

Standardkühler

GRV-Serie

Version 2020

KÜHLER-RATH

WILLI RATH KG
Autokühler
Herzogenbuscherstr. 41
D-54292 TRIER

TEL. +49 (0) 651/2 70 76-0
FAX. +49 (0) 651/2 70 76-22
info@kuehler-rath.de
www.kuehler-rath.de



Leistungsdaten



Technical drawing of the M150/16 fan unit, showing three views: front, side, and detail of the mounting bracket.

Front View: The fan unit is square with a total width of 474 mm and a total height of 550 mm. The central fan grille has a diameter of 430 mm. The mounting flange has a thickness of 30 mm. The mounting holes are spaced 158 mm apart, with a center-to-center distance of 100 mm between the two main mounting points. The mounting holes are labeled "Rp 1 1/4" and "M22x1.5".

Side View: The side view shows the fan unit's profile with a total height of 474 mm. The mounting flange has a thickness of 30 mm. The mounting holes are spaced 158 mm apart, with a center-to-center distance of 100 mm between the two main mounting points. The mounting holes are labeled "Rp 1 1/4" and "M22x1.5".

Detail of Mounting Bracket: The detail shows the mounting bracket with a thickness of 30 mm. It features a "Helicoil M8x12 (4x)" and a "Ø16x1.2" hole. The mounting holes are labeled "Rp 1 1/4" and "M22x1.5".

The figure consists of two line graphs. The left graph plots power (kW) on the y-axis (0 to 30) against temperature difference (Δt in °C) on the x-axis (0 to 55). It shows five linear curves for different flow rates: 130 lt/1' (purple), 100 lt/1' (cyan), 80 lt/1' (yellow), 50 lt/1' (magenta), and 30 lt/1' (dark blue). The right graph plots pressure drop (bar) on the y-axis (0 to 2) against flow rate (lt/1') on the x-axis (30 to 130). It shows a single curve for a 68 cSt fluid, with data points marked by diamonds.

Δt (°C)	130 lt/1'	100 lt/1'	80 lt/1'	50 lt/1'	30 lt/1'
0	0	0	0	0	0
15	5	4	3	2	1
30	10	8	6	4	2
45	15	12	9	6	3
55	20	16	12	8	4

Flow Rate (lt/1')	Pressure Drop (bar)
30	0.3
50	0.45
70	0.6
90	0.8
110	1.05
130	1.45

