



RETAIL EQUIPMENT LTD

Cabinet Type **Multi deck Full Height**

Model Designation **IDB**

File Reference **IDB-HC WC-2090**

Document Issue 1 17/08/2021 IP Issue 1

cabinet **TECHNICAL DATA**



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<a href="#">Technical Data -HC Refrigerant</a>	✓
<a href="#">Commissioning Data</a>	✓
<a href="#">Section and Plan</a>	✓

## Carter Retail Equipment Contacts

Web Site:- [www.cre-ltd.co.uk](http://www.cre-ltd.co.uk)

Online Document [https://www.cre-ltd.co.uk/idb\\_hc\\_wc\\_2090/](https://www.cre-ltd.co.uk/idb_hc_wc_2090/)

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

<b>Case Length [m]</b>	<b>3.75</b>	<b>2.50</b>	<b>1.88</b>	<b>1.25</b>			
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<b>Engineering Data</b>							
Total Heat Rejection KW	11.17	7.79	5.80	3.93			
Total Heat Rejection Fluid KW	10.51	7.13	5.47	3.60			
Total Heat Rejection Air KW	0.660	0.660	0.330	0.330			
DTX Glycol 27% Flow Rate [l/s]	0.476	0.323	0.248	0.163			
Nett Environment Cooling Effect kW	1.76	1.18	0.89	0.59			
Refrigerant Used	R1270	R1270	R1270	R1270			
Refrigerant Charge ea	650	430	650	470			
Refrigerant GWP	2	2	2	2			
Max Fluid Supply Temperature*	40°C						
Max Fluid Return Temperature*	46°C						
Plate Heat Exchanger PD Kpa	1.3	1.3	1.3	1.3			

\* Maximum water TD is 6K

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

<b>Case Length [m]</b>	<b>3.75</b>	<b>2.50</b>	<b>1.88</b>	<b>1.25</b>			
<b>Pressure Ratings</b>							
Refrigerant Liquid Side Pressure Rating	25 Bar		Refrigerant Suction Side Pressure Rating		25 Bar		
Fluid Pressure Rating	12 Bar						

<b>Case Length [m]</b>	<b>3.75</b>	<b>2.50</b>	<b>1.88</b>	<b>1.25</b>			
<b>Miscellaneous Data</b>							
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 L/H Side				Gravity		
Condensate Volume ISO 3 Ltr per 24hr							
Cabinet Weight	TBC	TBC	TBC				
Max STD shelf loading	N/A		Max Stiffened shelf loading		180 Kg/m2		
Standard number of shelves per bay	5		Angle Options (Typical as Standard)		0° / 10°		

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Product Type                      Dairy 3M1  
Product Temperature                      +5/-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		Watts	Watts
Lights Canopy/Frame	114	76	57	38			
Fans	42	28	21	14			
Controller + Sol/Liq	10	10	10	10			
Defrost	0	0	0	0			
Trims Frame	0	0	0	0			
Trims Other	0	0	0	0			
Plinth/Ambient Fans	0	0	0	0			
<b>Maximum Load – Off Cycle Defrost</b>	<b>166</b>	<b>114</b>	<b>88</b>	<b>62</b>			

Electrical Data (@ 230V 50Hz)	Amps	Amps	Amps	Amps		Amps	Amps
Lights Canopy/Frame	0.50	0.33	0.25	0.17			
Fans	0.18	0.12	0.09	0.06			
Controller + Sol/Liq	0.04	0.04	0.04	0.04			
Defrost	0.00	0.00	0.00	0.00			
Trims Frame	0.00	0.00	0.00	0.00			
Trims Other	0.00	0.00	0.00	0.00			
Plinth/Ambient Fans	0.00	0.00	0.00	0.00			
<b>Maximum Load – Off Cycle Defrost</b>	<b>0.72</b>	<b>0.50</b>	<b>0.38</b>	<b>0.27</b>			

