

# Kardex Megamat 650 Vertical Carousel Modules (VCM) 11' 0.9" W x 5' 7.4" D x 15' 8.4" H - 15 Carrier - Heavy Duty Storage System

Customer Technical Spec Sheet | Model / SKU: Kardex Megamat 650.2.2650.6.508.15

This customer spec sheet summarizes the configured Kardex Megamat 650 Vertical Carousel Module. The unit is configured as a heavy duty goods-to-person storage system with 15 carriers and an overall size of 11' 0.9" W x 5' 7.4" D x 15' 8.4" H.

## Configuration Summary

Configured Product Overview	
Series	Megamat 650
Duty Class	Heavy Duty
Depth Configuration	Standard Depth
Number of Carriers	15
Overall Unit Width	11 ft - 0.9 in. (3375 mm)
Overall Unit Depth	5 ft - 7.4 in. (1711 mm)
Overall Unit Height	15 ft - 8.4 in. (4785 mm)
Carrier Capacity (max)	1433 lbs. (650 kg.) : 80 lbs./ft <sup>2</sup>
Carrier Capacity (avg)	1433 lbs. (650 kg.) : 80 lbs./ft <sup>2</sup>
Average Carrier Payload	1391 lbs. (631 kg.)
Carrier Pitch	20 in. (508 mm)
Carrier Clear Height	17.72 in. (450 mm)
Carrier Clear Width	104.3 in. (2650 mm)
Carrier Clear Depth	24.7 in. (628 mm)
Carrier Surface Clear Depth	24.6 in. (626 mm) due to 2mm deep front lip

## Overall Unit Specifications

Dimensions, weights, load, and installation	
Minimum Room Height for Installation	15 ft - 10.4 in. (4835 mm)
Minimum Unit Clearance in Recess	1.97 in. (50mm)
Overall Depth Note	Excludes 12.6 in. (320 mm) deep Work Counter
Storage Area per Unit	411.8 ft <sup>2</sup> (38.28 m <sup>2</sup> )
Cubic Storage per Unit	396.4 ft <sup>3</sup> (11.23 m <sup>3</sup> )
Right End Frame Weight	2293 lb. (1040 kg)
Left End Frame Weight	1876 lb. (851 kg)
Unit Weight (Empty)	8217 lb. (3727 kg)

<b>Permissible Total Unit Weight</b>	29099 lb. (13199 kg)
<b>Average Floor Load</b>	3.25 lbs. /in. <sup>2</sup> (2286 kg. /m <sup>2</sup> )
<b>Supporting Contact Surface</b>	600cm <sup>2</sup> (see "Layout Diagram") = 60000mm <sup>2</sup>
<b>Configured Surface Pressure</b>	2.158 N/mm <sup>2</sup>
<b>Maximum Imbalance Load</b>	4630 lb. (2100 kg.)
<b>Cycle Speed</b>	4.92 in./sec.
<b>Access Time</b>	15.24 s (1/4 Revolution)

## Power and Controls

### Electrical and control details

<b>Power Supply</b>	3/PE 208V (50/60 Hz)
<b>Rated Operating Current</b>	22.9 A
<b>Fuse Protection</b>	30 A t
<b>Motor Power</b>	5.2 HP ; 3.8 kW
<b>Power Consumption, max.</b>	8.25 kVA
<b>Control Generation</b>	B&R X20 -- TIC (Total Intelligence Concept)
<b>Controller Location</b>	Right-Hand End Frame
<b>E-Stop</b>	E-Stop Location: (1) per Side Panel (2 Total)
<b>Controller</b>	OPTIC 12
<b>Virtual Site Control License</b>	Yes
<b>Not Included</b>	Communication Cable - Cat5 or Cat6 cable

Network Interface, Host communication ILA/T3, Weight Management, User Management, Web Browser access and Ergonomics

Interface for fire detection (alarm system and warning sound provided by customer when applicable)

## Access Opening Specifications

### Operator access area

<b>Work Counter</b>	Table Height: 1000 mm (39.37 in.)
<b>Work Counter Details</b>	Stainless Steel (w/colored cover) / Fixed Work Counter; Max. Load 150 kg.
<b>Door Type</b>	Manual Door
<b>Door Details</b>	Adds 320mm (12.6 in.) to overall unit depth
<b>Access Included</b>	Included: Confirmation Bar (under work counter)
<b>Navigator / Interface</b>	without Legacy Interface
<b>Front Light</b>	Front Light: LED Lamps

## Construction and Finish

### Construction materials and finish colors

<b>Material</b>	Steel
<b>Core Material</b>	Galvanized or ESD Galvanized Steel
<b>Panel Color</b>	RAL 7035 LIGHT GREY
<b>Door / Under Table Color</b>	RAL 230/60/15 Silver Fir Blue
<b>Corner Profiles Color</b>	RAL 7035 Light Grey
<b>Cover Above Access Color</b>	RAL 9016 Traffic White
<b>Access Side Covers Color</b>	RAL 7016 Anthracite Grey

## Thermal and Operating Data

### Heat dissipation information

<b>Heat Dissipation Control Cabinet</b>	130W
<b>Heat Dissipation Brake Resistor</b>	1000W (50% brake mode) -> 500W
<b>Heat Dissipation Motor</b>	760W (3.8kW motor, 20%)
<b>Complete Heat Dissipation / Machine</b>	1390W

## Carrier Details

### Carrier configuration

<b>Carriers per Unit</b>	(15) Multipurpose Carriers
<b>Carrier Pitch</b>	20 in. (508 mm)
<b>Carrier Clear Height</b>	17.72 in. (450 mm)
<b>Carrier Includes</b>	0.31 in. (8 mm) tall front lip
<b>Carrier Clear Width</b>	104.3 in. (2650 mm)
<b>Carrier Clear Depth</b>	24.7 in. (628 mm)
<b>Carrier Surface Clear Depth</b>	24.6 in. (626 mm) due to 2mm deep front lip
<b>Carrier Capacity (max)</b>	1433 lbs. (650 kg.) : 80 lbs./ft <sup>2</sup>
<b>Carrier Capacity (avg)</b>	1433 lbs. (650 kg.) : 80 lbs./ft <sup>2</sup>
<b>Average Carrier Payload</b>	1391 lbs. (631 kg.)
<b>Maximum Number of Cycles</b>	612122.5 - (Based on average carrier payload usage at 50% = 696 lbs. (315.5 kg.))

## Configured Shelf Details

8 of total 15 Carriers include the following shelf configurations:

<b>Shelf Configuration 1</b>	Qty 8 - (1) Non-Reinforced Shelf and (6) Supports [8.6 in.▼, 8.68 in.▲] Clear depth: 24.61
<b>Capacity per Level 1</b>	Capacity Per Level: 678 lb (max) : 37.9 lb/ft <sup>2</sup> (max)

See capacity /shelf level below, as capacity is downrated due to weight of shelf in carrier