

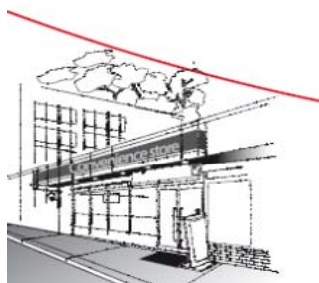


## CASTRA 21

### SEMI-VERTICAL REFRIGERATED DISPLAY CABINETS *multideck*



## Technical Data Sheet



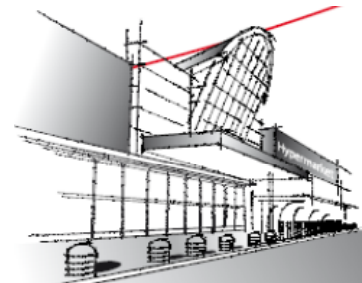
English



ISO 9001:2008

Tekso Quality Assurance Department

February, 2012 rev06



TECHNICAL DATA SHEET

CLIMATE CLASS 3 : 25° C - 60% RH (EN ISO 23953)

	Modules		Unit	1250	1875	2500	3750	
<b>Dimensions</b>	Length of Module <i>without endwall</i>		mm	1250	1875	2500	3750	
	Thickness of Endwall			40				
	Total Display Area (TDA)		m <sup>2</sup>	1,95	2,92	3,89	5,84	
	Display Opening Area			0,73	1,10	1,47	2,20	
	Net Volume		liter	433	649	865	1298	
<b>Refrigeration Data</b>	Refrigeration Load	3M1	<i>ti: -1°C/+1°C (Te: -8°C)</i>	W	1110	1665	2220	3325
		3M2	<i>ti: 2/4°C (Te: -7°C)</i>		957	1436	1915	2872
	Expansion Valve and Nozzle (Danfoss TEV)	(R134a) (3M1, 3M2), (*) <i>interior balance</i>		type	01 (*) / 01 (*)	02 / 02	03 / 02	03 / 03
		(R404A)(3M1, 3M2) (*) <i>interior balance</i>			01 (*) / 01 (*)	02 / 01	02 / 02	03 / 03
Expansion Valve and Nozzle (Danfoss AKV)	(R134a) (3M1, 3M2)		type	10-3 / 10-2	10-3 / 10-3	10-4 / 10-4	10-5 / 10-5	
	(R404A) (3M1, 3M2)			10-3 / 10-3	10-4 / 10-4	10-4 / 10-4	10-5 / 10-5	
<b>Electrical Data</b>	Lighting	Standart (T5) <i>canopy single row</i>		W	N/A	N/A	N/A	N/A
		Optional (LED) <i>canopy</i>			N/A	N/A	N/A	N/A
		Standart (T5) <i>shelf lighting (each row)</i>			28	42	56	84
		Optional (LED) <i>shelf lighting (each row)</i>			11	14	22	33
	Heaters	Trim heater canopy		W	N/A	N/A	N/A	N/A
		Defrost heater (3M1, 3M2)			N/A	N/A	N/A	N/A
	Fan Motor	Shaded Pole ( <i>standart</i> )		W	55	110	165	220
		Electronic - Energy Saving ( <i>optional</i> )			18	36	54	72
Antimist fan		N/A	N/A		N/A	N/A		
<b>Internal Fittings</b>	Shelves & Depths	min./standart/max. ( <i>rows</i> )		n°/(mm)	- / 1 (400) / 2 ( 300 & 400 )			
		with lighting standart / max. ( <i>rows</i> )		n°	1 / 2			
<b>info</b>	<i>All datas are based on 1 levels non lighting shelf</i>							
<b>Recommended Setting Parameters &amp; Temperature Classes</b>	<b>Compressor Regulation Parameters</b>							
	Compressor cut out temperature (supply air temperature)	3M1 ( <i>ti: -1/1 °C</i> )		°C	-1			
		3M2 ( <i>ti: 2/4 °C</i> )			+2			
	Compressor cut in temperature (supply air temperature)	3M1 ( <i>ti: -1/1 °C</i> )			+1			
		3M2 ( <i>ti: 2/4 °C</i> )			+4			
	<b>Defrost Regulation Parameters</b>							
	Defrost interval time			hour	6			
	Defrost endurance time			minute	45			
	Defrost termination temperature			°C	12			
	<b>Fan Regulation Parameters</b>							
	Fan cut in during defrost			-	YES (ON)			
	<b>Alarm Regulation Parameters</b>							
	High temperature alarm			°C	25			
	Low temperature alarm				-5			
	Power-on alarm override			minute	1			
	Defrost alarm override				1			
	Temperature alarm override				30			
<b>Temperature Classes</b>				Highest Temperature		Lowest Temperature		
M1			°C	+5	-1			
M2				+7	-1			

TECHNICAL DATA SHEET

CLIMATE CLASS 3 : 25° C - 60% RH (EN ISO 23953)

		Modules	Unit	1250	1875	2500	3750	
Dimensions	Length of Module <i>without endwall</i>		mm	1250	1875	2500	3750	
	Thickness of Endwall			40				
	Total Display Area (TDA)		m <sup>2</sup>	2,07	3,10	4,14	6,21	
	Display Opening Area			0,86	1,29	1,72	2,58	
	Net Volume			liter	438	656	875	1313
Refrigeration Data	Refrigeration Load	3M1	<i>ti: -1°C/+1°C (Te: -8°C)</i>	W	1185	1775	2370	3550
		3M2	<i>ti: 2/4°C (Te: -7°C)</i>		1015	1515	2030	3030
	Expansion Valve and Nozzle (Danfoss TEV)	(R134a) (3M1, 3M2), (*) <i>interior balance</i>		type	01 (*) / 01 (*)	02 / 02	03 / 03	04 / 03
		(R404A)(3M1, 3M2) (*) <i>interior balance</i>			01 (*) / 01 (*)	02 / 01	02 / 02	03 / 03
Expansion Valve and Nozzle (Danfoss AKV)	(R134a) (3M1, 3M2)		type	10-3 / 10-2	10-3 / 10-3	10-4 / 10-4	10-5 / 10-5	
	(R404A) (3M1, 3M2)			10-3 / 10-3	10-4 / 10-4	10-4 / 10-4	10-5 / 10-5	
Electrical Data	Lighting	Standart (T5) <i>canopy single row</i>		W	N/A	N/A	N/A	N/A
		Optional (LED) <i>canopy</i>			N/A	N/A	N/A	N/A
		Standart (T5) <i>shelf lighting (each row)</i>			28	42	56	84
		Optional (LED) <i>shelf lighting (each row)</i>			11	14	22	33
	Heaters	Trim heater canopy		W	N/A	N/A	N/A	N/A
		Defrost heater (3M1, 3M2)			N/A	N/A	N/A	N/A
	Fan Motor	Shaded Pole ( <i>standart</i> )		W	55	110	165	220
		Electronic - Energy Saving ( <i>optional</i> )			18	36	54	72
Antimist fan.		N/A	N/A		N/A	N/A		
Internal Fittings	Shelves & Depths	min./standart/max. ( <i>rows</i> )		n°/(mm)	- / 2 (400 & 500) / 3 ( 300 & 400 & 500 )			
		with lighting standart / max. ( <i>rows</i> )		n°	2 / 3			
info	<i>All datas are based on 2 levels non lighting shelves</i>							
Recommended Setting Parameters & Temperature Classes	<b>Compressor Regulation Parameters</b>							
	Compressor cut out temperature (supply air temperature)	3M1 ( <i>ti: -1/1 °C</i> )		°C	-1			
		3M2 ( <i>ti: 2/4 °C</i> )			+2			
	Compressor cut in temperature (supply air temperature)	3M1 ( <i>ti: -1/1 °C</i> )			+1			
		3M2 ( <i>ti: 2/4 °C</i> )			+4			
	<b>Defrost Regulation Parameters</b>							
	Defrost interval time			hour	6			
	Defrost endurance time			minute	45			
	Defrost termination temperature			°C	12			
	<b>Fan Regulation Parameters</b>							
	Fan cut in during defrost			-	YES (ON)			
	<b>Alarm Regulation Parameters</b>							
	High temperature alarm			°C	25			
	Low temperature alarm			°C	-5			
	Power-on alarm override				1			
	Defrost alarm override			minute	1			
	Temperature alarm override				30			
<b>Temperature Classes</b>				Highest Temperature		Lowest Temperature		
M1			°C	+5	-1			
M2			°C	+7	-1			

TECHNICAL DATA SHEET

CLIMATE CLASS 3 : 25° C - 60% RH (EN ISO 23953)

Modules		Unit	1250	1875	2500	3750		
Dimensions	Length of Module <i>without endwall</i>	mm	1250	1875	2500	3750		
	Thickness of Endwall		40					
	Total Display Area (TDA)	m <sup>2</sup>	2,21	3,31	4,42	6,63		
	Display Opening Area		0,99	1,48	1,97	2,96		
	Net Volume	liter	478	716	955	1433		
Refrigeration Data	Refrigeration Load	3M1	<i>ti: -1°C/+1°C (Te: -8°C)</i>		1205	1805	2410	3615
		3M2	<i>ti: 2/4°C (Te: -7°C)</i>		1035	1555	2070	3105
	Expansion Valve and Nozzle (Danfoss TEV)	(R134a) (3M1, 3M2), (*) <i>interior balance</i>		type	01 (*) / 01 (*)	02 / 02	03 / 02	03 / 03
		(R404A)(3M1, 3M2) (*) <i>interior balance</i>			01 (*) / 01 (*)	02 / 01	02 / 02	03 / 03
	Expansion Valve and Nozzle (Danfoss AKV)	(R134a) (3M1, 3M2)		type	10-3 / 10-3	10-3 / 10-3	10-4 / 10-4	10-5 / 10-5
(R404A) (3M1, 3M2)		10-3 / 10-3	10-4 / 10-4		10-4 / 10-4	10-5 / 10-5		
Electrical Data	Lighting	Standart (T5) <i>canopy single row</i>		W	N/A	N/A	N/A	N/A
		Optional (LED) <i>canopy</i>			N/A	N/A	N/A	N/A
		Standart (T5) <i>shelf lighting (each row)</i>			28	42	56	84
		Optional (LED) <i>shelf lighting (each row)</i>			11	14	22	33
	Heaters	Trim heater canopy		W	N/A	N/A	N/A	N/A
		Defrost heater (3M1, 3M2)			N/A	N/A	N/A	N/A
	Fan Motor	Shaded Pole ( <i>standart</i> )		W	55	110	165	220
		Electronic - Energy Saving ( <i>optional</i> )			18	36	54	72
Antimist fan.		N/A	N/A		N/A	N/A		
Internal Fittings	Shelves & Depths	min./standart/max. ( <i>rows</i> )		n°/(mm)	- / 2 (400 & 500) / 3 (300 & 400 & 500)			
		with lighting standart / max. ( <i>rows</i> )		n°	2 / 3			
info	<i>All datas are based on 2 levels non lighting shelves</i>							
Recommended Setting Parameters & Temperature Classes	<b>Compressor Regulation Parameters</b>							
	Compressor cut out temperature (supply air temperature)	3M1 ( <i>ti: -1/1 °C</i> )		°C	-1			
		3M2 ( <i>ti: 2/4 °C</i> )			+2			
	Compressor cut in temperature (supply air temperature)	3M1 ( <i>ti: -1/1 °C</i> )			+1			
		3M2 ( <i>ti: 2/4 °C</i> )			+4			
	<b>Defrost Regulation Parameters</b>							
	Defrost interval time			hour	6			
	Defrost endurance time			minute	45			
	Defrost termination temperature			°C	12			
	<b>Fan Regulation Parameters</b>							
	Fan cut in during defrost			-	YES (ON)			
	<b>Alarm Regulation Parameters</b>							
	High temperature alarm			°C	25			
	Low temperature alarm				-5			
	Power-on alarm override			minute	1			
	Defrost alarm override				1			
	Temperature alarm override				30			
<b>Temperature Classes</b>			Highest Temperature		Lowest Temperature			
M1			°C	+5	-1			
M2				+7	-1			

TECHNICAL DATA SHEET

CLIMATE CLASS 3 : 25° C - 60% RH (EN ISO 23953)

	Modules		Unit	1250	1875	2500	3750	
<b>Dimensions</b>	Length of Module <i>without endwall</i>		mm	1250	1875	2500	3750	
	Thickness of Endwall			40				
	Total Display Area (TDA)		m <sup>2</sup>	2,32	3,48	4,64	6,96	
	Display Opening Area			1,11	1,67	2,22	3,33	
	Net Volume		liter	495	743	990	1485	
<b>Refrigeration Data</b>	Refrigeration Load	3M1	<i>ti: -1°C/+1°C (Te: -8°C)</i>	W	1225	1835	2450	3670
		3M2	<i>ti: 2/4°C (Te: -7°C)</i>		1050	1585	2100	3170
	Expansion Valve and Nozzle (Danfoss TEV)	(R134a) (3M1, 3M2), (*) <i>interior balance</i>		type	01 (*) / 01 (*)	02 / 02	03 / 03	04 / 03
		(R404A)(3M1, 3M2) (*) <i>interior balance</i>			01 (*) / 01 (*)	02 / 01	02 / 02	03 / 03
Expansion Valve and Nozzle (Danfoss AKV)	(R134a) (3M1, 3M2)		type	10-3 / 10-3	10-3 / 10-3	10-4 / 10-4	10-5 / 10-5	
	(R404A) (3M1, 3M2)			10-3 / 10-3	10-4 / 10-4	10-4 / 10-4	10-5 / 10-5	
<b>Electrical Data</b>	Lighting	Standart (T5) <i>canopy single row</i>		W	N/A	N/A	N/A	N/A
		Optional (LED) <i>canopy</i>			N/A	N/A	N/A	N/A
		Standart (T5) <i>shelf lighting (each row)</i>			28	42	56	84
		Optional (LED) <i>shelf lighting (each row)</i>			11	14	22	33
	Heaters	Trim heater canopy		W	N/A	N/A	N/A	N/A
		Defrost heater (3M1, 3M2)			N/A	N/A	N/A	N/A
	Fan Motor	Shaded Pole ( <i>standart</i> )		W	55	110	165	220
		Electronic - Energy Saving ( <i>optional</i> )			18	36	54	72
Antimist fan.		N/A	N/A		N/A	N/A		
<b>Internal Fittings</b>	Shelves & Depths	min./standart/max. ( <i>rows</i> )		n°/(mm)	- / 3 (300 & 400 & 500) / 4 (300 & 400 & 500 & 600)			
		with lighting standart / max. ( <i>rows</i> )		n°	3 / 4			
<b>info</b>	<i>All datas are based on 3 levels non lighting shelves</i>							
<b>Recommended Setting Parameters &amp; Temperature Classes</b>	<b>Compressor Regulation Parameters</b>							
	Compressor cut out temperature (supply air temperature)	3M1 ( <i>ti: -1/1 °C</i> )		°C	-1			
		3M2 ( <i>ti: 2/4 °C</i> )			+2			
	Compressor cut in temperature (supply air temperature)	3M1 ( <i>ti: -1/1 °C</i> )			+1			
		3M2 ( <i>ti: 2/4 °C</i> )			+4			
	<b>Defrost Regulation Parameters</b>							
	Defrost interval time			hour	6			
	Defrost endurance time			minute	45			
	Defrost termination temperature			°C	12			
	<b>Fan Regulation Parameters</b>							
	Fan cut in during defrost			-	YES (ON)			
	<b>Alarm Regulation Parameters</b>							
	High temperature alarm			°C	25			
	Low temperature alarm				-5			
	Power-on alarm override			minute	1			
	Defrost alarm override				1			
	Temperature alarm override				30			
<b>Temperature Classes</b>				Highest Temperature		Lowest Temperature		
M1			°C	+5	-1			
M2				+7	-1			

