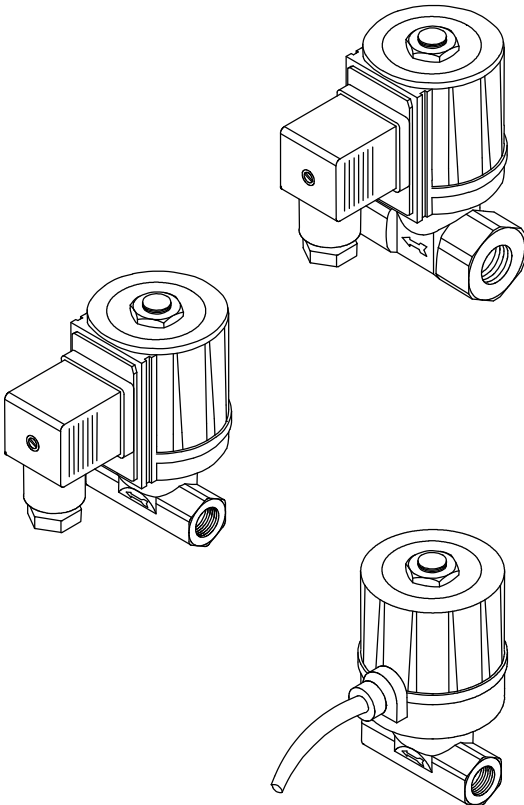


# E6... AND E11... SERIES

**BRAHMA**

**SOLENOID VALVES FOR LIGHT OIL, NAPHTHA, KEROSENE, WATER AND STEAM WITH 1/4", 3/8", 1/2" CONNECTIONS AND OPERATING PRESSURE UP TO 35 bar.**



## GENERAL DESCRIPTION

This series solenoid valves are of normally closed type, quick operating, suitable for civil and industrial applications, supplied with alternate or direct current. According to the suffix after their type reference they are suitable for light oil (no suffix), for kerosene ("K" suffix), for naphtha ("N" suffix) and for water or steam ("V" suffix).

Solenoid valves must be utilised with the indicated fluid only, in order to avoid the damage of seals and compromise the safety of devices in a very short time.

## TECHNICAL FEATURES

- Supply voltage (1): 230 Vac / 50 Hz
- Fluid temperature: 80 °C for light oil, naphtha and kerosene 140 °C for steam
- Room temperature: 0 ÷ 60 °C
- Opening and closing time: ≤ 1 s
- KV (E6 DN8): 1
- Mounting position: all
- Body: die-cast brass

(1) Versions with different supply voltages are available.

## APPROVALS

The types E11\*25\*A3C and E11\*25\*AFD are in accordance with the European standard DIN EN 264 (DIN Reg. No.5S216/03)

## SUMMARY TABLES

### SOLENOID VALVES FOR LIGHT OIL

Type	Operating pressure (bar)	Orifice diameter (mm)	Connections	Consumption (VA)
E6...	3	8	G1/4"	18.5
	3	8	G3/8"	18.5
	3	8	G1/2"	18.5
E11..	35	2.5	G1/4"	18.5
	10	4	G1/4"	18.5

### SOLENOID VALVES FOR NAPHTHA

Type	Operating pressure (bar)	Orifice diameter (mm)	Connections	Consumption (VA)
E6N	3	8	G1/4"	18.5
	3	8	G3/8"	18.5
	3	8	G1/2"	18.5
E11N	35	2.5	G1/4"	18.5
	10	4	G1/4"	18.5

### SOLENOID VALVES FOR KEROSENE

Type	Operating pressure (bar)	Orifice diameter (mm)	Connections	Consumption (VA)
E6K..	3	8	G1/4"	18.5
	3	8	G3/8"	18.5
	3	8	G1/2"	18.5
E11K..	35	2.5	G1/4"	18.5
	10	4	G1/4"	18.5

## SOLENOID VALVES FOR WATER OR STEAM

Type	Operating pressure (bar)	Orifice diameter (mm)	Connections	Consumption (VA)
E6V..	3	8	G1/4"	18.5
	3	8	G3/8"	18.5
	3	8	G1/2"	18.5
E11V..	35	2.5	G1/4"	18.5
	10	4	G1/4"	18.5