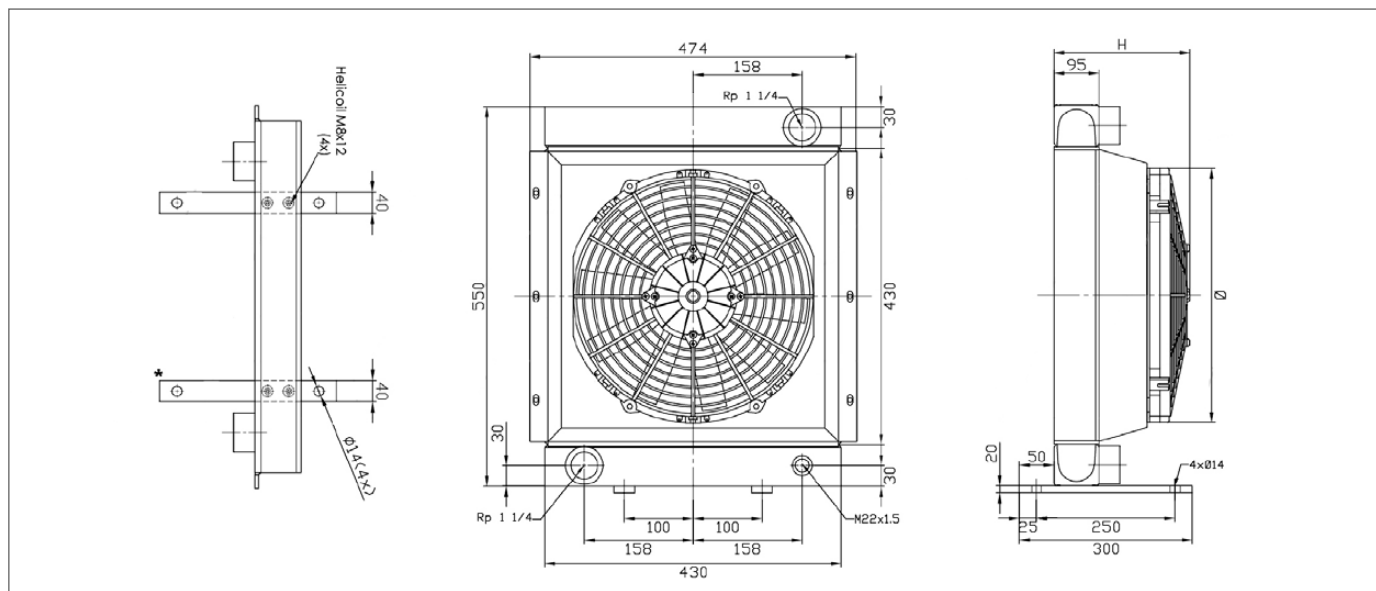
Ölkühler Serie GRV

Modell GRV 600S

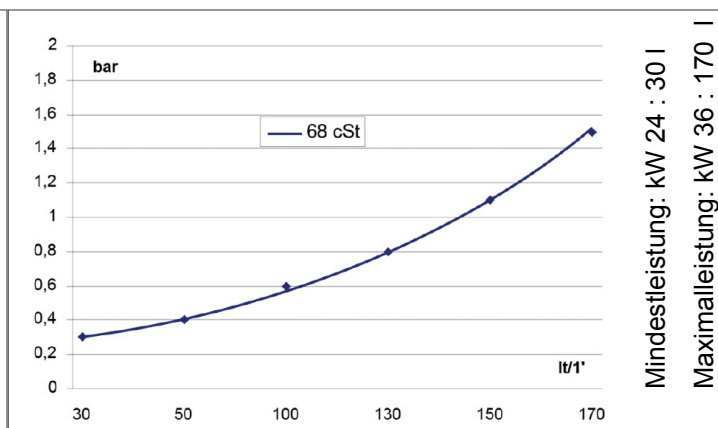
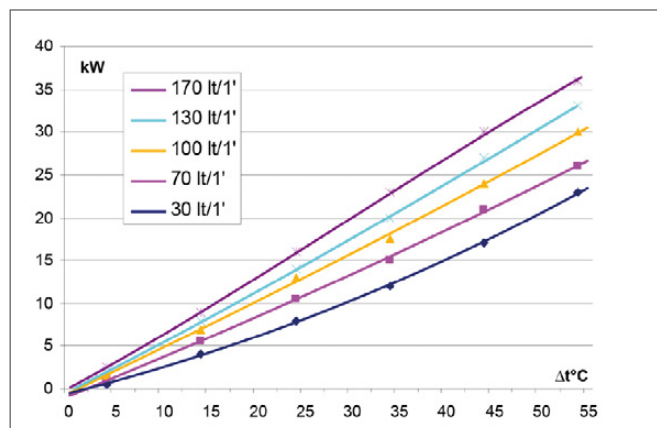
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Maße in mm



Artikelnummer:	Ausstattung:	Overall H:	Lüfterdurchmesser (mm):	Luftstrom (m³/h):	Volumen I:	Leistungsaufnahme:
86071	nur Ölkühler	95	-	-	-	-
86071Z	12V ziehend	260	305	1839	-	16,5 A
86071D	12V drückend	260	305	1736	-	14,9 A
860713	24V ziehend	260	305	2161	-	10,3 A
860714	24V drückend	260	305	2050	-	9,1 A
860711	230V-50/60Hz ziehend	220	300	3745	-	1,55 A
860712	230V-50/60Hz drückend	220	300	3745	-	1,55 A
860715	230/400V-50/60Hz 3FN ziehend	220	300	3350	-	0,48 A
860716	230/400V-50/60Hz 3FN drückend	220	300	3350	-	0,48 A
860717	hydraulisch ziehend	275	300	3080	-	0,41 kW
860718	hydraulisch drückend	275	300	3080	-	0,41 kW