TECHNICAL DATA SHEET

CLIMATE CLASS 3 : 25° C - 60% RH (EN ISO 23953)

	Modules		Unit	1250	1875	2500	3750	
Dimensions	Length of Module <i>without endwall</i>		mm	1250	1875	2500	3750	
	Thickness of Endwall			40				
	Total Display Area (TDA)		m <sup>2</sup>	2,44	3,67	4,89	7,33	
	Display Opening Area			1,23	1,85	2,46	3,69	
	Net Volume		liter	525	788	1050	1575	
Refrigeration Data	Refrigeration Load	3M1	<i>ti: -1°C/+1°C (Te: -8°C)</i>	W	1300	1950	2600	3900
		3M2	<i>ti: 2/4°C (Te: -7°C)</i>		1130	1695	2260	3390
	Expansion Valve and Nozzle (Danfoss TEV)	(R134a) (3M1, 3M2), (*) <i>interior balance</i>		type	01 (*) / 01 (*)	02 / 02	03 / 03	04 / 04
		(R404A)(3M1, 3M2) (*) <i>interior balance</i>			01 (*) / 01 (*)	02 / 02	03 / 03	03 / 03
Expansion Valve and Nozzle (Danfoss AKV)	(R134a) (3M1, 3M2)		type	10-3 / 10-3	10-4 / 10-3	10-4 / 10-4	10-5 / 10-5	
	(R404A) (3M1, 3M2)			10-3 / 10-3	10-4 / 10-4	10-5 / 10-5	10-5 / 10-5	
Electrical Data	Lighting	Standart (T5) <i>canopy single row</i>		W	N/A	N/A	N/A	N/A
		Optional (LED) <i>canopy</i>			N/A	N/A	N/A	N/A
		Standart (T5) <i>shelf lighting (each row)</i>			28	42	56	84
		Optional (LED) <i>shelf lighting (each row)</i>			11	14	22	33
	Heaters	Trim heater canopy		W	N/A	N/A	N/A	N/A
		Defrost heater (3M1, 3M2)			N/A	N/A	N/A	N/A
	Fan Motor	Shaded Pole ( <i>standart</i> )		W	55	110	165	220
		Electronic - Energy Saving ( <i>optional</i> )			18	36	54	72
Antimist fan.		N/A	N/A		N/A	N/A		
Internal Fittings	Shelves & Depths	min./standart/max. ( <i>rows</i> )		n°/(mm)	- / 3 (300 & 400 & 500) / 4 (300 & 400 & 500 & 600)			
		with lighting standart / max. ( <i>rows</i> )		n°	3 / 4			
info	<i>All datas are based on 3 levels non lighting shelves</i>							
Recommended Setting Parameters & Temperature Classes	<b>Compressor Regulation Parameters</b>							
	Compressor cut out temperature (supply air temperature)	3M1 ( <i>ti: -1/1 °C</i> )		°C	-1			
		3M2 ( <i>ti: 2/4 °C</i> )			+2			
	Compressor cut in temperature (supply air temperature)	3M1 ( <i>ti: -1/1 °C</i> )			+1			
		3M2 ( <i>ti: 2/4 °C</i> )			+4			
	<b>Defrost Regulation Parameters</b>							
	Defrost interval time			hour	6			
	Defrost endurance time			minute	45			
	Defrost termination temperature			°C	12			
	<b>Fan Regulation Parameters</b>							
	Fan cut in during defrost			-	YES (ON)			
	<b>Alarm Regulation Parameters</b>							
	High temperature alarm			°C	25			
	Low temperature alarm			°C	-5			
	Power-on alarm override				1			
	Defrost alarm override			minute	1			
	Temperature alarm override				30			
<b>Temperature Classes</b>				Highest Temperature		Lowest Temperature		
M1			°C	+5	-1			
M2			°C	+7	-1			

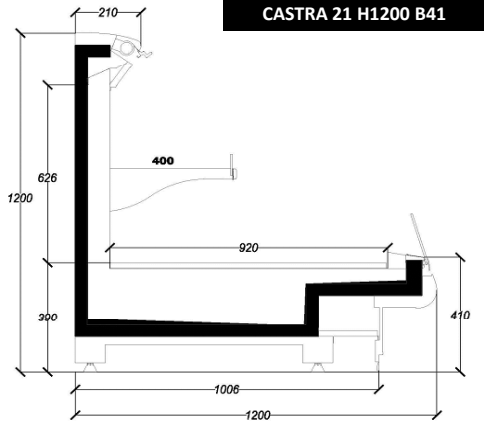
TECHNICAL DATA SHEET

CLIMATE CLASS 3 : 25° C - 60% RH (EN ISO 23953)

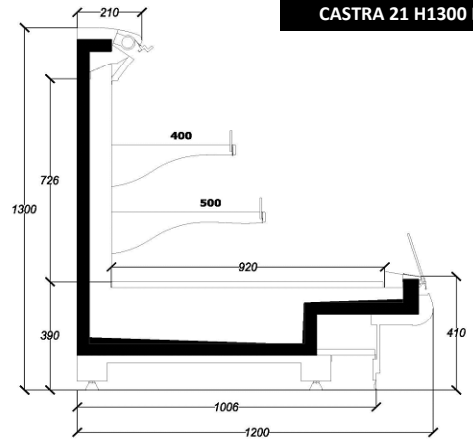
	Modules		Unit	1250	1875	2500	3750	
<b>Dimensions</b>	Length of Module <i>without endwall</i>		mm	1250	1875	2500	3750	
	Thickness of Endwall			40				
	Total Display Area (TDA)		m <sup>2</sup>	2,56	3,84	5,11	7,67	
	Display Opening Area			1,34	2,01	2,68	4,01	
	Net Volume		liter	618	926	1235	1853	
<b>Refrigeration Data</b>	Refrigeration Load	3M1	<i>ti: -1°C/+1°C (Te: -8°C)</i>	W	1385	2075	2770	4150
		3M2	<i>ti: 2/4°C (Te: -7°C)</i>		1215	1830	2430	3660
	Expansion Valve and Nozzle (Danfoss TEV)	(R134a) (3M1, 3M2), (*) <i>interior balance</i>		type	01 (*) / 01 (*)	02 / 02	03 / 03	04 / 04
		(R404A)(3M1, 3M2) (*) <i>interior balance</i>			01 (*) / 01 (*)	02 / 02	03 / 03	03 / 03
Expansion Valve and Nozzle (Danfoss AKV)	(R134a) (3M1, 3M2)		type	10-3 / 10-3	10-4 / 10-3	10-4 / 10-4	10-5 / 10-5	
	(R404A) (3M1, 3M2)			10-3 / 10-3	10-4 / 10-4	10-5 / 10-5	10-5 / 10-5	
<b>Electrical Data</b>	Lighting	Standart (T5) <i>canopy single row</i>		W	N/A	N/A	N/A	N/A
		Optional (LED) <i>canopy</i>			N/A	N/A	N/A	N/A
		Standart (T5) <i>shelf lighting (each row)</i>			28	42	56	84
		Optional (LED) <i>shelf lighting (each row)</i>			11	14	22	33
	Heaters	Trim heater canopy		W	N/A	N/A	N/A	N/A
		Defrost heater (3M1, 3M2)			N/A	N/A	N/A	N/A
	Fan Motor	Shaded Pole ( <i>standart</i> )		W	55	110	165	220
		Electronic - Energy Saving ( <i>optional</i> )			18	36	54	72
Antimist fan.		N/A	N/A		N/A	N/A		
<b>Internal Fittings</b>	Shelves & Depths	min./standart/max. ( <i>rows</i> )		n°/(mm)	- / 4 (300 & 400 & 500 & 600) / 5 (300 & 400 & 450 & 500 & 600)			
		with lighting standart / max. ( <i>rows</i> )		n°	4 / 5			
<b>info</b>	<i>All datas are based on 4 levels non lighting shelves</i>							
<b>Recommended Setting Parameters &amp; Temperature Classes</b>	<b>Compressor Regulation Parameters</b>							
	Compressor cut out temperature (supply air temperature)	3M1 ( <i>ti: -1/1 °C</i> )		°C	-1			
		3M2 ( <i>ti: 2/4 °C</i> )			+2			
	Compressor cut in temperature (supply air temperature)	3M1 ( <i>ti: -1/1 °C</i> )			+1			
		3M2 ( <i>ti: 2/4 °C</i> )			+4			
	<b>Defrost Regulation Parameters</b>							
	Defrost interval time			hour	6			
	Defrost endurance time			minute	45			
	Defrost termination temperature			°C	12			
	<b>Fan Regulation Parameters</b>							
	Fan cut in during defrost			-	YES (ON)			
	<b>Alarm Regulation Parameters</b>							
	High temperature alarm			°C	25			
	Low temperature alarm				-5			
	Power-on alarm override			minute	1			
	Defrost alarm override				1			
	Temperature alarm override				30			
<b>Temperature Classes</b>				Highest Temperature		Lowest Temperature		
M1			°C	+5	-1			
M2				+7	-1			

TECHNICAL DATA SHEET

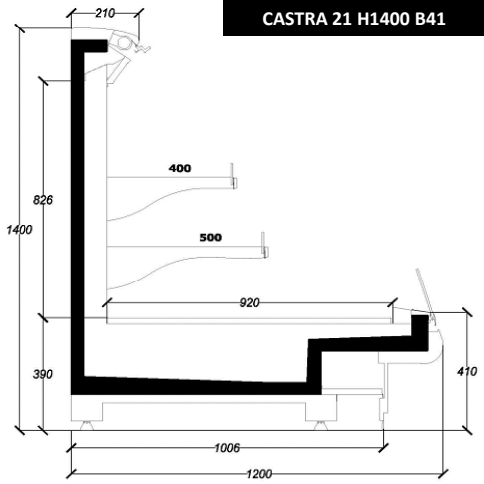
SECTIONAL VIEW



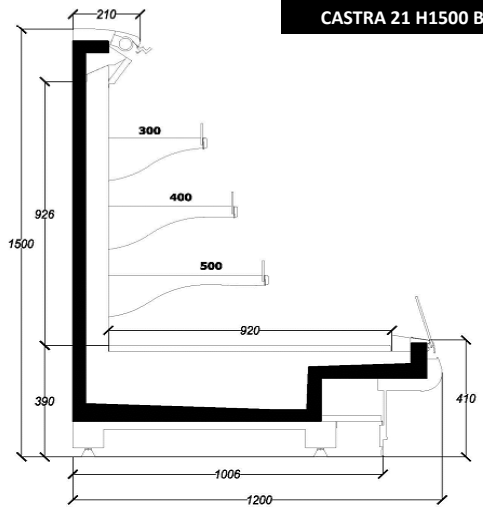
CASTRA 21 H1200 B41



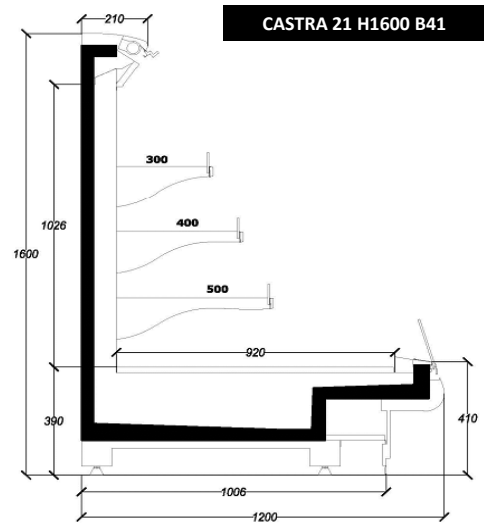
CASTRA 21 H1300 B41



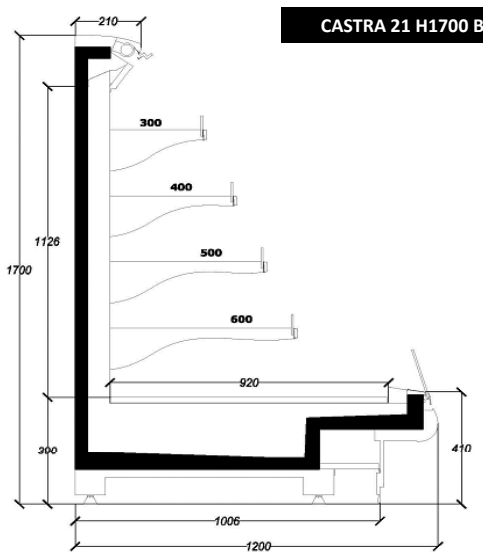
CASTRA 21 H1400 B41



CASTRA 21 H1500 B41



CASTRA 21 H1600 B41



CASTRA 21 H1700 B41

Note: Dimensions are in mm



TECHNICAL DATA SHEET

CLIMATE CLASS 3 : 25° C - 60% RH (EN ISO 23953)

