Kardex Megamat 180 Vertical Carousel Modules (VCM) 10' 8.9'' W x 5' 4.2'' D x 15' 5.4'' H - 20 Carrier - Light Duty Storage System

Customer Technical Spec Sheet | Model / SKU: Kardex Megamat 180.2.2650.6.381.20

This customer spec sheet summarizes the configured Kardex Megamat 180 Vertical Carousel Module. The unit is configured as a light duty goods-to-person storage system with 20 carriers and an overall size of 10' 8.9'' W x 5' 4.2'' D x 15' 5.4'' H.

Configuration Summary

Configured Product Overview	
Series	Megamat 180
Duty Class	Light Duty
Depth Configuration	Standard Depth
Number of Carriers	20
Overall Unit Width	10 ft - 9 in. (3275 mm)
Overall Unit Depth	5 ft - 4.3 in. (1631 mm)
Overall Unit Height	15 ft - 5.5 in. (4710 mm)
Carrier Capacity (max)	397 lbs. (180 kg.) : 22.2 lbs./ft²
Carrier Capacity (avg)	397 lbs. (180 kg.) : 22.2 lbs./ft²
Average Carrier Payload	373 lbs. (169 kg.)
Carrier Pitch	15 in. (381 mm)
Carrier Clear Height	13.35 in. (339 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 - 7.5 in. (4760 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	501.3 ft² (46.6 m²)
Cubic Storage per Unit	398.2 ft³ (11.28 m³)
Right End Frame Weight	1475 lb. (669 kg)
Left End Frame Weight	1206 lb. (547 kg)
Unit Weight (Empty)	6947 lb. (3151 kg)

Permissible Total Unit Weight	14398 lb. (6531 kg)
Average Floor Load	1.74 lbs. /in.² (1223 kg. /m²)
Supporting Contact Surface	600cm² (see "Layout Diagram") = 60000mm²
Configured Surface Pressure	1.068 N/mm²
Maximum Imbalance Load	1323 lb. (600 kg.)
Cycle Speed	4.92 in./sec.
Access Time	15.24 s (1/4 Revolution)

Power and Controls

Electrical and control details	
Power Supply	3/PE 208V (50/60 Hz)
Rated Operating Current	7.5 A
Fuse Protection	15 A t
Motor Power	1.5 HP ; 1.1 kW
Power Consumption, max.	2.7 kVA
Control Generation	B&R X20 -- TIC (Total Intelligence Concept)
Controller Location	Right-Hand End Frame
E-Stop	E-Stop Location: (1) per Side Panel (2 Total)
Controller	OPTIC 12
Virtual Site Control License	Yes
Not Included	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	
Work Counter	Table Height: 1000 mm (39.37 in.)
Work Counter Details	Stainless Steel (w/colored cover) / Fixed Work Counter; Max. Load 150 kg.
Door Type	Manual Door
Door Details	Adds 320mm (12.6 in.) to overall unit depth
Access Included	Included: Confirmation Bar (under work counter)
Navigator / Interface	without Legacy Interface
Front Light	Front Light: LED Lamps

Construction and Finish

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

Thermal and Operating Data

Heat dissipation information	
Heat Dissipation Control Cabinet	112W
Heat Dissipation Brake Resistor	500W (50% brake mode) -> 250W
Heat Dissipation Motor	220W (2.2kW motor, 20%)
Complete Heat Dissipation / Machine	582W

Carrier Details

Carrier configuration	
Carriers per Unit	(20) Multipurpose Carriers
Carrier Pitch	15 in. (381 mm)
Carrier Clear Height	13.35 in. (339 mm)
Carrier Includes	0.31 in. (8 mm) tall front lip
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
Carrier Capacity (max)	397 lbs. (180 kg.) : 22.2 lbs./ft²
Carrier Capacity (avg)	397 lbs. (180 kg.) : 22.2 lbs./ft²
Average Carrier Payload	373 lbs. (169 kg.)
Maximum Number of Cycles	689280 - (Based on average carrier payload usage at 50% = 186 lbs. (84.5 kg.))

Configured Shelf Details

8 of total 20 Carriers include the following shelf configurations:	
Shelf Configuration 1	Qty 8 - (1) Non-Reinforced Shelf and (3) Supports [6.44 in.▼, 6.48 in.▲] Clear depth: 24.61
Capacity per Level 1	Capacity Per Level: 168 lb (max) : 9.4 lb/ft² (max)

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