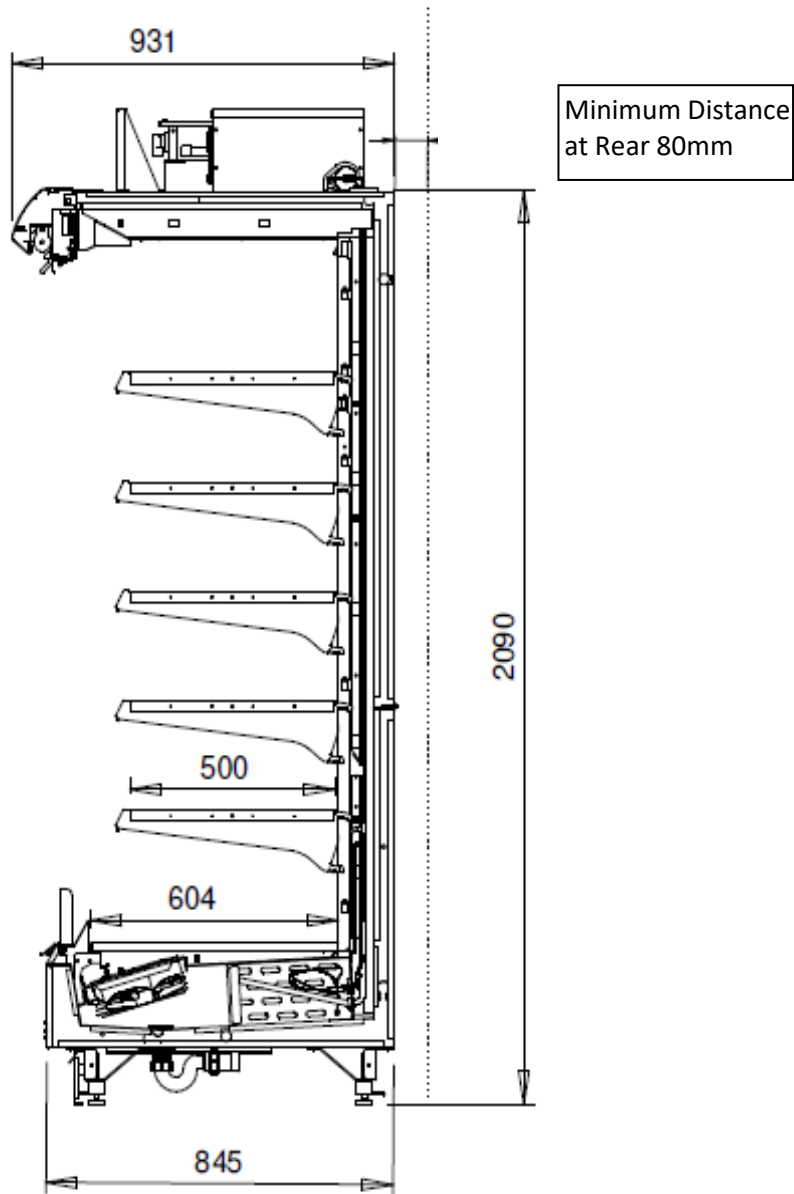
Energy Data*							
Case Length [m]	3.75	2.50	1.88	1.25			
DEC	50.91	34.02	25.58	17.13			
HREC	0.97	0.59	0.47	0.29			
TEC	51.88	34.62	26.04	17.42			
TDA	7.16	4.78	3.59	2.39			
TEC/TDA	7.24	7.25	7.25	7.30			
EEl Rating %	55%	52%	49%	45%			
ECO Design Rating	E	E	D	D			

\*Energy data base on 30/36 °C with 40% Glycol Mix. @ 3M2

\*\*HREC calculated using proposed ISO 23953 calculations

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Section Drawing IDB-HC WC-2090