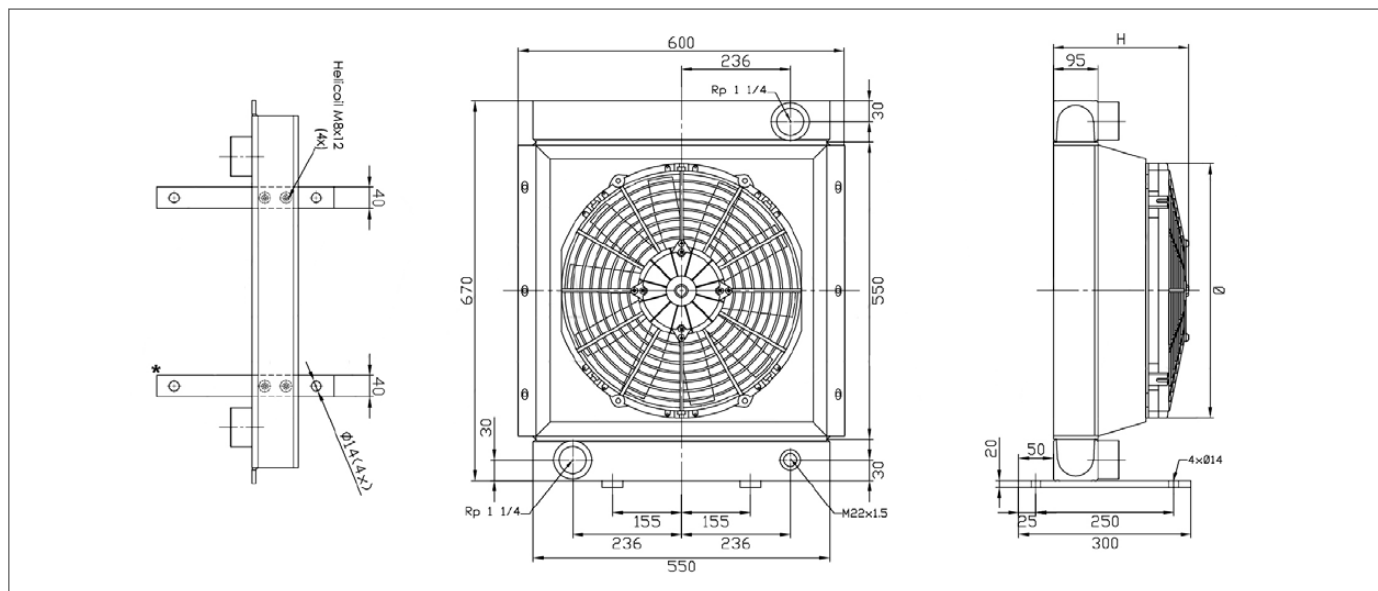
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Modell GRV 850S