Modules		Unit	1250	1875	2500	3750		
Dimensions	Length of Module <i>without endwall</i>	mm	1250	1875	2500	3750		
	Thickness of Endwall		40					
	Total Display Area (TDA)	m <sup>2</sup>	1,95	2,92	3,89	5,84		
	Display Opening Area		0,73	1,10	1,47	2,20		
	Net Volume		liter	433	649	865	1298	
Refrigeration Data	Refrigeration Load	3M1	<i>ti: -1°C/+1°C (Te: -8°C)</i>		1110	1665	2220	3325
		3M2	<i>ti: 2/4°C (Te: -7°C)</i>		957	1436	1915	2872
	Expansion Valve and Nozzle (Danfoss TEV)	(R134a) (3M1, 3M2), (*) <i>interior balance</i>		type	01 (*) / 01 (*)	02 / 02	03 / 02	03 / 03
		(R404A)(3M1, 3M2) (*) <i>interior balance</i>			01 (*) / 01 (*)	02 / 01	02 / 02	03 / 03
Expansion Valve and Nozzle (Danfoss AKV)	(R134a) (3M1, 3M2)		type	10-3 / 10-2	10-3 / 10-3	10-4 / 10-4	10-5 / 10-5	
	(R404A) (3M1, 3M2)			10-3 / 10-3	10-4 / 10-4	10-4 / 10-4	10-5 / 10-5	
Electrical Data	Lighting	Standart (T5) <i>canopy single row</i>		W	N/A	N/A	N/A	N/A
		Optional (LED) <i>canopy</i>			N/A	N/A	N/A	N/A
		Standart (T5) <i>shelf lighting (each row)</i>			28	42	56	84
		Optional (LED) <i>shelf lighting (each row)</i>			11	14	22	33
	Heaters	Trim heater canopy		W	N/A	N/A	N/A	N/A
		Defrost heater (3M1, 3M2)			N/A	N/A	N/A	N/A
	Fan Motor	Shaded Pole ( <i>standart</i> )		W	55	110	165	220
		Electronic - Energy Saving ( <i>optional</i> )			18	36	54	72
Antimist fan.		N/A	N/A		N/A	N/A		
Internal Fittings	Shelves & Depths	min./standart/max. ( <i>rows</i> )		n°/(mm)	- / 1 (400) / 2 ( 300 & 400)			
		with lighting standart / max. ( <i>rows</i> )		n°	1 / 2			
info	<b>All datas are based on 1 level non lighting shelves</b>							
Recommended Setting Parameters & Temperature Classes	<b>Compressor Regulation Parameters</b>							
	Compressor cut out temperature (supply air temperature)	3M1 ( <i>ti: -1/1 °C</i> )		°C	-1			
		3M2 ( <i>ti: 2/4 °C</i> )			+2			
	Compressor cut in temperature (supply air temperature)	3M1 ( <i>ti: -1/1 °C</i> )			+1			
		3M2 ( <i>ti: 2/4 °C</i> )			+4			
	<b>Defrost Regulation Parameters</b>							
	Defrost interval time			hour	6			
	Defrost endurance time			minute	45			
	Defrost termination temperature			°C	12			
	<b>Fan Regulation Parameters</b>							
	Fan cut in during defrost			-	YES (ON)			
	<b>Alarm Regulation Parameters</b>							
	High temperature alarm			°C	25			
	Low temperature alarm				-5			
	Power-on alarm override			minute	1			
	Defrost alarm override				1			
	Temperature alarm override				30			
<b>Temperature Classes</b>			Highest Temperature		Lowest Temperature			
M1			°C	+5	-1			
M2				+7	-1			

TECHNICAL DATA SHEET

CLIMATE CLASS 3 : 25° C - 60% RH (EN ISO 23953)

Modules		Unit	1250	1875	2500	3750		
Dimensions	Length of Module <i>without endwall</i>	mm	1250	1875	2500	3750		
	Thickness of Endwall		40					
	Total Display Area (TDA)	m <sup>2</sup>	2,07	3,10	4,14	6,21		
	Display Opening Area		0,86	1,29	1,72	2,58		
	Net Volume		liter	438	656	875	1313	
Refrigeration Data	Refrigeration Load	3M1	<i>ti: -1°C/+1°C (Te: -8°C)</i>		1185	1775	2370	3550
		3M2	<i>ti: 2/4°C (Te: -7°C)</i>		1015	1515	2030	3030
	Expansion Valve and Nozzle (Danfoss TEV)	(R134a) (3M1, 3M2), (*) <i>interior balance</i>		type	01 (*) / 01 (*)	02 / 02	03 / 03	04 / 03
		(R404A)(3M1, 3M2) (*) <i>interior balance</i>			01 (*) / 01 (*)	02 / 01	02 / 02	03 / 03
Expansion Valve and Nozzle (Danfoss AKV)	(R134a) (3M1, 3M2)		type	10-3 / 10-2	10-3 / 10-3	10-4 / 10-4	10-5 / 10-5	
	(R404A) (3M1, 3M2)			10-3 / 10-3	10-4 / 10-4	10-4 / 10-4	10-5 / 10-5	
Electrical Data	Lighting	Standart (T5) <i>canopy single row</i>		W	N/A	N/A	N/A	N/A
		Optional (LED) <i>canopy</i>			N/A	N/A	N/A	N/A
		Standart (T5) <i>shelf lighting (each row)</i>			28	42	56	84
		Optional (LED) <i>shelf lighting (each row)</i>			11	14	22	33
	Heaters	Trim heater canopy		W	N/A	N/A	N/A	N/A
		Defrost heater (3M1, 3M2)			N/A	N/A	N/A	N/A
	Fan Motor	Shaded Pole ( <i>standart</i> )		W	55	110	165	220
		Electronic - Energy Saving ( <i>optional</i> )			18	36	54	72
Antimist fan.		N/A	N/A		N/A	N/A		
Internal Fittings	Shelves & Depths	min./standart/max. ( <i>rows</i> )		n°/(mm)	- / 2 (400 & 500) / 3 ( 300 & 400 & 500 )			
		with lighting standart / max. ( <i>rows</i> )		n°	2 / 3			
info	<i>All datas are based on 2 levels non lighting shelves</i>							
Recommended Setting Parameters & Temperature Classes	<b>Compressor Regulation Parameters</b>							
	Compressor cut out temperature (supply air temperature)	3M1 ( <i>ti: -1/1 °C</i> )		°C	-1			
		3M2 ( <i>ti: 2/4 °C</i> )			+2			
	Compressor cut in temperature (supply air temperature)	3M1 ( <i>ti: -1/1 °C</i> )			+1			
		3M2 ( <i>ti: 2/4 °C</i> )			+4			
	<b>Defrost Regulation Parameters</b>							
	Defrost interval time			hour	6			
	Defrost endurance time			minute	45			
	Defrost termination temperature			°C	12			
	<b>Fan Regulation Parameters</b>							
	Fan cut in during defrost			-	YES (ON)			
	<b>Alarm Regulation Parameters</b>							
	High temperature alarm			°C	25			
	Low temperature alarm				-5			
	Power-on alarm override			minute	1			
	Defrost alarm override				1			
	Temperature alarm override				30			
<b>Temperature Classes</b>			Highest Temperature		Lowest Temperature			
M1			°C	+5	-1			
M2				+7	-1			

TECHNICAL DATA SHEET

CLIMATE CLASS 3 : 25° C - 60% RH (EN ISO 23953)

	Modules		Unit	1250	1875	2500	3750	
Dimensions	Length of Module <i>without endwall</i>		mm	1250	1875	2500	3750	
	Thickness of Endwall			40				
	Total Display Area (TDA)		m <sup>2</sup>	2,21	3,31	4,42	6,63	
	Display Opening Area			0,99	1,48	1,97	2,96	
	Net Volume		liter	478	716	955	1433	
Refrigeration Data	Refrigeration Load	3M1	<i>ti: -1°C/+1°C (Te: -8°C)</i>	W	1205	1805	2410	3615
		3M2	<i>ti: 2/4°C (Te: -7°C)</i>		1035	1555	2070	3105
	Expansion Valve and Nozzle (Danfoss TEV)	(R134a) (3M1, 3M2), (*) <i>interior balance</i>		type	01 (*) / 01 (*)	02 / 02	03 / 02	03 / 03
		(R404A)(3M1, 3M2) (*) <i>interior balance</i>			01 (*) / 01 (*)	02 / 01	02 / 02	03 / 03
Expansion Valve and Nozzle (Danfoss AKV)	(R134a) (3M1, 3M2)		type	10-3 / 10-3	10-3 / 10-3	10-4 / 10-4	10-5 / 10-5	
	(R404A) (3M1, 3M2)			10-3 / 10-3	10-4 / 10-4	10-4 / 10-4	10-5 / 10-5	
Electrical Data	Lighting	Standart (T5) <i>canopy single row</i>		W	N/A	N/A	N/A	N/A
		Optional (LED) <i>canopy</i>			N/A	N/A	N/A	N/A
		Standart (T5) <i>shelf lighting (each row)</i>			28	42	56	84
		Optional (LED) <i>shelf lighting (each row)</i>			11	14	22	33
	Heaters	Trim heater canopy		W	N/A	N/A	N/A	N/A
		Defrost heater (3M1, 3M2)			N/A	N/A	N/A	N/A
	Fan Motor	Shaded Pole ( <i>standart</i> )		W	55	110	165	220
		Electronic - Energy Saving ( <i>optional</i> )			18	36	54	72
Antimist fan.		N/A	N/A		N/A	N/A		
Internal Fittings	Shelves & Depths	min./standart/max. ( <i>rows</i> )		n°/(mm)	- / 2 (400 & 500) / 3 (300 & 400 & 500)			
		with lighting standart / max. ( <i>rows</i> )		n°	2 / 3			
info	<i>All datas are based on 2 levels non lighting shelves</i>							
Recommended Setting Parameters & Temperature Classes	<b>Compressor Regulation Parameters</b>							
	Compressor cut out temperature (supply air temperature)	3M1 ( <i>ti: -1/1 °C</i> )		°C	-1			
		3M2 ( <i>ti: 2/4 °C</i> )			+2			
	Compressor cut in temperature (supply air temperature)	3M1 ( <i>ti: -1/1 °C</i> )			+1			
		3M2 ( <i>ti: 2/4 °C</i> )			+4			
	<b>Defrost Regulation Parameters</b>							
	Defrost interval time			hour	6			
	Defrost endurance time			minute	45			
	Defrost termination temperature			°C	12			
	<b>Fan Regulation Parameters</b>							
	Fan cut in during defrost			-	YES (ON)			
	<b>Alarm Regulation Parameters</b>							
	High temperature alarm			°C	25			
	Low temperature alarm				-5			
	Power-on alarm override			minute	1			
	Defrost alarm override				1			
	Temperature alarm override				30			
<b>Temperature Classes</b>				Highest Temperature		Lowest Temperature		
M1			°C	+5	-1			
M2				+7	-1			

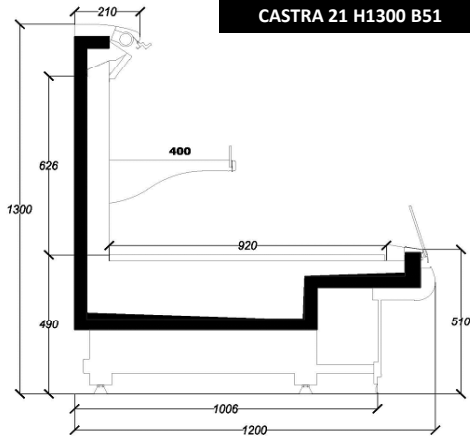
TECHNICAL DATA SHEET

CLIMATE CLASS 3 : 25° C - 60% RH (EN ISO 23953)

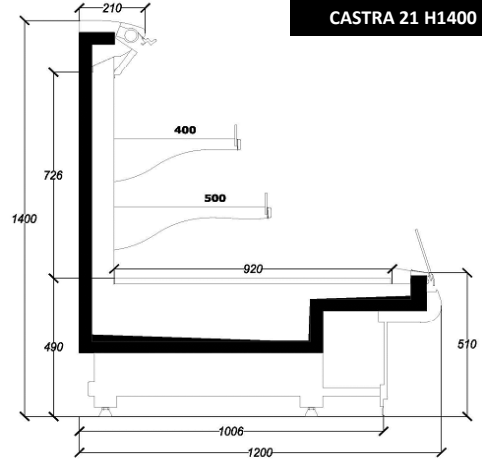
		Modules	Unit	1250	1875	2500	3750	
Dimensions	Length of Module <i>without endwall</i>		mm	1250	1875	2500	3750	
	Thickness of Endwall			40				
	Total Display Area (TDA)		m <sup>2</sup>	2,32	3,48	4,64	6,96	
	Display Opening Area			1,11	1,67	2,22	3,33	
	Net Volume			liter	495	743	990	1485
Refrigeration Data	Refrigeration Load	3M1	<i>ti: -1°C/+1°C (Te: -8°C)</i>	W	1225	1835	2450	3670
		3M2	<i>ti: 2/4°C (Te: -7°C)</i>		1050	1585	2100	3170
	Expansion Valve and Nozzle (Danfoss TEV)	(R134a) (3M1, 3M2), (*) <i>interior balance</i>		type	01 (*) / 01 (*)	02 / 02	03 / 03	04 / 03
		(R404A)(3M1, 3M2) (*) <i>interior balance</i>			01 (*) / 01 (*)	02 / 01	02 / 02	03 / 03
Expansion Valve and Nozzle (Danfoss AKV)	(R134a) (3M1, 3M2)		type	10-3 / 10-3	10-3 / 10-3	10-4 / 10-4	10-5 / 10-5	
	(R404A) (3M1, 3M2)			10-3 / 10-3	10-4 / 10-4	10-4 / 10-4	10-5 / 10-5	
Electrical Data	Lighting	Standart (T5) <i>canopy single row</i>		W	N/A	N/A	N/A	N/A
		Optional (LED) <i>canopy</i>			N/A	N/A	N/A	N/A
		Standart (T5) <i>shelf lighting (each row)</i>			28	42	56	84
		Optional (LED) <i>shelf lighting (each row)</i>			11	14	22	33
	Heaters	Trim heater canopy		W	N/A	N/A	N/A	N/A
		Defrost heater (3M1, 3M2)			N/A	N/A	N/A	N/A
	Fan Motor	Shaded Pole ( <i>standart</i> )		W	55	110	165	220
		Electronic - Energy Saving ( <i>optional</i> )			18	36	54	72
Antimist fan.		N/A	N/A		N/A	N/A		
Internal Fittings	Shelves & Depths	min./standart/max. ( <i>rows</i> )		n°/(mm)	- / 3 (300 & 400 & 500) / 4 (300 & 400 & 500 & 600)			
		with lighting standart / max. ( <i>rows</i> )		n°	3 / 4			
info	<i>All datas are based on 3 levels non lighting shelves</i>							
Recommended Setting Parameters & Temperature Classes	<b>Compressor Regulation Parameters</b>							
	Compressor cut out temperature (supply air temperature)	3M1 ( <i>ti: -1/1 °C</i> )		°C	-1			
		3M2 ( <i>ti: 2/4 °C</i> )			+2			
	Compressor cut in temperature (supply air temperature)	3M1 ( <i>ti: -1/1 °C</i> )			+1			
		3M2 ( <i>ti: 2/4 °C</i> )			+4			
	<b>Defrost Regulation Parameters</b>							
	Defrost interval time			hour	6			
	Defrost endurance time			minute	45			
	Defrost termination temperature			°C	12			
	<b>Fan Regulation Parameters</b>							
	Fan cut in during defrost			-	YES (ON)			
	<b>Alarm Regulation Parameters</b>							
	High temperature alarm			°C	25			
	Low temperature alarm				-5			
	Power-on alarm override			minute	1			
	Defrost alarm override				1			
	Temperature alarm override				30			
<b>Temperature Classes</b>				Highest Temperature		Lowest Temperature		
M1			°C	+5	-1			
M2				+7	-1			