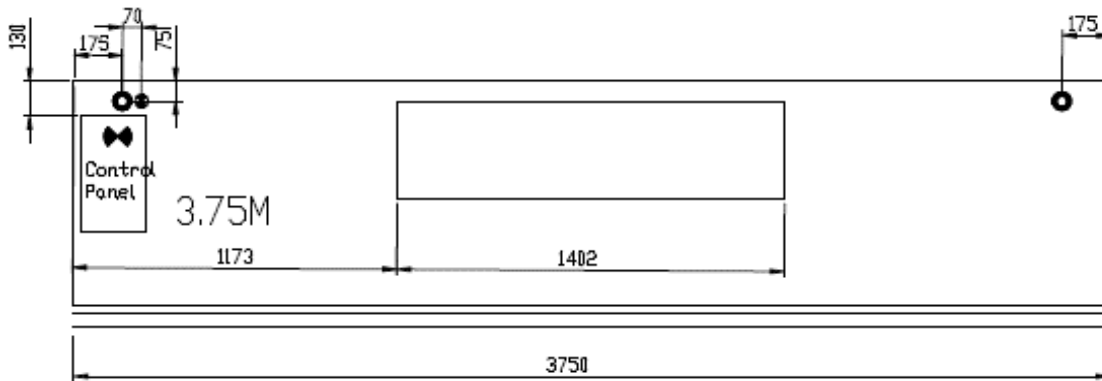
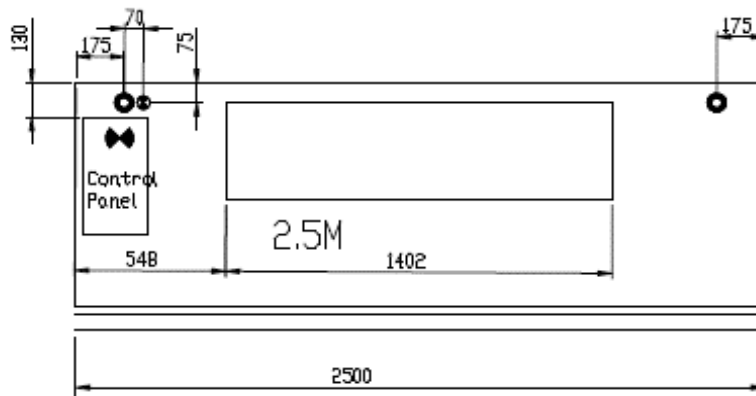


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**Plan Drawing Top IDB-HC WC-2090**

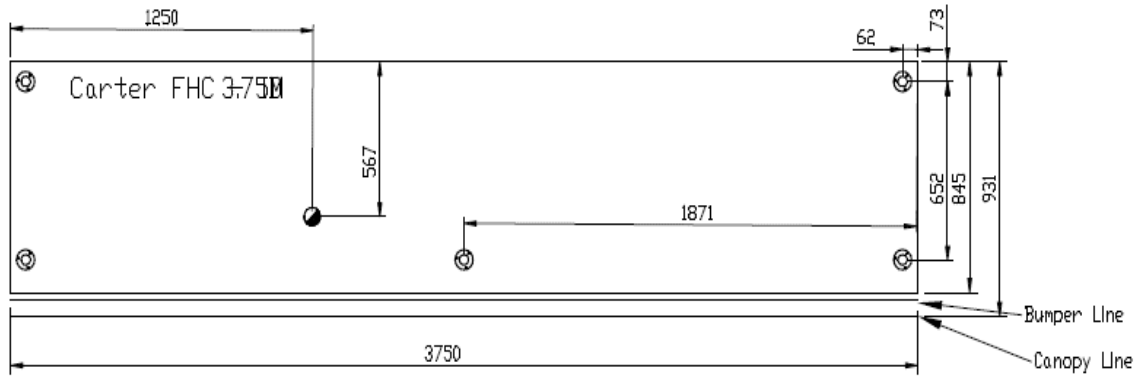
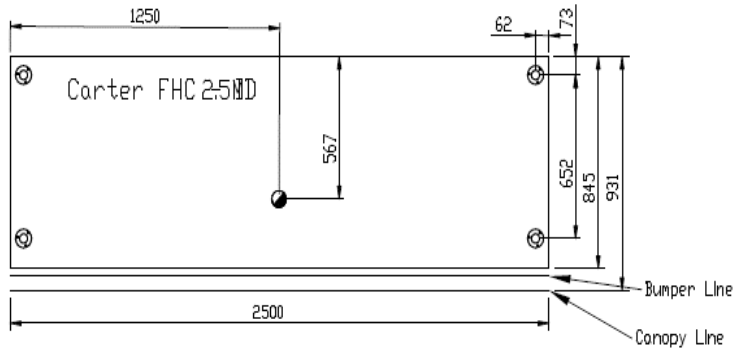
Key

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



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**Plan Drawing Base IDB-HC WC-2090**



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Set Up Data**		MEAT
Cut In Temperature °C		3
Cut Out Temperature °C		1
Anti Short Cycle Time (Seconds)		180
Lag Compressor Delay		180
Cabinet Temp ratio		40
No Defrost in 24hrs		8
Max Defrost Duration (Mins)		45
Defrost Termination Temp C ( Case Air Off)		8
Drain Down Time (Mins)		1
Fans in Refrigeration		ON
Integral Control		Basic

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