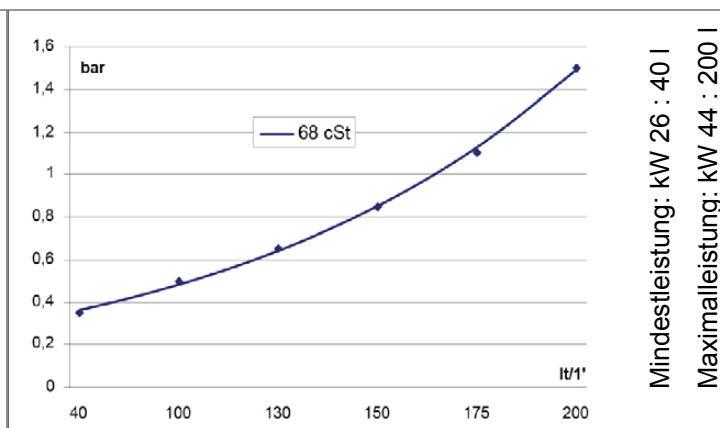
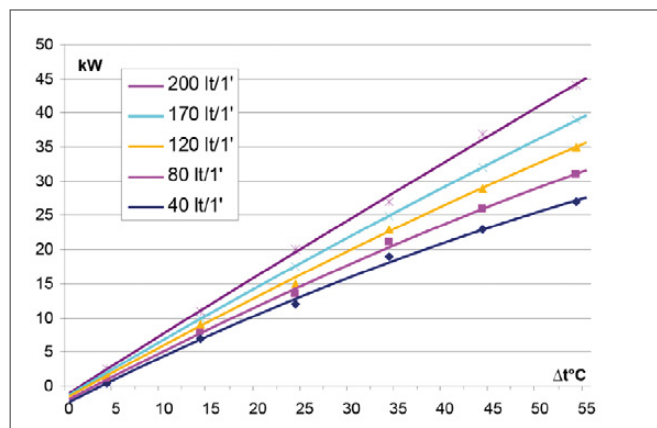
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Maße in mm



Artikelnummer:	Ausstattung:	Overall H:	Lüfterdurchmesser (mm):	Luftstrom (m³/h):	Volumen l:	Leistungsaufnahme:
86072	nur Ölkühler	95	-	-	-	-
86072Z	12V ziehend	290	2 x 305	3678	-	33,0 A
86072D	12V drückend	290	2 x 305	3472	-	29,8 A
860721	24V ziehend	290	2 x 305	4322	-	20,6 A
860722	24V drückend	290	2 x 305	4100	-	18,2 A
860723	230V-50/60Hz ziehend	310	500	9850	-	3,88 A
860724	230V-50/60Hz drückend	310	500	9850	-	3,88 A
860725	230/400V-50/60Hz 3FN ziehend	310	500	9195	-	1,41 A
860726	230/400V-50/60Hz 3FN drückend	310	500	9195	-	1,41 A
860727	hydraulisch ziehend	305	500	13300	-	4,1 kW
860728	hydraulisch drückend	305	500	13300	-	4,1 kW



Leistungsdaten

[illegible]

Left Graph: Power Consumption (kW) vs. Temperature Difference (Δt °C)

This graph shows the power consumption (kW) required for different flow rates (l/min) as a function of the temperature difference (Δt °C). The power consumption increases linearly with Δt for all flow rates. The flow rates are 220, 180, 120, 90, and 50 l/min.

Δt (°C)	220 l/min (kW)	180 l/min (kW)	120 l/min (kW)	90 l/min (kW)	50 l/min (kW)
0	0	0	0	0	0
10	10	8	6	4	2
20	20	16	12	8	4
30	30	24	18	12	6
40	40	32	24	16	8
50	50	40	30	20	10

Right Graph: Pressure Drop (bar) vs. Flow Rate (l/min)

This graph shows the pressure drop (bar) as a function of the flow rate (l/min) for a viscosity of 68 cSt. The pressure drop increases non-linearly with the flow rate.

Flow Rate (l/min)	Pressure Drop (bar)
50	0.35
90	0.48
120	0.65
160	0.88
190	1.18
220	1.65

