

FILTER AUTOMATION KIT

The result of Irritec's long experience in automatic filtration, these automation kits make it possible to fully automate Rotodisk Automatic filters and sand media filters in a practical and fast manner. Available in different types to better suit the specific needs of each system.



Advantages

- ✓ **Complete kits** for automated filter cleaning.
- ✓ Models with **Battery and / or 220 VAC power supply**
- ✓ **Differential DP Sensor**
- ✓ **Highly reliable solenoids**
- ✓ **Metal bracket** for quick mounting on all Irritec Automatic filters
- ✓ **Compatible with Rotodisk Automatic and quartzite filters** (models with 3-way valves only)

Principle of operation

1. As a result of the differential DP Sensor, the control unit continuously detects the state of cleanliness of the filter.
2. The backwash control unit manages the wash times of each filter and is set according to water quality.
3. The washing cycles are carried out in 2 modes:
 - Timed: with defined time intervals
 - DP: based on the required DP Sensor values

Selecting the correct model

		KTB	KPB	KFB	KCB	KFA	KCA
MODELS							
General Specifications	POWER SUPPLY	Battery				220 VAC	
	SOLENOID TYPE	9 - 12 latch				24 VAC	
	No. of OUTLETS (FILTERS)	1 - 4	2 - 8	2 - 10	2 -15	2 - 10	2 - 15
Functions	DP SENSOR	Differential					
	WASHING CYCLES HISTORY	No			Yes		
	ENABLING	Yes	No		Yes	No	Yes

KTB

Functions

- ✓ D.P. is integrated and easy to replace
- ✓ D.P. values displayed in real time

Operating characteristics

- Time between washes (hh : mm)
- Wash time for each single element (mm: ss)
- Pause Time
- Delay time between filters
- Read current DP value
- DP setpoint for automatic wash operation
- Manual operation

Control unit specifications

DIMENSIONS	230x140x80 mm
WEIGHT	0.7 kg
BOX	ABS
IP RATING	IP-54
ELECTRICAL POWER SUPPLY	2.7 - 5 VDC
ABSORPTION CURRENT	20uA
WORKING TEMPERATURE	0°C to 60°C
WORK HUMIDITY	0 to 95% non-condensing
FUSES/ELECTRICAL PROTECTIONS	Resettable PolySwitch PTC
OUTPUTS	Transistor
OUTPUT VOLTAGE	18VDC Latch type

Solenoid specifications

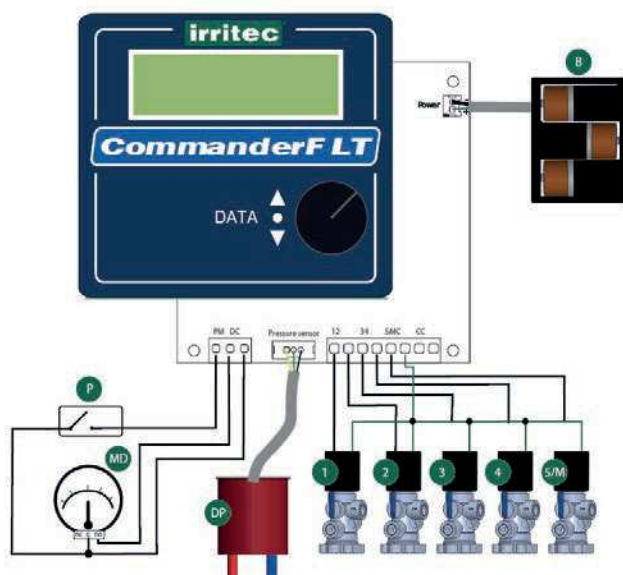
OPERATING PRESSURE	0-10 bar
ORIFICE DIAMETER	1.5 mm
FLOW COEFFICIENT	Kv=0.08 m³/h a 1 bar DP

Materials

BODY	Nylon
GASKETS	NBR
"WET" PARTS	Stainless Steel and Polyamide

Electrical Specifications

VOLTAGE	9-40 VDC
RESISTANCE	6 ohm
INDUCTANCE	90 mH



KPB



Control unit specifications

CONTAINER	IP 65 water resistant
POWER SUPPLY	2 x 1.5 VDC torch batteries (bridge not present) External power supply (with bridge)
OUTPUTS	No. x 4 stations (filter+master)
WASH TIMES (DURATION)	7-15-30 sec - 1-2-3-4-6-8-10-15-20 min.
WAIT TIMES (CYCLE)	15-30 min. - 1-2-3-4-8-10-12-24h.
INTERNAL PRESSURE SWITCH	Delta P 0.2-0.4-0.8-1.0-1.2-1.4-1.8-2.0-2.2 bar
OUTPUTS	Solenoids VDC Latch
DP SENSOR	Integrated analogue DP sensor; also compatible with external dry contact DP sensor