TECHNICAL DATA SHEET

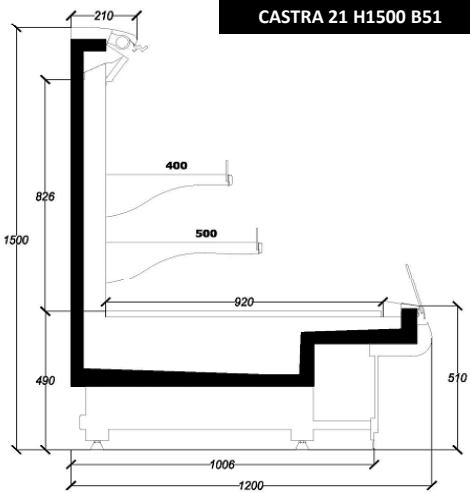
SECTIONAL VIEW - B51



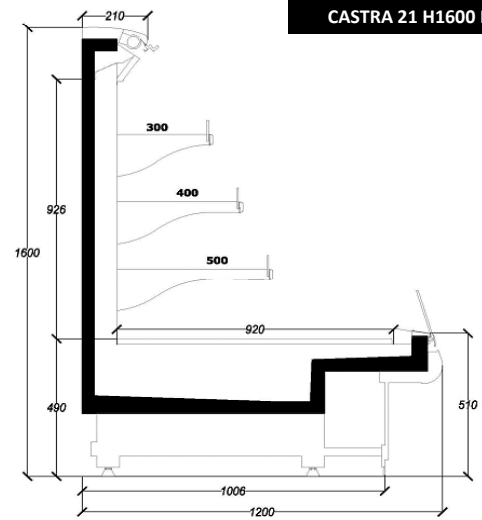
CASTRA 21 H1300 B51



CASTRA 21 H1400 B51



CASTRA 21 H1500 B51

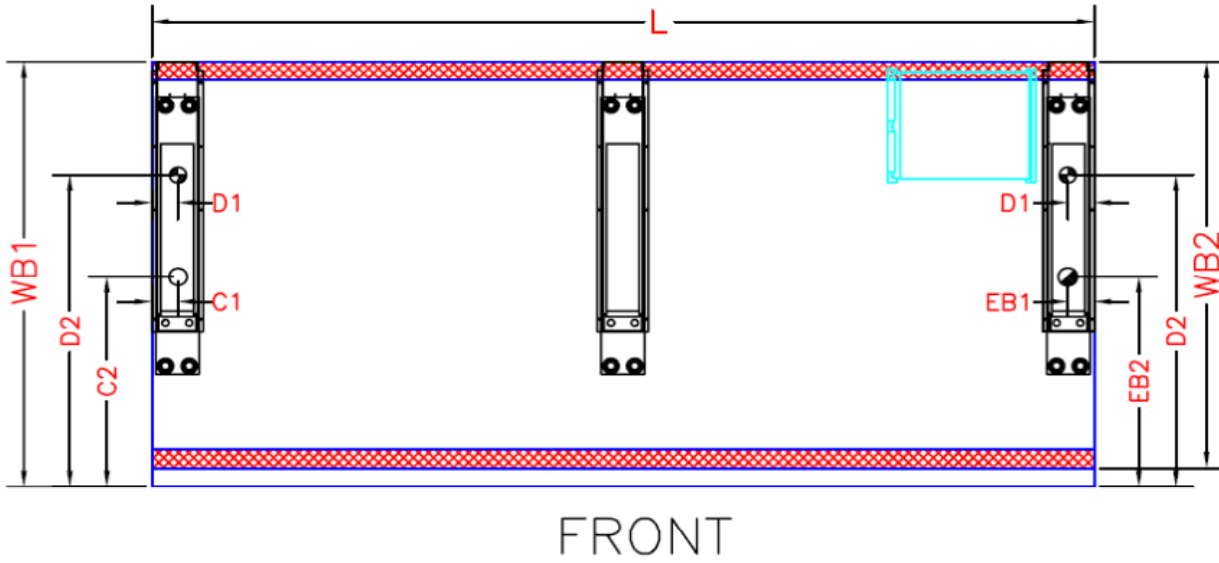


CASTRA 21 H1600 B51

Note: Dimensions are in mm

TECHNICAL DATA SHEET

PLAN VIEW



Modules	Length (mm)	1250	1875	2500	3750	SYMBOL	
CASTRA 21	L (w/o endwall)	1250	1875	2500	3750	L	Length
	C1	70				WB	Width Base
	C2	594				D	Drain
	WB1	1200				C	Copper Tube
	WB2	1148				EB	Electrical Base
	EB1	70				<i>Note: Dimensions are in mm</i>	
	EB2	594					
	D1	70					
D2	880						

TECHNICAL DATA SHEET

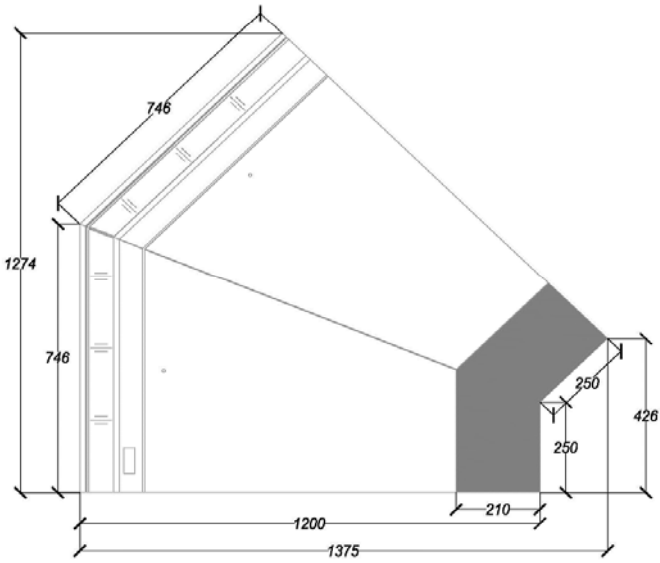
CLIMATE CLASS 3 : 25° C - 60% RH (EN ISO 23953)

	Modules		Unit	IC 45	OC 45	
Dimensions	Length of Module <i>without endwall</i>		mm	1274	1090	
	Thickness of Endwall			40		
	Total Display Area (TDA)		m <sup>2</sup>			
	Display Opening Area					
	Net Volume			liter		
Refrigeration Data	Refrigeration Load	3M1	<i>ti: -1/1°C (Te: -8°C)</i>	W	1320	1100
		3M2	<i>ti: 2/4°C (Te: -7°C)</i>		1140	950
	Expansion Valve and Nozzle (Danfoss TEV)	(R134a) (3M1, 3M2), (*) <i>interior balance</i>		type	02 (*) / 01 (*)	01 (*) / 01 (*)
		(R404A)(3M1, 3M2) (*) <i>interior balance</i>			01 (*) / 01 (*)	01 (*) / 01 (*)
Expansion Valve and Nozzle (Danfoss AKV)	(R134a) (3M1, 3M2)		type	10-3 / 10-3	10-3 / 10-2	
	(R404A) (3M1, 3M2)			10-3 / 10-3	10-3 / 10-3	
Electrical Data	Lighting	Standart (T5) <i>canopy single row</i>		W	N/A	N/A
		Optional (LED) <i>canopy</i>			N/A	N/A
		Standart (T5) <i>shelf lighting (each row)</i>			N/A	N/A
		Optional (LED) <i>shelf lighting (each row)</i>			N/A	N/A
	Heaters	Trim heater canopy		W	N/A	N/A
		Defrost heater (3M1, 3M2)			N/A	N/A
	Fan Motor	Shaded Pole ( <i>standart</i> )		W	55	55
		Electronic - Energy Saving ( <i>optional</i> )			18	18
Antimist fan		N/A	N/A			
Internal Fittings	Shelves & Depths	min./standart/max. ( <i>rows</i> )		n°/(mm)	- / 1 (400) / 2 (300 & 400)	
		with lighting standart / max. ( <i>rows</i> )			n°	1 / 2
info	<b>All datas are based on non lighting shelf</b>					
Recommended Setting Parameters & Temperature Classes	<b>Compressor Regulation Parameters</b>					
	Compressor cut out temperature (supply air temperature)	3M1 ( <i>ti: -1/1 °C</i> )		°C	-1	
		3M2 ( <i>ti: 2/4 °C</i> )			+2	
	Compressor cut in temperature (supply air temperature)	3M1 ( <i>ti: -1/1 °C</i> )			+1	
		3M2 ( <i>ti: 2/4 °C</i> )			+4	
	<b>Defrost Regulation Parameters</b>					
	Defrost interval time			hour	6	
	Defrost endurance time			minute	45	
	Defrost termination temperature			°C	12	
	<b>Fan Regulation Parameters</b>					
	Fan cut in during defrost			-	YES (ON)	
	<b>Alarm Regulation Parameters</b>					
	High temperature alarm			°C	25	
	Low temperature alarm				-5	
	Power-on alarm override			minute	1	
	Defrost alarm override				1	
	Temperature alarm override				30	
<b>Temperature Classes</b>				Highest Temperature	Lowest Temperature	
M1			°C	+5	-1	
M2				+7	-1	

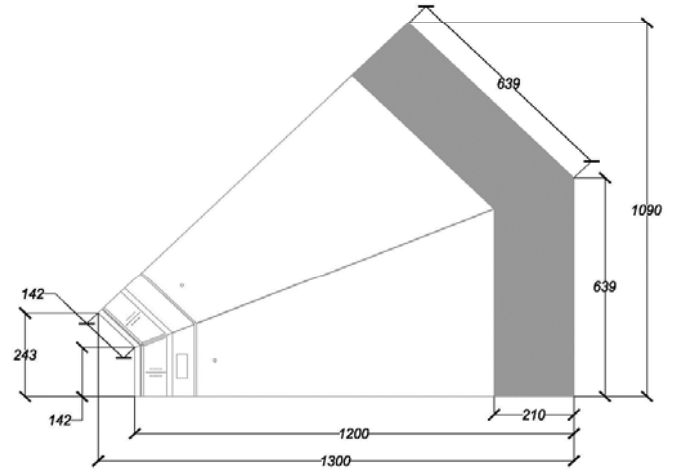
TECHNICAL DATA SHEET

SECTIONAL VIEW

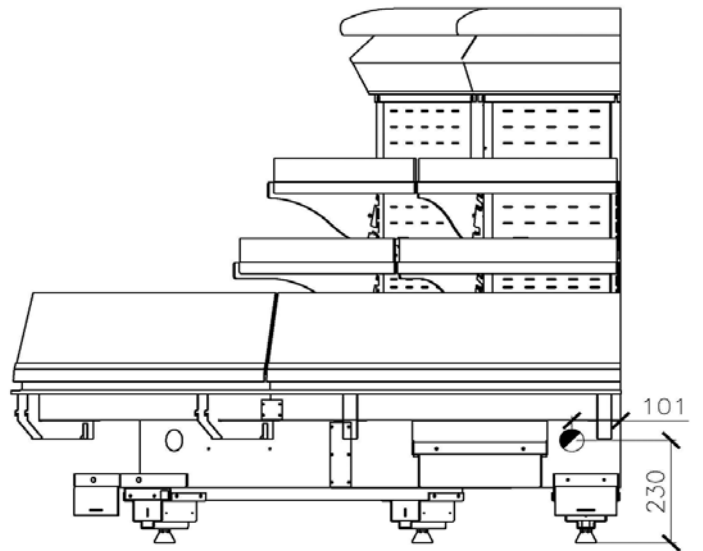
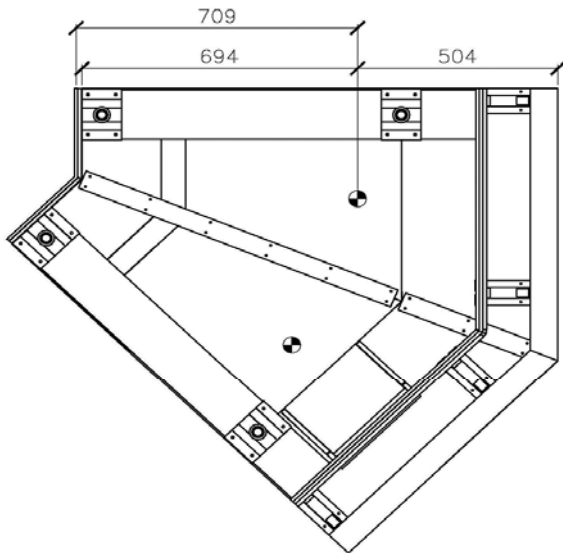
CASTRA 21 H1200 B41 OC45



