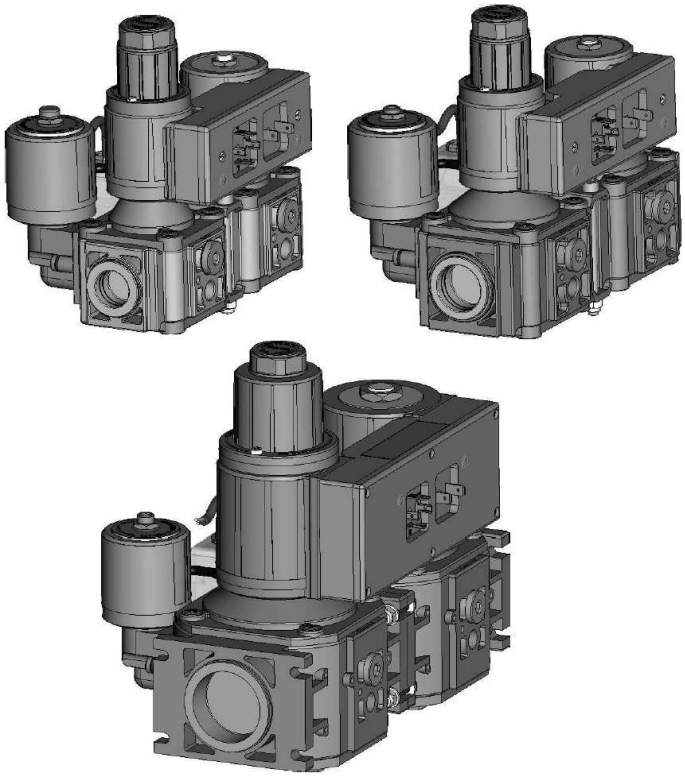
GVN/GVCN25...
GVN/GVCN30...
GVN/GVCN40...
SERIES

COMBINED VALVE UNITS FOR GAS WITH ¾" 1" 1-½" CONNECTIONS AND DIFFERENT OPERATING PRESSURE



GENERAL DESCRIPTION

This series of combined valve units usually consists of a quick opening valve and a slow opening valve, which are mechanically connected by an O-Ring and a suitable fixing bracket. These devices can be fitted with a by-pass valve and/or a gas pressure switch with fixed or adjustable setting, and with an inlet pressure regulator to adjust the gas pressure and keep it constant. The electrical connections between the components of the system are carried out by means of a printed circuit board placed in a plastic casing. The valve system is electrically connected to the control unit by means of a four-pin MPM plug enabling a very easy wiring in any applications.

The presence of supply voltage is signalled by a LED indicator useful during installation and maintenance operations.

For information about the features of each solenoid valve used in these combined valve units, please refer to the corresponding technical leaflets (EGN25, EGN30 and EGN40 series of quick, slow or by-pass valves).

TECHNICAL FEATURES

- Class:	A
- Group:	2
- Supply voltage (1):	230 Vac / 50-60 Hz 110 Vac / 50-60 Hz
- Operating temperature range:	-10℃ / +60℃
- Closing time:	≤1s
- Opening time:	≤1s (for quick opening versions only)
- Protection rating:	IP40
- Mounting position:	horizontal and vertical (not upside-down)
- Valve bodies:	die-cast aluminium

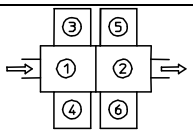
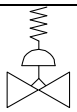
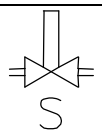
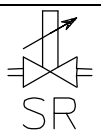
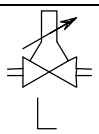
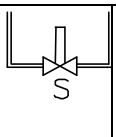
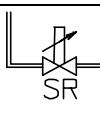
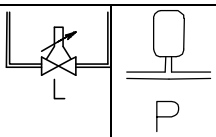
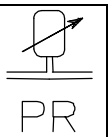
(1) Versions with different supply voltage are available.

INSTALLATION

- Respect the applicable national and European standards (e.g. EN60335-1) regarding electrical safety.
- Assemble the valve to the installation in such a way that the arrow on the valve body has the same direction as the fuel flow.
- When assembling the valve to the installation piping, avoid twisting on the sheath but always use a hexagonal key on the valve body.
- Make sure that no foreign matters have entered the valve body.