Functions

- ✓ Analogue settings (no. x 3 knobs)
- ✓ Duration (Filter wash time)
- ✓ Cycle (max. pause time between washing cycles)
- ✓ D.P. values for cycle activation
- ✓ Pause between filters (Internal setting)

Solenoid specifications

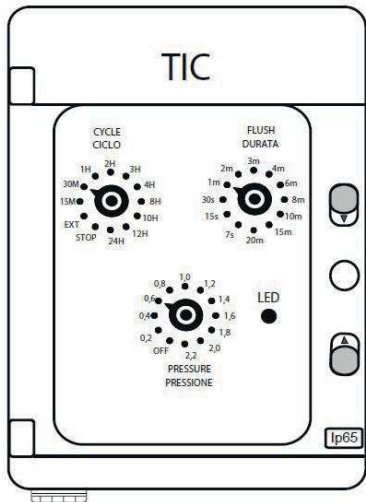
OPERATING PRESSURE	0-10 bar
ORIFICE DIAMETER	1.5 mm
FLOW COEFFICIENT	Kv=0.08 m³/h a 1 bar DP

Materials

BODY	Nylon
GASKETS	NBR
"WET" PARTS	Stainless Steel and Polyamide

Electrical Specifications

VOLTAGE	9-40 VDC
RESISTANCE	6 ohm
INDUCTANCE	90 mH



KFB



Functions

- ✓ BATTERY power supply / DC
- ✓ Duration (Filter wash time)
- ✓ Cycle (max. pause time between washing cycles)
- ✓ D.P. values for cycle activation
- ✓ Pause between filters
- ✓ Master Valve Delay
- ✓ Washing cycles history
- ✓ D.P. delay time
- ✓ D.P. values displayed in real time

Control unit specifications

POWER SUPPLY	4 x type D alkaline - 12 VDC
OUTPUTS	Solenoids 12 VDC latch
PRESSURE DIFF.:	Integrated analogue DP sensor; also compatible with external dry contact DP sensor
TEMPERATURE	0-60 °C

Solenoid specifications

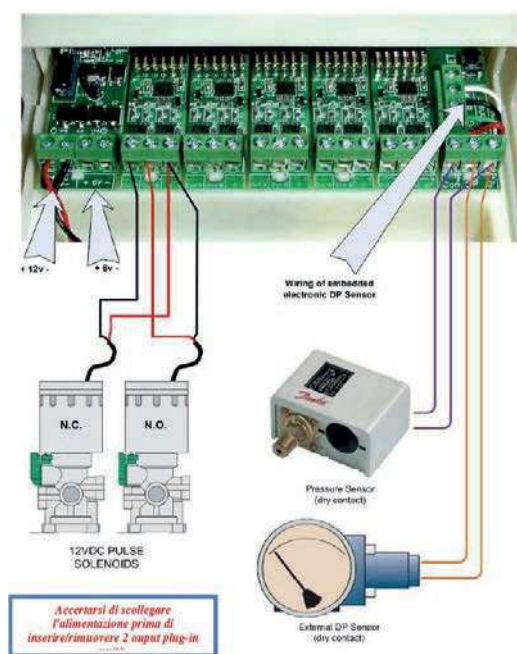
OPERATING PRESSURE	0-10 bar
ORIFICE DIAMETER	1.5 mm
FLOW COEFFICIENT	Kv=0.08 m³/h a 1 bar DP

Materials

BODY	Nylon
GASKETS	NBR
"WET" PARTS	Stainless Steel and Polyamide

Electrical Specifications

VOLTAGE	9-40 VDC
RESISTANCE	6 ohm
INDUCTANCE	90 mH



KFA



Functions

- ✓ BATTERY power supply / DC
- ✓ Duration (Filter wash time)
- ✓ Cycle (max. pause time between washing cycles)
- ✓ D.P. values for cycle activation
- ✓ Pause between filters
- ✓ Master Valve Delay
- ✓ Washing cycles history
- ✓ D.P. delay time
- ✓ D.P. values displayed in real time

Control unit specifications

POWER SUPPLY	220 VAC 60 Hz with integrated 24 VAC transformer
OUTPUTS	24 VAC
PRESSURE DIFF.:	Integrated analogue DP sensor; also compatible with external dry contact DP sensor
TEMPERATURE	0-60 °C

