

**Summation Gearbox for City Bus****Technical Specification**

- Drive by two water cooled Siemens ELFA traction motors 1PV5135 or 1PV5138
- Labyrinth seals on input shafts,  
shaft seal with sealing lip on output shaft
- Double input shafts prepared for splined traction motor shaft to DIN 5480,  
internal splines N 30x1.25x30x22x9H
- Flanged output shaft to ISO 12667 for connection with standard cardan shafts
- Max. traction torque per motor 470 Nm  
Peak torque per motor (rarely acting) 600 Nm  
Max. motor speed 10000 rpm  
Ratio  $i = 4.05$
- Dimensioning of roller bearings according to UIm load cycle of articulated bus with a weight of 28 t  
(see below table)

Traction torque per motor (Nm)	Average motor speed (rpm)				
	1000	3000	5000	7000	9000
	Time slice				
392	5%	1%	0%	0%	0%
235	0%	13%	6%	0%	0%
78	3%	3%	35%	31%	2%

Average running speed 40 km/h  
Average motor speed 4990 rpm  
Average power per motor 66 kW  
Modified rated bearing life 20000 h

- Motor torque during forward motion acting 75% of running time in direction of rotation and 25% opposed (regenerative braking)
- Direction of rotation during forward motion counter clockwise with view to the output shaft flange
- Angle of Cardan shaft deflection in normal position  $7^\circ$   
at max. compression of spring suspension  $13^\circ$
- Max. permissible pitch of the bus  $\pm 15\%$   
Max. permissible rolling angle of the bus  $\pm 10\%$  (short time acting during slow motion up to 5 km/h)  
Max. acceleration resp. braking according to riding conditions
- For further technical data and mechanical interface refer to outline DWG 6 043 721



