

EVISA ATEX

Directive 2014/34/UE equipment classification			IEC60079-0 equipment classification Equipment Protection Level				Zoi	nes						
Use	ATEX group	Category	Protection level	If ATEX presence	Use	Equip gro		EPL	Protection level	If ATEX presence	6007	79-10		
Firedamp		M1 All firedamps content	Very high	Power on	Firedamp mines	Firedamp			Ma All firedamps content	Very high	Power on			
mines	1	M2 Within a certain value	High	Power off		'	'	M2 Within a certain value	High	Power off				
		1G	Very high		_		0			Ga	Very high		(0
		2G	High		Gas explosive	п	B C	Gb	High		:	1		
Surface		3G	Normal	Daa.	atmospheres		Gc	Reinforced		:	2			
Industries	II	1D	Very high	Power on	Duet			Da	Very high	Power on	20	IP6X		
		2D	High		Dust explosive	explosive	Ш	B C	Db	High		21	IP6X	
	3D Normal atmospheres		Dc	Reinforced		22	IP6X							

EPL: Equipment protection level

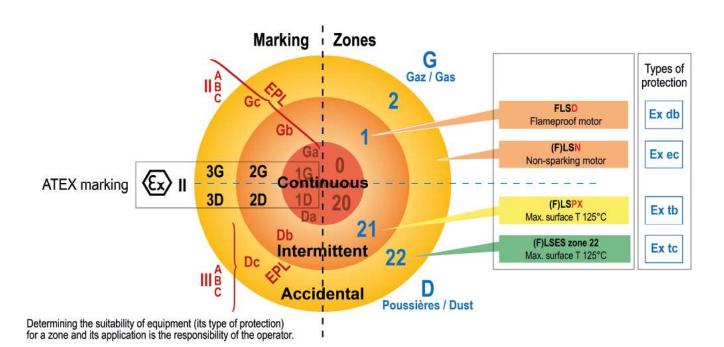
I : Methane IIA : Propane

IIB : Ethylene

IIIA: combustible airborne particles

IIIB: non-conductive dust (electrical resistivity > $10^3 \Omega$.m)

IIC : Hydrogen, Acetylene IIIC : conductive dust



TEMPERATURE CLASS	T1	T2	Т3	Т4	Т5	Т6
Ignition Temperature	> 450 °C	> 300 °C	> 200 °C	> 135 °C	> 100 °C	> 85 °C
Max. permissible surface temperature of the equipment	450 °C	300 °C	200 °C	135 °C	100 °C	85 °C

Selection tool EVISA ATEX

High performance ATEX oil-flooded vacuum pumps

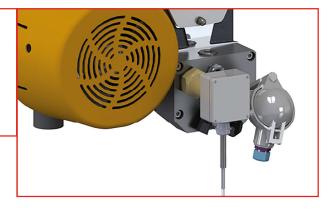


Gas & dust certified electrical motor. IE3 efficiency class.

PT100 temperature sensor as standard equipment.

Optional oil level sensor.

Fixation on reinforced metallic flange.





Oil mist filters designed for ATEX areas.

50 Hz	Evisa 65.R HV Atex	Evisa 100.R HV Atex	Evisa 200.R HV Atex	Evisa 300.R HV Atex
Nominal air flow rate m ³ .h ⁻¹ - cfm	68 - 40	100 - 58,8	200 - 117,7	300 - 176,5
End vacuum mbar - torr - Gast ballast closed	≤ 6.10 ⁻² - 4,5.10 ⁻²			
End vacuum mbar - torr - Gast ballast opened	≤ 5.10 ⁻¹ - 3,8.10 ⁻¹	≤ 5.10 ⁻¹ - 3,8.10 ⁻¹	≤1-0,75	≤ 2 - 1,5
Motor power	1,5 kW	2,2 kW	4 kW	5.5 kW









N° INERIS-EQEN : 033438/17

EVISA ATEX lubricated vane pumps are designed for a wide range of applications in potentially explosive atmospheres. They can be installed either in gas or dust zones or both. They can run continuously from atmospheric pressure to ultimate vacuum.

They are silent and extremely robust.