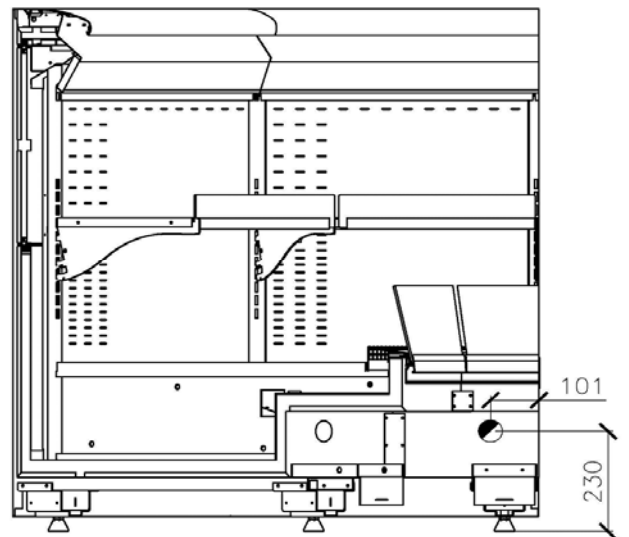
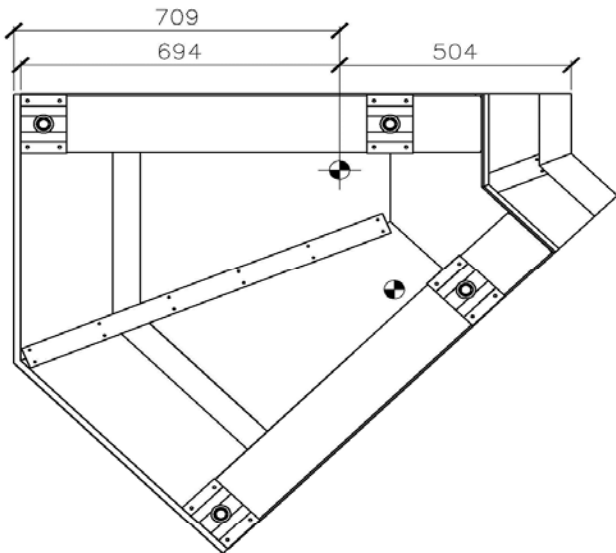
CASTRA 21 H1200 B41 IC45



PLAN VIEW - OC45



PLAN VIEW - IC45



Note: Dimensions are in mm

Tekso reserves the right to change any technical details

Tekso Documentation Department February, 2012rev06



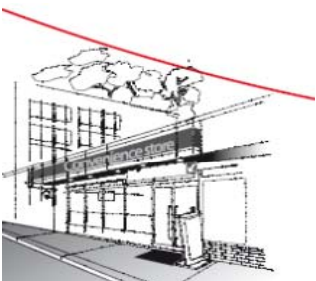


## CASTRA 44

### SEMI-VERTICAL REFRIGERATED DISPLAY CABINETS *multideck*



## Technical Data Sheet



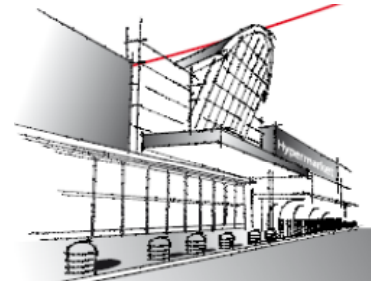
English



ISO 9001:2008

Tekso Quality Assurance Department

February, 2012 rev02



TECHNICAL DATA SHEET

CLIMATE CLASS 3 : 25° C - 60% RH (EN ISO 23953)

Modules		Unit	1250	1875	2500	3750		
Dimensions	Length of Module <i>without endwall</i>	mm	1250	1875	2500	3750		
	Thickness of Endwall		40					
	Total Display Area (TDA)	m <sup>2</sup>	1,68	2,53	3,37	5,05		
	Display Opening Area		0,73	1,10	1,47	2,20		
	Net Volume		liter	433	649	865	1298	
Refrigeration Data	Refrigeration Load	3M1	<i>ti: -1°C/+1°C (Te: -8°C)</i>		1150	1725	2300	3450
		3M2	<i>ti: 2/4°C (Te: -7°C)</i>		1050	1580	2100	3160
		3H1	<i>ti: 6/8°C (Te: -5°C)</i>		865	1295	1730	2590
	Expansion Valve and Nozzle (Danfoss TEV)	(R134a) (3M1, 3M2, 3H1), (*) <i>interior balance</i>	type	01 (*) / 01 (*) / 01 (*)	02 / 02 / 02	03 / 03 / 02	04 / 03 / 03	
		(R404A) (3M1, 3M2, 3H1) (*) <i>interior balance</i>		01 (*) / 01 (*) / 01 (*)	02 / 01 / 01	02 / 02 / 02	03 / 03 / 03	
	Expansion Valve and Nozzle (Danfoss AKV)	(R134a) (3M1, 3M2, 3H1)	type	10-3 / 10-3 / 10-2	10-3 / 10-3 / 10-3	10-4 / 10-4 / 10-3	10-5 / 10-4 / 10-4	
(R404A) (3M1, 3M2, 3H1)		10-3 / 10-3 / 10-2		10-4 / 10-3 / 10-3	10-4 / 10-4 / 10-4	10-5 / 10-5 / 10-4		
Electrical Data	Lighting	Standart (T5) <i>canopy single row</i>	W	28	42	56	84	
		Optional (LED) <i>canopy</i>		29	42	58	87	
		Standart (T5) <i>shelf lighting (each row)</i>		28	42	56	84	
		Optional (LED) <i>shelf lighting (each row)</i>		11	14	22	33	
	Heaters	Trim heater canopy	W	N/A	N/A	N/A	N/A	
		Defrost heater (3M1, 3M2, 3H1)		N/A	N/A	N/A	N/A	
	Fan Motor	Shaded Pole ( <i>standart</i> )	W	55	110	165	220	
		Electronic - Energy Saving ( <i>optional</i> )		18	36	54	72	
Antimist fan.		N/A		N/A	N/A	N/A		
Internal Fittings	Shelves & Depths	min./standart/max. ( <i>rows</i> )	n°/(mm)	- / 1 (400) / 2 ( 300 & 400 )				
		with lighting standart / max. ( <i>rows</i> )	n°	1 / 2				
info	<b>All datas are based on 1 levels non lighting shelf and single canopy lighting</b>							
Recommended Setting Parameters & Temperature Classes	<b>Compressor Regulation Parameters</b>							
	Compressor cut out temperature (supply air temperature)	3M1 ( <i>ti: -1/1 °C</i> )	°C	-1				
		3M2 ( <i>ti: 2/4 °C</i> )		+2				
		3H1 ( <i>ti: 6/8 °C</i> )		+6				
	Compressor cut in temperature (supply air temperature)	3M1 ( <i>ti: -1/1 °C</i> )		+1				
		3M2 ( <i>ti: 2/4 °C</i> )		+4				
		3H1 ( <i>ti: 6/8 °C</i> )		+8				
	<b>Defrost Regulation Parameters</b>							
	Defrost interval time	hour	6					
	Defrost endurance time	minute	45					
	Defrost termination temperature	°C	12					
	<b>Fan Regulation Parameters</b>							
	Fan cut in during defrost	-	YES (ON)					
	<b>Alarm Regulation Parameters</b>							
	High temperature alarm	°C	25					
	Low temperature alarm		-5					
	Power-on alarm override	minute	1					
	Defrost alarm override		1					
	Temperature alarm override		30					
	<b>Temperature Classes</b>			Highest Temperature	Lowest Temperature			
M1	°C	+5		-1				
M2		+7		-1				
H1		+10		+1				

TECHNICAL DATA SHEET

CLIMATE CLASS 3 : 25° C - 60% RH (EN ISO 23953)

Modules		Unit	1250	1875	2500	3750		
Dimensions	Length of Module <i>without endwall</i>	mm	1250	1875	2500	3750		
	Thickness of Endwall		40					
	Total Display Area (TDA)	m <sup>2</sup>	1,81	2,71	3,61	5,42		
	Display Opening Area		0,86	1,29	1,72	2,58		
	Net Volume		liter	438	656	875	1313	
Refrigeration Data	Refrigeration Load	3M1	<i>ti: -1°C/+1°C (Te: -8°C)</i>		1200	1815	2400	3630
		3M2	<i>ti: 2/4°C (Te: -7°C)</i>		1120	1680	2240	3360
		3H1	<i>ti: 6/8°C (Te: -5°C)</i>		905	1370	1810	2740
	Expansion Valve and Nozzle (Danfoss TEV)	(R134a) (3M1, 3M2, 3H1), (*) <i>interior balance</i>	type	01 (*) / 01 (*) / 01 (*)	02 / 02 / 02	03 / 03 / 02	04 / 03 / 03	
		(R404A) (3M1, 3M2, 3H1) (*) <i>interior balance</i>		01 (*) / 01 (*) / 01 (*)	02 / 01 / 01	02 / 02 / 02	03 / 03 / 03	
	Expansion Valve and Nozzle (Danfoss AKV)	(R134a) (3M1, 3M2, 3H1)	type	10-3 / 10-3 / 10-2	10-3 / 10-3 / 10-3	10-4 / 10-4 / 10-3	10-5 / 10-4 / 10-4	
(R404A) (3M1, 3M2, 3H1)		10-3 / 10-3 / 10-2		10-4 / 10-3 / 10-3	10-4 / 10-4 / 10-4	10-5 / 10-5 / 10-4		
Electrical Data	Lighting	Standart (T5) <i>canopy single row</i>	W	28	42	56	84	
		Optional (LED) <i>canopy</i>		29	42	58	87	
		Standart (T5) <i>shelf lighting (each row)</i>		28	42	56	84	
		Optional (LED) <i>shelf lighting (each row)</i>		11	14	22	33	
	Heaters	Trim heater canopy	W	N/A	N/A	N/A	N/A	
		Defrost heater (3M1, 3M2, 3H1)		N/A	N/A	N/A	N/A	
	Fan Motor	Shaded Pole ( <i>standart</i> )	W	55	110	165	220	
		Electronic - Energy Saving ( <i>optional</i> )		18	36	54	72	
Antimist fan.		N/A		N/A	N/A	N/A		
Internal Fittings	Shelves & Depths	min./standart/max. ( <i>rows</i> )	n°/(mm)	- / 2 (400 & 500) / 3 (300 & 400 & 500)				
		with lighting standart / max. ( <i>rows</i> )	n°	2 / 3				
info	<b>All datas are based on 2 levels non lighting shelves and single canopy lighting</b>							
Recommended Setting Parameters & Temperature Classes	<b>Compressor Regulation Parameters</b>							
	Compressor cut out temperature (supply air temperature)	3M1 ( <i>ti: -1/1 °C</i> )	°C	-1				
		3M2 ( <i>ti: 2/4 °C</i> )		+2				
		3H1 ( <i>ti: 6/8 °C</i> )		+6				
	Compressor cut in temperature (supply air temperature)	3M1 ( <i>ti: -1/1 °C</i> )		+1				
		3M2 ( <i>ti: 2/4 °C</i> )		+4				
		3H1 ( <i>ti: 6/8 °C</i> )		+8				
	<b>Defrost Regulation Parameters</b>							
	Defrost interval time	hour	6					
	Defrost endurance time	minute	45					
	Defrost termination temperature	°C	12					
	<b>Fan Regulation Parameters</b>							
	Fan cut in during defrost	-	YES (ON)					
	<b>Alarm Regulation Parameters</b>							
	High temperature alarm	°C	25					
	Low temperature alarm	°C	-5					
	Power-on alarm override	minute	1					
	Defrost alarm override		1					
	Temperature alarm override		30					
	<b>Temperature Classes</b>			Highest Temperature		Lowest Temperature		
M1	°C	+5		-1				
M2		+7		-1				
H1		+10		+1				

TECHNICAL DATA SHEET

CLIMATE CLASS 3 : 25° C - 60% RH (EN ISO 23953)

