

# Variable speed units





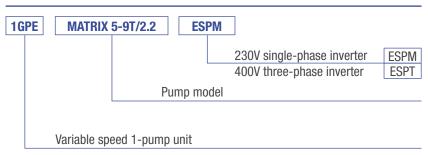
## **VARIABLE SPEED UNITS WITH AN ELECTRIC PUMP**



Pressure booster system with a multi-stage stainless steel electric pump with constant pressure control, including a variable speed electronic inverter device (model E-SPD+) and 2-litre expansion tank. The 1GPE systems are particularly suitable for domestic pressure boosting, limited garden irrigation, washing vehicles and clean water movement in general. The new E-SPD+ inverter device boasts easy use and programming thanks to simplified, intuitive software that allows the user to make the settings and start-up in about 2 minutes.

The 1GPE systems are available in 230V single-phase and 400V three-phase versions but, in both cases, the pump installed is of the three-phase type to ensure greater efficiency and lower energy consumption.

## **IDENTIFICATION CODE**



## **TECHNICAL DATA**

Maximum working pressure	10 bar
Maximum liquid temperature	80°C
Electric motor in insulation class	F
Efficiency	IE3
Protection degree	IP55
Supply voltage	$230V \pm 10\%$ (single-phase versions) $400V \pm 10\%$ (three-phase versions)



## **VARIABLE SPEED UNITS WITH AN ELECTRIC PUMP**

Model	kW	HP	IP Q=Flow rate												Input		DNA	DNN		
			l/min	0	20	30	45	60	80	100	130	160	200	250	350	450	curi			
			m³/h	0	1.2	1.8	2.7	3.6	4.8	6	7.8	9.6	12	15	21	27	[ <i>[</i> 3			
					H=Head [m]											230V				
1GPE MATRIX 3-5T/0.75 ESPM	0.75	1		56.5	52.5	49.0	42.5	34.0	20.0	-	-	-	-	-	-	-	3	-	G1"	G1"
1GPE MATRIX 3-6T/0.9 ESPM	0.9	1.2		68.0	62.5	58.5	51.0	41.0	24.0	-	-	-	-	-	-	-	4.3	-	G1"	G1"
1GPE MATRIX 5-5T/1.3 ESPM	1.3	1.8		57.5	-	54.0	51.0	48.5	43.5	36.7	22.0	-	-	-	-	-	5.8	-	G11/4	G1"
1GPE MATRIX 5-6T/1.3 ESP(M)(T)	1.3	1.8		69.0	-	64.5	61.5	58.0	52.0	44.0	26.4	-	-	-	-	-	5.8	3.3	G11/4	G1"
1GPE MATRIX 5-7T/1.5 ESP(M)(T)	1.5	2		80.5	-	75.5	72.0	67.5	61.0	51.5	30.8	-	-	-	-	-	6.6	3.8	G11/4	G1"
1GPE MATRIX 5-9T/2.2 ESPM	2.2	3		104.0	-	97.0	92.0	87.0	78.0	66.0	39.6	-	-	-	-	-	8.2	-	G11/4	G1"
1GPE MATRIX 10-4T/1.5 ESP(M)(T)	1.5	2		48.0	-	-	-	44.5	43.0	41.0	38.1	34.0	25.7	11.6	-	-	6.6	3.8	G1½	G11/4
1GPE MATRIX 10-5T/2.2 ESP(M)(T)	2.2	3		60.0	-	-	-	55.5	53.5	51.5	47.5	42.5	32.1	14.5	-	-	8.2	4.7	G1½	G11/4
1GPE MATRIX 10-6T/2.2 ESP(M)(T)	2.2	3		72.0	-	-	-	66.5	64.5	62.0	57.0	51.0	38.5	17.4	-	-	8.2	4.7	G1½	G11/4
1GPE MATRIX 18-6T/4 ESPT	4	5.5		72.5	-	-	-	-	-	-	66.0	64.0	60.5	56.0	42.5	15.6	-	8.7	G2"	G1½

## **SPECIFICATIONS**

Pressure booster set with constant pressure control with variable frequency, consisting of a multi-stage electric pump in AISI 304 stainless steel (MATRIX range) including the E-SPD+ inverter device and 1 five-way connector in AISI 304 stainless steel (on the delivery side), 1 analogue pressure gauge and 1 pressure transducer (4-20mA). The 1GPE pressure booster set comes fitted as standard with a 2-litre expansion tank.

The pressure booster sets are designed to be connected and to communicate with other identical units, working in parallel.

## **SEE ALL THE OPTIONALS ON PAGE 47**



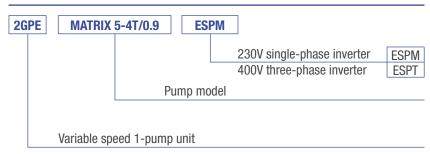
## **VARIABLE SPEED UNITS WITH TWO ELECTRIC PUMPS**



Pressure booster sets consisting of 2 multistage horizontal electric pumps in AISI 304 stainless steel, including E-SPD+ inverter devices for constant pressure control. Particularly suitable for domestic and residential water supply, distribution networks related to the building service sector, water supply for industry in general, irrigation of gardens, parks and sports fields, and clean water movement in general.

The 2GPE MATRIX units are available in 230V single-phase and 400V three-phase versions but, in both cases, the pump installed is of the three-phase type to ensure greater efficiency and lower energy consumption.