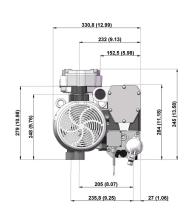
- Single stage vacuum pump with an end vacuum of 6.10⁻² mbar
- Compactness and noise level optimized for an easy integration in machines
- High water vapor pumping capacity with finely adjustable gas ballast
- Integrated oil mist filter on the exhaust
- Standard temperature safety control by intrinsically safe PT100

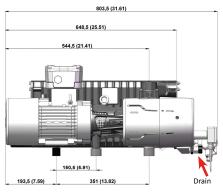
Technical characteristics

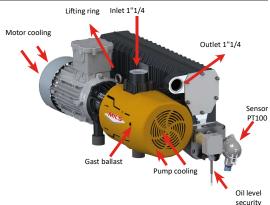
			50 Hz
	Nominal flow rate m ³	68 - 40	
	PNEUROP pumping s	65 <i>- 38,2</i>	
	Pumping speed at 1 r	mbar inlet pressure (1) m ³ .h ⁻¹ - cfm	40 - 23,5
	Closed gas ballast	End vacuum mbar - torr	≤ 6.10 ⁻² - 4,5.10 ⁻²
	0	End vacuum mbar - torr	≤ 5.10 ⁻¹ - 3,8.10 ⁻¹
	Opened gas ballast 3 rotations	Water vapor permitted maximum pressure mbar - torr	50 - <i>37,5</i>
		Water vapor capacity kg.h ⁻¹	2
	Pulling and and	End vacuum mbar - torr	≤ 3 - 2,3
E65.R	Fully opened gas ballast	Water vapor permitted maximum pressure mbar - torr	80 - 60
ATEX		Water vapor capacity kg.h ⁻¹	3
HV	100 % synthetic oil		MV99S
	Oil capacity - qt		3 - 3,2
	Noise level dB(A)		67
		Voltage	3ph - 230/400 V - 50 Hz
	IE3 electrical motor	Motor power	1,50 kW
		Rotation speed min ⁻¹	1500
	Inlet connection	1"1/4 BSP	
	Outlet connection	1"1/4 BSP	
	Weight with oil kg - //		85 - 187,4
(1)	Outlet connection	Motor power Rotation speed min ⁻¹	1,50 kW 1500 1"1/4 BSP 1"1/4 BSP

⁽¹⁾ Measurements according to PNEUROP 6602 specifications - 20°C

Dimensions mm (inch)







References

E65.R ATEX HV	WITH GAS BALLAST
LUJIN AILA NV	WIIN GAS BALLASI

DUST AND GAS ZONE

112/2G c,k,b IIB T4 Gb/Gb - II2D c,k,b IIIC T135°C Db/Db 824392

Accessories and options

Oil level security		333172
Suction filter	Paper cartridge 126PA	625470
ATEX Zone II2G IIB	Carbon cartridge 126CH	625471
II2D IIIC	Polyester cartridge 126PO	619884
Stainless steel inlet or outle	619886	
Elevated base frame H = 15	625209	
Flame arrester DN50	625417	
PT100 intrinsically safe power supply (assembly out of atex zone) - Output 0-10V		362640

Maintenance kits

3 000 hours usual maintenance

724608

12 000 hours preventive maintenance

724609

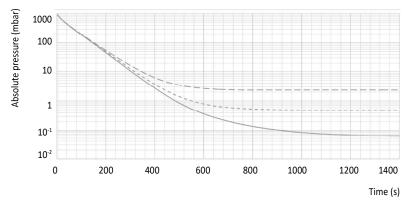


3 000 hours usual maintenance



12 000 hours preventive maintenance

Pumping speed on 1000 I vessel

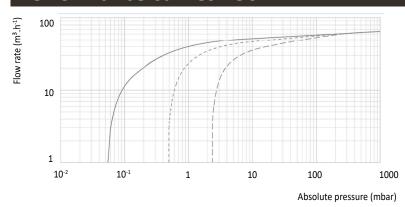


50 Hz - Closed gas ballast

— 50 Hz - Opened gas ballast 3 rotations

50 Hz - Fully opened gas ballast

Performance curves - 50 Hz



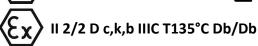
50 Hz - Closed gas ballast

50 Hz - Opened gas ballast 3 rotations

50 Hz - Fully opened gas ballast



II 2/2 G c,k,b IIB T4 Gb/Gb EVISA E100.R ATEX





EVISA ATEX lubricated vane pumps are designed for a wide range of applications in potentially explosive atmospheres. They can be installed either in gas or dust zones or both. They can run continuously from atmospheric pressure to ultimate vacuum.