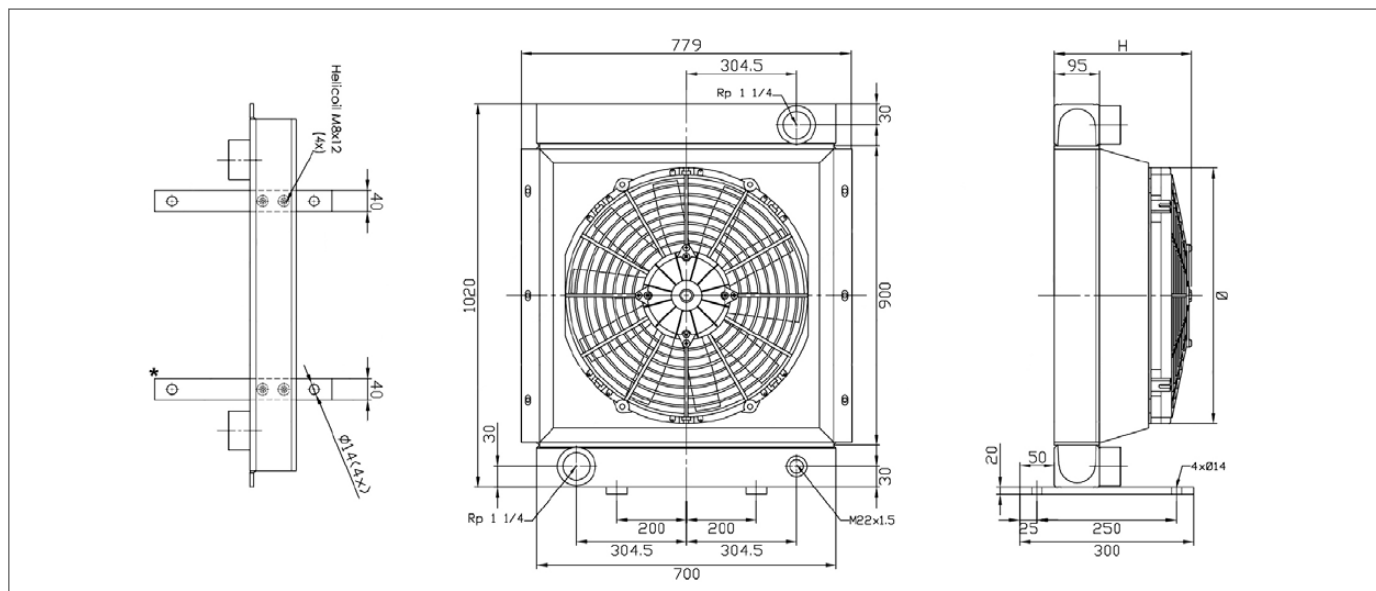
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Modell GRV 1500S

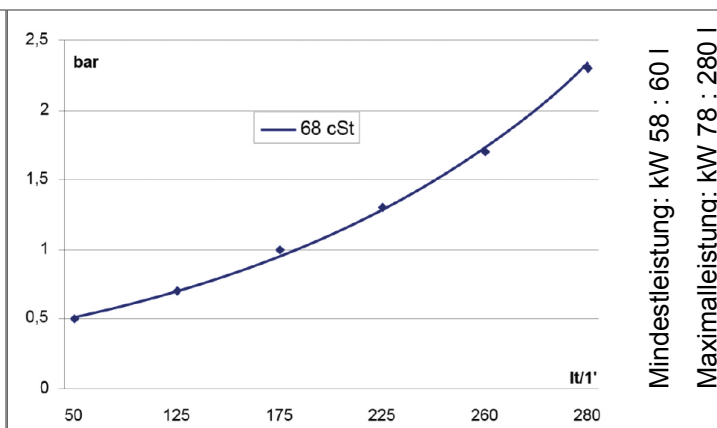
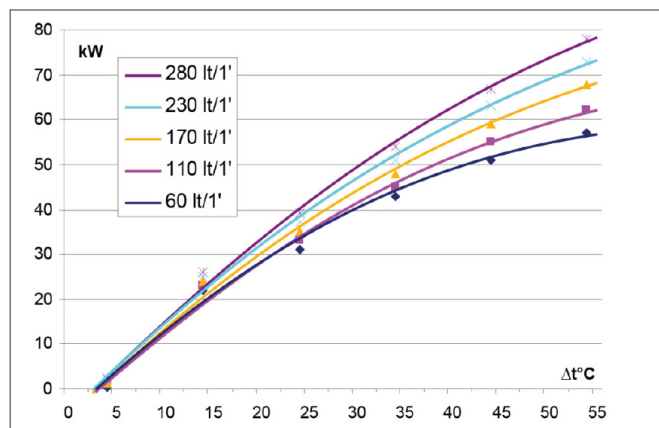
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Maße in mm



