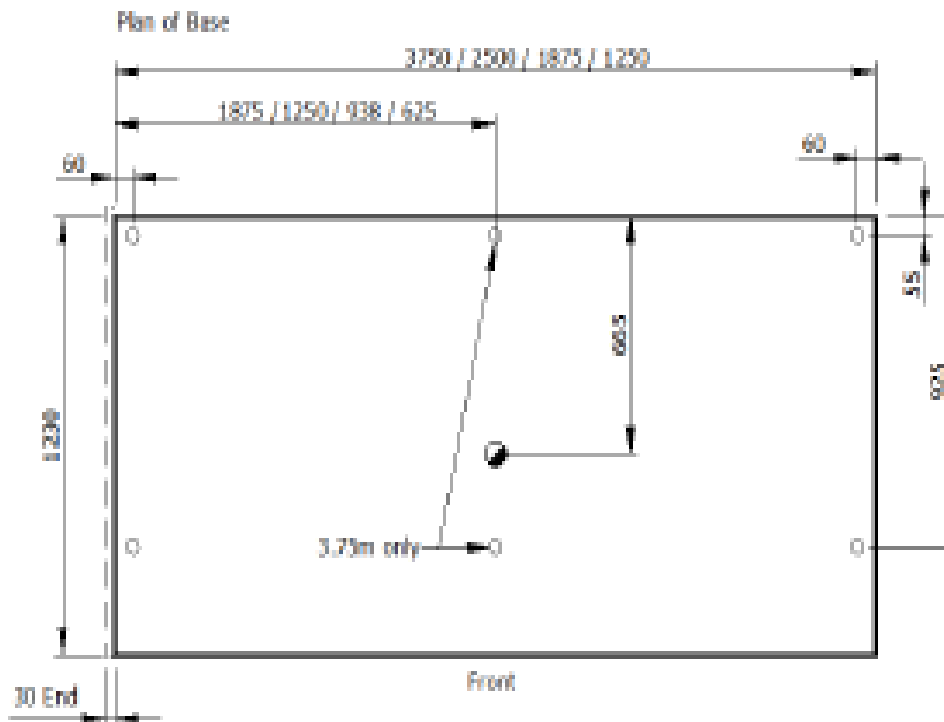
HE-WC HC-2090



Key

- Refrig Outlet
- ⊞ Mains Supply
- Foot Position
- Drain Outlet
- ⊞ Electrical Outlet

[Return to Contents](#)



Key

- ⊙ Refrig Outlet
- ⊕ Mains Supply
- ⊙ Foot Position
- Drain Outlet
- ⊗ Electrical Outlet

[Return to Contents](#)