They are silent and extremely robust.

- Single stage vacuum pump with an end vacuum of 6.10⁻² mbar
- Compactness and noise level optimized for an easy integration in machines
- High water vapor pumping capacity with finely adjustable gas ballast
- · Integrated oil mist filter on the exhaust
- Standard temperature safety control by intrinsically safe PT100

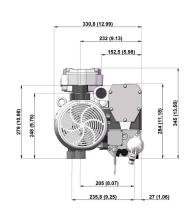
Technical characteristics

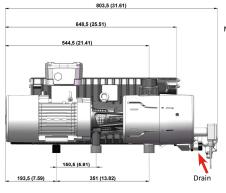
N° INERIS-EQEN: 033438/17

			50 Hz
	Nominal flow rate m ³	100 - 58,8	
	PNEUROP pumping s	96 - 56,5	
	Pumping speed at 1 r	nbar inlet pressure (1) m ³ .h ⁻¹ - cfm	52 - <i>30,6</i>
	Closed gas ballast	End vacuum mbar - torr	≤ 6.10 ⁻² - 4,5.10 ⁻²
	6	End vacuum mbar - torr	≤ 5.10 ⁻¹ - 3,8.10 ⁻¹
	Opened gas ballast 3 rotations	Water vapor permitted maximum pressure mbar - torr	59 - 44,2
		Water vapor capacity kg.h ⁻¹	3,4
	Fully opened gas ballast	End vacuum mbar - torr	≤ 2 - 1,5
E100.R		Water vapor permitted maximum pressure mbar - torr	95 - 71,2
ATEX		Water vapor capacity kg.h ⁻¹	5,5
HV	100 % synthetic oil		MV99S
	Oil capacity - qt	3 - 3,2	
	Noise level dB(A)	67	
		Voltage	3ph - 230/400 V - 50 Hz
	IE3 electrical motor	Motor power	2,20 kW
		Rotation speed min ⁻¹	1500
	Inlet connection	1''1/4 BSP	
	Outlet connection	1''1/4 BSP	
	Weight with oil kg - //)	92,5 - 202,9
(1) Mags		NEUROR 6602 specifications - 20°C	32,3 - 202,3

⁽¹⁾ Measurements according to PNEUROP 6602 specifications - 20°C

Dimensions mm (inch)







security

References

E100.R ATEX HV	WITH GAS BALLAST
DUST AND GAS ZONE II2/2G c,k,b IIB T4 Gb/Gb - II2D c,k,b IIIC T135°C Db/Db	824393

Accessories and options

Oil level security		333172
Suction filter	Paper cartridge 126PA	625470
ATEX Zone II2G IIB	Carbon cartridge 126CH	625471
II2D IIIC	Polyester cartridge 126PO	619884
Stainless steel inlet or outle	619886	
Elevated base frame H = 15	625209	
Flame arrester DN50	625417	
PT100 intrinsically safe pow (assembly out of atex zone)	PT100 intrinsically safe power supply (assembly out of atex zone) - Output 0-10V	

Maintenance kits

3 000 hours usual maintenance

724608

12 000 hours preventive maintenance

724610

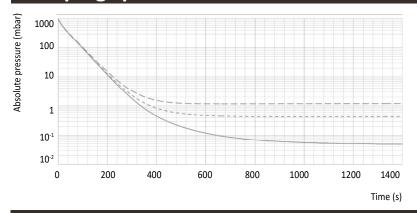


3 000 hours usual maintenance



12 000 hours preventive maintenance

Pumping speed on 1000 l vessel

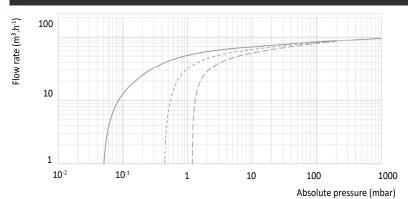


50 Hz -Closed gas ballast

50 Hz - Opened gas ballast 3 rotations

50 Hz - Fully opened gas ballast

Performance curves - 50 Hz



50 Hz - Closed gas ballast

50 Hz - Opened gas ballast 3 rotations

50 Hz - Fully opened gas ballast

II 2/2 G c,k,b IIB T4 Gb/Gb EVISA E200.R ATEX





N° INERIS-EQEN: 033438/17

EVISA ATEX lubricated vane pumps are designed for a wide range of applications in potentially explosive atmospheres. They can be installed either in gas or dust zones or both. They can run continuously from atmospheric pressure to ultimate vacuum.

