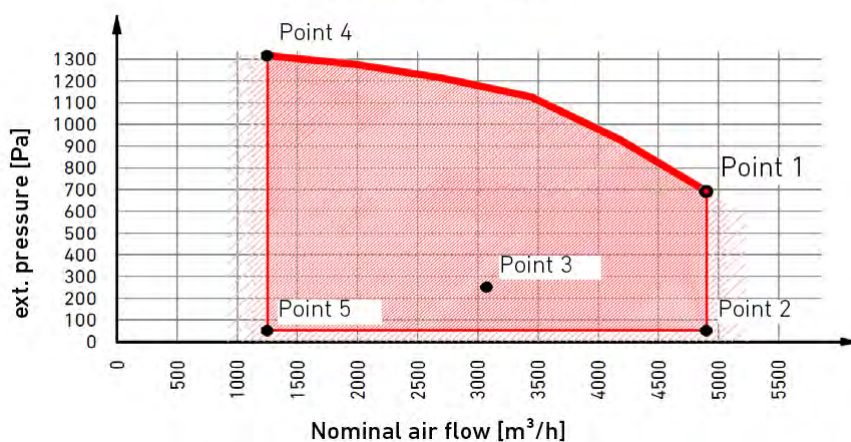


## Product fiche LG 4000

Model ID	PICHLER LG 4000
Type	Two-way ventilation plant for non-residential use
Drive type	Speed control
Type of heat recovery *	Other heat recovery system counterflow heat exchanger

### Area of application



The apparatus complies with the Eco-design Directive inside the cross-hatched area.

The diagram applies to the reference configuration (fans, filters, heat exchangers) without assemblies not for ventilation (e.g. heating coils, louvre flaps, etc.). Additional loss of pressure must be taken into account when installing assemblies not for ventilation.

Punkt 1			
Internal specific fan power	$SVL_{int}$	823	[W/(m <sup>3</sup> /s)]
Thermal transmission	$\eta_{t,nwla}$	82,10%	[-]
Enclosure sound power level	$L_{WA}$	61	[dB(A)]
Nominal airflow	$q_{nom}$	1,361	[m <sup>3</sup> /s]
		4900	[m <sup>3</sup> /h]
Actual electrical input power	$P_{el,ges}$	4,76	[kW]
Airflow speed	$v_{nom}$	1,56	[m/s]
Nominal outside pressure SUP	$\Delta p_{s,ext SUP}$	690	[Pa]
Nominal outside pressure ETA	$\Delta p_{s,ext ETA}$	690	[Pa]
Internal pressure drop across ventilation components, SUP	$\Delta p_{s,int SUP}$	282	[Pa]
Internal pressure drop across ventilation components, ETA	$\Delta p_{s,int ETA}$	245	[Pa]
Internal pressure drop across non-ventilation components, SUP	$\Delta p_{s,add SUP}$	149	[Pa]
Internal pressure drop across non-ventilation components, ETA	$\Delta p_{s,add ETA}$	183	[Pa]
Static efficiency fan	$\eta_{fan SUP}$	64,11	[%]
Static efficiency fan	$\eta_{fan ETA}$	63,94	[%]
External air leakage (at $\pm 400$ Pa)		< 0,5	[%]
Internal air leakage (at 250 Pa)		< 2	[%]
Energy class, SUP-filter (F7) **		2455,0	[kWh]
Energy class, ETA-filter (M5) **		2032,6	[kWh]
Punkt 2			
Internal specific fan power	$SVL_{int}$	969	[W/(m <sup>3</sup> /s)]
Thermal transmission	$\eta_{t,nwla}$	82,10%	[-]
Enclosure sound power level	$L_{WA}$	59	[dB(A)]
Nominal airflow	$q_{nom}$	1,361	[m <sup>3</sup> /s]
		4900	[m <sup>3</sup> /h]
Nominal outside pressure SUP	$\Delta p_{s,ext SUP}$	50	[Pa]
Nominal outside pressure ETA	$\Delta p_{s,ext ETA}$	50	[Pa]
Punkt 3			
Internal specific fan power	$SVL_{int}$	445	[W/(m <sup>3</sup> /s)]
Thermal transmission	$\eta_{t,nwla}$	83,90%	[-]
Enclosure sound power level	$L_{WA}$	52	[dB(A)]
Nominal airflow	$q_{nom}$	0,854	[m <sup>3</sup> /s]
		3075	[m <sup>3</sup> /h]
Nominal outside pressure SUP	$\Delta p_{s,ext SUP}$	250	[Pa]
Nominal outside pressure ETA	$\Delta p_{s,ext ETA}$	250	[Pa]