### Warning

When the E6... valve is used with fuel oil, especially in suction systems, it may happen that after a regulation shut-down of the burner having reached the set temperature, the valve cannot open. This is due to the ram stroke caused by the quick closing of the valve with the fluid still in motion in the pipe. To eliminate such inconvenience it is necessary to remove the bottom valve and make the back pipe to the tank about as long as the suction pipe. In this way the pressure wave caused by the closing can be discharged inside the tank, which before was prevented by the bottom valve.

### INSTALLATION

- Respect the applicable national and European standards (e.g. EN 60335-1) regarding electrical safety.
- Even in the versions without earth conductor the installation must ensure the valve body connection to earth to guarantee adequate protection against the risk of electric shock (EN 60335-1).
- Assemble the valve to the installation so that the arrow on the valve body has the same direction as the fuel flow.
- During the assembly of the valve to the installation piping, avoid twisting on the sheath and always use an hexagonal key to be fitted to the valve body.
- Make sure that no foreign matters have entered the valve body.
- Always fit a filter to the valve inlet with a mesh section not exceeding 0.5 mm.
- Ensure a perfect connection between the valve earth conductor and the earth of the installation.
- Make sure that the max. fuel input pressure never exceeds the value appearing on the label.

### CHECKING AT START

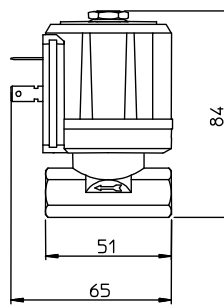
Check the valve before the first start, after any overhaul or a long period of non-operation of the system. In particular, check the valve seal where the supply piping is connected to the valve; check the valve opening and closing according to the electrical signal received by the solenoid.

### DIRECTIONS FOR THE REPLACEMENT OF THE SOLENOID

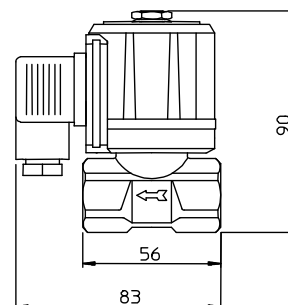
To replace the solenoid, proceed as follows:

- switch off the main switch providing supply voltage to the system;
- unscrew the stop nut placed on the top of the valve;
- remove the knurled washer, the stop disk and the crimped washer in sequence;
- remove the solenoid from the valve sheath; insert the new solenoid and proceed in the opposite way to assemble the valve.