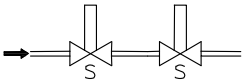
Make sure that the max. fuel input pressure never exceeds the value appearing on the product label.

TABLE OF THE CONNECTIONS

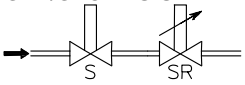
Module combination	Module position according to the type								
									
GVN/GVCN..*S*S		1 - 2							
GVN/GVCN..*S*SR		1	2						
GVN/GVCN..*S*L		1		2					
GVN/GVCN..*S*L*S(SR-L)		1		2	5 - 6	5 - 6	5 - 6		
GVN/GVCN..*S*L*S(SR-L)*P		1		2	5 - 6	5 - 6	5 - 6	3 - 4	
GVN/GVCN..*S*L*S(SR-L)*PR		1		2	5 - 6	5 - 6	5 - 6		3 - 4
GVN/GVCN..STF*..*..	7								

SYNOPTIC TABLE

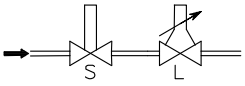
GVN/GVCN..*S*S



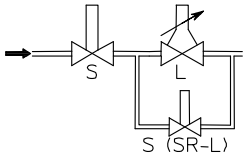
GVN/GVCN..*S*SR



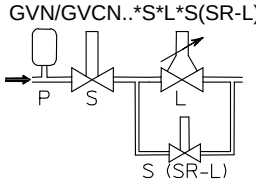
GVN/GVCN..*S*L



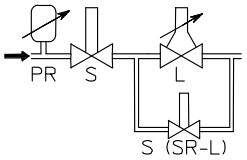
GVN/GVCN..*S*L*S(SR-L)



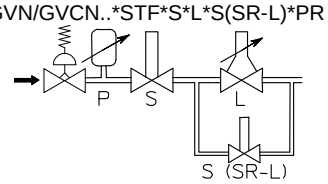
GVN/GVCN..*S*L*S(SR-L)*P



GVN/GVCN..*S*L*S(SR-L)*PR

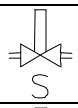
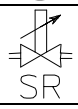
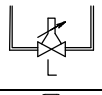
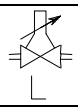
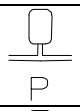


GVN/GVCN..*STF*S*L*S(SR-L)*PR



N.B.: The versions appearing in the Table of the connections and in the Synoptic table are available for any type of GVN/GVCN25, GVN/GVCN30 and GVN/GVCN40 and for any operating pressure.

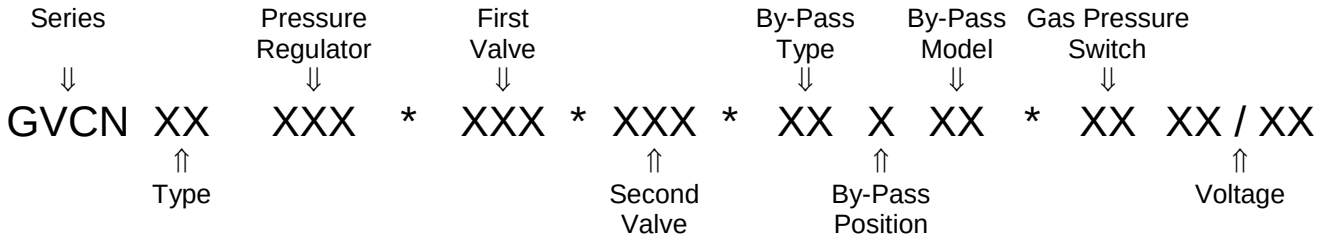
MODULES

	ON-OFF QUICK OPENING SOLENOID VALVE		ON-OFF QUICK OPENING BY-PASS WITH FLOW ADJUSTER
	ON-OFF QUICK OPENING SOLENOID VALVE WITH FLOW ADJUSTER		ON-OFF SLOW OPENING BY-PASS WITH FLOW ADJUSTER
	ON-OFF SLOW OPENING SOLENOID VALVE WITH FLOW ADJUSTER		GAS PRESSURE SWITCH
	ON-OFF QUICK OPENING BY-PASS		ADJUSTABLE GAS PRESSURE SWITCH
	PRESSURE REGULATOR		

