If a IEC normalised motor is to be fitted onto the gearbox, check availability of the applicable adapter.

13.0 After the drive unit has been selected

check the following:

a) Thermal capacity

Make sure that the thermal capacity of the gearbox is equal to or greater than the mechanical power required by the application, as per equation (4) at page 9. If this is not the case provide a supplementary cooling system (see chap. 29) or select a larger gearbox.

b) Maximum torque

Make sure that neither the momentary peak torque nor the starting torque under load ever exceed the M2max value that the gearbox is rated for (see tab. A7).

(A7)

Gearbox	M_{2max} [Nm]	Gearbox	M_{2max} [Nm]
GTN00	1200	GTN11	54000
GTN01	3400	GTN13	66000
GTN03	3500	GTN14	100000
GTN04	4800	GTN15	126000
GTN05	7000	GTN16	162000
GTN06	12000	GTN17	216000
GTN07	18000	GTN18	300000
GTN09	27000	GTN19	420000
GTN10	36000	GTN21	650000

c) Overhung load

Examine the application and establish:

- Overhung load applying to input and/or output shaft through the following formula:

$$R_{c1-2} = \frac{2000 \times M_{r1-2} \times K_r}{d} \quad (17)$$

Rc1-2 overhung load (N)
1 = for input shaft
2 = for output shaft
M1-2 Torque at the shaft (Nm)
d P.C.D (mm) of transmission element (sprocket,gear, pulley, etc.)
Kr = 1 chain transmission
Kr = 1,25 gear transmission
Kr = 1,5-2,5 V-belt transmission