Punkt 4			
Internal specific fan power	$SVL_{int}$	250	[W/(m <sup>3</sup> /s)]
Thermal transmission	$\eta_{t,nwla}$	88,40%	[-]
Enclosure sound power level	$L_{WA}$	72	[dB(A)]
Nominal airflow	$q_{nom}$	0,347	[m <sup>3</sup> /s]
		1250	[m <sup>3</sup> /h]
Nominal outside pressure SUP	$\Delta p_{s,ext SUP}$	1315	[Pa]
Nominal outside pressure ETA	$\Delta p_{s,ext ETA}$	1315	[Pa]
Punkt 5			
Internal specific fan power	$SVL_{int}$	201	[W/(m <sup>3</sup> /s)]
Thermal transmission	$\eta_{t,nwla}$	88,40%	[-]
Enclosure sound power level	$L_{WA}$	46	[dB(A)]
Nominal airflow	$q_{nom}$	0,347	[m <sup>3</sup> /s]
		1250	[m <sup>3</sup> /h]
Nominal outside pressure SUP	$\Delta p_{s,ext SUP}$	50	[Pa]
Nominal outside pressure ETA	$\Delta p_{s,ext ETA}$	50	[Pa]

**The ventilation unit complies with Eco-design Directive (EU Regulation 1253/2014) as required for 2018.**

#### Visual filter warning

The ventilation unit has a visual warning to replace the filter. An error message will be displayed on the control panel when the set pressure difference is exceeded.

**WARNING: The plant will not work efficiently unless the filter is replaced regularly, causing power consumption to increase.**

#### Disposal

Equipment that is no longer functional must be uninstalled by a specialist firm and properly disposed of at a suitable facility. The Electrical and Electronic Equipment Act (EAG-VO), implementing Community law Directives 202/95/EC (RoHS) and 2002/96/EC (WEEE Directive) applies.

\* Types of heat recovery:

Sistema abbinato del circuito

\*\* The energy class is calculated based on the annual operating hours (8760 h) and average pressure loss (see table below for final pressure loss pursuant to ÖNORM EN 13053).

Max. pressure drop across filter pursuant to ÖNORM EN 13053:	Filter class	Final pressure difference
	G1-G4	150 Pa
	M5-F7	200 Pa
	F8 - F9	300 Pa

## ISO 16890: the new standard for the classification of air filters

### EVIA RECOMMENDATION

Filter class EN 779	EVIA recommendation			
	ISO Coarse	ISO ePM10	ISO ePM2,5	ISO ePM1
G2	≥ 30%	-	-	-
G3	≥ 45%	-	-	-
G4	≥ 60%	-	-	-
M5	-	≥ 50%	-	-
M6	-	-	≥ 50%	-
F7	-	-	-	≥ 50%
F8	-	-	-	≥ 70%
F9	-	-	-	≥ 80%

### EUROVENT RECOMMENDATION 4/23 (2017) – ORIENTATION GUIDE DIN EN 779 – DIN EN ISO 16890 OF VDMA

In compliance with DIN EN 779	In compliance with DIN EN ISO 16890			
	ISO Coarse	ISO ePM10	ISO ePM2,5	ISO ePM1
G2	30% – 50%	-	-	-
G3	45% – 65%	-	-	-
G4	60% – 85%	-	-	-
M5	80% – 95%	40% – 70%	10% – 45%	5% – 35%
M6	> 90%	45% – 80%	20% – 50%	10% – 40%
F7	> 95%	80% – 90%	50% – 75%	40% – 65%
F8	> 95%	90% – 100%	75% – 95%	65% – 90%
F9	> 95%	90% – 100%	85% – 95%	80% – 90%

M5 to F9 following Eurovent Recommendation 4/23 (2017); the information is to be meant as an orientation guide and is supplied without liability.

Information based on the current state of knowledge of EU Regulation 1253/2014  
Download from: [www.pichlerluft.at](http://www.pichlerluft.at)

Responsible for the content: J. Pichler Gesellschaft m.b.H.  
All rights reserved | Subject to change without notice | Version: 05/2020 EH