## **IDENTIFICATION CODE**



## **TECHNICAL DATA**

Maximum working pressure	10 bar
Maximum liquid temperature	85°C
Electric motor in insulation class	F
Efficiency	IE3
Protection degree	IP55
Supply voltage	$230V \pm 10\%$ (single-phase versions) $400V \pm 10\%$ (three-phase versions)



## **VARIABLE SPEED UNITS WITH TWO ELECTRIC PUMPS**

2GPE MATRIX																		
Model	kW	HP		Q=Flow rate									Input		DNA	DNM		
	x2	x2	I/min	0	40	60 90 120 160 200 260 320 400 500		curi										
			m³/h	0	2.4	3.6	5.4	7.2	9.6	12.0	15.6	19.2	24.0	30.0	[/ 3	-		
							1	Н=Неа	d [m]	ı		ı	1	1	230V			
2GPE MATRIX 3-3T/0.65 ESPM	0.65	0.9		33.9	31.4	29.3	25.5	20.4	12.0	-	-	-	-	-	2.8	-	G1½	G1½
2GPE MATRIX 3-4T/0.65 ESP(M)(T)	0.65	0.9		45.0	42.0	39.1	34.0	27.2	16.0	-	-	-	-	-	3.1	1.8	G1½	G1½
2GPE MATRIX 3-5T/0.75 ESP(M)(T)	0.75	1		56.5	52.5	49.0	42.5	34.0	20.0	-	-	-	-	-	3	1.7	G1½	G1½
2GPE MATRIX 3-6T/0.9 ESP(M)(T)	0.9	1.2		68.0	62.5	58.5	51.0	41.0	24.0	-	-	-	-	-	4.3	2.5	G1½	G1½
2GPE MATRIX 3-7T/1.3 ESP(M)(T)	1.3	1.8		79.0	73.0	68.5	59.5	47.5	28.0	-	-	-	-	-	5.8	3.3	G1½	G1½
2GPE MATRIX 3-8T/1.3 ESPT	1.3	1.8		90.5	83.5	78.0	68.0	54.5	32.0	-	-	-	-	-	-	3.3	G1½	G1½
2GPE MATRIX 3-9T/1.5 ESPT	1.5	2		102.0	94.0	88.0	76.5	61.0	36.0	-	-	-	-	-	-	3.8	G1½	G1½
2GPE MATRIX 5-3T/0.65 ESPM	0.65	0.9		34.5	-	32.3	30.7	29.0	26.0	22.0	13.2	-	-	-	3.1	-	G2	G1½
2GPE MATRIX 5-4T/0.9 ESP(M)(T)	0.9	1.2		46.0	-	43.0	41.0	38.6	34.7	29.4	17.6	-	-	-	4.3	2.5	G2	G1½
2GPE MATRIX 5-5T/1.3 ESP(M)(T)	1.3	1.8		57.5	-	54.0	51.0	48.5	43.5	36.7	22.0	-	-	-	5.8	3.3	G2	G1½
2GPE MATRIX 5-6T/1.3 ESP(M)(T)	1.3	1.8		69.0	-	64.5	61.5	58.0	52.0	44.0	26.4	-	-	-	5.8	3.3	G2	G1½
2GPE MATRIX 5-7T/1.5 ESPT	1.5	2		80.5	-	75.5	72.0	67.5	61.0	51.5	30.8	-	-	-	-	3.8	G2	G1½
2GPE MATRIX 5-8T/2.2 ESPT	2.2	3		92.0	-	86.0	82.0	77.0	69.5	58.5	35.2	-	-	-	-	4.7	G2	G1½
2GPE MATRIX 5-9T/2.2 ESPT	2.2	3		104.0	-	97.0	92.0	87.0	78.0	66.0	39.6	-	-	-	-	4.7	G2	G1½
2GPE MATRIX 10-4T/1.5 ESPT	1.5	2.0		48.0	-	-	-	44.5	43.0	41.0	38.1	34.0	25.7	11.6	-	3.8	G2½	G2½
2GPE MATRIX 10-5T/2.2 ESPT	2.2	3.0		60.0	-	-	-	55.5	53.5	51.5	47.5	42.5	32.1	14.5	-	4.7	G21/2	G2½
2GPE MATRIX 10-6T/2.2 ESPT	2.2	3.0		72.0	-	-	-	66.5	64.5	62.0	57.0	51.0	38.5	17.4	-	4.7	G2½	G2½

## **SPECIFICATIONS**

Pressure booster sets with constant pressure control with variable frequency, consisting of 2 multi-stage horizontal electric pumps in AISI 304 stainless steel (MATRIX range), including E-SPD+ inverter devices mounted on the motor. The units are installed on their own galvanised steel base (with omega profile). The protection panel, with 2 suitably sized residual current switch disconnectors, has clean contacts directly connected to the E-SPD+ device for the main connections to the digital inputs and outputs available, without the need to intervene on the inverter devices themselves. The pumps are joined together by means of an intake manifold and a delivery manifold, both in AISI 304 stainless steel. The unit is completed with 4 brass shut-off valves (2 on the intake side and 2 on the delivery side), 2 brass check valves (on the delivery side), 2 pressure transducers (4-20mA) and 1 analogue pressure gauge. The unit is factory tested and assembled prior to consignment.

## **SEE ALL THE OPTIONALS ON PAGE 47**