They are silent and extremely robust.

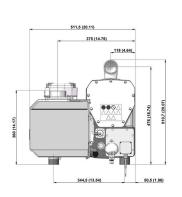
- Single stage vacuum pump with an end vacuum of 6.10-2 mbar
- High pumping speed even at low pressure
- High water vapor pumping capacity with gas ballast
- Integrated oil mist filter on the exhaust
- Standard temperature safety control by intrinsically safe PT100

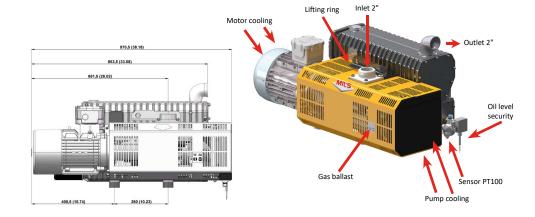
Technical characteristics

			50 Hz
	Nominal flow rate r	200 - 117,7	
	PNEUROP pumping	speed (1) m ³ .h ⁻¹ - <i>cfm</i>	190 - 111,8
	Pumping speed at 1	. mbar inlet pressure (1) m ³ .h ⁻¹ - cfm	<u>134 - 78,9</u>
	Closed gas ballast	End vacuum mbar - torr	≤ 6.10 ⁻² - 4,5.10 ⁻²
	Fully anamad ass	End vacuum mbar - torr	≤ 1 - 0,75
	Fully opened gas ballast	Water vapor permitted maximum pressure mbar - torr	20,2 - 15,1
		Water vapor capacity kg.h ⁻¹	2,2
E200.R	100 % synthetic oil		MV99S
ATEX	Oil capacity - qt		5 - <i>5,3</i>
HV	Noise level dB(A)		71
		Voltage	3ph - 230/400 V - 50 Hz
	IE3 electrical motor	Motor power	4 kW
		Rotation speed min ⁻¹	1500
	Inlet connection	2" BSP	
	Outlet connection	2" BSP	
	Weight with oil kg -	<i>lb</i>	163,5- 359,4

⁽¹⁾ Measurements according to PNEUROP 6602 specifications - 20°C

Dimensions mm (inch)





References

E200.R ATEX HV	WITH GAS BALLAST
ZONE	

DUST AND GAS ZONE
II2/2G c,k,b IIB T4 Gb/Gb - II2D c,k,b IIIC T135°C Db/Db

824394

Accessories and options

Oil level security		333172
Suction filter	Paper cartridge 201PA	625472
ATEX Zone II2G IIB	Carbon cartridge 201CH	625473
II2D IIIC	Polyester cartridge 201PO	619885
Stainless steel inlet or outle	619887	
Elevated base frame H = 15	670806	
Flame arrester DN80	625422	
PT100 intrinsically safe pow (assembly out of atex zone)	er supply - Output 0-10V	362640

Maintenance kits

3 000 hours usual maintenance

724885

12 000 hours preventive maintenance

724887

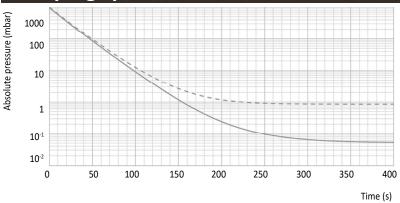


3 000 hours usual maintenance

12 000 hours preventive maintenance



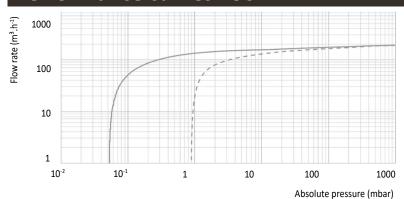
Pumping speed on 1000 I vessel



50 Hz - Closed gas ballast

= 50 Hz - With opened gas ballast

Performance curves - 50 Hz



50 Hz - Closed gas ballast

50 Hz - With opened gas ballast



II 2/2 G c,k,b IIB T4 Gb/Gb EVISA E300.R ATEX



II 2/2 D c,k,b IIIC T135°C Db/Db



EVISA ATEX lubricated vane pumps are designed for a wide range of applications in potentially explosive atmospheres. They can be installed either in gas or dust zones or both. They can run continuously from atmospheric pressure to ultimate vacuum.

