# Installation and Maintenance Instructions for CE Mark on ASHCROFT® Switches/Low Voltage Directive 73/23/EEC



### **INSTALLATION REQUIREMENTS**

- To minimize the risk of injury, the switch enclosure must be selected according to the area classification and installed according to the required safety and electrical codes.
- Before operating the switch all conduit entries and/or junction boxes need to be closed according to the required safety and electrical codes.
- To attain the degree of protection listed on the switch it may be necessary to add required conduit fittings.
- The switch must be protected from moisture, shock and/or extreme vibration.
- The ambient temperature limits for switches are −20 to 150°F, (−28 to 65°C).

#### **CAUTIONS**

- Always install the cover after wiring the switch and before power is supplied.
- Before removing the cover in hazardous areas be sure there is no explosive atmosphere present and the power supply is turned off.
- For ATEX approved switches all safety locking devices and electrical earthing must be installed or connected before operating.
- Never carry a temperature switch by holding only the stem, bulb or capillary.
- Do not exceed ranges, current and/or voltage limits.
- The protection degree of the switch is only valid when the switch is installed in accordance with all safety and electrical codes and regulations.

#### **CLEANING**

- Never use aggressive solvents.
- Do not use high pressure water to clean the switch.

### MAINTENANCE/TROUBLESHOOTING

- All Ashcroft switches require little or no maintenance.
- Be sure that the case is closed at all times.
- When the switch is exposed to process media that may harden and/or build up in the pressure port, the switch should be removed and cleaned as needed.
- If the switch does not function, only trained and skilled personnel should check on the wiring, power supply and/or mounting.
- If the problem can not be solved, please contact one of the Ashcroft affiliates or distributors.

## **ELECTRICAL CONNECTIONS**

- Only trained and skilled personnel are allowed to install the wires to the electrical terminals of the switch.
- Cable couplers, glands and conduit connectors must have the correct electrical approvals.
- Always follow safety and electrical regulations when connecting these devices.
- The system ground of the device is marked with a green colored screw and/or by the ground symbol.
- ATEX approved switches have an external ground screw that must be connected.
- · Micro switch terminals and wire color codes:

NO (Normally Open) Blue
NC (Normally Closed) Red
C (Common) White

**Ground** Green (F-Series only)

#### **TABLE 1: MICRO SWITCH ELECTRICAL RATINGS**

MICRO SWITCH CODE				ELECTRICAL RATING	
Single	Dual	Single	Dual	Vac	Vdc
K	KK	20	61	15A, 250V	0.4A, 120V
W	WW	21	65	5A, 250V	6A, 30V
Р	PP	22	67	5A, 250V	2.5A, 28V
С	N/A	23	N/A	22A, 250V	
G	GG	24	64	15A, 480V	0.25A, 250V
S	N/A	25	N/A	10A, 125V	10A, 125V
F	FF	26	62	15A, 250V	0.4V, 120V
Υ	YY	27	63	15A, 250V	
U	UU	28	N/A	15A, 250V	6A, 30V
Е	EE	29	N/A	15A, 250V	6A, 30V
М	MM	31	70	1A, 125V	50mA, 60V
J	JJ	32	68	11A, 250V	5A, 30V
L	LL	42	71	1A, 125V	
N/A	N/A	50	N/A	15A, 250V	
Н	HH	35	N/A	10A, 250V	0.25A, 250V