Solenoid specifications

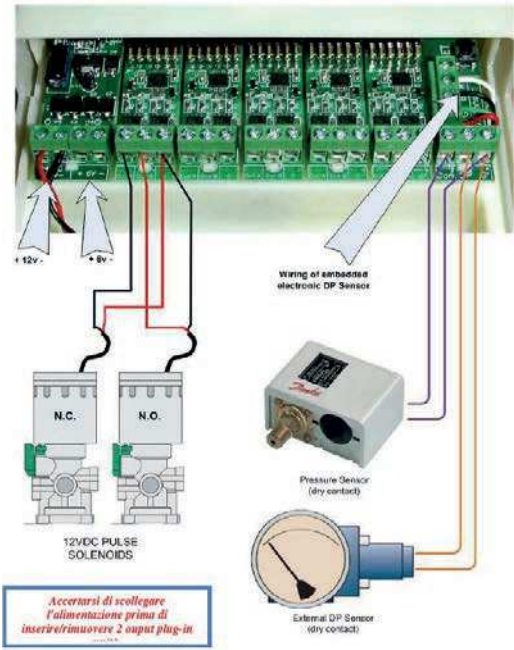
OPERATING PRESSURE	0-10 bar
ORIFICE DIAMETER	1.5 mm
FLOW COEFFICIENT	Kv=0.08 m³/h a 1 bar DP

Materials

BODY	Nylon
GASKETS	NBR
"WET" PARTS	Stainless Steel and Polyamide

Electrical Specifications

VOLTAGE	9-40 VDC
RESISTANCE	6 ohm
INDUCTANCE	90 mH



KCB



Functions

- ✓ Power supply 12 VDC
- ✓ Duration (Filter wash time)
- ✓ Cycle (max. pause time between washing cycles)
- ✓ D.P. values for cycle activation
- ✓ Settable D.P. delay
- ✓ Pause between filters
- ✓ Washing cycles history
- ✓ External enabling and operating windows
- ✓ Time-, D.P. or Volume-based washing cycles

Control unit specifications

DIMENSIONS	324 x 100 x 130 mm
WEIGHT	3 kg
CONTAINER MATERIAL	ABS
IP RATING	IP 54
ELECTRICAL POWER SUPPLY (+/- 10%)	12 VDC
CONSUMPTION	15 mA
OUTPUT ABSORPTION	20 mA
INPUT ABSORPTION	8 mA
BACKUP BATTERY	NI-CAD 3.6V - 110 mAh
BACKUP BATTERY LIFE (in OFF mode)	1 year
WORKING TEMPERATURE	0 - 60 °C
WORK HUMIDITY	0 - 95% (without condensing)
FUSE	0.5 Amp
OUTPUT TYPE	Via Relay
COMPATIBLE SOLENOIDS	12 VDC LATCH

Solenoid specifications

OPERATING PRESSURE	0-10 bar
ORIFICE DIAMETER	1.5 mm
FLOW COEFFICIENT	Kv=0.08 m³/h a 1 bar DP

Materials

BODY	Nylon
GASKETS	NBR
"WET" PARTS	Stainless Steel and Polyamide

Electrical Specifications

VOLTAGE	9-40 VDC
RESISTANCE	6 ohm
INDUCTANCE	90 mH



KCA



Functions

- ✓ Power supply 220 VAC
- ✓ Duration (Filter wash time)
- ✓ Cycle (max. pause time between washing cycles)
- ✓ D.P. values for cycle activation
- ✓ Settable D.P. delay
- ✓ Pause between filters
- ✓ Washing cycles history
- ✓ External enabling and operating windows
- ✓ Time-, D.P. or Volume-based washing cycles
- ✓ Different washing cycles can be set for different filters

Control unit specifications

DIMENSIONS	324 x 100 x 130 mm
WEIGHT	3 kg
CONTAINER MATERIAL	ABS
IP RATING	IP 54
ELECTRICAL POWER SUPPLY (+/- 10%)	220 VAC
CONSUMPTION	75 mA
OUTPUT ABSORPTION	20 mA
INPUT ABSORPTION	8 mA
BACKUP BATTERY	NI-CAD 3.6V - 110 mAh
BACKUP BATTERY LIFE (in OFF mode)	1 year
WORKING TEMPERATURE	0 - 60 °C
WORK HUMIDITY	0 - 95% (without condensing)
FUSE	0.5 Amp
OUTPUT TYPE	Via Relay
COMPATIBLE SOLENOIDS	24 VAC
OUTPUTS FUSE	4 Amp

Solenoid specifications

OPERATING PRESSURE	0-10 bar
ORIFICE DIAMETER	1.5 mm
FLOW COEFFICIENT	Kv=0.08 m³/h a 1 bar DP

Materials

BODY	Nylon
GASKETS	NBR
"WET" PARTS	Stainless Steel and Polyamide

Electrical Specifications

VOLTAGE	24 VDC
POWER	3.5 watt
CURRENT	Tip 0.20 amp Maintenance: 0.20 amp