They are silent and extremely robust.

- Single stage vacuum pump with an end vacuum of 6.10⁻² mbar
- High pumping speed even at low pressure
- · High water vapor pumping capacity with gas ballast
- Integrated oil mist filter on the exhaust
- Standard temperature safety control by intrinsically safe PT100

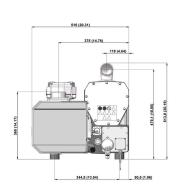
N° INERIS-EQEN: 033438/17

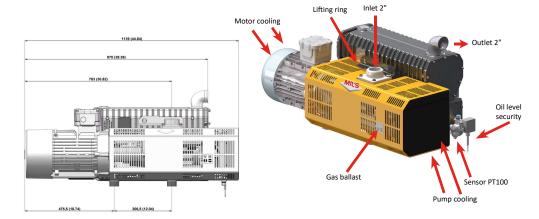
Technical characteristics

			50 Hz
E300.R ATEX HV	Nominal flow rate m ³ .h ⁻¹ - cfm		300 - 176,5
	PNEUROP pumping speed (1) m ³ .h ⁻¹ - cfm		280 - <i>165</i>
	Pumping speed at 1 mbar inlet pressure (1) m ³ .h ⁻¹ - cfm		171 - 101
	Without gas ballast	End vacuum mbar - torr	≤ 6.10 ⁻² - 4,5.10 ⁻²
	Fully opened gas ballast	End vacuum mbar - torr	≤ 2 - 1,5
		Water vapor permitted maximum pressure mbar - torr	18,6 - 13,9
		Water vapor capacity kg.h ⁻¹	2,3
	100 % synthetic oil		MV99S
	Oil capacity I - qt		5 - <i>5,3</i>
	Noise level dB(A)		72
	IE3 electrical motor	Voltage	3ph - 230/400 V - 50 Hz
		Motor power	5,5 kW
		Rotation speed min ⁻¹	1500
	Inlet connection		2" BSP
	Outlet connection		2" BSP
	Weight with oil kg -	b	206 - 454,2

⁽¹⁾ Measurements according to PNEUROP 6602 specifications - 20°C

Dimensions mm (inch)





References

E300.R ATEX HV WITH GAS BALLAST

DUST AND GAS ZONE

112/2G c,k,b IIB T4 Gb/Gb - II2D c,k,b IIIC T135°C Db/Db

Accessories and options

Oil level security	333172	
Suction filter	Paper cartridge 201PA	625472
ATEX Zone II2G IIB	Carbon cartridge 201CH	625473
II2D IIIC	Polyester cartridge 201PO	619885
Stainless steel inlet or outle	619887	
Elevated base frame H = 15	616595	
Flame arrester DN80	625422	
PT100 intrinsically safe pow (assembly out of atex zone)	362640	

Maintenance kits

3 000 hours usual maintenance

724886

12 000 hours preventive maintenance

724888

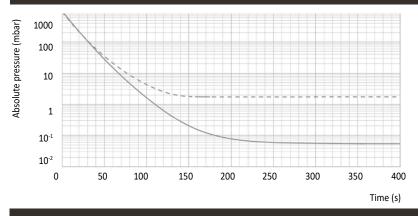


3 000 hours usual maintenance

12 000 hours preventive maintenance



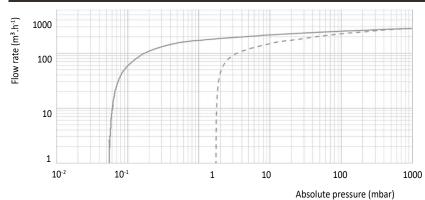
Pumping speed on 1000 I vessel



50 Hz - Closed gas ballast

50 Hz - With opened gas ballast

Performance curves - 50 Hz



50 Hz - Closed gas ballast

— 50 Hz - With opened gas ballast