

## 47 SERIES ATEX COIL WITH PWM SOCKET

C47 series coils are specially designed for the control of fluids in explosive atmospheres or potentially explosive atmospheres. These coils, which operate with DC voltage, provide both energy saving and low heating values, enabling safe use in ex-proof environments.

### GENERAL FEATURES

- New design
- High performance
- Long lasting
- Energy saving
- It can be used for the control of LPG, natural gas, fuel oil, diesel oil and other flammable explosive fluids.



### ELECTRICAL SPECIFICATIONS

**Continuous Energization :** ED %100

**Coil Insulation Class :** H (180°C) (IEC 85)

**Coil Coating :** Reinforced Fiber Glass

**Environment Temperature :** -10°C, +60°C

**Protection Class :** II 2G Ex mb IIC T4-T5 Gb, IP68

II 2D Ex tb IIIC T(120-90) °C Db, IP68

**Cable Connection :** 3x0.75 mm<sup>2</sup> Atex cable 3 meters. (It can be produced in desired size upon order.)

**Standard Voltage :** 12-48 VDC 10-25W

**Voltage Tolerance :** DC -5%, +10%

**Amplitude modulation :** 11- 89 % (Production can be made in desired amplitude modulations.)

### COIL MATERIALS

**Body :** Atex Poliamid 6.6 GFR 30 FR VO

**Inner Parts:** Stainless Steel, Brass: Copper (EN 12735-1)

### CABLE CONNECTIONS

**Brown Cable :** +VDC

**Yellow-Green Cable:** Grounding

**Blue Cable :** -VDC

Jumper Configuration			24 V DC 18 W Coil				12 V DC 18 W Coil			
	3	2	1	Power Rate	Max. reach of the coils Temperature (°C)	Current drawn when the coil is at 24 °C (A)	Current drawn when the coil is at max. temperature (A)	Max. reach of the coils Temperature (°C)	Current drawn when the coil is at 24 °C (A)	Current drawn when the coil is at max. temperature (A)
1	0	0	0	11%	30,6	0,011	0,011	29,2	0,012	0,012
2	0	0	1	22%	34,8	0,039	0,039	34	0,058	0,056
3	0	1	0	33%	42,4	0,085	0,083	38,2	0,142	0,014
4	0	1	1	44%	53,2	0,15	0,14	51,4	0,26	0,244
5	1	0	0	56%	67,2	0,241	0,214	63,4	0,428	0,383
6	1	0	1	67%	82,4	0,347	0,29	76,2	0,626	0,512
7	1	1	0	78%	94,8	0,465	0,378	90	0,855	0,684
8	1	1	1	89%	104	0,604	0,474	104	1,125	0,847

**Warning:** The important point to be considered when determining the amplitude modulation is not to choose the lowest power ratio, but the one that is low enough not to leave the core. You can get technical support for modulation values suitable for solenoids.