

TECHNICAL DATA : SMV 4531 TC5 HLT

LIFTING DATA			
Lift capacities (at load center LC1 / LC2 / LC3)	kg	45 000 / 31 000 / 16 000	
Lift capacities (at load center LC1 / LC2 / LC3 at max lifting height)	kg	45 000 / 31 000 / 16 000	
Load centers (LC1 / LC2 / LC3)	mm	2 000 / 3 850 / 6 350	
Lifting speed, unloaded / at 40 % load / at rated load	m/s	0,38 / 0,35 / 0,23	
Lowering speed, unloaded / at rated load	m/s	0,35 / 0,4	
DRIVING DATA			
Drive speed forward, unloaded / at rated load	km/h	24 / 22	
Drive speed reverse, unloaded / at rated load	km/h	24 / 22	
Incline (driving ability) at rated load at 0 km/h/at 2 km/h	%	20 / 12	
Towing (power ability) at rated load at 0 km/h/at 2 km/h	kN	120 / 120	
SERVICE WEIGHT / AXLE PRESSURE			
Service weight	kg	71 800	
Axle pressure front at load center LC1, unloaded / at rated load	kg	37 500 / 102 200	
Axle pressure front at load center LC2, unloaded / at rated load	kg	42 000 / 95 500	
Axle pressure rear at load center LC1, unloaded / at rated load	kg	34 300 / 14 600	
Axle pressure rear at load center LC2, unloaded / at rated load	kg	29 800 / 7 300	
Axle pressure in driving position, front/rear (at rated load)	kg	93 100 / 23 700	
DIESEL ENGINE POWERED GENSET (CAN bus controlled)			
Engine make / model name		Volvo TAD 873 VE	
Emission approval EU / US		Stage 4 / Tier 4f	
Monitoring / emission controlled / CanBus		Yes / yes / yes	
Fuel / type of engine / intercooler		Diesel / 4-stroke / yes	
Power ISO 3046 / max speed	kW / rpm	235 / 2 200	
Torque ISO 3046 / at speed	Nm / rpm	1 300 / 1 310	
Displacement / No. of cylinders / type	L	7,7 / 6 / Inline	
Fuel consumption, normal driving	L/h	10 - 12	
Generator, type/power / voltage	/ kW / V	Permanent magnet, direct drive, oil cooled / 250 / 700	
Starting battery, voltage/capacity	V / Ah	2 x 12 / 140	
ENERGY STORAGE (CAN bus controlled)			
Type		Super capacitor, 6x130 V modules	
Functional principle		Produced energy from Genset, and recovered from Braking or Lowering is utilized by any machine function as required	
Energy storage capacity / Power capacity	kWh / kW	1,0 / 300	
Cooling		Forced air (inherent cooling fans)	
DRIVE AXLE & BRAKE SYSTEM			
Electric drive motor make / type		BAE Systems E-axle / asynchronous AC motor, oil cooled	
Drive motor power / tractive effort	kW / kNm	200 / 109	
Drive axle make / model name		Kessler / R102	
Driving brake system, type / affected wheels		Wet disc brake / spring release / drive wheels	
Parking brake system, type / affected wheels		Wet disc brake / spring release / drive wheels	
STEER AXLE & STEER SYSTEM			
Steer axle type / steering system		Double acting cylinder / hydraulic servo assisted	
WHEELS			
Number of wheels, front + rear / type (*driven)		4*+2 / pneumatic	
Tire pressure front / rear	MPa	1,0 / 1,0	
Tire dimensions (Ply rating) front / rear	Inch (No)	18.00 x 25" (PR 40) / 18.00 x 25" (PR 40)	
Rim dimension front / rear	Inch	13.00 x 25" / 13.00 x 25"	
HYDRAULIC SYSTEM (CAN bus controlled)			
Hydraulic pump make / model name		Parker Hannifin / E-Pump	
Hydraulic system / pump types		Load sensing system / piston pump/hydraulic motor – direct drive by electric motor/generator (x2 – boom lifting / boom extension)	
		Load sensing re-generative system / piston pump – direct drive by electric motor (x2 – boom boost / steering-spreader-hyd. brakes)	
Power-on-demand / Low energy / Separate oil tanks		Yes / yes / hydraulics & brakes	
Nominal hydraulic oil pressure boom / spreader	MPa / MPa	24 / 15	
TANK VOLUMES			
Diesel tank volume	L	650	
Hydraulic tank volume	L	850	
LIFT EQUIPMENT & SPREADER			
Spreader make / type		ELME 817-MPS / Toplift (container)	
Spreader functions		20-40 ft containers	
Spreader locking containers / lifting eyes		4 x top twist locks / 4 x in corners	
Sideshift stroke / rotation / pile slope type (pile slope stroke)	mm / deg /	± 800 / +195 : -105 / Manual MPS / (± 2,0)	
OTHERS			
Safety, Monitoring & overload system / programmable / colour		Electronic system EMC / yes / yes	
Manual sliding cabin / stroke	/ mm	Yes / 1 800	
Noise level (inside Cab / Lm)	DIN 45635	66	
Noise level (inside Cab/ LpAZ)	EN 12053	75	
Noise level (outside at 7 m/ Lwa)	2000/14/EC	111	
NORMS & STANDARDS (including sub-ordinate ones)			
Machine Directive in Europe	2006:42:EC	Yes, CE marked for compliance	
EMC directive	2004:108:EC	Yes, CE marked for compliance	
Low voltage directive	2006:95:EC	Yes, CE marked for compliance	
Safety of Industrial trucks – reach stackers	ISO EN 3691.2	Yes	
Safety of industrial trucks	EN 1175-1, -2, -3	Yes	
Stability of Industrial Trucks	ISO 13562	Yes	
Industrial trucks – electromagnetic compatibility	EN 12895	Yes	
Ind. trucks – safety req. for traction batteries	EN 50272-3	Yes	
Safety related parts of control system	ISO 13849	Yes	