SUMMARY TABLE

Type		Operating pressure (mbar)	Orifice diameter (mm)	Connection	Consumption (for each valve) 230Vac	Consumption (for each valve) 110Vac
GVN/GVCN25*..	*0 ÷ 500*	25	G3/4"	*20VA*	*18VA*	*18VA*
GVN/GVCN30*..	0 ÷ 500	30	G1"	25VA	25VA	25VA
GVN/GVCN40*..	0 ÷ 500	40	G1 ½"	48W	48W	48W

PART REFERENCES



Series: GVCN = combined valve unit with connection
GVN = combined valve unit without connection

Type: type of valve composing the combined unit (e.g. EGN25:25, EGN30:30, EGN40:40)

Pressure Regulator: ST= Pressure regulator without inlet filter
STF= Pressure regulator with inlet filter

First valve: S: quick opening
SR: quick opening with flow adjuster
L: slow opening with flow adjuster
operating pressure range (see value appearing in the summary table)
pressure test point position: X: downstream left Y: downstream right
Z: upstream left W: upstream right

Second valve: see "First valve" above

By-pass type: S: quick opening
SR: quick opening with flow adjuster
L: slow opening with flow adjuster

By-pass position: D: right
S: left

By-pass model: : standard by-pass (no letter)
15: by-pass made with EG15 valve body (for GVN/GVCN30 versions only)
25: by-pass made with EGN25 valve body (for GVN/GVCN40 versions only)

Gas pressure switch: : no gas pressure switch (no letter)
P: fixed setting (*****)
PR: adjustable setting (*****)

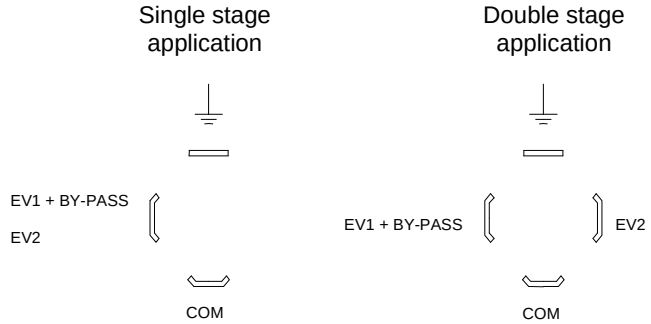
Voltage: 230/50-60: 230 Vac 50-60 Hz
110/50-60: 110 Vac 50-60 Hz

(*****) The gas pressure switch position is always the same as the by-pass position; in case the by-pass is not available, the gas pressure switch position is Right.