Modules		Unit	1250	1875	2500	3750		
Dimensions	Length of Module <i>without endwall</i>	mm	1250	1875	2500	3750		
	Thickness of Endwall		40					
	Total Display Area (TDA)	m <sup>2</sup>	1,95	2,92	3,89	5,84		
	Display Opening Area		0,99	1,48	1,97	2,96		
	Net Volume	liter	478	716	955	1433		
Refrigeration Data	Refrigeration Load	3M1	<i>ti: -1°C/+1°C (Te: -8°C)</i>		1315	1970	2630	3940
		3M2	<i>ti: 2/4°C (Te: -7°C)</i>		1235	1855	2470	3710
		3H1	<i>ti: 6/8°C (Te: -5°C)</i>		975	1465	1950	2930
	Expansion Valve and Nozzle (Danfoss TEV)	(R134a) (3M1, 3M2, 3H1), (*) <i>interior balance</i>	type	01 (*) / 01 (*) / 01 (*)	02 / 02 / 02	03 / 03 / 02	04 / 04 / 03	
		(R404A) (3M1, 3M2, 3H1) (*) <i>interior balance</i>		01 (*) / 01 (*) / 01 (*)	02 / 02 / 01	03 / 03 / 02	03 / 03 / 03	
	Expansion Valve and Nozzle (Danfoss AKV)	(R134a) (3M1, 3M2, 3H1)	type	10-3 / 10-3 / 10-2	10-3 / 10-3 / 10-3	10-4 / 10-4 / 10-3	10-5 / 10-5 / 10-4	
(R404A) (3M1, 3M2, 3H1)		10-3 / 10-3 / 10-2		10-4 / 10-4 / 10-3	10-5 / 10-5 / 10-4	10-5 / 10-5 / 10-5		
Electrical Data	Lighting	Standart (T5) <i>canopy single row</i>	W	28	42	56	84	
		Optional (LED) <i>canopy</i>		29	42	58	87	
		Standart (T5) <i>shelf lighting (each row)</i>		28	42	56	84	
		Optional (LED) <i>shelf lighting (each row)</i>		11	14	22	33	
	Heaters	Trim heater canopy	W	N/A	N/A	N/A	N/A	
		Defrost heater (3M1, 3M2, 3H1)		N/A	N/A	N/A	N/A	
	Fan Motor	Shaded Pole ( <i>standart</i> )	W	55	110	165	220	
		Electronic - Energy Saving ( <i>optional</i> )		18	36	54	72	
Antimist fan.		N/A		N/A	N/A	N/A		
Internal Fittings	Shelves & Depths	min./standart/max. ( <i>rows</i> )	n°/(mm)	- / 2 (400 & 500) / 3 (300 & 400 & 500)				
		with lighting standart / max. ( <i>rows</i> )	n°	2 / 3				
info	<b>All datas are based on 2 levels non lighting shelves and single canopy lighting</b>							
Recommended Setting Parameters & Temperature Classes	<b>Compressor Regulation Parameters</b>							
	Compressor cut out temperature (supply air temperature)	3M1 ( <i>ti: -1/1 °C</i> )	°C	-1				
		3M2 ( <i>ti: 2/4 °C</i> )		+2				
		3H1 ( <i>ti: 6/8 °C</i> )		+6				
	Compressor cut in temperature (supply air temperature)	3M1 ( <i>ti: -1/1 °C</i> )		+1				
		3M2 ( <i>ti: 2/4 °C</i> )		+4				
		3H1 ( <i>ti: 6/8 °C</i> )		+8				
	<b>Defrost Regulation Parameters</b>							
	Defrost interval time	hour	6					
	Defrost endurance time	minute	45					
	Defrost termination temperature	°C	12					
	<b>Fan Regulation Parameters</b>							
	Fan cut in during defrost	-	YES (ON)					
	<b>Alarm Regulation Parameters</b>							
	High temperature alarm	°C	25					
	Low temperature alarm	°C	-5					
	Power-on alarm override	minute	1					
	Defrost alarm override		1					
	Temperature alarm override		30					
	<b>Temperature Classes</b>			Highest Temperature		Lowest Temperature		
M1	°C	+5		-1				
M2		+7		-1				
H1		+10		+1				

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CLIMATE CLASS 3 : 25° C - 60% RH (EN ISO 23953)

Modules		Unit	1250	1875	2500	3750		
Dimensions	Length of Module <i>without endwall</i>	mm	1250	1875	2500	3750		
	Thickness of Endwall		40					
	Total Display Area (TDA)	m <sup>2</sup>	2,06	3,09	4,11	6,17		
	Display Opening Area		1,11	1,67	2,22	3,33		
	Net Volume		liter	495	743	990	1485	
Refrigeration Data	Refrigeration Load	3M1	<i>ti: -1°C/+1°C (Te: -8°C)</i>		1365	2050	2730	4100
		3M2	<i>ti: 2/4°C (Te: -7°C)</i>		1270	1900	2540	3800
		3H1	<i>ti: 6/8°C (Te: -5°C)</i>		1025	1550	2050	3100
	Expansion Valve and Nozzle (Danfoss TEV)	(R134a) (3M1, 3M2, 3H1), (*) <i>interior balance</i>	type	01 (*) / 01 (*) / 01 (*)	02 / 02 / 02	03 / 03 / 02	04 / 04 / 03	
		(R404A) (3M1, 3M2, 3H1) (*) <i>interior balance</i>		01 (*) / 01 (*) / 01 (*)	02 / 02 / 01	03 / 03 / 02	03 / 03 / 03	
	Expansion Valve and Nozzle (Danfoss AKV)	(R134a) (3M1, 3M2, 3H1)	type	10-3 / 10-3 / 10-2	10-3 / 10-3 / 10-3	10-4 / 10-4 / 10-3	10-5 / 10-5 / 10-4	
(R404A) (3M1, 3M2, 3H1)		10-3 / 10-3 / 10-2		10-4 / 10-4 / 10-3	10-5 / 10-5 / 10-4	10-5 / 10-5 / 10-5		
Electrical Data	Lighting	Standart (T5) <i>canopy single row</i>	W	28	42	56	84	
		Optional (LED) <i>canopy</i>		29	42	58	87	
		Standart (T5) <i>shelf lighting (each row)</i>		28	42	56	84	
		Optional (LED) <i>shelf lighting (each row)</i>		11	14	22	33	
	Heaters	Trim heater canopy	W	N/A	N/A	N/A	N/A	
		Defrost heater (3M1, 3M2, 3H1)		N/A	N/A	N/A	N/A	
	Fan Motor	Shaded Pole ( <i>standart</i> )	W	55	110	165	220	
		Electronic - Energy Saving ( <i>optional</i> )		18	36	54	72	
Antimist fan.		N/A		N/A	N/A	N/A		
Internal Fittings	Shelves & Depths	min./standart/max. ( <i>rows</i> )	n°/(mm)	- / 3 (300 & 400 & 500) / 4 (300 & 400 & 500 & 600)				
		with lighting standart / max. ( <i>rows</i> )	n°	3 / 4				
info	<b>All datas are based on 3 levels non lighting shelves and single canopy lighting</b>							
Recommended Setting Parameters & Temperature Classes	<b>Compressor Regulation Parameters</b>							
	Compressor cut out temperature (supply air temperature)	3M1 ( <i>ti: -1/1 °C</i> )	°C	-1				
		3M2 ( <i>ti: 2/4 °C</i> )		+2				
		3H1 ( <i>ti: 6/8 °C</i> )		+6				
	Compressor cut in temperature (supply air temperature)	3M1 ( <i>ti: -1/1 °C</i> )		+1				
		3M2 ( <i>ti: 2/4 °C</i> )		+4				
		3H1 ( <i>ti: 6/8 °C</i> )		+8				
	<b>Defrost Regulation Parameters</b>							
	Defrost interval time	hour	6					
	Defrost endurance time	minute	45					
	Defrost termination temperature	°C	12					
	<b>Fan Regulation Parameters</b>							
	Fan cut in during defrost	-	YES (ON)					
	<b>Alarm Regulation Parameters</b>							
	High temperature alarm	°C	25					
	Low temperature alarm		-5					
	Power-on alarm override	minute	1					
	Defrost alarm override		1					
	Temperature alarm override		30					
	<b>Temperature Classes</b>			Highest Temperature	Lowest Temperature			
M1	°C	+5			-1			
M2		+7			-1			
H1		+10			+1			

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CLIMATE CLASS 3 : 25° C - 60% RH (EN ISO 23953)

Modules		Unit	1250	1875	2500	3750		
Dimensions	Length of Module <i>without endwall</i>	mm	1250	1875	2500	3750		
	Thickness of Endwall		40					
	Total Display Area (TDA)	m <sup>2</sup>	2,18	3,27	4,36	6,55		
	Display Opening Area		1,23	1,85	2,46	3,69		
	Net Volume		liter	525	788	1050	1575	
Refrigeration Data	Refrigeration Load	3M1	<i>ti: -1°C/+1°C (Te: -8°C)</i>		1595	2390	3190	4780
		3M2	<i>ti: 2/4°C (Te: -7°C)</i>		1485	2225	2970	4450
		3H1	<i>ti: 6/8°C (Te: -5°C)</i>		1175	1765	2350	3530
	Expansion Valve and Nozzle (Danfoss TEV)	(R134a) (3M1, 3M2, 3H1), (*) <i>interior balance</i>	type	02 (*) / 02 (*) / 01(*)	03 / 03 / 02	03 / 03 / 03	04 / 04 / 04	
		(R404A)(3M1, 3M2, 3H1) (*) <i>interior balance</i>		02 (*) / 01 (*) / 01(*)	03 / 02 / 02	03 / 03 / 03	04 / 04 / 03	
	Expansion Valve and Nozzle (Danfoss AKV)	(R134a) (3M1, 3M2, 3H1)	type	10-3 / 10-3 / 10-2	10-4 / 10-4 / 10-3	10-5 / 10-4 / 10-4	10-5 / 10-5 / 10-5	
(R404A) (3M1, 3M2, 3H1)		10-3 / 10-3 / 10-3		10-4 / 10-4 / 10-3	10-5 / 10-5 / 10-4	10-6 / 10-5 / 10-5		
Electrical Data	Lighting	Standart (T5) <i>canopy single row</i>	W	28	42	56	84	
		Optional (LED) <i>canopy</i>		29	42	58	87	
		Standart (T5) <i>shelf lighting (each row)</i>		28	42	56	84	
		Optional (LED) <i>shelf lighting (each row)</i>		11	14	22	33	
	Heaters	Trim heater canopy	W	N/A	N/A	N/A	N/A	
		Defrost heater (3M1, 3M2, 3H1)		N/A	N/A	N/A	N/A	
	Fan Motor	Shaded Pole ( <i>standart</i> )	W	55	110	165	220	
		Electronic - Energy Saving ( <i>optional</i> )		18	36	54	72	
Antimist fan.		N/A		N/A	N/A	N/A		
Internal Fittings	Shelves & Depths	min./standart/max. ( <i>rows</i> )	n°/(mm)	- / 3 (300 & 400 & 500) / 4 (300 & 400 & 500 & 600)				
		with lighting standart / max. ( <i>rows</i> )	n°	3 / 4				
info	<b>All datas are based on 3 levels non lighting shelves and single canopy lighting</b>							
Recommended Setting Parameters & Temperature Classes	<b>Compressor Regulation Parameters</b>							
	Compressor cut out temperature (supply air temperature)	3M1 ( <i>ti: -1/1 °C</i> )	°C	-1				
		3M2 ( <i>ti: 2/4 °C</i> )		+2				
		3H1 ( <i>ti: 6/8 °C</i> )		+6				
	Compressor cut in temperature (supply air temperature)	3M1 ( <i>ti: -1/1 °C</i> )		+1				
		3M2 ( <i>ti: 2/4 °C</i> )		+4				
		3H1 ( <i>ti: 6/8 °C</i> )		+8				
	<b>Defrost Regulation Parameters</b>							
	Defrost interval time	hour	6					
	Defrost endurance time	minute	45					
	Defrost termination temperature	°C	12					
	<b>Fan Regulation Parameters</b>							
	Fan cut in during defrost	-	YES (ON)					
	<b>Alarm Regulation Parameters</b>							
	High temperature alarm	°C	25					
	Low temperature alarm		-5					
	Power-on alarm override	minute	1					
	Defrost alarm override		1					
	Temperature alarm override		30					
	<b>Temperature Classes</b>			Highest Temperature		Lowest Temperature		
	M1	°C	+5		-1			
	M2		+7		-1			
H1	+10		+1					

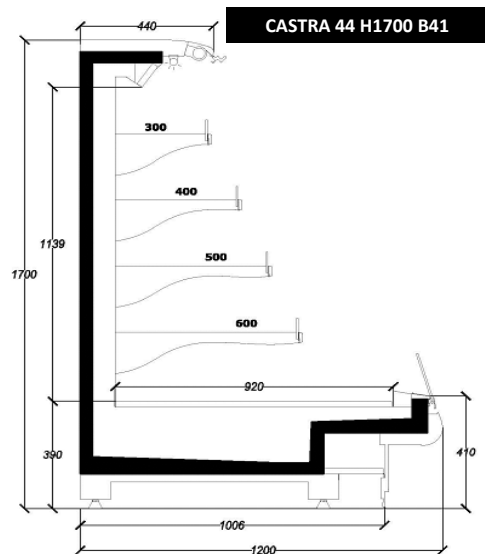
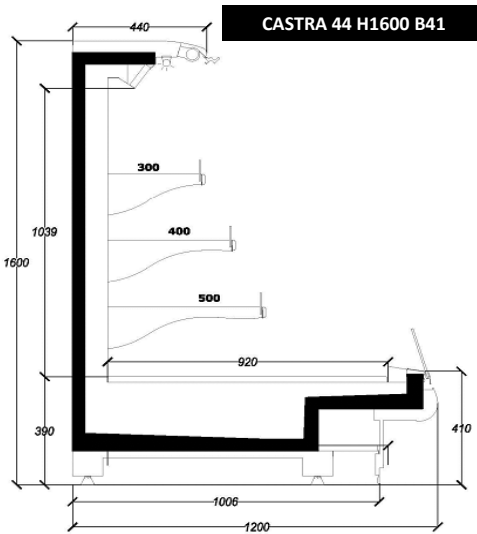
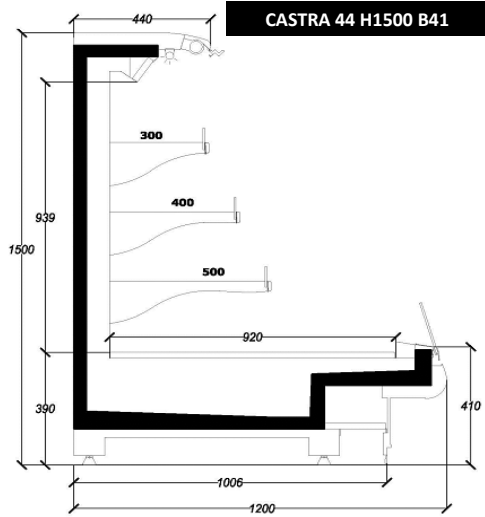
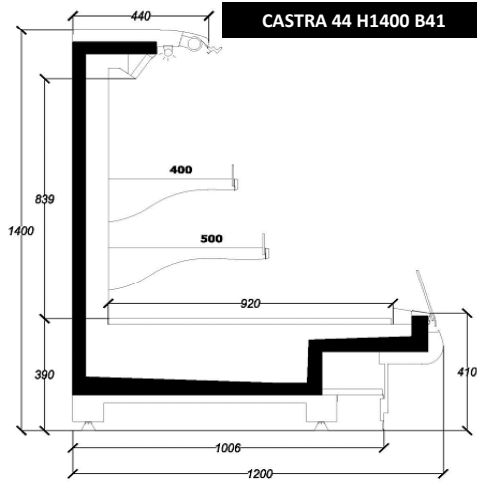
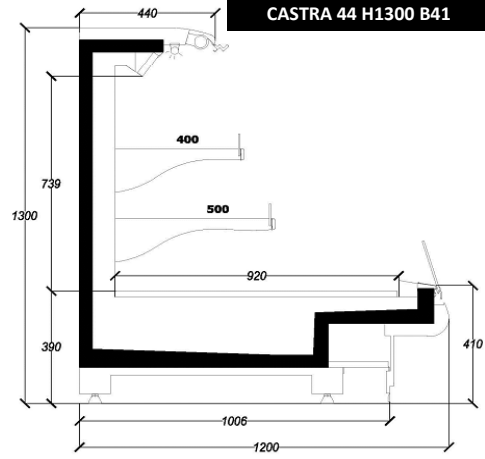
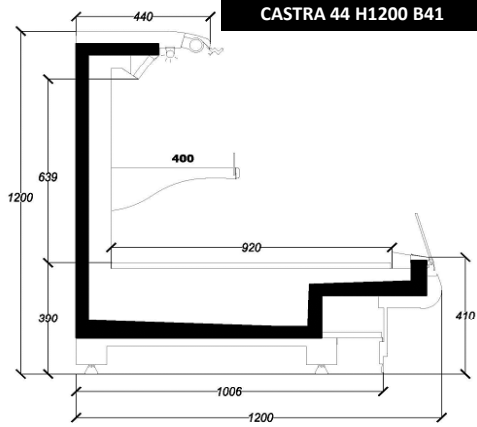
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CLIMATE CLASS 3 : 25° C - 60% RH (EN ISO 23953)

