

Vacuum Pump***	ATEX design		Frequency 50 / 60 Hz	Ultimate vacuum	Category		Explosion Group		Temperature Class		ATEX Classification of Vacuum Pump
	light / heavy				Inside	Outside	Inside	Outside*	Inside**	Outside**	
MINK MM 1104 BV	light	50 / 60 Hz	60 hPa	3D	-	IIIB	-	125°C	-	Ex II inside: 3D Ex h IIIB T125°C Dc Ex II outside: No ATEX zone	
	heavy		200 hPa	2G	2G	IIB3	IIB3	T3	T4	Ex II inside: 2G Ex h IIB3 T3 Gb Ex II outside: 2G Ex h IIB3 T4 Gb	
MINK MM 1144 BV	light	50 / 60 Hz	60 hPa	3D	-	IIIB	-	125°C	-	Ex II inside: 3D Ex h IIIB T125°C Dc Ex II outside: No ATEX zone	
	heavy		250 hPa	2G	2G	IIB3	IIB3	T3	T4	Ex II inside: 2G Ex h IIB3 T3 Gb Ex II outside: 2G Ex h IIB3 T4 Gb	
MINK MM 1102 BV MINK MM 1324 AV	light	50 / 60 Hz	60 hPa	3D	-	IIIB	-	125°C	-	Ex II inside: 3D Ex h IIIB T125°C Dc Ex II outside: No ATEX zone	
	heavy		300 hPa	2G	2G	IIB3	IIB3	T3	T4	Ex II inside: 2G Ex h IIB3 T3 Gb Ex II outside: 2G Ex h IIB3 T4 Gb	
MINK MM 1142 BV	light	50 / 60 Hz	60 hPa	3D	-	IIIB	-	125°C	-	Ex II inside: 3D Ex h IIIB T125°C Dc Ex II outside: No ATEX zone	
	heavy		350 hPa	2G	2G	IIB3	IIB3	T3	T4	Ex II inside: 2G Ex h IIB3 T3 Gb Ex II outside: 2G Ex h IIB3 T4 Gb	
MINK MM 1202 AV	light	50 / 60 Hz	100 hPa	3D	-	IIIB	-	125°C	-	Ex II inside: 3D Ex h IIIB T125°C Dc Ex II outside: No ATEX zone	
	heavy	50 / 60 Hz	250 hPa	2G	2G	IIB3	IIB3	T3	T4	Ex II inside: 2G Ex h IIB3 T3 Gb Ex II outside: 2G Ex h IIB3 T4 Gb	
MINK MM 1252 AV	light	50 / 60 Hz	100 hPa	3D	-	IIIB	-	125°C	-	Ex II inside: 3D Ex h IIIB T125°C Dc Ex II outside: No ATEX zone	
	heavy	50 Hz 60 Hz	300 hPa 350 hPa	2G	2G	IIB3	IIB3	T3	T3	Ex II inside: 2G Ex h IIB3 T3 Gb Ex II outside: 2G Ex h IIB3 T3 Gb	
MINK MM 1322 AV	light	50 / 60 Hz	150 hPa	3D	-	IIIB	-	125°C	-	Ex II inside: 3D Ex h IIIB T125°C Dc Ex II outside: No ATEX zone	
	heavy	50 Hz 60 Hz	350 hPa 400 hPa	2G	2G	IIB3	IIB3	T3	T3	Ex II inside: 2G Ex h IIB3 T3 Gb Ex II outside: 2G Ex h IIB3 T3 Gb	
MINK MV 0040 D MINK MV 0060 D MINK MV 0080 D	light	50 / 60 Hz	40 hPa	3D	-	IIIB	-	125°C	-	Ex II inside: 3D Ex h IIIB T125°C Dc Ex II outside: No ATEX Zone	
MINK MV 0312 B	light	50 / 60 Hz	150 hPa	3D	-	IIIB	-	125°C	-	Ex II inside: 3D Ex h IIIB T125°C Dc Ex II outside: No ATEX zone	
MINK MV 0502 B MINK MV 0602 B MINK MV 1202 A	light	50 / 60 Hz	200 hPa	3D	-	IIIB	-	125°C	-	Ex II inside: 3D Ex h IIIB T125°C Dc Ex II outside: No ATEX zone	

\* ensure motor selected is correct for classification \*\* Different temperature classes are possible with reduced vacuum levels. \*\*\* options: Aqua, gas-tight, inlet filter, vacuum relief valve, sealing material  
For further technical data please refer to the respective product leaflets.

### Ex Zones and Equipment Categories

Explosive atmosphere	Zone <sup>1</sup>	Category <sup>1</sup>	Probability that the vacuum pump is an ignition source
Constant, long-term or frequently present	0	1	No ignition source, not even in the event of double malfunctions
To be expected from time to time	1	2	No ignition source, also in case of single malfunctions
Rarely, and even if present then only briefly	2	3	No ignition source during normal operation

<sup>1</sup> rating for inside and outside of the vacuum pump