Example: GVCN 25*S*SRZ*SRD*P 230/50-60

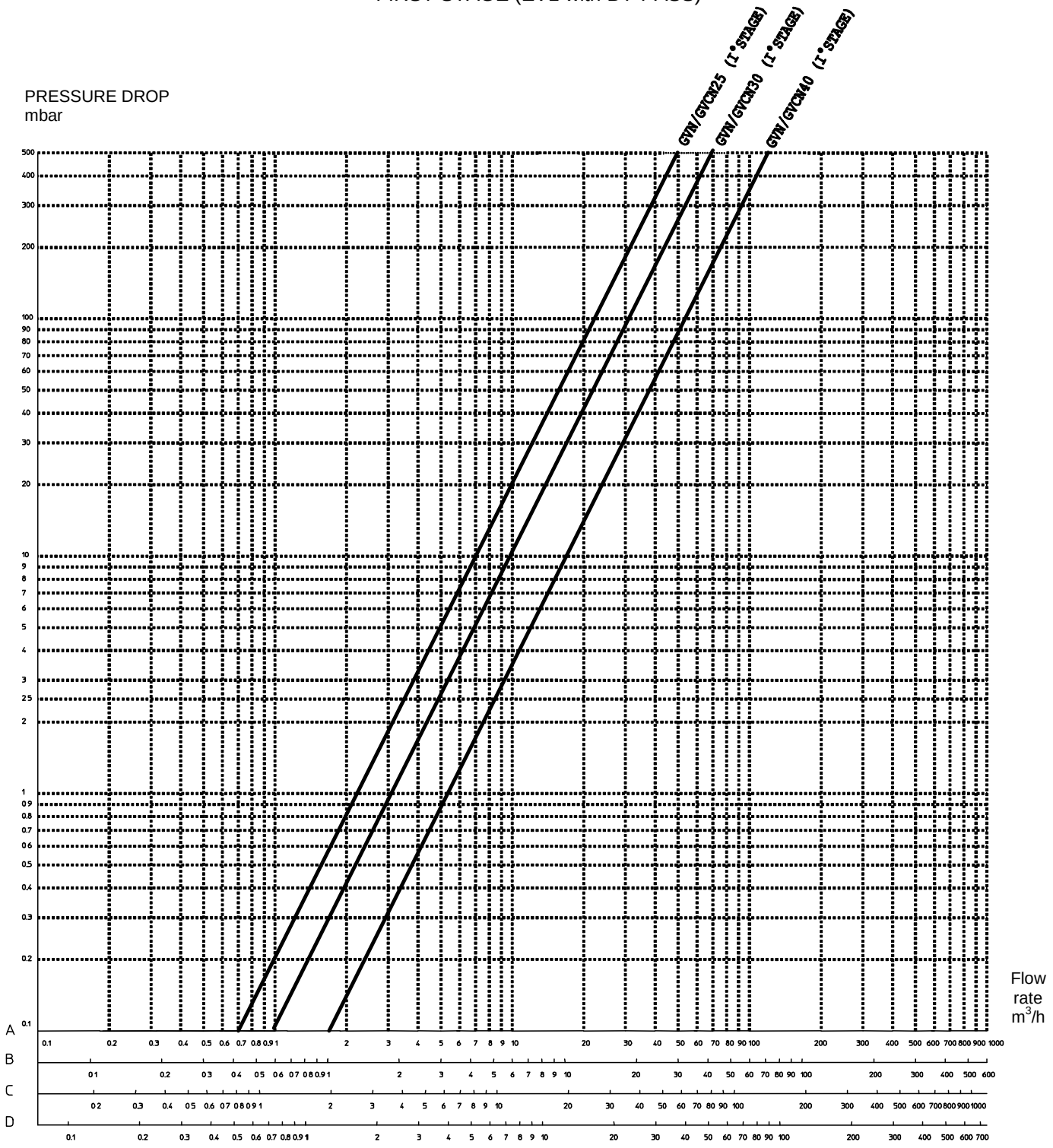
GVCN: combined valve unit with connection
25: valve type EGN25
S: quick opening
SRZ: quick opening with flow adjuster and pressure test point upstream left
SRD: quick opening by-pass with flow adjuster on the right side
P: fixed-setting gas pressure switch (on the right side like the by-pass)
230/50-60: power supply 230 Vac 50-60 Hz

ELECTRICAL CONNECTION FOR TYPES GVCN25, GVCN30, GVCN40 WITH OR WITHOUT BY-PASS



DIAGRAM

FIRST STAGE (EV1 with BY-PASS)



