

Introduction

Following data are known:

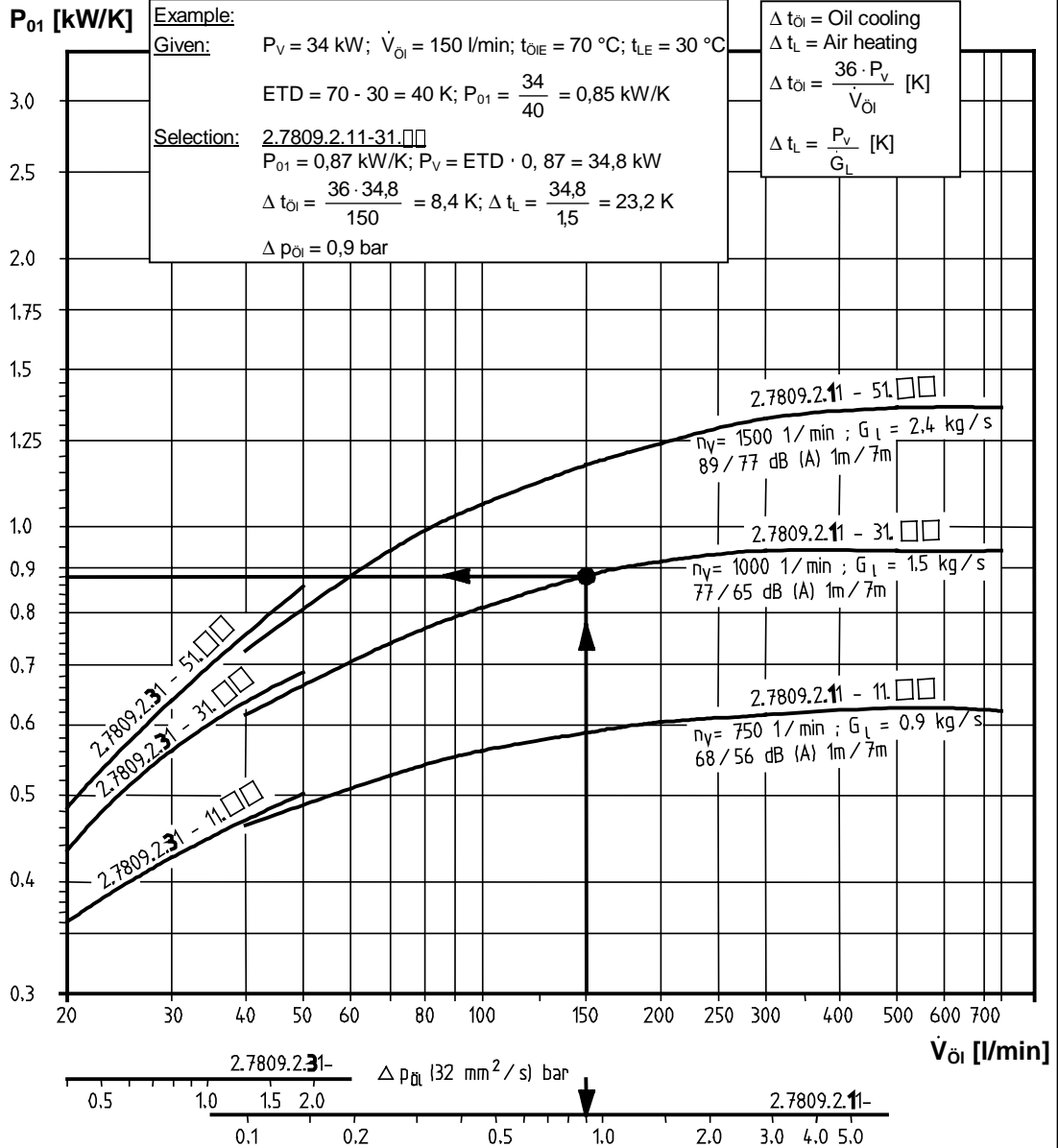
Dissipation loss P_V [kW]
 Oil flow \dot{V}_{Oil} [l/min]
 Max. perm. oil temperature t_{OIE} [°C]
 Cooling air temperature t_{LE} [°C]

From the following can be calculated:

Entry - Temperature - Difference
 $ETD = t_{OIE} - t_{LE}$ [K]
 Specific cooling capacity with ETD = 1 K
 $P_{01} = \frac{P_V}{ETD}$ [kW/K]

In hydraulik systems, the dissipation loss is approximately 20 – 25 % of drive power.

Performance diagrams



Δp_{Oil} - Correction

The Δp -value obtained from the curves applies for $\nu = 32$ mm²/s ($\hat{=} 32$ cSt).
 For differing viscosities, the Δp -value has to be multiplied by the factor f.

10	15	20	32	40	50	60	80	100	150	200	250	300	400	500	mm ² /s
0,5	0,65	0,75	1,0	1,2	1,4	1,6	2,1	2,7	4	5,5	7,3	9,5	16	30	f