Modules		Unit	1250	1875	2500	3750		
Dimensions	Length of Module <i>without endwall</i>	mm	1250	1875	2500	3750		
	Thickness of Endwall		40					
	Total Display Area (TDA)	m <sup>2</sup>	2,29	3,44	4,59	6,88		
	Display Opening Area		1,34	2,01	2,68	4,01		
	Net Volume	liter	618	926	1235	1853		
Refrigeration Data	Refrigeration Load	3M1	<i>ti: -1°C/+1°C (Te: -8°C)</i>		1675	2520	3350	5040
		3M2	<i>ti: 2/4°C (Te: -7°C)</i>		1560	2335	3120	4670
		3H1	<i>ti: 6/8°C (Te: -5°C)</i>		1260	1900	2520	3800
	Expansion Valve and Nozzle (Danfoss TEV)	(R134a) (3M1, 3M2, 3H1), (*) <i>interior balance</i>	type	02 (*) / 02 (*) / 01(*)	03 / 03 / 02	03 / 03 / 03	04 / 04 / 04	
		(R404A)(3M1, 3M2, 3H1) (*) <i>interior balance</i>		02 (*) / 01 (*) / 01(*)	03 / 02 / 02	03 / 03 / 03	04 / 04 / 03	
	Expansion Valve and Nozzle (Danfoss AKV)	(R134a) (3M1, 3M2, 3H1)	type	10-3 / 10-3 / 10-2	10-4 / 10-4 / 10-3	10-5 / 10-4 / 10-4	10-5 / 10-5 / 10-5	
(R404A) (3M1, 3M2, 3H1)		10-3 / 10-3 / 10-3		10-4 / 10-4 / 10-3	10-5 / 10-5 / 10-4	10-6 / 10-5 / 10-5		
Electrical Data	Lighting	Standart (T5) <i>canopy single row</i>	W	28	42	56	84	
		Optional (LED) <i>canopy</i>		29	42	58	87	
		Standart (T5) <i>shelf lighting (each row)</i>		28	42	56	84	
		Optional (LED) <i>shelf lighting (each row)</i>		11	14	22	33	
	Heaters	Trim heater canopy	W	N/A	N/A	N/A	N/A	
		Defrost heater (3M1, 3M2, 3H1)		N/A	N/A	N/A	N/A	
	Fan Motor	Shaded Pole ( <i>standart</i> )	W	55	110	165	220	
		Electronic - Energy Saving ( <i>optional</i> )		18	36	54	72	
Antimist fan.		N/A		N/A	N/A	N/A		
Internal Fittings	Shelves & Depths	min./standart/max. ( <i>rows</i> )	n°/(mm)	- / 4 (300 & 400 & 500 & 600) / 5 (300 & 400 & 450 & 500 & 600)				
		with lighting standart / max. ( <i>rows</i> )	n°	4 / 5				
info	<b>All datas are based on 4 levels non lighting shelves and single canopy lighting</b>							
Recommended Setting Parameters & Temperature Classes	<b>Compressor Regulation Parameters</b>							
	Compressor cut out temperature (supply air temperature)	3M1 ( <i>ti: -1/1 °C</i> )	°C	-1				
		3M2 ( <i>ti: 2/4 °C</i> )		+2				
		3H1 ( <i>ti: 6/8 °C</i> )		+6				
	Compressor cut in temperature (supply air temperature)	3M1 ( <i>ti: -1/1 °C</i> )		+1				
		3M2 ( <i>ti: 2/4 °C</i> )		+4				
		3H1 ( <i>ti: 6/8 °C</i> )		+8				
	<b>Defrost Regulation Parameters</b>							
	Defrost interval time	hour	6					
	Defrost endurance time	minute	45					
	Defrost termination temperature	°C	12					
	<b>Fan Regulation Parameters</b>							
	Fan cut in during defrost	-	YES (ON)					
	<b>Alarm Regulation Parameters</b>							
	High temperature alarm	°C	25					
	Low temperature alarm	°C	-5					
	Power-on alarm override	minute	1					
	Defrost alarm override		1					
	Temperature alarm override		30					
	<b>Temperature Classes</b>			Highest Temperature		Lowest Temperature		
	M1	°C	+5		-1			
M2	+7		-1					
H1	+10		+1					

TECHNICAL DATA SHEET

SECTIONAL VIEW



Note: Dimensions are in mm



TECHNICAL DATA SHEET

CLIMATE CLASS 3 : 25° C - 60% RH (EN ISO 23953)

Modules		Unit	1250	1875	2500	3750		
Dimensions	Length of Module <i>without endwall</i>	mm	1250	1875	2500	3750		
	Thickness of Endwall		40					
	Total Display Area (TDA)	m <sup>2</sup>	1,68	2,53	3,37	5,05		
	Display Opening Area		0,73	1,10	1,47	2,20		
	Net Volume		liter	433	649	865	1298	
Refrigeration Data	Refrigeration Load	3M1	<i>ti: -1°C/+1°C (Te: -8°C)</i>		1150	1725	2300	3450
		3M2	<i>ti: 2/4°C (Te: -7°C)</i>		1050	1580	2100	3160
		3H1	<i>ti: 6/8°C (Te: -5°C)</i>		865	1295	1730	2590
	Expansion Valve and Nozzle (Danfoss TEV)	(R134a) (3M1, 3M2, 3H1), (*) <i>interior balance</i>	type	01 (*) / 01 (*) / 01 (*)	02 / 02 / 02	03 / 03 / 02	04 / 03 / 03	
		(R404A) (3M1, 3M2, 3H1) (*) <i>interior balance</i>		01 (*) / 01 (*) / 01 (*)	02 / 01 / 01	02 / 02 / 02	03 / 03 / 03	
	Expansion Valve and Nozzle (Danfoss AKV)	(R134a) (3M1, 3M2, 3H1)	type	10-3 / 10-3 / 10-2	10-3 / 10-3 / 10-3	10-4 / 10-4 / 10-3	10-5 / 10-4 / 10-4	
(R404A) (3M1, 3M2, 3H1)		10-3 / 10-3 / 10-2		10-4 / 10-3 / 10-3	10-4 / 10-4 / 10-4	10-5 / 10-5 / 10-4		
Electrical Data	Lighting	Standart (T5) <i>canopy single row</i>	W	28	42	56	84	
		Optional (LED) <i>canopy</i>		29	42	58	87	
		Standart (T5) <i>shelf lighting (each row)</i>		28	42	56	84	
		Optional (LED) <i>shelf lighting (each row)</i>		11	14	22	33	
	Heaters	Trim heater canopy	W	N/A	N/A	N/A	N/A	
		Defrost heater (3M1, 3M2, 3H1)		N/A	N/A	N/A	N/A	
	Fan Motor	Shaded Pole ( <i>standart</i> )	W	55	110	165	220	
		Electronic - Energy Saving ( <i>optional</i> )		18	36	54	72	
Antimist fan.		N/A		N/A	N/A	N/A		
Internal Fittings	Shelves & Depths	min./standart/max. ( <i>rows</i> )	n°/(mm)	- / 1 (400) / 2 (300 & 400)				
		with lighting standart / max. ( <i>rows</i> )	n°	1 / 2				
info	<b>All datas are based on 1 level non lighting shelves and single canopy lighting</b>							
Recommended Setting Parameters & Temperature Classes	<b>Compressor Regulation Parameters</b>							
	Compressor cut out temperature (supply air temperature)	3M1 ( <i>ti: -1/1 °C</i> )	°C	-1				
		3M2 ( <i>ti: 2/4 °C</i> )		+2				
		3H1 ( <i>ti: 6/8 °C</i> )		+6				
	Compressor cut in temperature (supply air temperature)	3M1 ( <i>ti: -1/1 °C</i> )		+1				
		3M2 ( <i>ti: 2/4 °C</i> )		+4				
		3H1 ( <i>ti: 6/8 °C</i> )		+8				
	<b>Defrost Regulation Parameters</b>							
	Defrost interval time	hour	6					
	Defrost endurance time	minute	45					
	Defrost termination temperature	°C	12					
	<b>Fan Regulation Parameters</b>							
	Fan cut in during defrost	-	YES (ON)					
	<b>Alarm Regulation Parameters</b>							
	High temperature alarm	°C	25					
	Low temperature alarm		-5					
	Power-on alarm override	minute	1					
	Defrost alarm override		1					
	Temperature alarm override		30					
	<b>Temperature Classes</b>			Highest Temperature	Lowest Temperature			
M1	°C	+5			-1			
M2		+7			-1			
H1		+10			+1			

TECHNICAL DATA SHEET

CLIMATE CLASS 3 : 25° C - 60% RH (EN ISO 23953)

Modules		Unit	1250	1875	2500	3750		
Dimensions	Length of Module <i>without endwall</i>	mm	1250	1875	2500	3750		
	Thickness of Endwall		40					
	Total Display Area (TDA)	m <sup>2</sup>	1,81	2,71	3,61	5,42		
	Display Opening Area		0,86	1,29	1,72	2,58		
	Net Volume		liter	438	656	875	1313	
Refrigeration Data	Refrigeration Load	3M1	<i>ti: -1°C/+1°C (Te: -8°C)</i>		1200	1815	2400	3630
		3M2	<i>ti: 2/4°C (Te: -7°C)</i>		1120	1680	2240	3360
		3H1	<i>ti: 6/8°C (Te: -5°C)</i>		905	1370	1810	2740
	Expansion Valve and Nozzle (Danfoss TEV)	(R134a) (3M1, 3M2, 3H1), (*) <i>interior balance</i>	type	01 (*) / 01 (*) / 01 (*)	02 / 02 / 02	03 / 03 / 02	04 / 03 / 03	
		(R404A) (3M1, 3M2, 3H1) (*) <i>interior balance</i>		01 (*) / 01 (*) / 01 (*)	02 / 01 / 01	02 / 02 / 02	03 / 03 / 03	
	Expansion Valve and Nozzle (Danfoss AKV)	(R134a) (3M1, 3M2, 3H1)	type	10-3 / 10-3 / 10-2	10-3 / 10-3 / 10-3	10-4 / 10-4 / 10-3	10-5 / 10-4 / 10-4	
(R404A) (3M1, 3M2, 3H1)		10-3 / 10-3 / 10-2		10-4 / 10-3 / 10-3	10-4 / 10-4 / 10-4	10-5 / 10-5 / 10-4		
Electrical Data	Lighting	Standart (T5) <i>canopy single row</i>	W	28	42	56	84	
		Optional (LED) <i>canopy</i>		29	42	58	87	
		Standart (T5) <i>shelf lighting (each row)</i>		28	42	56	84	
		Optional (LED) <i>shelf lighting (each row)</i>		11	14	22	33	
	Heaters	Trim heater canopy	W	N/A	N/A	N/A	N/A	
		Defrost heater (3M1, 3M2, 3H1)		N/A	N/A	N/A	N/A	
	Fan Motor	Shaded Pole ( <i>standart</i> )	W	55	110	165	220	
		Electronic - Energy Saving ( <i>optional</i> )		18	36	54	72	
Antimist fan.		N/A		N/A	N/A	N/A		
Internal Fittings	Shelves & Depths	min./standart/max. ( <i>rows</i> )	n°/(mm)	- / 2 (400 & 500) / 3 (300 & 400 & 500)				
		with lighting standart / max. ( <i>rows</i> )	n°	2 / 3				
info	<b>All datas are based on 2 levels non lighting shelves and single canopy lighting</b>							
Recommended Setting Parameters & Temperature Classes	<b>Compressor Regulation Parameters</b>							
	Compressor cut out temperature (supply air temperature)	3M1 ( <i>ti: -1/1 °C</i> )	°C	-1				
		3M2 ( <i>ti: 2/4 °C</i> )		+2				
		3H1 ( <i>ti: 6/8 °C</i> )		+6				
	Compressor cut in temperature (supply air temperature)	3M1 ( <i>ti: -1/1 °C</i> )		+1				
		3M2 ( <i>ti: 2/4 °C</i> )		+4				
		3H1 ( <i>ti: 6/8 °C</i> )		+8				
	<b>Defrost Regulation Parameters</b>							
	Defrost interval time	hour	6					
	Defrost endurance time	minute	45					
	Defrost termination temperature	°C	12					
	<b>Fan Regulation Parameters</b>							
	Fan cut in during defrost	-	YES (ON)					
	<b>Alarm Regulation Parameters</b>							
	High temperature alarm	°C	25					
	Low temperature alarm		-5					
	Power-on alarm override	minute	1					
	Defrost alarm override		1					
	Temperature alarm override		30					
	<b>Temperature Classes</b>			Highest Temperature		Lowest Temperature		
	M1	°C	+5		-1			
M2	+7		-1					
H1	+10		+1					

TECHNICAL DATA SHEET

CLIMATE CLASS 3 : 25° C - 60% RH (EN ISO 23953)