A : Standard flow rate m^3/h of NATURAL GAS relative density 0.554

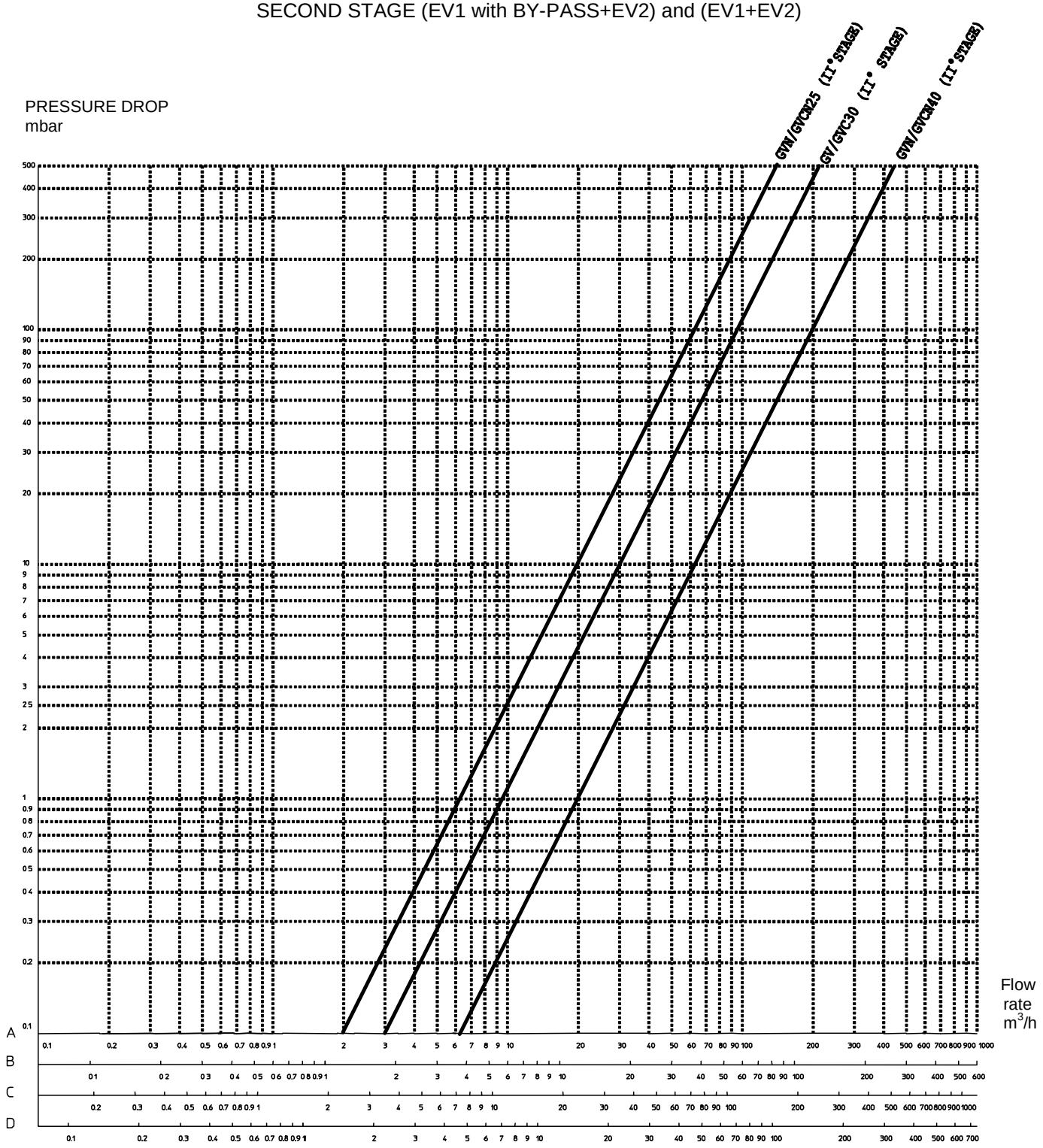
B : Standard flow rate m^3/h of LPG relative density 1.54

C : Standard flow rate m^3/h of TOWN GAS relative density 0.411

D : Standard flow rate m^3/h of AIR relative density 1

DIAGRAM

SECOND STAGE (EV1 with BY-PASS+EV2) and (EV1+EV2)



A : Standard flow rate m^3/h of NATURAL GAS relative density 0.554

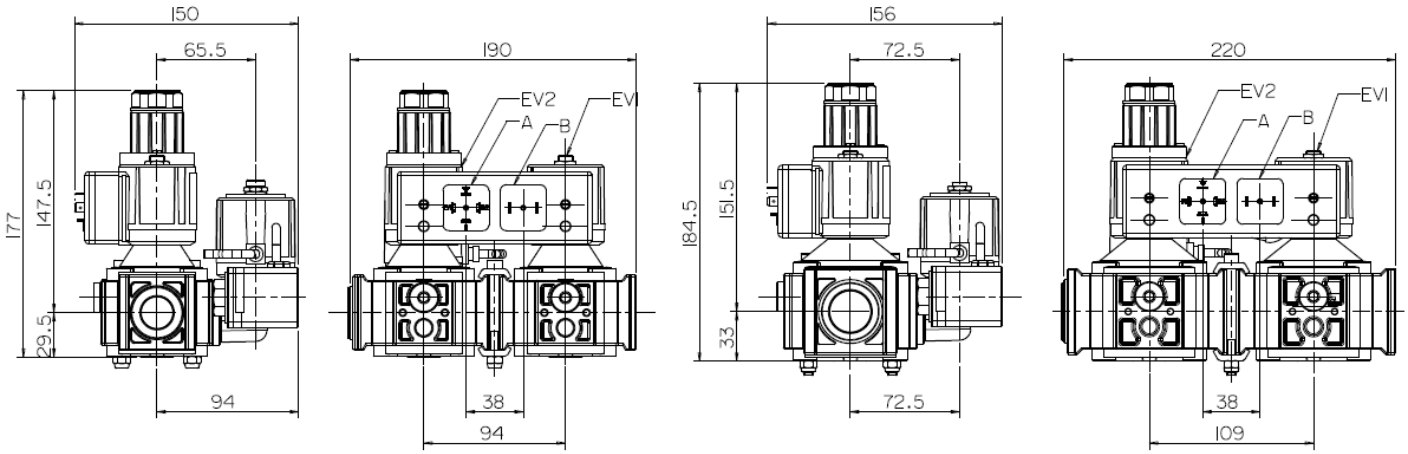
B : Standard flow rate m^3/h of LPG relative density 1.54