Artikelnummer:	Ausstattung:	Overall H:	Lüfterdurchmesser (mm):	Luftstrom (m³/h):	Volumen l:	Leistungsaufnahme:
86074	nur Ölkühler	95	-	-	-	-
86074Z	12V ziehend	290	4 x 305	7356	-	66,0 A
86074D	12V drückend	290	4 x 305	6944	-	59,6 A
860741	24V ziehend	290	4 x 305	8644	-	41,2 A
860742	24V drückend	290	4 x 305	8200	-	36,4 A
860743	230V-50/60Hz ziehend	320	630	11025	-	2,62 A
860744	230V-50/60Hz drückend	320	630	11025	-	2,62 A
860745	230/400V-50/60Hz 3FN ziehend	320	630	11270	-	1,2 A
860746	230/400V-50/60Hz 3FN ziehend	320	630	11270	-	1,2 A
860747	hydraulisch ziehend	325	630	23600	-	7,4 kW
860748	hydraulisch drückend	325	630	23600	-	7,4 kW



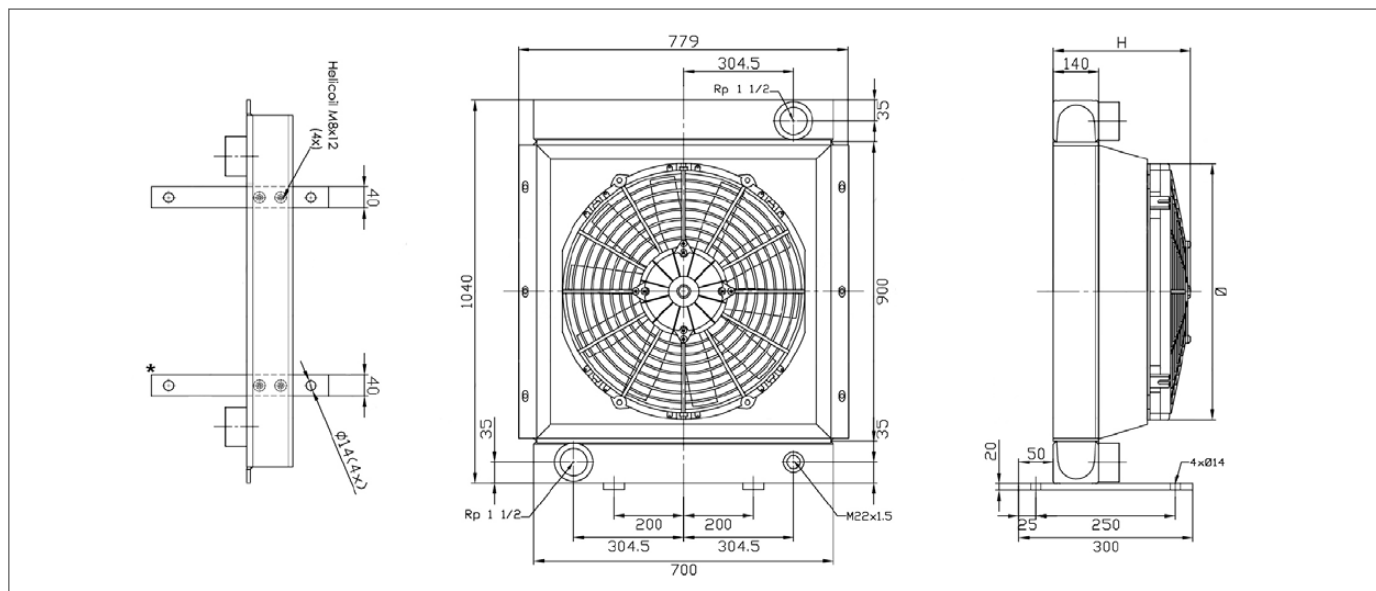
Ölkühler Serie GRV

Modell GRV 3000S

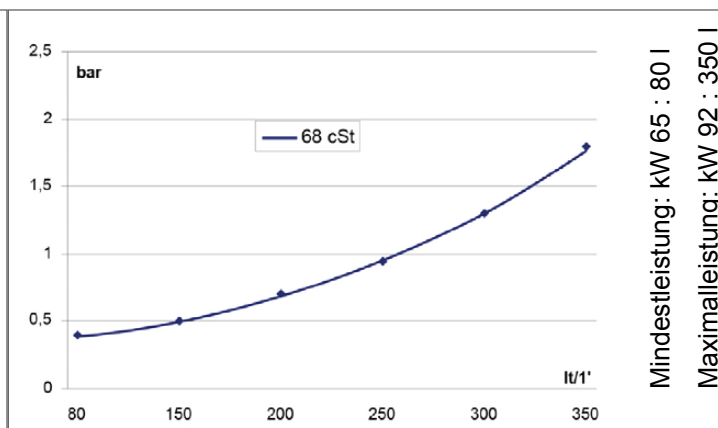
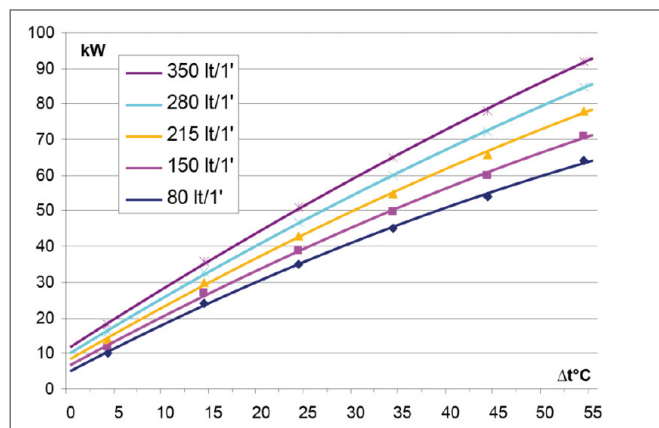
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Maße in mm