Modules		Unit	1250	1875	2500	3750		
Dimensions	Length of Module <i>without endwall</i>	mm	1250	1875	2500	3750		
	Thickness of Endwall		40					
	Total Display Area (TDA)	m <sup>2</sup>	1,95	2,92	3,89	5,84		
	Display Opening Area		0,99	1,48	1,97	2,96		
	Net Volume		liter	478	716	955	1433	
Refrigeration Data	Refrigeration Load	3M1	<i>ti: -1°C/+1°C (Te: -8°C)</i>		1315	1970	2630	3940
		3M2	<i>ti: 2/4°C (Te: -7°C)</i>		1235	1855	2470	3710
		3H1	<i>ti: 6/8°C (Te: -5°C)</i>		975	1465	1950	2930
	Expansion Valve and Nozzle (Danfoss TEV)	(R134a) (3M1, 3M2, 3H1), (*) <i>interior balance</i>	type	01 (*) / 01 (*) / 01 (*)	02 / 02 / 02	03 / 03 / 02	04 / 04 / 03	
		(R404A) (3M1, 3M2, 3H1) (*) <i>interior balance</i>		01 (*) / 01 (*) / 01 (*)	02 / 02 / 01	03 / 03 / 02	03 / 03 / 03	
	Expansion Valve and Nozzle (Danfoss AKV)	(R134a) (3M1, 3M2, 3H1)	type	10-3 / 10-3 / 10-2	10-3 / 10-3 / 10-3	10-4 / 10-4 / 10-3	10-5 / 10-5 / 10-4	
(R404A) (3M1, 3M2, 3H1)		10-3 / 10-3 / 10-2		10-4 / 10-4 / 10-3	10-5 / 10-5 / 10-4	10-5 / 10-5 / 10-5		
Electrical Data	Lighting	Standart (T5) <i>canopy single row</i>	W	28	42	56	84	
		Optional (LED) <i>canopy</i>		29	42	58	87	
		Standart (T5) <i>shelf lighting (each row)</i>		28	42	56	84	
		Optional (LED) <i>shelf lighting (each row)</i>		11	14	22	33	
	Heaters	Trim heater canopy	W	N/A	N/A	N/A	N/A	
		Defrost heater (3M1, 3M2, 3H1)		N/A	N/A	N/A	N/A	
	Fan Motor	Shaded Pole ( <i>standart</i> )	W	55	110	165	220	
		Electronic - Energy Saving ( <i>optional</i> )		18	36	54	72	
Antimist fan.		N/A		N/A	N/A	N/A		
Internal Fittings	Shelves & Depths	min./standart/max. ( <i>rows</i> )	n°/(mm)	- / 2 (400 & 500) / 3 (300 & 400 & 500)				
		with lighting standart / max. ( <i>rows</i> )	n°	2 / 3				
info	<b>All datas are based on 2 levels non lighting shelves and single canopy lighting</b>							
Recommended Setting Parameters & Temperature Classes	<b>Compressor Regulation Parameters</b>							
	Compressor cut out temperature (supply air temperature)	3M1 ( <i>ti: -1/1 °C</i> )	°C	-1				
		3M2 ( <i>ti: 2/4 °C</i> )		+2				
		3H1 ( <i>ti: 6/8 °C</i> )		+6				
	Compressor cut in temperature (supply air temperature)	3M1 ( <i>ti: -1/1 °C</i> )		+1				
		3M2 ( <i>ti: 2/4 °C</i> )		+4				
		3H1 ( <i>ti: 6/8 °C</i> )		+8				
	<b>Defrost Regulation Parameters</b>							
	Defrost interval time	hour	6					
	Defrost endurance time	minute	45					
	Defrost termination temperature	°C	12					
	<b>Fan Regulation Parameters</b>							
	Fan cut in during defrost	-	YES (ON)					
	<b>Alarm Regulation Parameters</b>							
	High temperature alarm	°C	25					
	Low temperature alarm	°C	-5					
	Power-on alarm override	minute	1					
	Defrost alarm override		1					
	Temperature alarm override		30					
	<b>Temperature Classes</b>			Highest Temperature		Lowest Temperature		
M1	°C	+5		-1				
M2		+7		-1				
H1		+10		+1				

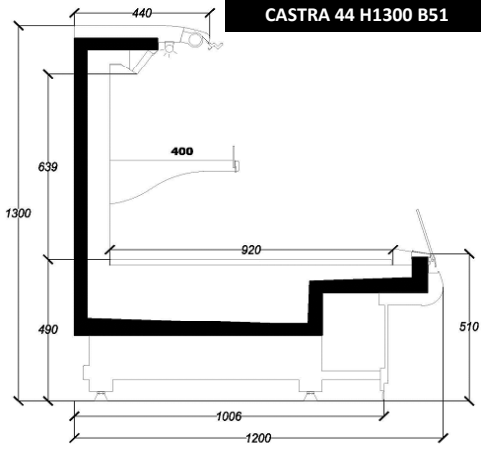
TECHNICAL DATA SHEET

CLIMATE CLASS 3 : 25° C - 60% RH (EN ISO 23953)

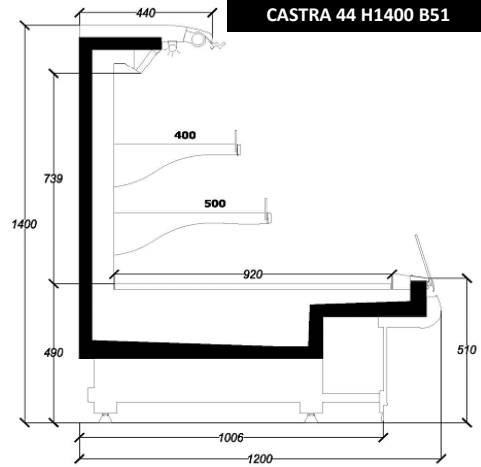
Modules		Unit	1250	1875	2500	3750		
Dimensions	Length of Module <i>without endwall</i>	mm	1250	1875	2500	3750		
	Thickness of Endwall		40					
	Total Display Area (TDA)	m <sup>2</sup>	2,06	3,09	4,11	6,17		
	Display Opening Area		1,11	1,67	2,22	3,33		
	Net Volume		liter	495	743	990	1485	
Refrigeration Data	Refrigeration Load	3M1	<i>ti: -1°C/+1°C (Te: -8°C)</i>		1365	2050	2730	4100
		3M2	<i>ti: 2/4°C (Te: -7°C)</i>		1270	1900	2540	3800
		3H1	<i>ti: 6/8°C (Te: -5°C)</i>		1025	1550	2050	3100
	Expansion Valve and Nozzle (Danfoss TEV)	(R134a) (3M1, 3M2, 3H1), (*) <i>interior balance</i>	type	01 (*) / 01 (*) / 01 (*)	02 / 02 / 02	03 / 03 / 02	04 / 04 / 03	
		(R404A) (3M1, 3M2, 3H1) (*) <i>interior balance</i>		01 (*) / 01 (*) / 01 (*)	02 / 02 / 01	03 / 03 / 02	03 / 03 / 03	
	Expansion Valve and Nozzle (Danfoss AKV)	(R134a) (3M1, 3M2, 3H1)	type	10-3 / 10-3 / 10-2	10-3 / 10-3 / 10-3	10-4 / 10-4 / 10-3	10-5 / 10-5 / 10-4	
(R404A) (3M1, 3M2, 3H1)		10-3 / 10-3 / 10-2		10-4 / 10-4 / 10-3	10-5 / 10-5 / 10-4	10-5 / 10-5 / 10-5		
Electrical Data	Lighting	Standart (T5) <i>canopy single row</i>	W	28	42	56	84	
		Optional (LED) <i>canopy</i>		29	42	58	87	
		Standart (T5) <i>shelf lighting (each row)</i>		28	42	56	84	
		Optional (LED) <i>shelf lighting (each row)</i>		11	14	22	33	
	Heaters	Trim heater canopy	W	N/A	N/A	N/A	N/A	
		Defrost heater (3M1, 3M2, 3H1)		N/A	N/A	N/A	N/A	
	Fan Motor	Shaded Pole ( <i>standart</i> )	W	55	110	165	220	
		Electronic - Energy Saving ( <i>optional</i> )		18	36	54	72	
Antimist fan.		N/A		N/A	N/A	N/A		
Internal Fittings	Shelves & Depths	min./standart/max. ( <i>rows</i> )	n°/(mm)	- / 3 (300 & 400 & 500) / 4 (300 & 400 & 500 & 600)				
		with lighting standart / max. ( <i>rows</i> )	n°	3 / 4				
info	<b>All datas are based on 3 levels non lighting shelves and single canopy lighting</b>							
Recommended Setting Parameters & Temperature Classes	<b>Compressor Regulation Parameters</b>							
	Compressor cut out temperature (supply air temperature)	3M1 ( <i>ti: -1/1 °C</i> )	°C	-1				
		3M2 ( <i>ti: 2/4 °C</i> )		+2				
		3H1 ( <i>ti: 6/8 °C</i> )		+6				
	Compressor cut in temperature (supply air temperature)	3M1 ( <i>ti: -1/1 °C</i> )		+1				
		3M2 ( <i>ti: 2/4 °C</i> )		+4				
		3H1 ( <i>ti: 6/8 °C</i> )		+8				
	<b>Defrost Regulation Parameters</b>							
	Defrost interval time	hour	6					
	Defrost endurance time	minute	45					
	Defrost termination temperature	°C	12					
	<b>Fan Regulation Parameters</b>							
	Fan cut in during defrost	-	YES (ON)					
	<b>Alarm Regulation Parameters</b>							
	High temperature alarm	°C	25					
	Low temperature alarm		-5					
	Power-on alarm override	minute	1					
	Defrost alarm override		1					
	Temperature alarm override		30					
	<b>Temperature Classes</b>			Highest Temperature		Lowest Temperature		
M1	°C	+5		-1				
M2		+7		-1				
H1		+10		+1				

TECHNICAL DATA SHEET

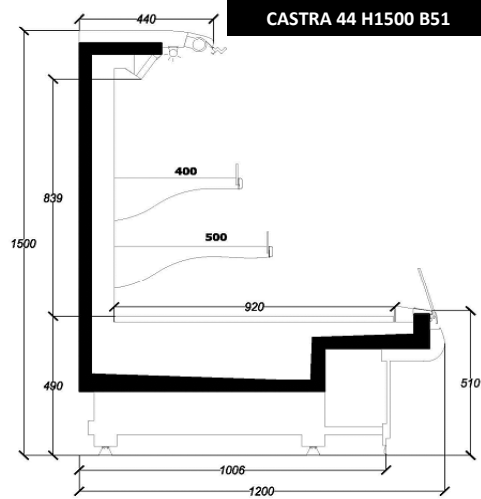
SECTIONAL VIEW



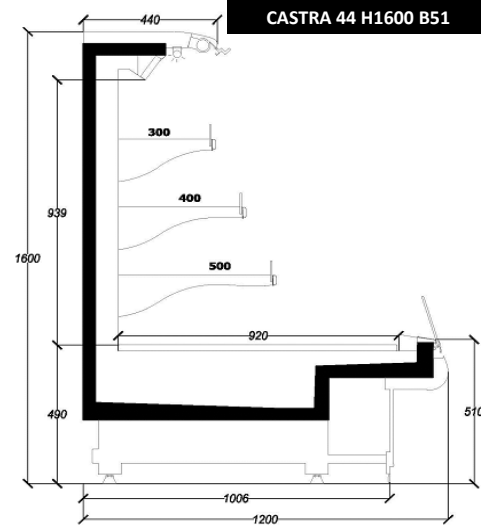
CASTRA 44 H1300 B51



CASTRA 44 H1400 B51



CASTRA 44 H1500 B51

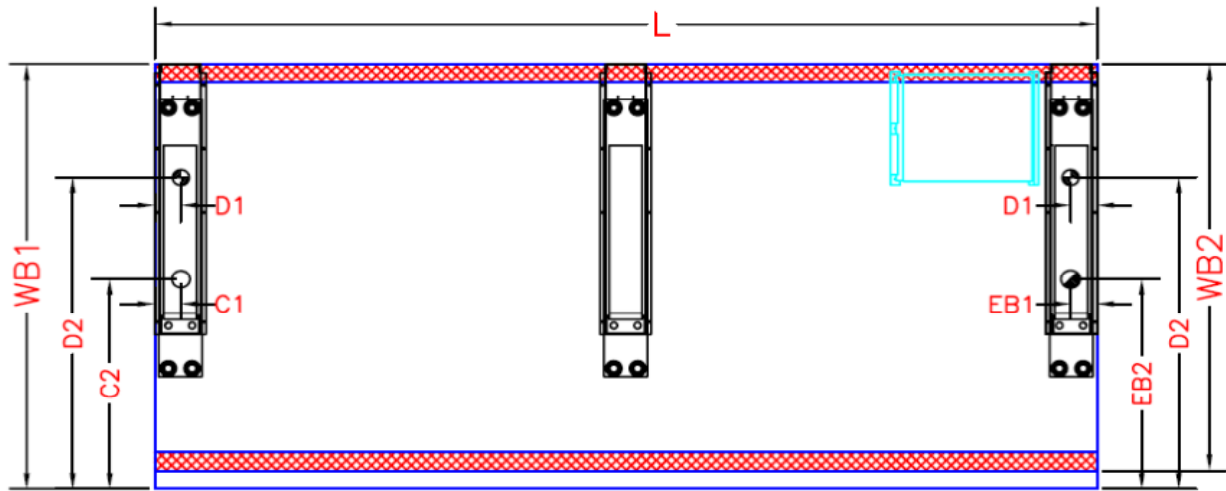


CASTRA 44 H1600 B51

Note: Dimensions are in mm

TECHNICAL DATA SHEET

PLAN VIEW



FRONT



Modules	Length (mm)	1250	1875	2500	3750	SYMBOL	
CASTRA 44	L (w/o endwall)	1250	1875	2500	3750	L	Length
	C1	70				WB	Width Base
	C2	594				D	Drain
	WB1	1200				C	Copper Tube
	WB2	1148				EB	Electrical Base
	EB1	70				<i>Note: Dimensions are in mm</i>	
	EB2	594					
	D1	70					
D2	880						