

### Design:

3-way solenoid valve, direct acting, normally closed (circuit function C), normally open (circuit function D) or universal function (circuit function T) and normally open 2/2-way (circuit function B).

### Fluids handled:

See Table 1.

### Pressure range:

Maximum inlet pressure see label on valve.

### Installation:

Before installing valve ensure that piping etc. is free of foreign matter (metal shavings, pipe sealing materials, welding scale etc.). Installation as required but preferable with coil uppermost. Installation in this position tends to prevent foreign matter remaining in core tube (increased life). Do not put any loads on coil unit.

PTFE tape is recommended for sealing ports. Mounting is accomplished by means of four M4 x 8 mm tapped holes located on the valve underside. Letters on valve body indicate pressure port, exhaust and outlet of the valve.

All listed valves type 6014 satisfied coil insulation H (Epoxy material, designated EP).

### Marking (example):

#### Body material

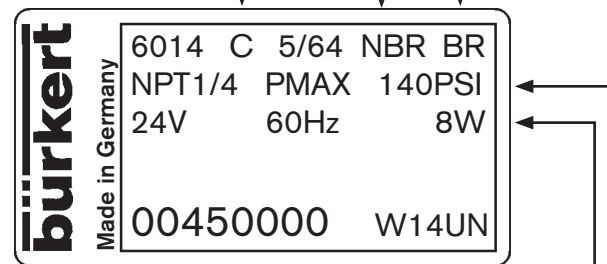
BR = Brass  
SS = Stainless steel  
PA = Polyamide

#### Seal material

EPDM = EPDM  
NBR = NBR  
FKM = FKM

#### Circuit function

C = normally closed  
D = normally open  
T = universal function  
B = normally open 2/2-way



Identity number

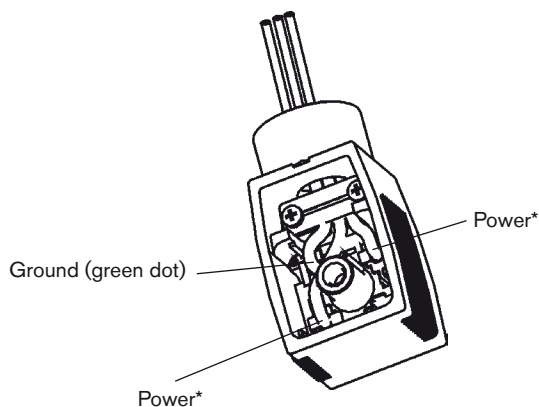
Voltage / frequency / power consumption

Maximum pressure

UL listed for General Purpose

TABLE 1:

| Valve Series              | Seal Material                        | Fluid Temperature | Ambient Temperature | Fluids                |
|---------------------------|--------------------------------------|-------------------|---------------------|-----------------------|
| 6014                      | EG (PTFE + Graphit),<br>(PTFE + FKM) | -40 °C to +130 °C | -40 °C to +55 °C    | Air, Inert Gas, Steam |
| 6014 with manual override |                                      | -10 °C to +120 °C | -10 °C to +55 °C    |                       |
| 6014                      | EF                                   | 0 °C to +100 °C   | 0 °C to +55 °C      | Water                 |
| 6014                      | FF with IB46 (FKM)                   | -40 °C to +100 °C | -40 °C to +55 °C    | Air, Inert Gas        |
| 6014                      | FF (FKM)                             | -10 °C to +100 °C | -10 °C to +55 °C    | Air, Inert Gas        |
|                           |                                      | 0 °C to +100 °C   | 0 °C to +55 °C      | Water                 |
| 6014 with manual override | AA (EPDM)                            | -30 °C to +100 °C | -30 °C to +55 °C    | Air, Inert Gas, Steam |
|                           |                                      | -10 °C to +100 °C | -10 °C to +55 °C    |                       |
| 6014                      |                                      | 0 °C to +100 °C   | 0 °C to +55 °C      | Water                 |
| 6014                      | BB (NBR)                             | -10 °C to +90 °C  | -10 °C to +55 °C    | No.2 Fuel Oil         |
|                           | FF (FKM)                             | -10 °C to +120 °C | -10 °C to +55 °C    |                       |

**Wiring Diagram****Electrical Connection Type 2509**

\* Orientation is not important

**Electrical Connection:**

Ensure supply voltage/frequency corresponds with that on label.

Voltage tolerance is  $\pm 10\%$ .

Available Electrical Connections see "Marking".

Wiring diagram see above.

For this product to be considered UL-listed and CSA approved for General Purpose and FM approved for Hazardous Locations Division 2, it must be in conjunction with the type 2509 cable plug connector (Electrically Operated Valves Parts, YSY12).

The connector and gasket must be assembled to the valve with the screw provided after the connection of the wire leads. This valve and connector assembly is delivered together and is to be used as one unit.

For valves to be used in Intrinsically Safe Applications the positive pole is identified by a "+" on the pin or wire No. 1 has to be connected to the "+".

See Control Drawing for the Rules of Interconnection.

**Warning:**

All valves to be used in Intrinsically Safe Applications must be clearly marked as Intrinsically Safe Apparatus.

**Trouble-Shooting:**

Check port connections, minimum operating pressure differential if required and supply voltage. Ensure pilot hole in piston is clear and pilot bore in the valve outlet is not obstructed. If core does not pull in, check for short circuit, coil burn-out or foreign matter impeding core movement. A jammed or missing core causes the coil to overheat in the case of AC supply.

**Warning:**

These products are designed to operate in a wide variety of applications, it is the user's responsibility to select a model that is appropriate for the application. This product is designed to be installed only by suitably qualified and trained personnel. Specifications should not be exceeded under any circumstances.

The torque for the terminal screw on type 2509 is 0,5 Nm (4,4 lbf-in.).

Changes made to this product will render any applicable warranty null and void.

Specifications subject to change without notice.

Any questions? Please call Bürkert Contromatic Technical Service at (949) 223 31 00.

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