C : Standard flow rate m^3/h of TOWN GAS relative density 0.411

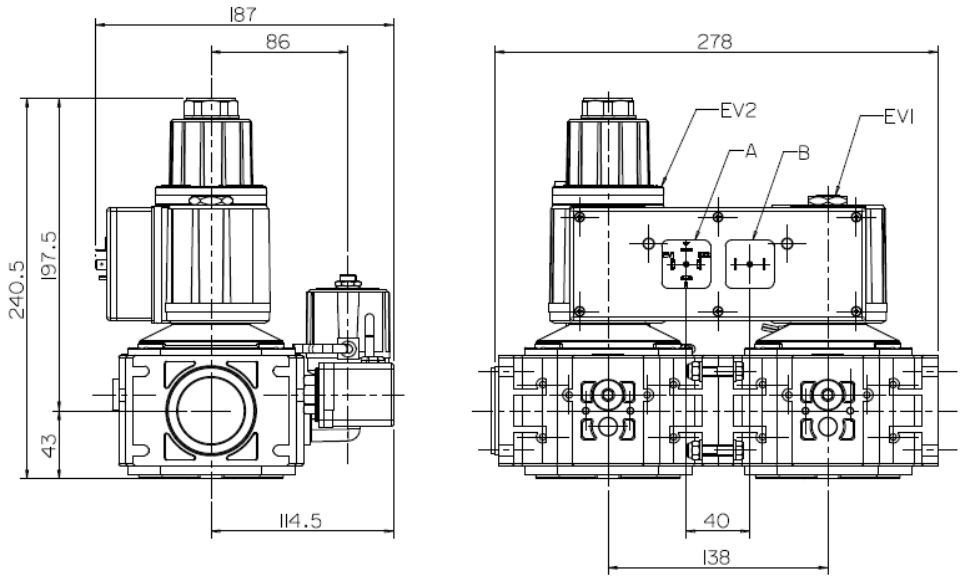
D : Standard flow rate m^3/h of AIR relative density 1

N.B.: In case of a combined valve unit without by-pass, the max. flow rate is equivalent to 70% of the single valve flow rate.

OVERALL DIMENSIONS



GVCN25*S*L*SRD*PR **GVCN30*S*L*SRD*PR**



GVCN40*S*L*SRD*PR

KEY TO SYMBOLS
EV1: ON - OFF quick opening solenoid valve
EV2: ON - OFF slow opening solenoid valve
BY-PASS: ON – OFF quick opening solenoid valve
P: gas pressure switch
A: solenoid valve power supply connection plug (4 pins)
B: gas pressure switch connection plug (2 pins), available for GVCN25, GVCN30 and GVCN40 with gas pressure switch only.

NOTES
- The (a/m) dimensions of GVCN versions can be considered valid for GVN versions too, as the latter ones differ in the separate electrical wiring only.
- For the versions equipped with pressure regulator, add the length of this one as shown below:
  In GVN/GVCN25 length of the pressure regulator “120 mm”.
  In GVN/GVCN30 length of the pressure regulator “120 mm”.
  In GVN/GVCN40 length of the pressure regulator “180 mm”.

ATTENTION --> Company Brahma S.p.A. declines any responsibility for any damage resulting from Customer tampering with the device.

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