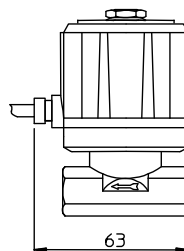
### OVERALL DIMENSIONS



E6N\*1/4\*AFP

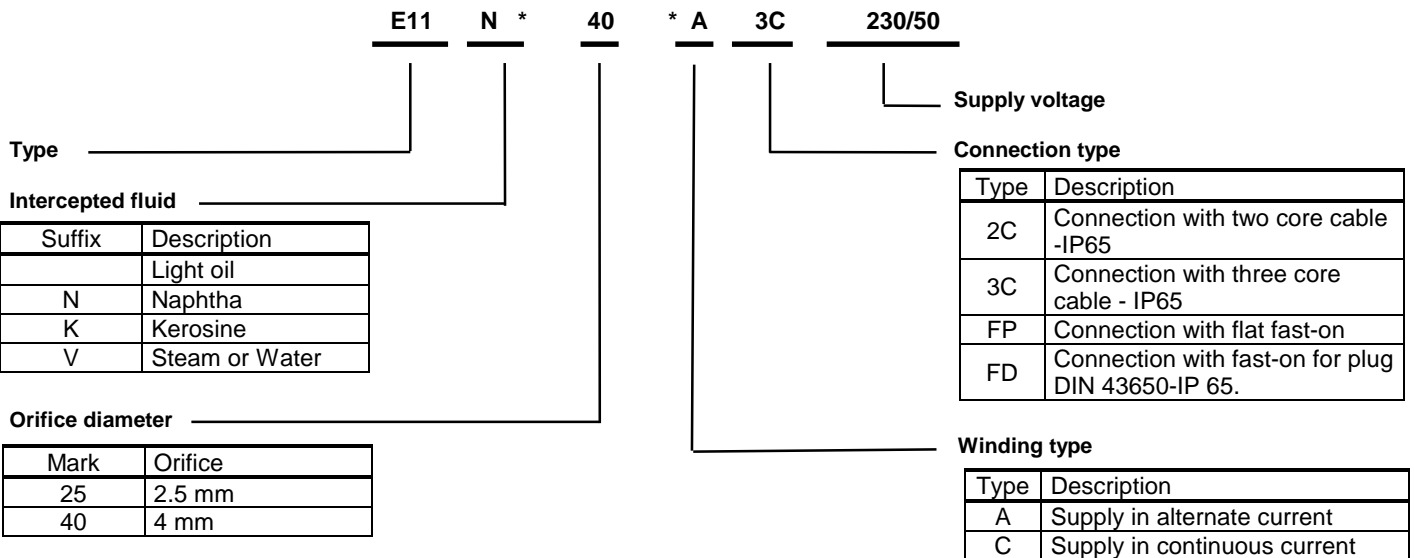
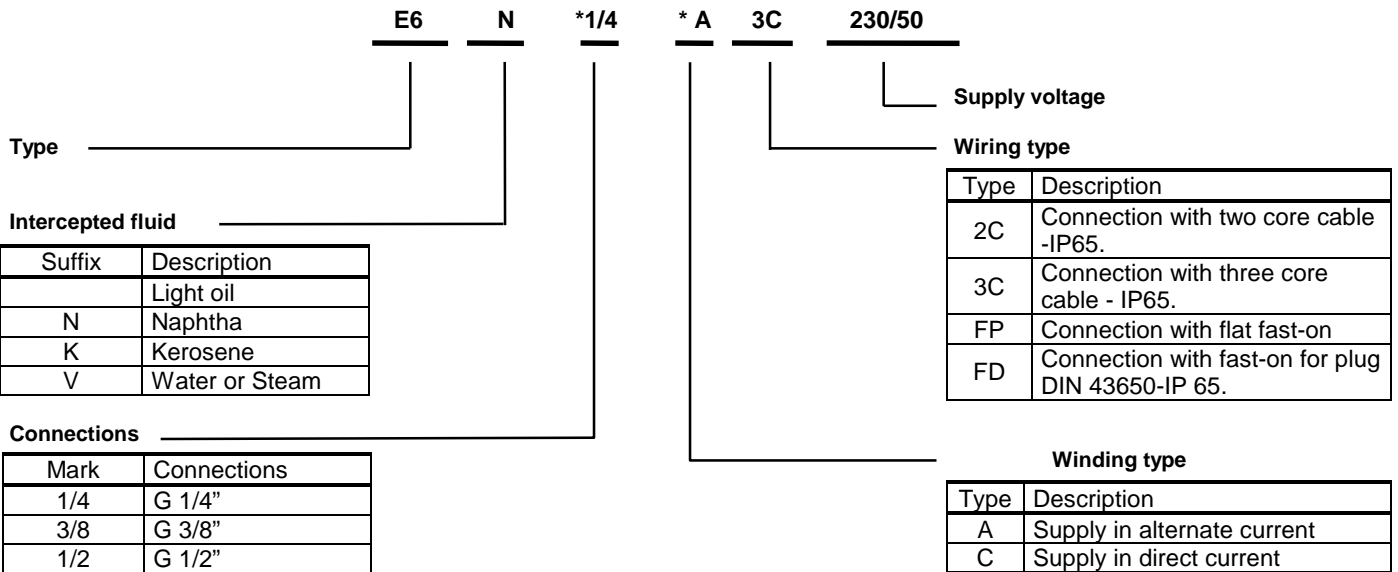


E6\*1/2\*AFD



E11\*25\*A3C

## TYPE REFERENCE



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

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08/10/13 Subject to amendments without notice