Artikelnummer:	Ausstattung:	Overall H:	Lüfterdurchmesser (mm):	Luftstrom (m³/h):	Volumen l:	Leistungsaufnahme:
86008	nur Ölkühler	140	-	-	-	-
86075Z	12V ziehend	335	4 x 305	7356	-	66,0 A
86075D	12V drückend	335	4 x 305	6944	-	59,6 A
860753	24V ziehend	335	4 x 305	8644	-	41,2 A
860754	24V drückend	335	4 x 305	8200	-	36,4 A
860751	230V-50/60Hz ziehend	365	630	11025	-	2,62 A
860752	230V-50/60Hz drückend	365	630	11025	-	2,62 A
860755	230/400V-50/60Hz 3FN ziehend	365	630	11270	-	1,2 A
860086	230/400V-50/60Hz 3FN drückend	365	630	11720	-	1,2 A
860757	hydraulisch ziehend	370	630	23600	-	7,4 kW
860758	hydraulisch drückend	370	630	23600	-	7,4 kW



Mindestleistung: kW 65 : 80 I
Maximalleistung: kW 92 : 350 I

KÜHLER-RATH

Kontakt:

Willi Rath KG
Herzogenbuscherstr. 41
54292 Trier

Tel.: +49 (0) 651/270 76-0
Fax: +49 (0) 651/270 76-22

Öffnungszeiten:
Montag-Freitag 8-17 Uhr

www.kuehler-rath.de
info@kuehler-rath.de